

Содержание

Гидравлические блоки с присоединениям в линию_SUN	32
1 Table of Contents	32
2 Technical Tips	68
3 Line Mount Body Locator	38
4 Series 1	70
4.1 T-13A	70
4.1.1 90 degree body.	70
4.1.2 Inline body.	70
4.1.3 Two cavity inline body.	71
4.1.4 Inline body with reverse free flow check.	71
4.1.5 Rectifier body.	72
4.2 T-10A	73
4.2.1 90 degree body, SAE-8	73
4.2.2 90 degree body, SAE-12	73
4.2.3 Inline body	74
4.2.4 Through port body with gauge port, SAE-10	75
4.2.5 Through port body with gauge port, SAE-12	75
4.2.6 Dual through port body	76
4.2.7 90 degree .75" SAE Code 61 flange port body with gauge port	77
4.2.8 90 degree .75" SAE Code 62 flange port body with gauge port	77
4.2.9 90 degree 1.00" SAE Code 61 flange port body with gauge port	78
4.2.10 90 degree 1.00" SAE Code 62 flange port body	78
4.2.11 Sandwich mount through port .75" SAE Code 61 body with gauge port	79
4.2.12 Flange mount through port .75" SAE Code 61 body with threaded outlet and gauge port	79
4.2.13 Sandwich mount through port .75" SAE Code 61 body with gauge port	80
4.2.14 Sandwich mount through port .75" SAE Code 62 body with gauge port	80
4.2.15 Flange mount through port .75" SAE Code 61 body with threaded outlet and gauge port	81
4.2.16 Flange mount through port .75" SAE Code 62 body with threaded outlet and gauge port	81
4.2.17 Two cavity body for cross-port relief applications	82
4.2.18 Two cavity body for cross-port relief applications	82
4.2.19 Two cavity .75" SAE Code 61 flange port body for cross-port relief applications	83
4.2.20 Two cavity .75" SAE Code 62 flange port body for cross-port relief applications	83
4.2.21 Two cavity 1.00" SAE Code 61 flange port body with gauge ports for cross-port relief applications	84
4.2.22 Two cavity 1.00" SAE Code 62 flange port body with gauge ports for cross-port relief applications	84
4.2.23 Body with reverse free flow check	85
4.2.24 Two cavity body with make-up checks for cross-port relief applications	85
4.3 T-11A	86
4.3.1 90 degree body	86

4.3.2	90 degree body with high capacity port 3	86
4.3.3	Inline body	87
4.3.4	90 degree body with gauge port	88
4.3.5	90 degree body with high capacity port 3 and gauge port	88
4.3.6	Through port body with gauge port for reducing applications	89
4.3.7	Through port body with gauge port	90
4.3.8	Gasket mount body for load control applications	90
4.3.9	Nipple mount body for load control applications, SAE-6	91
4.3.10	Nipple mount body for load control applications, SAE-8	91
4.3.11	Flange mount through port .75" SAE Code 61 body with threaded outlet and gauge port.	92
4.3.12	Flange mount through port .75" SAE Code 62 body with threaded outlet and gauge port	92
4.3.13	Sandwich mount through port .75" SAE Code 61 body with gauge port	93
4.3.14	Sandwich mount through port .75" SAE Code 62 body with gauge port	93
4.3.15	Inline body with port 3 connected to port 2	94
4.3.16	90 degree body with integral shuttle	94
4.3.17	Body with reverse free flow check and gauge port for reducing applications	95
4.3.18	Body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications	95
4.3.19	Body with reverse free flow check and gauge port	96
4.3.20	Through port body with reverse free flow check and gauge port	96
4.3.21	Through port body with reverse free flow check and gauge port for reducing applications	97
4.3.22	Through port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications	97
4.3.23	Two cavity 90 degree cross-piloted body for load control applications	98
4.3.24	Two cavity 90 degree cross-piloted body with shuttle for load control applications	98
4.3.25	Inline body for load control applications	99
4.3.26	Two cavity inline gasket mount cross-piloted body for load control applications	99
4.3.27	Two cavity inline cross-piloted body for load control applications	100
4.3.28	Two cavity inline cross-piloted body with shuttle for load control applications	100
4.3.29	Two cavity gasket mount body for load control applications	101
4.3.30	Two cavity through port body with shuttle and gauge ports	101
4.3.31	Two cavity dual load control body with checks	102
4.3.32	Two cavity dual load control body with checks and shuttle	102
4.3.33	Two cavity dual load control body with make-up checks	103
4.3.34	Two cavity dual load control body with make-up checks and shuttle	103
4.3.35	Two cavity dual sequence body with reverse free flow checks	104
4.3.36	Four cavity triple sequence body with reverse free flow checks	104
4.3.37	Two cavity load-sensing body with three signal input	105
4.3.38	Three cavity load-sensing body with four signal input	105
4.3.39	Four cavity four-way logic body for directional applications	106
4.3.40	Five cavity four-way logic body for directional applications	106

4.4	T-21A	107
4.4.1	90 degree body	107
4.4.2	Body with reverse free flow check and gauge port for reducing/relieving applications	107
4.4.3	Two cavity 90 degree cross-piloted body with common port 4 for load control applications	108
4.4.4	Two cavity 90 degree cross-piloted body with independent port 4 for load control applications	108
4.5	T-31A	109
4.5.1	Body for flow divider/combiner applications	109
4.5.2	Four port body	109
5	Series 2	110
5.1	T-5A	110
5.1.1	90 degree body	110
5.1.2	Direct mount .75" SAE Code 61 body	110
5.1.3	Inline body	111
5.1.4	Two cavity body	111
5.1.5	Rectifier body	112
5.1.6	Body with reverse free flow check	112
5.2	T-3A	113
5.2.1	90 degree body	113
5.2.2	90 degree body with gauge port	113
5.2.3	Inline body	114
5.2.4	Through port body with gauge ports, SAE-12	114
5.2.5	Through port body with gauge ports, SAE-16	115
5.2.6	90 degree .75" SAE Code 61 flange port body with gauge port	116
5.2.7	90 degree .75" SAE Code 62 flange port body with gauge port	116
5.2.8	90 degree 1.00" SAE Code 61 flange port body with gauge port	117
5.2.9	90 degree 1.00" SAE Code 62 flange port body with gauge port	117
5.2.10	90 degree 1.25" SAE Code 61 flange port body with gauge port	118
5.2.11	90 degree 1.25" SAE Code 62 flange port body with gauge port	118
5.2.12	Sandwich mount through port 1.00" SAE Code 61 body with gauge port	119
5.2.13	Sandwich mount through port 1.00" SAE Code 62 body with gauge port	119
5.2.14	Sandwich mount through port 1.25" SAE Code 61 body with gauge port	120
5.2.15	Sandwich mount through port 1.25" SAE Code 62 body with gauge port	120
5.2.16	Sandwich mount through port 1.25" SAE Code 61 flange port body with gauge port	121
5.2.17	Sandwich mount through port 1.25" SAE Code 62 flange port body with gauge port	121
5.2.18	Flange mount through port 1.00" SAE Code 61 body with threaded outlet and gauge port	122
5.2.19	Flange mount through port 1.00" SAE Code 62 body with threaded outlet and gauge port	122
5.2.20	Flange mount through port 1.25" SAE Code 61 body with threaded outlet and gauge port	123
5.2.21	Flange mount through port 1.25" SAE Code 62 body with threaded outlet and gauge port	123
5.2.22	Two cavity body with gauge ports for cross-port relief applications	124

5.2.23	Two cavity body for cross-port relief applications	124
5.2.24	Two cavity 1.00" SAE Code 61 flange port body with gauge ports for cross-port relief applications	125
5.2.25	Two cavity 1.00" SAE Code 62 flange port body with gauge ports for cross-port relief applications	125
5.2.26	Two cavity 1.25" SAE Code 61 flange port body with gauge ports for cross-port relief applications	126
5.2.27	Two cavity 1.25" SAE Code 62 flange port body with gauge ports for cross-port relief applications	126
5.2.28	Body with reverse free flow check	127
5.2.29	Two cavity body with make-up checks for cross-port relief applications	127
5.3	T-2A	128
5.3.1	90 degree body	128
5.3.2	90 degree body with high capacity port 3	128
5.3.3	Body with port 3 connected to port 2	129
5.3.4	90 degree body with gauge port	130
5.3.5	90 degree body with high capacity port 3 and gauge port	130
5.3.6	Inline body	131
5.3.7	Through port body with gauge port, SAE-12	131
5.3.8	Through port body with gauge port,	132
5.3.9	Through port body with high capacity port 3 and gauge port	132
5.3.10	Sandwich mount through port 1.00" SAE Code 61 body with gauge port	133
5.3.11	Sandwich mount through port 1.00" SAE Code 62 body with gauge port	133
5.3.12	Flange mount through port 1.00" SAE Code 61 body with threaded outlet and gauge port	134
5.3.13	Flange mount through port 1.00" SAE Code 62 body with threaded outlet and gauge port	134
5.3.14	Direct mount .75" SAE Code 61 body with through pilot/drain port	135
5.3.15	Direct mount .75" SAE Code 62 body with through pilot/drain port	135
5.3.16	Flange mount through port .75" SAE Code 61 body with through pilot/drain port	136
5.3.17	90 degree body with shuttle	136
5.3.18	Nipple mount body for load control applications	137
5.3.19	Gasket mount body for load control applications	137
5.3.20	Body with reverse free flow check and gauge port for reducing and reducing/relieving applications	138
5.3.21	Through port body with reverse free flow check and gauge port for reducing applications	139
5.3.22	Through port body with high capacity port 3	139
5.3.23	Body with reverse free flow check and gauge port	140
5.3.24	Through port body with reverse free flow check and gauge port	140
5.3.25	Inline body for load control applications	141
5.3.26	Two cavity inline gasket mount cross-piloted body for load control applications	141
5.3.27	Two cavity inline cross-piloted body for load control applications	142
5.3.28	Two cavity inline cross-piloted body with shuttle for load control applications	142
5.3.29	Two cavity body for flow control applications	143

5.3.30	Two cavity gasket mount body for load control applications	143
5.3.31	Two cavity 90 degree cross–piloted body for load control applications	144
5.3.32	Two cavity 90 degree cross–piloted body with shuttle for load control applications	144
5.3.33	Two cavity dual load control body with checks	145
5.3.34	Two cavity dual load control body with checks and shuttle	145
5.3.35	Two cavity dual load control body with make–up checks	146
5.3.36	Two cavity dual load control body with make–up checks and shuttle	146
5.3.37	Two cavity dual sequence body with reverse free flow checks	147
5.3.38	Two cavity through port body with shuttle and gauge ports	147
5.3.39	Four cavity four–way logic body for directional applications	148
5.3.40	Five cavity four–way logic body for directional applications	148
5.4	T-22A	149
5.4.1	90 degree body	149
5.4.2	Body with reverse free flow check and gauge port	149
5.4.3	Two cavity 90 degree cross–piloted body with common port 4 for load control applications	150
5.4.4	Two cavity 90 degree cross–piloted body with independent port 4 for load control applications	150
5.4.5	Gasket mount body for load control applications	151
5.4.6	Two cavity gasket mount dual load control body	151
5.5	T-32A	152
5.5.1	Body for flow divider/combiner applications	152
5.5.2	Four port body	152
6	Series 3	153
6.1	T-16A	153
6.1.1	90 degree body with gauge port	153
6.1.2	Inline body	153
6.1.3	Inline 1.00” SAE Code 61 flange port body	154
6.1.4	Through port body with gauge port, SAE-20	154
6.1.5	90 degree 1.00” SAE Code 61 flange port body with gauge port	155
6.1.6	90 degree 1.00” SAE Code 62 flange port body with gauge port	155
6.1.7	90 degree 1.25” SAE Code 61 flange port body with gauge port	156
6.1.8	90 degree 1.25” SAE Code 62 flange port body with gauge port	156
6.1.9	90 degree 1.50” SAE Code 61 flange port body with gauge port	157
6.1.10	90 degree 1.50” SAE Code 62 flange port body with gauge port	157
6.1.11	90 degree 2.00” SAE Code 61 flange port body with gauge port	159
6.1.12	90 degree 2.00” SAE Code 62 flange port body with gauge port	159
6.1.13	Through port 1.00” SAE Code 61 flange port body with gauge port	160
6.1.14	Through port 1.00” SAE Code 62 flange port body with gauge port	160
6.1.15	Through port 1.25” SAE Code 61 flange port body with gauge port	161
6.1.16	Through port 1.25” SAE Code 62 flange port body with gauge port	161
6.1.17	Through port 1.50” SAE Code 61 flange port body with gauge port	162
6.1.18	Through port 1.50” SAE Code 62 flange port body with gauge port	162
6.1.19	Through port 2.00” SAE Code 61 flange port body with gauge port	163
6.1.20	Through port 2.00” SAE Code 62 flange port body with gauge port	163

6.1.21	Sandwich mount through port 1.50" SAE Code 61 body with gauge port	164
6.1.22	Sandwich mount through port 1.50" SAE Code 62 body with gauge port	164
6.1.23	Sandwich mount through flange port 1.50" SAE Code 61 body with gauge port	165
6.1.24	Sandwich mount through flange port 1.50" SAE Code 62 body with gauge port	165
6.1.25	Flange mount through port 1.50" SAE Code 61 body with threaded outlet and gauge port	166
6.1.26	Flange mount through port 1.50" SAE Code 62 body with threaded outlet and gauge port	166
6.1.27	Two cavity body with gauge ports for cross-port relief applications	167
6.1.28	Two cavity 1.50" SAE Code 61 flange port body with gauge ports for cross-port relief applications	168
6.1.29	Two cavity 1.50" SAE Code 62 flange port body with gauge ports or cross-port relief applications	168
6.1.30	Two cavity 2.00" SAE Code 61 flange port body with gauge ports for cross-port relief applications	169
6.1.31	Two cavity 2.00" SAE Code 62 flange port body with gauge ports for cross-port relief applications	169
6.1.32	Rectifier body	170
6.1.33	Body with reverse free flow check and gauge port	170
6.1.34	1.00" SAE Code 61 flange port body with reverse free flow check and gauge port	171
6.1.35	1.00" SAE Code 62 flange port body with reverse free flow check and gauge port	171
6.1.36	1.25" SAE Code 61 flange port body with reverse free flow check and gauge port	172
6.1.37	1.25" SAE Code 62 flange port body with reverse free flow check and gauge port	172
6.1.38	Two cavity body with make-up checks for cross-port relief applications	173
6.1.39	Body with moldulating element for pressure compensated flow control applications	173
6.2	T-17A	174
6.2.1	90 degree body	174
6.2.2	90 degree body with gauge port	174
6.2.3	90 degree body with high capacity port 3 and gauge port	175
6.2.4	Inline body	175
6.2.5	Through port body with gauge port	176
6.2.6	Through port body with gauge port for reducing applications	177
6.2.7	Through port body with high capacity port 3 and gauge port for reducing/relieving applications	177
6.2.8	Gasket mount body for load control applications, SAE-12	178
6.2.9	Gasket mount body for load control applications, SAE-16	178
6.2.10	Two cavity gasket mount body for load control applications, SAE-12	179
6.2.11	Two cavity gasket mount body for load control applications, SAE-16	179
6.2.12	90 degree 1.00" SAE Code 61 flange port body	180
6.2.13	90 degree 1.00" SAE Code 62 flange port body	180
6.2.14	90 degree 1.25" SAE Code 61 flange port body	181
6.2.15	90 degree 1.25" SAE Code 62 flange port body	181

6.2.16	90 degree 1.00" SAE Code 61 flange port body with gauge port	182
6.2.17	90 degree 1.00" SAE Code 62 flange port body with gauge port	182
6.2.18	90 degree 1.25" SAE Code 61 flange port body with gauge port	183
6.2.19	90 degree 1.25" SAE Code 62 flange port body with gauge port	183
6.2.20	90 degree 1.00" SAE Code 61 flange port body with high capacity port 3 and gauge port	184
6.2.21	90 degree 1.00" SAE Code 62 flange port body with high capacity port 3 and gauge port	184
6.2.22	90 degree 1.25" SAE Code 61 flange port body with high capacity port 3 and gauge port	185
6.2.23	90 degree 1.25" SAE Code 62 flange port body with high capacity port 3 and gauge port	185
6.2.24	Through port 1.00" SAE Code 61 flange port body with gauge port	186
6.2.25	Through port 1.00" SAE Code 62 flange port body with gauge port	186
6.2.26	Through port 1.25" SAE Code 61 flange port body with gauge port	187
6.2.27	Through port 1.25" SAE Code 62 flange port body with gauge port	187
6.2.28	Nipple mount body for load control applications	188
6.2.29	90 degree body with shuttle for load control applications	189
6.2.30	90 degree 1.00" SAE Code 61 flange port body with shuttle for load control applications	189
6.2.31	90 degree 1.25" SAE Code 61 flange port body with shuttle for load control applications	190
6.2.32	90 degree 1.25" SAE Code 62 flange port body with shuttle for load control applications	190
6.2.33	Sandwich mount through flange port 1.25" SAE Code 61 body with gauge port	191
6.2.34	Sandwich mount through flange port 1.25" SAE Code 62 body with gauge port	191
6.2.35	Sandwich mount through flange port 1.25" SAE Code 61 body with gauge port	192
6.2.36	Sandwich mount through flange port 1.25" SAE Code 62 body with gauge port	192
6.2.37	Flange mount through port 1.25" SAE Code 61 body with threaded outlet and gauge port	193
6.2.38	Flange mount through port 1.25" SAE Code 62 body with threaded outlet and gauge port	193
6.2.39	Direct mount .75" SAE Code 61 body with through pilot/drain port	194
6.2.40	Direct mount .75" SAE Code 62 body with through pilot/drain port	194
6.2.41	Direct mount 1.00" SAE Code 61 body with through pilot/drain port	195
6.2.42	Direct mount 1.00" SAE Code 62 body with through pilot/drain port	195
6.2.43	Direct mount 1.25" SAE Code 61 body with through pilot/drain port	196
6.2.44	Two cavity body for flow control applications, SAE-6	196
6.2.45	Two cavity body for flow control applications, SAE-16	196
6.2.46	Two cavity 90 degree cross-piloted body for load control applications	197
6.2.47	Two cavity 90 degree cross-piloted body with shuttle for load control applications	197
6.2.48	Two cavity cross-piloted 1.00" SAE Code 61 body for load control applications	198

6.2.49	Two cavity cross-piloted 1.25" SAE Code 61 body for load control applications	198
6.2.50	Two cavity cross-piloted 1.00" SAE Code 61 body with shuttle for load control applications	199
6.2.51	Two cavity cross-piloted 1.25" SAE Code 61 body with shuttle for load control applications	199
6.2.52	Two cavity dual load control body with checks	200
6.2.53	Two cavity dual load control body with checks and shuttle	200
6.2.54	Two cavity dual load control body with make-up checks	201
6.2.55	Two cavity dual load control body with make-up checks and shuttle	201
6.2.56	Two cavity dual sequence body with reverse free flow checks	202
6.2.57	1.00" SAE Code 62 flange port body with reverse free flow check and gauge port for sequence applications	203
6.2.58	1.25" SAE Code 62 flange port body with reverse free flow check and gauge port for sequence applications	203
6.2.59	Body with reverse free flow check and gauge port for sequence applications	204
6.2.60	Through port body with reverse free flow check and gauge port for sequence applications	204
6.2.61	Through port body with reverse free flow check and gauge port for reducing applications	205
6.2.62	Body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications	205
6.2.63	1.00" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications	206
6.2.64	1.00" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications	206
6.2.65	Through port 1.00" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications	207
6.2.66	1.25" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications	208
6.2.67	1.25" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications	208
6.2.68	1.25" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appl	209
6.2.69	1.25" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appli	209
6.2.70	Four cavity four-way logic body for directional applications	210
6.2.71	Five cavity four-way logic body for directional applications	210
6.2.72	Four cavity four-way 1.00" SAE Code 61 flange port logic body for directional applications	211
6.2.73	Four cavity four-way 1.25" SAE Code 61 flange port logic body for directional applications	211
6.2.74	Five cavity four-way 1.00" SAE Code 61 flange port logic body for directional applications	212
6.2.75	Five cavity four-way 1.25" SAE Code 61 flange port logic body for directional applications	212
6.2.76	Two cavity through port body with shuttle and gauge ports	213
6.2.77	Two cavity through flange port 1.00" SAE Code 61 body with shuttle and gauge ports	214

6.2.78	Two cavity through flange port 1.00" SAE Code 62 body with shuttle and gauge ports	214
6.2.79	Two cavity through flange port 1.25" SAE Code 61 body with shuttle and gauge ports	215
6.2.80	Two cavity through flange port 1.25" SAE Code 62 body with shuttle and gauge ports	215
6.3	T-23A	216
6.3.1	90 degree body with gauge port	216
6.3.2	90 degree 1.00" SAE Code 61 flange port body with gauge port	217
6.3.3	90 degree 1.00" SAE Code 62 flange port body with gauge port	217
6.3.4	Direct mount 1.00" SAE Code 62 body	218
6.3.5	90 degree 1.25" SAE Code 61 flange port body with gauge port	219
6.3.6	90 degree 1.25" SAE Code 62 flange port body with gauge port	219
6.3.7	Two cavity 90 degree cross-piloted body with common port 4 for load control applications	220
6.3.8	Two cavity 90 degree cross-piloted body with independent port 4 for load control applications	220
6.3.9	Two cavity cross-piloted 1.00" SAE Code 61 flange port body with common port 4 for load control applications	221
6.3.10	Two cavity cross-piloted 1.00" SAE Code 62 flange port body with common port 4 for load control applications	221
6.3.11	Two cavity cross-piloted 1.25" SAE Code 61 flange port body with common port 4 for load control applications	222
6.3.12	Two cavity cross-piloted 1.25" SAE Code 62 flange port body with common port 4 for load control applications	222
6.3.13	Two cavity cross-piloted 1.00" SAE Code 61 flange port body with independent port 4 for load control applications	223
6.3.14	Two cavity cross-piloted 1.00" SAE Code 62 flange port body with independent port 4 for load control applications	223
6.3.15	Two cavity cross-piloted 1.25" SAE Code 61 flange port body with independent port 4 for load control applications	224
6.3.16	Two cavity cross-piloted 1.25" SAE Code 62 flange port body with independent port 4 for load control applications	224
6.3.17	Body with reverse free flow check and gauge port for reducing/relieving applications	225
6.3.18	1.00" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing/relieving applications	226
6.3.19	1.00" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing/relieving applications	226
6.3.20	1.25" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing/relieving applications	227
6.3.21	1.25" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing/relieving applications	227
6.4	T-33A	228
6.4.1	Body for flow divider/combiner applications, SAE-16	228
6.4.2	Body for flow divider/combiner applications, SAE-20	228
6.4.3	Four port body, SAE-16	229
6.4.4	Four port body, SAE-20	229
6.4.5	1.00" SAE Code 61 flange port body for flow divider/combiner applications	230
6.4.6	1.00" SAE Code 62 flange port body for flow divider/combiner applications	230

6.4.7	1.25" SAE Code 61 flange port body for flow divider/combiner applications	231
6.4.8	1.25" SAE Code 62 flange port body for flow divider/combiner applications	231
7	Series 4	232
7.1	T-18A	232
7.1.1	90 degree body with gauge port	232
7.1.2	Through port body with gauge port	232
7.1.3	90 degree 1.00" SAE Code 61 flange port body with gauge port	233
7.1.4	90 degree 1.00" SAE Code 62 flange port body with gauge port	233
7.1.5	90 degree 1.25" SAE Code 61 flange port body with gauge port	234
7.1.6	90 degree 1.25" SAE Code 62 flange port body with gauge port	234
7.1.7	90 degree 1.50" SAE Code 61 flange port body with gauge port	235
7.1.8	90 degree 1.50" SAE Code 62 flange port body with gauge port	235
7.1.9	90 degree 2.00" SAE Code 61 flange port body with gauge port	236
7.1.10	90 degree 2.00" SAE Code 62 flange port body with gauge port	236
7.1.11	Inline 1.50" SAE Code 61 flange port body	237
7.1.12	Inline 2.00" SAE Code 61 flange port body	237
7.1.13	Through port 1.00" SAE Code 61 flange port body with gauge port	238
7.1.14	Through port 1.00" SAE Code 62 flange port body with gauge port	238
7.1.15	Through port 1.25" SAE Code 61 flange port body with gauge port	239
7.1.16	Through port 1.25" SAE Code 62 flange port body with gauge port	239
7.1.17	Through port 1.50" SAE Code 61 flange port body with gauge port	240
7.1.18	Through port 1.50" SAE Code 62 flange port body with gauge port	240
7.1.19	Through port 2.00" SAE Code 61 flange port body with gauge port	241
7.1.20	Through port 2.00" SAE Code 62 flange port body with gauge port	241
7.1.21	Sandwich mount through flange port 1.00" SAE Code 62 body with gauge port	242
7.1.22	Sandwich mount through flange port 2.00" SAE Code 61 body with gauge port	243
7.1.23	Sandwich mount through flange port 2.00" SAE Code 62 body with gauge port	243
7.1.24	Sandwich mount through flange port 2.00" SAE Code 61 body with gauge port	244
7.1.25	Sandwich mount through flange port 2.00" SAE Code 62 body with gauge port	244
7.1.26	Two cavity 2.00" SAE Code 61 flange port high capacity body	245
7.1.27	Two cavity 1.50" SAE Code 61 flange port body with gauge ports for cross-port relief applications	246
7.1.28	Two cavity 1.50" SAE Code 62 flange port body with gauge ports for cross-port relief applications	246
7.1.29	Two cavity 2.00" SAE Code 61 flange port body with gauge ports for cross-port relief applications	247
7.1.30	Two cavity 2.00" SAE Code 62 flange port body with gauge ports for cross-port relief applications	247
7.1.31	Body with reverse free flow check	248
7.1.32	1.25" SAE Code 61 flange port body with reverse free flow check for relief applications	249
7.1.33	1.25" SAE Code 62 flange port body with reverse free flow check for relief applications	249

7.1.34	1.50" SAE Code 61 flange port body with reverse free flow check for relief applications	250
7.1.35	1.50" SAE Code 62 flange port body with reverse free flow check for relief applications	250
7.1.36	2.00" SAE Code 61 flange port body with reverse free flow check for relief applications	251
7.1.37	2.00" SAE Code 62 flange port body with reverse free flow check for relief applications	251
7.2	T-19A	252
7.2.1	90 degree body	252
7.2.2	90 degree body with gauge port	252
7.2.3	90 degree body with high capacity port 3 and gauge port	253
7.2.4	Through port body with gauge port	253
7.2.5	Through port body with gauge port for reducing applications	254
7.2.6	Through port body with high capacity port 3 and gauge port for reducing/relieving applications	254
7.2.7	Inline 1.50" SAE Code 61 flange port body	255
7.2.8	Inline 2.00" SAE Code 61 flange port body	255
7.2.9	90 degree 1.00" SAE Code 61 flange port body	256
7.2.10	90 degree 1.00" SAE Code 62 flange port body	256
7.2.11	90 degree 1.00" SAE Code 61 flange port body with gauge port	257
7.2.12	90 degree 1.00" SAE Code 62 flange port body with gauge port	257
7.2.13	90 degree 1.25" SAE Code 61 flange port body	258
7.2.14	90 degree 1.25" SAE Code 62 flange port body	258
7.2.15	90 degree 1.25" SAE Code 61 flange port body with gauge port	259
7.2.16	90 degree 1.25" SAE Code 62 flange port body with gauge port.	259
7.2.17	90 degree 1.25" SAE Code 61 flange port body with high capacity port 3 and gauge port	260
7.2.18	90 degree 1.25" SAE Code 62 flange port body with high capacity port 3 and gauge port	260
7.2.19	90 degree 1.50" SAE Code 61 flange port body	261
7.2.20	90 degree 1.50" SAE Code 62 flange port body	261
7.2.21	90 degree 1.50" SAE Code 61 flange port body with gauge port	262
7.2.22	90 degree 1.50" SAE Code 62 flange port body with gauge port	262
7.2.23	90 degree 1.50" SAE Code 61 flange port body with high capacity port 3 and gauge port	263
7.2.24	90 degree 1.50" SAE Code 62 flange port body with high capacity port 3 and gauge port	263
7.2.25	90 degree 2.00" SAE Code 61 flange port body	264
7.2.26	90 degree 2.00" SAE Code 62 flange port body	264
7.2.27	90 degree 2.00" SAE Code 61 flange port body with gauge port	265
7.2.28	90 degree 2.00" SAE Code 62 flange port body with gauge port	265
7.2.29	90 degree 2.00" SAE Code 61 flange port body with high capacity port 3 and gauge port.	266
7.2.30	90 degree 2.00" SAE Code 62 flange port body with high capacity port 3 and gauge port	266
7.2.31	Through port 1.00" SAE Code 61 flange port body with gauge port	267
7.2.32	Through port 1.00" SAE Code 62 flange port body with gauge port	267

7.2.33	Through port 1.25" SAE Code 61 flange port body with gauge port	268
7.2.34	Through port 1.25" SAE Code 62 flange port body with gauge port	268
7.2.35	Through port 1.50" SAE Code 61 flange port body with gauge port	269
7.2.36	Through port 1.50" SAE Code 62 flange port body with gauge port	269
7.2.37	Through port 2.00" SAE Code 61 flange port body with gauge port.	270
7.2.38	Through port 2.00" SAE Code 62 flange port body with gauge port	270
7.2.39	Direct mount 1.25" SAE Code 61 body	271
7.2.40	Direct mount 1.25" SAE Code 62 body	271
7.2.41	Direct mount 1.50" SAE Code 61 body	272
7.2.42	Direct mount 1.50" SAE Code 62 body	272
7.2.43	Sandwich mount through port 1.50" SAE Code 61 body with gauge port	273
7.2.44	Sandwich mount through port 1.50" SAE Code 62 body with gauge port	273
7.2.45	Sandwich mount through flange port 1.50" SAE Code 61 body with gauge port	274
7.2.46	Sandwich mount through flange port 1.50" SAE Code 62 body with gauge port	274
7.2.47	Flange mount through port 1.50" SAE Code 61 body with threaded outlet and gauge port	275
7.2.48	Flange mount through port 1.50" SAE Code 62 body with threaded outlet and gauge port	275
7.2.49	Direct mount 90 degree 2.00" SAE Code 61 flange port body	276
7.2.50	Two cavity 2.00" SAE Code 61 flange port high capacity body	277
7.2.51	Two cavity 2.00" direct mount SAE Code 61 flange port high capacity body	277
7.2.52	Four cavity four-way 1.50" SAE Code 61 flange port logic body for directional applications	278
7.2.53	Five cavity four-way 1.50" SAE Code 61 flange port logic body for directional applications	278
7.2.54	Four cavity four-way 2.00" SAE Code 61 flange port logic body for directional applications	279
7.2.55	Five cavity four-way 2.00" SAE Code 61 flange port logic body for directional applications	279
7.2.56	90 degree 1.50" SAE Code 61 flange port body with shuttle	280
7.2.57	90 degree 1.50" SAE Code 62 flange port body with shuttle	280
7.2.58	90 degree 2.00" SAE Code 61 flange port body with shuttle	281
7.2.59	90 degree 2.00" SAE Code 62 flange port body with shuttle	281
7.2.60	Two cavity cross-piloted inline 1.50" SAE Code 61 flange port body for load control applications	282
7.2.61	Two cavity cross-piloted inline 1.50" SAE Code 61 flange port body with shuttle for load control applications	282
7.2.62	Two cavity cross-piloted inline 2.00" SAE Code 61 flange port body for load control applications	283
7.2.63	Two cavity cross-piloted inline 2.00" SAE Code 61 flange port body with shuttle for load control applications	283
7.2.64	Two cavity 90 degree cross-piloted 1.50" SAE Code 61 flange port body for load control applications	284
7.2.65	Two cavity 90 degree cross-piloted 1.50" SAE Code 61 flange port body with shuttle for load control applications	284
7.2.66	Two cavity 90 degree cross-piloted 1.50" SAE Code 62 flange port body for load control applications	285

7.2.67	Two cavity 90 degree cross-piloted 1.50" SAE Code 62 flange port body with shuttle for load control applications	285
7.2.68	Two cavity 90 degree cross-piloted 2.00" SAE Code 61 flange port body for load control applications	286
7.2.69	Two cavity 90 degree cross-piloted 2.00" SAE Code 61 flange port body with shuttle for load control applications	286
7.2.70	Body with reverse free flow check and gauge port	287
7.2.71	1.25" SAE Code 61 flange port body with reverse free flow check and gauge port	288
7.2.72	1.25" SAE Code 62 flange port body with reverse free flow check and gauge port	288
7.2.73	1.50" SAE Code 61 flange port body with reverse free flow check and gauge port	289
7.2.74	1.50" SAE Code 62 flange port body with reverse free flow check and gauge port	289
7.2.75	2.00" SAE Code 61 flange port body with reverse free flow check and gauge port	290
7.2.76	2.00" SAE Code 62 flange port body with reverse free flow check and gauge port	290
7.2.77	Body with reverse free flow check and gauge port for reducing applications	291
7.2.78	Body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications	291
7.2.79	1.25" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications	292
7.2.80	1.25" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications	292
7.2.81	1.50" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications	293
7.2.82	1.50" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications	293
7.2.83	1.50" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appli	294
7.2.84	1.50" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appli	294
7.2.85	2.00" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appli	295
7.2.86	2.00" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appli	295
7.2.87	2.00" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications	296
7.2.88	2.00" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications	296
7.3	T-24A	297
7.3.1	90 degree body	297
7.3.2	90 degree body with high capacity port 3 and gauge port	297
7.3.3	90 degree 1.25" SAE Code 61 flange port body	298
7.3.4	90 degree 1.25" SAE Code 62 flange port body	298
7.3.5	90 degree 1.50" SAE Code 61 flange port body	299
7.3.6	90 degree 1.50" SAE Code 62 flange port body	299
7.3.7	90 degree 2.00" SAE Code 61 flange port body	300

7.3.8	90 degree 2.00" SAE Code 62 flange port body	300
7.3.9	90 degree 1.25" SAE Code 61 high capacity flange port body with gauge port	301
7.3.10	90 degree 1.25" SAE Code 62 high capacity flange port body with gauge port	301
7.3.11	90 degree 1.50" SAE Code 61 high capacity flange port body with gauge port	302
7.3.12	90 degree 1.50" SAE Code 62 high capacity flange port body with gauge port	302
7.3.13	90 degree 2.00" SAE Code 61 high capacity flange port body with gauge port	303
7.3.14	90 degree 2.00" SAE Code 62 high capacity flange port body with gauge port	303
7.3.15	Direct mount 1.00" SAE Code 62 body	304
7.3.16	Direct mount 1.25" SAE Code 62 body	304
7.3.17	Direct mount 1.50" SAE Code 62 body	305
7.3.18	Two cavity cross-piloted body with common port 4 for load control applications	306
7.3.19	Two cavity cross-piloted body with independent port 4 for load control applications	306
7.3.20	Two cavity cross-piloted 1.50" SAE Code 61 flange port body with common port 4 for load control applications	307
7.3.21	Two cavity cross-piloted 1.50" SAE Code 62 flange port body with common port 4 for load control applications	307
7.3.22	Two cavity cross-piloted 2.00" SAE Code 61 flange port body with common port 4 for load control applications	308
7.3.23	Two cavity cross-piloted 2.00" SAE Code 62 flange port body with common port 4 for load control applications	308
7.3.24	Two cavity cross-piloted 1.50" SAE Code 61 flange port body with independent port 4 for load control applications	309
7.3.25	Two cavity cross-piloted 1.50" SAE Code 62 flange port body with independent port 4 for load control applications	309
7.3.26	Two cavity cross-piloted 2.00" SAE Code 61 flange port body with independent port 4 for load control applications	310
7.3.27	Two cavity cross-piloted 2.00" SAE Code 62 flange port body with independent port 4 for load control applications	310
7.3.28	Body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications	311
7.3.29	1.50" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appli	312
7.3.30	1.50" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appli	312
7.3.31	2.00" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appli	313
7.3.32	2.00" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving appli	313
7.4	T-34A	314
7.4.1	Body for flow divider/combiner applications	314
7.4.2	Four port body	314
7.4.3	1.00" SAE Code 61 flange port body for flow divider/combiner applications	315

7.4.4	1.00" SAE Code 62 flange port body for flow divider/combiner applications	315
7.4.5	1.25" SAE Code 61 flange port body for flow divider/combiner applications	316
7.4.6	1.25" SAE Code 62 flange port body for flow divider/combiner applications	316
7.4.7	1.50" SAE Code 61 flange port body for flow divider/combiner applications	317
7.4.8	1.50" SAE Code 62 flange port body for flow divider/combiner applications	317
8	Valve Assembly Packages	318
8.1	Valve Assembly Technical Information	325
8.2	Regenerative Valve Technical Information	365
8.3	Valve Assembly Package Locator	319
8.3.1	Solenoid Operated Ventable Relief	326
8.3.1.1	Normally Open	326
8.3.1.2	Normally Closed	326
8.3.2	Solenoid and Relief Pilot Control Assembly	338
8.3.2.1	Normally Open	338
8.3.2.2	Normal Closed	338
8.3.3	Cross Port Relief Assembly	339
8.3.3.1	Normally Open	339
8.3.3.2	Normally Closed	339
8.3.4	Hydrostatic Transmission Assembly	344
8.3.4.1	Inline body, SAE-8	344
8.3.4.2	.75" SAE flange port body	345
8.3.4.3	Inline body, SAE-16	346
8.3.4.4	1.00" SAE flange port body, code 61	347
8.3.4.5	1.00" SAE flange port body, code 62	347
8.3.4.6	1.25" SAE code 61 flange port body	348
8.3.4.7	1.25" SAE code 62 flange port body	349
8.3.4.8	1.50" SAE code 61 flange port body	350
8.3.4.9	1.50" SAE code 62 flange port body	350
8.3.4.10	2.00" SAE code 61 flange port body	351
8.3.4.11	2.00" SAE code 62 flange port body	351
8.3.5	Hot Oil Shuttle and Relief Assembly	352
8.3.5.1	Inline body, SAE-12	352
8.3.5.2	.75" SAE flange port body, Code 61	353
8.3.5.3	.75" SAE flange port body, Code 62	353
8.3.5.4	Inline body, SAE-16, Port T: SAE-10	354
8.3.5.5	1.00" SAE flange port, code 61	355
8.3.5.6	1.00" SAE flange port, code 62	355
8.3.5.7	Inline body, SAE-16, Port T: SAE-12	356
8.3.5.8	1.25" SAE flange port body, Code 61	357
8.3.5.9	1.25" SAE flange port body, Code 62	357
8.3.5.10	Inline body, SAE-20	358
8.3.5.11	1.50" SAE flange port body, Code 61	359
8.3.5.12	1.50" SAE flange port body, Code 62	359
8.3.5.13	2.00" SAE flange port body, Code 61	360
8.3.5.14	2.00" SAE flange port body, Code 62	360

8.3.6	Flow Divider/Combiner Tractive Drive Assembly	361
8.3.6.1	Ports 2,3, and 4: SAE-10	361
8.3.6.2	Ports 2,3, and 4: SAE-12	362
8.3.6.3	Ports 2,3, and 4: SAE-16	363
8.3.6.4	Ports 2,3, and 4: SAE-20	364
8.3.7	Regeneration Assembly, Pressure Sensitive	366
8.3.7.1	60 L/min maximum regenerative flow	366
8.3.7.2	40 L/min maximum regenerative flow with load holding check valve	366
8.3.7.3	120 L/min maximum regenerative flow	367
8.3.7.4	80 L/min maximum total flow with load holding check valve	367
8.3.7.5	240 L/min maximum regenerative flow, SAE-20	368
8.3.7.6	200 L/min maximum regenerative flow, 1.00" SAE Code 61	369
8.3.7.7	460 L/min maximum regenerative flow, 1.25" SAE Code 62	370
8.3.7.8	480 L/min maximum regenerative flow, SAE-20	371
8.3.7.9	960 L/min maximum regenerative flow, 2.00" SAE code 61 flange	372
8.3.8	Accumulator Dump Assembly	373
8.3.8.1	Ports P,T,A1 and A2: SAE-12	373
8.3.8.2	Ports P,A1 and A2: SAE-20	374
8.3.8.3	Ports P,A1 and A2: 1.25" SAE Code 61 flange	374
8.3.9	Pump Circuit Control Assembly, Suitable for Reservoir Mounting	375
8.3.9.1	For use with multiple pump circuits	375
8.3.9.2	For single pump circuits	376
8.3.10	Pressure Compensated Priority Flow Control Assembly	377
8.3.10.1	Up to 23 L/min Priority Flow	377
8.3.10.2	Up to 45 L/min Priority Flow	377
8.3.10.3	Up to 95 L/min Priority Flow	378
8.3.10.4	Up to 95 L/min Priority Flow, 1.25" SAE Code 61 flange	378
8.3.10.5	Up to 200 L/min Priority Flow, 2.00" SAE Code 61 flange	379
	Гидравлические блоки с присоединениям под CETOP клапана_SUN	380
1	Table of Contents	380
2	Sandwich Body Technical Tips	388
3	Sandwich Body Locator	393
4	ISO 03 Sandwich Bodies	411
4.1	Relief Valves	411
4.1.1	P to T, High Capacity	411
4.1.2	P to T, Externally Vented	412
4.1.3	P to T, N. O., Solenoid Vented	413
4.1.4	P to T, N. C., Solenoid Vented	413
4.1.5	Out of T, High Capacity	414
4.1.6	A to T, High Capacity	415
4.1.7	B toT, High Capacity	415
4.1.8	A to T, FF check T to B	416
4.1.9	B toT, FF check to T to A	416
4.1.10	A to B, High Capacity	417
4.1.11	B to A, High Capacity	417

4.1.12	A to T, Externally Vented	418
4.1.13	B to T, Externally Vented	418
4.1.14	A and B to T, High Capacity	419
4.1.15	A to B and B to A, High Capacity, Cross Port	420
4.2	Sequence Valves	421
4.2.1	In to P	421
4.2.2	In to A, Reverse FF Check	422
4.2.3	Out of B, Reverse FF Check	422
4.2.4	In to B, Reverse FF Check	422
4.2.5	Out of A, Reverse FF Check	422
4.3	Reducing Valves	423
4.3.1	On P, Drained to T	423
4.3.2	On P, Drained Externally	424
4.3.3	On A Drained to B	425
4.3.4	On B Drained to A	425
4.3.5	On A Drained Externally	426
4.3.6	On B Drained Externally	426
4.3.7	On A Drain to T, Reverse FF Check	427
4.3.8	On B Drain to T, Reverse FF Check	427
4.3.9	On A and B, Drains to Opposite Port	428
4.4	Reducing/Relieving Valves	429
4.4.1	On P Tank to T Drained to T	429
4.4.2	On P Tank to T Vented Externally	430
4.4.3	On P Tank to T Drained Externally	430
4.4.4	On A Tank to B Drained to B	431
4.4.5	On B Tank to A Drained to A	431
4.4.6	On A Tank to T Drained to T Reverse FF Check	432
4.4.7	On B Tank to T Drained to T Reverse FF Check	432
4.4.8	On A and B Tanks and Drains to Opposite Port	433
4.5	Counterbalance Valves	434
4.5.1	On A Pilot from B	434
4.5.2	On B Pilot from A	434
4.5.3	On A Pilot from B Vent to T	435
4.5.4	On B Pilot from A Vent to T	435
4.5.5	On A No pilot assist	436
4.5.6	On B No pilot assist	436
4.5.7	On A and B Cross-Piloted	437
4.5.8	On A and B Cross-Piloted Vents to T	438
4.5.9	Cushion Lock Circuit On A and B	439
4.6	Pilot Operated Check Valves	440
4.6.1	On A Pilot from B	440
4.6.2	On B Pilot from A	440
4.6.3	On A Pilot from B Vent to T	441
4.6.4	On B Pilot from A Vent to T	441
4.6.5	On A and B Cross-Piloted	442

4.6.6	On A and B Cross–Piloted Vents to T	443
4.7	Flow Control Valves	444
4.7.1	Meter–In P	444
4.7.2	Meter–Out T	444
4.7.3	Meter–In P, High Capacity	444
4.7.4	Meter–Out T, High Capacity	444
4.7.5	Bleed–Off P to T	445
4.7.6	Priority Flow on P	446
4.7.7	Meter–In A	447
4.7.8	Meter–Out A	447
4.7.9	Meter–In B	447
4.7.10	Meter–Out B	447
4.7.11	Meter–In A, High Capacity	447
4.7.12	Meter–Out A, High Capacity	447
4.7.13	Meter–In B, High Capacity	447
4.7.14	Meter–Out B, High Capacity	447
4.7.15	Bleed–Off A to T	448
4.7.16	Bleed–Off B to T	448
4.7.17	Bleed–Off A to T, High Capacity	448
4.7.18	Bleed–Off B to T, High Capacity	448
4.7.19	Meter–In A and B	449
4.7.20	Meter–Out A and B	449
4.7.21	Meter–In A and B, High Capacity	449
4.7.22	Meter–Out A and B, High Capacity	449
4.7.23	Bleed–Off A and B to T	450
4.7.24	Bleed–Off A and B to T, High Capacity	450
4.7.25	Bleed–Off A to B and B to A	451
4.8	Check Valves	452
4.8.1	On P	452
4.8.2	On T	452
4.8.3	On P High Capacity	452
4.8.4	On T High Capacity	452
4.8.5	T to P	453
4.8.6	On A Free Flow Into Valve	454
4.8.7	On A Free Flow Out of Valve	454
4.8.8	On B Free Flow Into Valve	454
4.8.9	On B Free Flow Out of Valve	454
4.8.10	On A Free Flow Into Valve. High Capacity	454
4.8.11	On A Free Flow Out of Valve, High Capacity	454
4.8.12	On B Free Flow Into Valve, High Capacity	454
4.8.13	On B Free Flow Out of Valve,High Capacity	454
4.8.14	T to A	455
4.8.15	T to B	455
4.8.16	T to A, High Capacity	455
4.8.17	T to B, High Capacity	455

4.8.18	A to B	456
4.8.19	B to A	456
4.8.20	B to P, For Regenerative Circuits	456
4.8.21	On A and B, Free Flow Out of Valve	457
4.8.22	On A and B, Free Flow Into Valve	457
4.8.23	On A and B Free Flow Out of Valve, High Capacity	457
4.8.24	On A and B Free Flow Into Valve, High Capacity	457
4.8.25	T to A and B	458
4.8.26	T to A and B, High Capacity	458
4.9	Circuit Savers	459
4.9.1	Pilot Choke	459
4.9.2	Shuttle A and B, Output External	460
4.9.3	Checks from A and B–Adapter to ISO 05 w/Y Port	460
4.9.4	Pressure Compensator, Restrictive	461
4.9.5	Pressure Compensator, Restrictive, w/Load–Sensing Port	461
4.9.6	Pressure Compensator, Bypass	461
4.9.7	Flow Divider and/or Combiner on A	462
4.9.8	Flow Divider and/or Combiner on B	462
4.9.9	B to A, Regenerative	463
4.9.10	A to B, Regenerative	463
4.9.11	B to A, Regenerative, Full Time	464
4.9.12	A to B, Regenerative, Full Time	464
4.9.13	Swap Block, Swaps A and B	465
4.9.14	P and A, Tap in Manifold	465
4.9.15	P and B, Tap in Manifold	465
4.9.16	A and T, Tap in Manifold	465
4.9.17	B and T, Tap in Manifold	465
4.9.18	A and B, Tap in Manifold	465
4.10	Side Ported Subplates	466
4.10.1	Relief P to T	466
4.10.2	Relief P to T, Check on P	467
4.10.3	Reducing on P	469
4.10.4	Reducing/Relieving on P	469
4.10.5	Bypass Compensator for Proportional Valves	470
4.10.6	Relief P to T and Bypass Flow Regulator	471
4.10.7	Relief P to T Regenerative Regenerative B to A	472
4.11	Rear Ported Subplates	466
4.11.1	Relief P to T	466
4.11.2	Relief P to T, Check on P	467
4.11.3	Reducing on P	469
4.11.4	Reducing/ Relieving on P	469
4.12	Side Ported Subplates with Gasket Mount Tank Port	466
4.12.1	Relief P to T	466
4.12.2	Air–Bleed and Start–Up	468
4.12.3	Reducing on P	469

4.12.4	Reducing/ Relieving on P	469
4.13	Bar Manifolds	473
4.13.1	Mounting Bracket Dimension Chart	473
4.13.2	Parallel Circuit with Relief Cavity	473
4.13.2.1	Ports P,T: SAE-10, Ports A,B: SAE-8	473
4.14	Cover Plates	476
4.14.1	All Ports Blocked	476
4.14.2	P to A and B to T	476
4.14.3	P to B and A to T	476
4.14.4	P to T, A and B blocked	477
4.14.5	A to B, P and T blocked	477
4.14.6	P to B, A and T blocked	477
4.14.7	P to A and B, T blocked	478
5	ISO 05 Sandwich Bodies	479
5.1	Relief Valves	479
5.1.1	P to T	479
5.1.2	P to T, High Capacity	479
5.1.3	P to T, Externally Vented	480
5.1.4	P to T, N.O. Solenoid Vented	481
5.1.5	P to T, N.C. Solenoid Vented	481
5.1.6	Out of T, High Capacity	482
5.1.7	A to T	483
5.1.8	A to T, High Capacity	483
5.1.9	A to T, FF Check T to B	484
5.1.10	A to B	485
5.1.11	B to A	485
5.1.12	A to B, High Capacity	485
5.1.13	B to A, High Capacity	485
5.1.14	A to T, Externally Vented	486
5.1.15	B to T, Externally Vented	486
5.1.16	A to T, N.C. Solenoid Vented	487
5.1.17	B to T, N.C. Solenoid Vented	487
5.1.18	A to T, N.O. Solenoid Vented	487
5.1.19	B to T, N.O. Solenoid Vented	487
5.1.20	A and B to T	488
5.1.21	A and B to T, High Capacity	488
5.1.22	A to B and B to A, Cross Port	489
5.1.23	A to B and B to A, High Capacity, Cross Port	489
5.1.24	B to T	490
5.1.25	B to T, High Capacity	490
5.2	Sequence Valves	491
5.2.1	In to P	491
5.2.2	In to A, Reverse FF Check	492
5.2.3	Out of B, Reverse FF Check	492
5.2.4	In to B, Reverse FF Check	492

5.2.5	Out of A, Reverse FF Check	492
5.3	Reducing Valves	493
5.3.1	On P, Drained to T	493
5.3.2	On P, Drained Externally	494
5.3.3	On A Drained to B	495
5.3.4	On A, Drained Externally	496
5.3.5	On B, Drained Externally	496
5.3.6	On A Drain to T, Reverse FF Check	497
5.3.7	On B Drain to T, Reverse FF Check	497
5.3.8	On B Drained to A	498
5.3.9	On A and B, Drains to Opposite Port	499
5.4	Reducing/Relieving Valves	500
5.4.1	On P Tank to T, Drained to T	500
5.4.2	On P Tank to T Drained to T, High Capacity	500
5.4.3	On P Tank to T, Vented Externally	501
5.4.4	On P Tank to T, Drained Externally	501
5.4.5	On P Tank to T, N.O. Solenoid on Drain	502
5.4.6	On P Tank to T, N.C. Solenoid on Drain	502
5.4.7	On A Tank to B Drained T	503
5.4.8	On A Tank to T Drained to T, Reverse FF Check	504
5.4.9	On B Tank to T Drained to T, Reverse FF Check	504
5.4.10	On A tank to T, Vented Externally Reverse FF Check	505
5.4.11	On A tank to T, Drained Externally Reverse FF Check	505
5.4.12	On B Tank to T, Vented Externally Reverse FF Check	505
5.4.13	On B Tank to T, Drained Externally Reverse FF Check	505
5.4.14	On B Tank to A Drained to A	506
5.4.15	On A and B, Tanks and Drains to Opposite Port	507
5.5	Counterbalance Valves	508
5.5.1	On A Pilot from B	508
5.5.2	On A Pilot from B Vent to T	509
5.5.3	On B Pilot from A Vent to T	509
5.5.4	On A, No Pilot Assist	510
5.5.5	On B, No Pilot Assist	510
5.5.6	On B Pilot from A	511
5.5.7	On A and B, Cross-Piloted	512
5.5.8	On A and B, Cross-Piloted Vents to T	513
5.5.9	Cushion Lock Circuit On A and B	514
5.6	Pilot Operated Check Valves	515
5.6.1	On A Pilot from B	515
5.6.2	On A Pilot from B Vent to T	516
5.6.3	On B Pilot from A Vent to T	516
5.6.4	On B Pilot from A	517
5.6.5	On A and B, Cross-Piloted	518
5.6.6	On A and B, Cross-Piloted Vents to T	519
5.7	Flow Control	520

5.7.1	Meter–In P	520
5.7.2	Bleed–Off P to T	521
5.7.3	Meter–In A	522
5.7.4	Meter–Out B	522
5.7.5	Meter–Out A	523
5.7.6	Meter–In B	523
5.7.7	Bleed–Off A to T	524
5.7.8	Bleed–Off B to T	524
5.7.9	Meter–In A and B	525
5.7.10	Meter–Out A and B	525
5.7.11	Bleed–Off A and B to T	526
5.7.12	Bleed–Off A to B and B to A	527
5.7.13	Meter–Out T	528
5.8	Check Valves	529
5.8.1	On P	529
5.8.2	On A, Free Flow Out of Valve	530
5.8.3	On B, Free Flow Into Valve	530
5.8.4	On A, Free Flow Into Valve	531
5.8.5	On B, Free Flow Out of Valve	531
5.8.6	B to A	532
5.8.7	A to B	532
5.8.8	On A and B, Free Flow Out of Valve	533
5.8.9	On A and B, Free Flow Into Valve	533
5.8.10	T to A and B	534
5.8.11	On T	535
5.9	Circuit Savers	536
5.9.1	Air–Bleed and Start–Up	536
5.9.2	Pilot Choke	537
5.9.3	Shuttle A and B, Output External	538
5.9.4	Checks from A and B–Adapter to ISO 05 w/Y Port	538
5.9.5	Pressure Compensator, Restrictive	539
5.9.6	Pressure Compensator, Restrictive w/Load–Sensing Port	539
5.9.7	Pressure Compensator, Bypass	539
5.9.8	B to A Regenerative	540
5.9.9	A to B Regenerative, Full Time	541
5.9.10	B to A Regenerative, Full Time	541
5.9.11	A to B Regenerative	542
5.9.12	P and A Tap in Manifold	543
5.9.13	P, T, A and B Tap in Manifold	543
5.9.14	A and B Tap in Manifold	544
5.9.15	Swap Block Swaps A and B	544
5.9.16	Adapter to Next Smaller Valve Pattern	545
5.9.17	ISO 05 to ISO 05 with Dual Tank Ports	545
5.9.18	ISO 05 to ISO 05 with X and Y, Access to X and Y (Amer)	546
5.9.19	ISO 05 to ISO 05 with X and Y, Access to X and Y (Euro)	546

5.10	Side Ported Subplates	547
5.10.1	Relief P to T	547
5.10.2	Relief P to T Check on P	548
5.10.3	Air-Bleed and Start-Up	549
5.10.4	Reducing on P	550
5.10.5	Reducing/ Relieving on P	550
5.10.6	Bypass Compensator for Proportional Valves	551
5.10.7	Relief P to T and Bypass Flow Regulator	552
5.10.8	Relief P to T Regenerative Regenerative B to A	553
5.11	Rear Ported Subplates	547
5.11.1	Relief P to T	547
5.11.2	Relief P to T Check on P	548
5.11.3	Air-Bleed and Start-Up	549
5.11.4	Reducing on P	550
5.11.5	Reducing/ Relieving on P	550
5.12	Side Ported Subplates with Gasket Mount Tank Port	547
5.12.1	Relief P to T	547
5.12.2	Air-Bleed and Start-Up	549
5.12.3	Reducing on P	550
5.12.4	Reducing/ Relieving on P	550
5.13	Bar Manifolds	554
5.13.1	Mounting Bracket Dimension Chart	473
5.13.2	Parallel Circuit with Relief Cavity	554
5.13.3	Ports P,T: SAE-12, Ports A,B: SAE-8	554
5.13.3.1	One Station	554
5.13.3.2	Two Station	555
5.13.3.3	Three Station	556
5.13.3.4	Four Station	557
5.13.3.5	Five Station	558
5.13.4	Port T: SAE-16, Ports A,B,P: SAE-12	554
5.13.4.1	One Station, High Capacity	554
5.13.4.2	Two Station, High Capacity	555
5.13.4.3	Three Station, High Capacity	556
5.13.4.4	Four Station, High Capacity	557
5.13.4.5	Five Station, High Capacity	558
6	ISO 05xy Sandwich Bodies	559
6.1	Relief Valves	559
6.1.1	P to T, High Capacity	559
6.1.2	P to T, Externally Vented	560
6.1.3	A to T, High Capacity	561
6.1.4	A to T, FF Check T to B	562
6.1.5	A to B, High Capacity	563
6.1.6	B to A, High Capacity	563
6.1.7	A and B to T, High Capacity	564
6.1.8	A to B and B to A, Cross Port	565

6.1.9 B to T, High Capacity	566
6.2 Sequence Valves	568
6.2.1 In to P	568
6.2.2 In to A, Reverse FF Check	569
6.2.3 Out of B, Reverse FF Check	569
6.2.4 Out of A, Reverse FF Check	569
6.2.5 In to B, Reverse FF Check	569
6.3 Reducing Valves	570
6.3.1 On P Drained to T	570
6.3.2 On A Drained to B	571
6.3.3 On A Drain to T, Reverse FF Check	572
6.3.4 On B Drain to T, Reverse FF Check	572
6.3.5 On B Drained A	573
6.3.6 On A and B, Drains to Opposite Port	574
6.4 Reducing/Relieving Valves	575
6.4.1 On P Tank to T Drained T	575
6.4.2 On P Tank to T, Vented Externally	576
6.4.3 On P Tank to T, Drained Externally	576
6.4.4 On A Tank to B Drained B	577
6.4.5 On A Tank to T Drained to T, Reverse FF Check	578
6.4.6 On B Tank to T Drained to T, Reverse FF Check	578
6.4.7 On A tank to T, Vented Externally Reverse FF Check	579
6.4.8 On A tank to T, Drained Externally Reverse FF Check	579
6.4.9 On B Tank to T, Vented Externally Reverse FF Check	579
6.4.10 On B Tank to T, Drained Externally Reverse FF Check	579
6.4.11 On B Tank to A Drained A	580
6.4.12 On A and B, Tanks and Drains to Opposite Port	581
6.5 Counterbalance Valves	582
6.5.1 On A Pilot from B	582
6.5.2 On A Pilot from B Vent to T	583
6.5.3 On B Pilot from A Vent to T	583
6.5.4 On A No Pilot Assist	584
6.5.5 On B No pilot assist	584
6.5.6 On B Pilot from A	585
6.5.7 On A and B, Cross–Piloted	586
6.5.8 On A and B, Cross–Piloted Vents to T	587
6.5.9 Cushion Lock Circuit On A and B	588
6.6 Pilot Operated Check Valves	589
6.6.1 On A Pilot from B	589
6.6.2 On A Pilot from B Vent to T	590
6.6.3 On B Pilot from A Vent to T	590
6.6.4 On B Pilot from A	591
6.6.5 On A and B, Cross–Piloted	592
6.6.6 On A and B, Cross–Piloted Vents to T	593
6.7 Flow Control Valves	594

6.7.1	Meter–In P	594
6.7.2	Meter–In P, High Capacity	594
6.7.3	Priority Flow P	595
6.7.4	Meter–In A	596
6.7.5	Meter–Out B	596
6.7.6	Meter–In A, High Capacity	596
6.7.7	Meter–Out A	597
6.7.8	Meter–In B	597
6.7.9	Meter–Out A, High Capacity	597
6.7.10	Meter–In B, High Capacity	598
6.7.11	Meter–Out B, High Capacity	598
6.7.12	Priority Flow On A, Bypass to T, Reverse FF Check	599
6.7.13	Priority Flow On B, Bypass to T, Reverse FF Check	599
6.7.14	Meter–In A and B	600
6.7.15	Meter–Out A and B	600
6.7.16	Meter–In A and B, High Capacity	600
6.7.17	Meter–Out A and B, High Capacity	600
6.7.18	Bleed–Off A and B to T	601
6.7.19	Bleed–Off A to B and B to A	602
6.7.20	Meter–Out T	603
6.8	Check Valves	605
6.8.1	On P	605
6.8.2	On P, High Capacity	605
6.8.3	On A, Free Flow Out of Valve	606
6.8.4	On B, Free Flow Into Valve	606
6.8.5	On A, Free Flow Out of Valve, High Capacity	606
6.8.6	On A, Free Flow Into Valve	607
6.8.7	On B, Free Flow Out of Valve	607
6.8.8	On A Free Flow Into Valve, High Capacity	607
6.8.9	B to A	608
6.8.10	A to B	608
6.8.11	On B, Free Flow Out of Valve, High Capacity	609
6.8.12	On B, Free Flow Into Valve, High Capacity	609
6.8.13	On A and B, Free Flow Out of Valve	610
6.8.14	On A and B, Free Flow Into Valve	610
6.8.15	On A and B, Free Flow Out of Valve, High Capacity	610
6.8.16	On A and B, Free Flow Into Valve, High Capacity	610
6.8.17	T to A and B	611
6.8.18	On T	612
6.9	Circuit Savers	614
6.9.1	Air–Bleed and Start–Up	614
6.9.2	Shuttle A and B, Output External	615
6.9.3	Checks from A and B–Adapter to ISO 05 w/Y Port	615
6.9.4	Pressure Compensator, Restrictive	616
6.9.5	Pressure Compensator, Restrictive w/Load–Sensing Port	616

6.9.6	Pressure Compensator, Bypass	616
6.9.7	B to A Regenerative	617
6.9.8	ISO 05 with X and Y Amer to Euro	618
6.9.9	ISO 05 with X and Y Euro to Amer	618
6.9.10	Bosch L Port to ISO 05 X Port, European	619
6.9.11	ISO 05 X Port, European, to Bosch L Port	619
6.10	Side Ported Subplates	620
6.10.1	Relief P to T	620
6.11	Bar Manifolds	621
6.11.1	Mounting Bracket Dimension Chart	473
6.11.2	(U.S) Parallel Circuit with Relief Cavity and Y Port	621
6.11.2.1	Port T: SAE-16, Ports A,B,P: SAE-12, Port Y: SAE-6	621
6.11.3	(CETOP) Parallel Circuit with Relief Cavity and Y Port	621
6.11.3.1	Port T: SAE-16, Ports A,B,P: SAE-12, Port Y: SAE-6	621
6.12	Cover Plates	627
6.12.1	All Ports Blocked	627
6.12.2	P to A and B to T	627
6.12.3	P to B and A to T	627
6.12.4	P to T, A and B blocked	628
6.12.5	A to B, P and T blocked	628
6.12.6	P to B, A and T blocked	628
7	IOS 07 Sandwich Bodies	630
7.1	Relief Valves	630
7.1.1	P to T	630
7.1.2	P to T, Externally Vented	631
7.1.3	P to T, N.O. Solenoid Vented	632
7.1.4	P to T, N.C. Solenoid Vented	632
7.1.5	Out of T	633
7.1.6	Out of T, High Capacity	633
7.1.7	A to T	634
7.1.8	A to T, FF Check T to B	635
7.1.9	A and B to T, High Capacity	636
7.1.10	A to B and B to A,Cross Port	637
7.1.11	B to T	638
7.2	Sequence Valves	639
7.2.1	In to P	639
7.2.2	In to A, Reverse FF Check	640
7.2.3	Out of A, Reverse FF Check	640
7.2.4	In to B, Reverse FF Check	641
7.2.5	Out of B, Reverse FF Check	641
7.3	Reducing Valves	642
7.3.1	On P, Drained to T	642
7.3.2	On P, Drained Externally	643
7.3.3	On A Drained to B	644
7.3.4	On A, Drained Externally	645

7.3.5	On B Drained to A	647
7.3.6	On A and B, Drains to Opposite Port	648
7.4	Reducing/Relieving Valves	649
7.4.1	On P Tank to T Drained to T	649
7.4.2	On A Tank to B Drained to B	650
7.4.3	On A Tank to T Drained to T, Reverse FF Check	651
7.4.4	On B Tank to T Drained to T, Reverse FF Check	651
7.4.5	On B Tank to A Drained to A	652
7.4.6	On A and B, Tanks and Drains to Opposite Port	653
7.5	Counterbalance Valves	654
7.5.1	On A Pilot from B	654
7.5.2	On A Pilot from B Vent to T	655
7.5.3	On B Pilot from A Vent to T	655
7.5.4	On A, No pilot assist	656
7.5.5	On B, No pilot assist	656
7.5.6	On B Pilot from A	657
7.5.7	On A and B, Cross–Piloted	658
7.5.8	On A and B, Cross–Piloted Vents to T	659
7.6	Pilot Operated Checks	660
7.6.1	On A Pilot from B	660
7.6.2	On A Pilot from B Vent to T	661
7.6.3	On B Pilot from A Vent to T	661
7.6.4	On B Pilot from A	662
7.6.5	On A and B, Cross–Piloted	663
7.6.6	On A and B, Cross–Piloted Vents to T	664
7.7	Flow Control Valves	665
7.7.1	Meter–In P	665
7.7.2	Meter–In P, High Capacity	665
7.7.3	Meter–In A	666
7.7.4	Meter–In A, High Capacity	666
7.7.5	Meter–Out A	667
7.7.6	Meter–Out A, High Capacity	667
7.7.7	Meter–In B	668
7.7.8	Meter–In B, High Capacity	668
7.7.9	Meter–Out B	669
7.7.10	Meter–Out B, High Capacity	669
7.7.11	Meter–In A and B	670
7.7.12	Meter–In A and B, High Capacity	670
7.7.13	Meter–Out A and B	671
7.7.14	Meter–Out A and B, High Capacity	671
7.7.15	Meter–Out T	672
7.7.16	Meter–Out T, High Capacity	672
7.8	Check Valves	673
7.8.1	On P	673
7.8.2	On A, Free Flow Out of Valve	674

7.8.3	On A, Free Flow Out of Valve, High Capacity	674
7.8.4	On A, Free Flow Into Valve	675
7.8.5	On A, Free Flow Into Valve, High Capacity	675
7.8.6	On B, Free Flow Out of Valve	676
7.8.7	On B, Free Flow Out of Valve, High Capacity	676
7.8.8	On B, Free Flow Into Valve	677
7.8.9	On B Free Flow Into Valve, High Capacity	677
7.8.10	On A and B, Free Flow of Valve	678
7.8.11	On A and B Free Flow Out of Valve, High Capacity	678
7.8.12	On A and B, Free Flow Into Valve	679
7.8.13	On A and B, Free Flow Into Valve, High Capacity	679
7.8.14	On T	680
7.9	Circuit Savers	681
7.9.1	Air-Bleed and Start-Up	681
7.9.2	Shuttle A and B, Output External	682
7.9.3	Checks from A and B Output to Y Port	682
7.9.4	Pressure Compensator, Restrictive	683
7.9.5	Pressure Compensator, Restrictive w/Load-Sensing Port	683
7.9.6	Pressure Compensator, Bypass	683
7.9.7	B to A, Regenerative	684
7.9.8	B to A Regenerative, Full Time	685
7.9.9	A to B Regenerative, Full Time	685
7.9.10	A to B Regenerative	686
7.10	Side Ported Subplates	687
7.10.1	Relief P to T	687
7.10.2	Air-Bleed and Start-Up	687
7.11	Bar Manifolds	688
7.11.1	Mounting Bracket Dimension Chart	473
7.11.2	Parallel Circuit with Relief Cavity and Y Port	688
7.11.2.1	Port T: SAE-16, Ports A,B,P: SAE-12, Port Y: SAE-6	688
8	ISO 08 Sandwich Bodies	690
8.1	Relief Valves	690
8.1.1	P to T	690
8.1.2	P to T, High Capacity	690
8.1.3	P to T, Externally Vented	691
8.1.4	P to T, N.O. Solenoid Vented	692
8.1.5	P to T, N.C. Solenoid Vented	692
8.1.6	Out of T	693
8.1.7	Out of T, High Capacity	693
8.1.8	A to T	694
8.1.9	A to T, High Capacity	694
8.1.10	A to T, Externally Vented	695
8.1.11	B to T, Externally Vented	695
8.1.12	A and B to T, High Capacity	696
8.1.13	A to B and B to A, Cross Port	697

8.1.14	A to B and B to A, High Capacity, Cross Port	697
8.1.15	B to T	698
8.1.16	B to T, High Capacity	698
8.2	Sequence Valves	699
8.2.1	In to P	699
8.2.2	In to A, Reverse FF Check	700
8.2.3	Out of A, Reverse FF Check	700
8.2.4	Out of B, Reverse FF Check	701
8.3	Reducing Valves	702
8.3.1	On P, Drained to T	702
8.3.2	On P, Drained to T, High Capacity	702
8.3.3	On P, Drained Externally	703
8.3.4	On A Drained B	704
8.3.5	On A Drained to B, High Capacity	704
8.3.6	On A Drain to T, Reverse FF Check	705
8.3.7	On B Drain to T, Reverse FF Check	705
8.3.8	On B Drained A	706
8.3.9	On B Drained to A, High Capacity	706
8.3.10	On A and B, Drains to Opposite Port	707
8.3.11	On A and B Drains to Opposite Port, High Capacity	707
8.4	Reducing/Relieving Valves	708
8.4.1	On P Tank to T Drained to T	708
8.4.2	On P Tank to T Drained to T, High Capacity	708
8.4.3	On P Tank to T, Vented Externally	709
8.4.4	On P Tank to T, Drained Externally	709
8.4.5	On A Tank to B, Drained to B	710
8.4.6	On A Tank to B Drained to B, High Capacity	710
8.4.7	On A Tank to T Drained to T, Reverse FF Check	711
8.4.8	On B Tank to T Drained to T, Reverse FF Check	711
8.4.9	On B Tank to A Drained A	712
8.4.10	On B Tank to A Drained to A,High Capacity	712
8.4.11	On A and B, Tanks and Drains to Opposite Port	713
8.4.12	On A and B Tanks and Drains to Opposite Port, High Capacity	713
8.5	Counterbalance Valves	714
8.5.1	On A Pilot from B	714
8.5.2	On A Pilot from B, High Capacity	714
8.5.3	On A Pilot from B Vent to T	715
8.5.4	On B Pilot from A Vent to T	715
8.5.5	On A No pilot assist	716
8.5.6	On B Pilot from A	717
8.5.7	On B Pilot from A, High Capacity	717
8.5.8	On A and B, Cross–Piloted	718
8.5.9	On A and B, Cross–Piloted, High Capacity	718
8.5.10	On A and B, Cross–Piloted Vents to T	719
8.6	Pilot Operated Check Valves	720

8.6.1	On A Pilot from B	720
8.6.2	On A Pilot from B, High Capacity	720
8.6.3	On A Pilot from B Vent to T	721
8.6.4	On B Pilot from A Vent to T	721
8.6.5	On B Pilot from A	722
8.6.6	On B Pilot from A, High Capacity	722
8.6.7	On A and B, Cross-Piloted	723
8.6.8	On A and B, Cross-Piloted, High Capacity	723
8.6.9	On A and B, Cross-Piloted, Vents to T	724
8.7	Flow Control Valves	725
8.7.1	Meter-In P	725
8.7.2	Meter-In P, High Capacity	725
8.7.3	Bleed-Off P to T	726
8.7.4	Meter-In A	727
8.7.5	Meter-In A, High Capacity	727
8.7.6	Meter-Out A	728
8.7.7	Meter-Out A, High Capacity	728
8.7.8	Bleed-Off A to T	729
8.7.9	Meter-In B	730
8.7.10	Meter-In B, High Capacity	730
8.7.11	Meter-Out B	731
8.7.12	Meter-Out B, High Capacity	731
8.7.13	Meter-Out B	732
8.7.14	Meter-In A and B	733
8.7.15	Meter-In A and B, High Capacity	733
8.7.16	Meter-Out A and B	734
8.7.17	Meter-Out A and B, High Capacity	734
8.7.18	Meter-Out T	735
8.7.19	Meter-Out T, High Capacity	735
8.8	Check Valves	736
8.8.1	On P	736
8.8.2	On P, High Capacity	736
8.8.3	On A, Free Flow Out of Valve	737
8.8.4	On A, Free Flow Out of Valve, High Capacity	737
8.8.5	On A, Free Flow Into Valve	738
8.8.6	On A, Free Flow Into Valve, High Capacity	738
8.8.7	On B, Free Flow Out of Valve	739
8.8.8	On B, Free Flow Out of Valve, High Capacity	739
8.8.9	On B, Free Flow Into Valve	740
8.8.10	On B, Free Flow Into Valve, High Capacity	740
8.8.11	On A and B, Free Flow Out of Valve	741
8.8.12	On A and B, Free Flow Out of Valve, High Capacity	741
8.8.13	On A and B, Free Flow Into Valve	742
8.8.14	On A, Free Flow Into Valve, High Capacity	742
8.8.15	T to A and B	743

8.8.16	T to A and B, High Capacity	743
8.8.17	On T	744
8.8.18	On T, High Capacity	744
8.9	Circuit Savers	745
8.9.1	Air-Bleed and Start-Up	745
8.9.2	Shuttle A and B, Output External	746
8.9.3	Checks from A and B Output to Y Port	746
8.9.4	Pressure Compensator, Restrictive	747
8.9.5	Pressure Compensator, Restrictive w/Load-Sensing Port	747
8.9.6	Pressure Compensator, Bypass	747
8.9.7	B to A Regenerative	748
8.9.8	B to A Regenerative, High Capacity	748
8.9.9	B to A Regenerative, Full Time	749
8.9.10	A to B Regenerative, Full Time	749
8.9.11	A to B R Regenerative	750
8.9.12	A to B Regenerative, High Capacity	750
8.10	Side Ported Subplates	751
8.10.1	Relief P to T	751
8.10.2	Air-Bleed and Start-Up	751
8.10.3	Reducing on P	752
8.10.4	Reducing/ Relieving on P	752
8.11	Rear Ported Subplates	751
8.11.1	Relief P to T	751
8.11.2	Air-Bleed and Start-Up	751
8.11.3	Reducing on P	752
8.11.4	Reducing/ Relieving on P	752
8.12	Side Ported Subplates wit Gasket Mount Tank Port	751
8.12.1	Relief P to T	751
8.12.2	Air-Bleed and Start-Up	751
8.12.3	Reducing on P	752
8.12.4	Reducing/ Relieving on P	752
8.13	Bar Manifolds	753
8.13.1	Mounting Bracket Dimension Chart	473
8.13.2	Parallel Circuit with Relief Cavity and Y Port	753
8.13.3	Port T: SAE-20, Ports A,B,P: SAE-16, Port Y: SAE-8	753
8.13.3.1	One Station	753
8.13.3.2	Two Station	754
8.13.3.3	Three Station	754



Contents



Warranty Information, Performance Assurance, and Application Limitation	Inside Cover
A Guide for using SUN Catalogues	iii
The SUN Code System for Ordering	viii
SUN Product Overview	xii
Technical Information about SUN Products	xiv
Cartridge Control Options	xvi
Section 11: LINE MOUNT BODIES	11.00.02
Line Mount Body Locator	11.00.02
Technical Tips	11.02
Line Mount Bodies	11.04
Series 1, T-13A	11.04
Series 1, T-10A	11.07
Series 1, T-11A	11.20
Series 1, T-21A	11.41
Series 1, T-31A	11.43
Series 2, T-5A	11.44
Series 2, T-3A	11.47
Series 2, T-2A	11.62
Series 2, T-22A	11.83
Series 2, T-32A	11.86
Series 3, T-16A	11.87
Series 3, T-17A	11.108
Series 3, T-23A	11.150
Series 3, T-33A	11.162
Series 4, T-18A	11.166
Series 4, T-19A	11.186
Series 4, T-24A	11.231
Series 4, T-34A	11.248
Section 12: SANDWICH BODIES	12.007
Sandwich Body Locator	12.007
Section 13: VALVE ASSEMBLY PACKAGES	13.00.02
Valve Assembly Locator	13.00.02
Valve Assembly Packages, Ordering Information	13.01
Electrical Connector Options for Solenoid Operated Assemblies	13.01
Valve Assemblies	13.02
Solenoid Operated Ventable Relief Assemblies	13.02
Solenoid and Relief Pilot Control Assembly	13.14
Cross-Port Relief Assemblies	13.15
Hydrostatic Transmission Assemblies	13.20
Hot Oil Shuttle and Relief Assemblies	13.28
Flow Divider/Combiner Tractive Drive Assemblies	13.38
Technical Tips on Regenerative Valves	13.42
Regeneration Assemblies	13.43
Accumulator Dump Assemblies	13.50
Pump Circuit Control Assemblies	13.52
Pressure-Compensated Priority Flow Control Assemblies	13.54
Valve Assembly Package Cross Reference Chart	13.57
Section 14: GENERAL INFORMATION	14.02
Direct Motor Mounting Bodies List	14.02
Cartridge Cavities and Cavity Tools	14.04
Solenoid Valve Interfaces	14.13
Cartridge Control Kits	14.14
Orifice Pressure Drop Data	14.15
Coil Information	14.16
Model Code Index	14.17
SUN Distributor Listing	Inside Back Cover



Prices for Sun Cavity Form Tools are net and not subject to discounts.

Prices for Custom Products and Modifications of Standard Valves are by quotation only.

Sun Hydraulics reserves the right to change existing prices and discounts at any time without notice to customers.

Selling prices are governed by the price list in effect at the time of acceptance of a purchase order.

Specifications, descriptions and illustrative material contained herein were as accurate as known at the time this publication was approved for printing.

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THREE SEPARATE SUN CATALOGUES

SUN Hydraulics will be publishing a series of three separate catalogues to present the full range of SUN products to the marketplace.

1. **The Cartridge Catalogue** presents SUN's two-piece, floating style screw-in cartridge valves.
2. **The Line Mount Body Catalogue** contains line mount and direct motor mounted bodies and SUN pre-configured valve assemblies.
3. **The Sandwich Body Catalogue** presents SUN's ISO 03, 05, 05 x, y, 07, 08, sandwiches and one to five station bar manifolds.

Important "Locators"

The three catalogues are cross referenced within a number of "Locators" that are placed at the beginning of catalogue sections. Each Locator helps to identify and locate products not only in the catalogue which you may be using, but also in the two other catalogues. Every catalogue contains locators that reference products found in other SUN catalogues.

At the foundation of all locators are the SUN cavities, represented by the letter T-followed by a number and the letter A. (Example: T-3A) See page 14.04 for further information on SUN cavities. When the cavity configuration of a cartridge matches the cavity configuration in a mounting component, a physical fit is guaranteed. See the example below. However, it is important to note that because a physical fit between two components exists, it does not necessarily result in a logical and/or functional hydraulic circuit. Pay close attention to cartridge and cavity flow paths and pressure ratings to ensure a reasonable, functional circuit.

THE SUN LINE MOUNT BODY CATALOGUE

The SUN Hydraulics Line Mount Body Catalogue contains 250 pages of line mount bodies and more than 50 pages of pre-configured valve assembly packages. Line mount bodies are categorized by frame size (Series 1, 2, 3, and 4), and within each frame size, by cavity (see Contents page i). Valve Assembly Packages are categorized by function (see Contents).

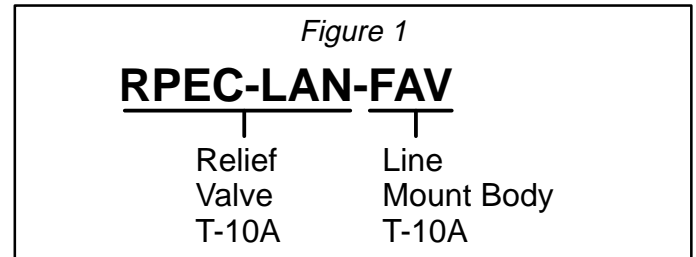
Line Mount Body Section

▶▶▶ Technical Tips

Line Mount Body Technical Tips provide information on the types of ports SUN offers, detailed specifications on materials (grade 6061 aluminium and grade 65-45-12 SG iron), and inch and metric specifications on SAE four-bolt flange patterns.

▶▶▶ Line Mount Body Locator (See Figure 2)

The Line Mount Body Locator appears on pages 11.00.01 through 11.00.31. and serves as a guide to identifying body styles and the location of body data pages



in the Line Mount Body Catalogue. Complete physical descriptions including mounting configurations and material options of bodies can be found on body data pages.

Line mount bodies are categorized by cavity and include model codes, function symbols and page numbers of cartridges in the Cartridge Catalogue that have identical cavity configurations. The sequence of appearance of the locators matches that of body data pages in the Line Mount Body Catalogue. All frame size 1 cavities appear first; within each frame size grouping, two-port cavity bodies appear first, followed by three-port and four-port cavity bodies.

NOTE: Three-port bodies (T-2A, T-11A, T-17A, and T-19A cavities) with a high capacity port three are listed on separate locator pages from standard third port capacity bodies. This is done in an attempt to avoid confusion on what cartridges should be used in these bodies. Typically, only reducing/relieving and priority flow control cartridges are used in three-port bodies with a high capacity third port.

NOTE: It is critical to remember that a physical cavity match between cartridge and body does not necessarily guarantee a functional or logical hydraulic circuit. Before ordering any cartridge/body assembly, first look at both cartridge and body data pages to ensure the assembly results in a functional circuit.

▶▶▶ Line Mount Body Data Page (See Figure 3)

Data pages for line mount bodies provide all information required to specify and apply the product presented. The format of the page is presented in a consistent and easy to read style. Generally, there are two basic body styles shown on each page. (In some instances, one body with a multiplicity of port options occupies a single page.)

To help portray body configurations, a stylized rendering is included above and to the left of each body drawing. A schematic rendering is also presented for some of the more complicated bodies.

Below the stylized rendering is a list of cartridges with their corresponding cartridge catalogue page numbers, that can be used in the body shown. The cartridges listed on body data pages do not represent all possible combinations. However, the cartridges listed do guarantee a logical, functional circuit. Other cartridges with matching cavity configurations can also be used to create a logical, functional circuit.

Figure 2 Line Mount Body Locator

LINE MOUNT BODY LOCATOR
Cavity Size: T-10A

FUNCTIONS

Relief

Cartridge RPEC RPEE **RDDA** RQEB RBAC

Page 1.06 1.08 1.10 1.12 1.16

Hydraulic Control Function

Main Port Type MAIN PORT SIZE OPTIONS

SAE Flange				.75 061	.75 062	1.0 061	1.0 062
NPTF Port	1/4 to .50	1/4 to .75	1/4 to 1.0				
SAE Port	1/4 to -10	1/4 to -12	1/4 to -16				
BSPF Port	1/4 to .50	1/4 to .75	1/4 to 1.0				

Configuration Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model

FA*
11.07

FA 0 FA 3 FA P FA 4
11.11 11.11 11.12 11.12

Annotations:
 - Bodies are shown by cavity size
 - Functions Listed
 - Outline Drawing of Cavity
 - Model Code and Page Location (in Cartridge Catalogue) of Typical Cartridges used in specified Cavity
 - Cartridge Function Symbol
 - Main Port Size Options within 4 main Port Types
 - Line Mount Body Model Code
 - Page Location for Body in Line Mount Catalogue
 - Pictorial representation of Body Styles

Figure 3 Line Mount Body Data Page

LINE MOUNT BODIES
Aluminium rated to 210 bar and SG Iron rated to 210 bar

Easy Reference Tab with Series and Cavity Size

Stylized rendering of Body Configuration

Series T-10A

90 degree body.

T-10A Cavity Locating Shoulder Depth 0.8 mm.

Typical Cartridges Used with Page Location in the Cartridge Catalogue

Physical description of body

TYPICAL CARTRIDGES USED WITH THIS BODY

CXDA - + + +	Page 5.08
CXDU - + + +	Page 5.10
MFCC - + + +	Page 5.12
CNCC - + + +	Page 5.14
MCB - + + +	Page 5.16
NCB - + + +	Page 5.18
FXCA - + + +	Page 5.20
PCB - + + +	Page 5.22
FDBA - + + +	Page 5.24
CSAA - + + +	Page 10.09
CSAC - + + +	Page 10.09
CDAA - + + +	Page 10.11
CDAC - + + +	Page 10.11
FDCA - + + +	Page 10.14

Mounting Hole: 8.5 mm diameter through hole.

Charts showing Mounting Hole Configurations, Port Sizes and Model Codes for both Aluminium and SG Iron Bodies

Port Size	ALUMINIUM		SG IR	
	Model Code	Label	Model Code	Label
25NPTF	GAA		GAA5	
375NPTF	GAB		GAB5	
SAE-4	GAI		GAI5	
SAE-6	GAI			

VALVE ASSEMBLY PACKAGES

The Valve Assembly Package section of this catalogue includes a locator, general ordering information (including electrical connector options for solenoid operated assemblies), and valve assembly data pages.

SUN valve assemblies include two or more dissimilar cartridges in a single manifold block. Cartridge configurations (control and adjustment ranges) are carefully selected for use in these products. While the user has the option of changing the configuration of the control cartridge in an assembly, SUN recommends careful consideration be applied before making any changes.

NOTE: This section includes a Cross Reference Chart to Valve Assembly Model Codes (see page 13.57). Beginning in 1990, SUN designed many line mount bodies with integral checks and/or shuttle valves that provide a functional and/or physical replacement for products that were previously offered as valve assemblies. The chart provided at the end of the valve assembly section details these changes. The cross reference chart also contains new assembly designs that offer a functional improvement over previous assemblies.

IMPORTANT: No models manufactured by SUN have been obsoleted. Older valve assembly products that

have a new line mount replacement or new functional design can still be ordered in the original configuration using the old valve assembly model code.

Valve Assembly Package Section

▶▶▶ Valve Assembly Locator (See Figure 4)

The Valve Assembly Locator is a detailed table of contents for this section of the catalogue. The locator presents assemblies by function, including a circuit diagram, and lists the page numbers where detailed information can be found. Locators also list the main cartridges used in an assembly, with the corresponding cartridge page in the SUN Cartridge Catalogue.

▶▶▶ Valve Assembly Data Page (See Figure 5)

Valve assembly data pages present a detailed physical description of the product, a circuit description, and all porting, mounting configuration, and material options. Where necessary, technical tips regarding application of a specific assembly package are provided on the data page.

It is important to note that all solenoid operated assemblies are limited to 210 bar operating pressure. The pressure limitation is a result of using Waterman solenoids in these packages. SUN is currently adapting these packages to operate at pressure ratings up to 350 bar using SUN's new solenoid valves. Consult your distributor or the SUN factory if you require high pressure operation.

Figure 4 Valve Assembly Package Locator

VALVE ASSEMBLY PACKAGE LOCATOR					
VALVE PACKAGE	FUNCTION	ASSEMBLY		CARTRIDGE INCLUDED	
		MODEL CODE	PAGE	MODEL CODE	PAGE
Cross-Port Relief Assembly with Shuttle and Solenoid Operated Vent Normally Closed		YVCH-LAH-A*	13.15	RVCA	1.19
		YVEH-LAH-A*	13.16	CSAB	10.08
		YVPH-LAH-A*	13.17, 13.18, 13.19	RVVA	1.18
				CSAB	10.08
Hydrostatic Transmission Assembly		XRDB-LCH-A*	13.20, 13.21	RVGA	1.19
		XRFB-LCH-A*	13.22, 13.23	CSAB	10.08
				RVCA	1.19
				CSAB	10.08
				RSCF	10.05
				RDD	1.10
				RPEC	1.06
				DSEN	10.06
		RDA	1.10		
		RPEC	1.06		
		DSGH	10.07		
				DA	1.11
				DC	1.11
				RJB-LCH-A*	

Figure 5 Valve Assembly Package Data Page

HYDROSTATIC TRANSMISSION ASSEMBLY INLINE BODY

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

Mounting Hole Dimensions	Ports 1 & 2		Port T	Ports G1, G2, & G3		ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price	Port Code	List Price	Port Code	List Price	
Inch	SAE 12	SAE 9	25 NPTF	L			LS		
Metric	.75 BSPP	.375 BSPP	25 BSPP	W			WS		

Options

CARTRIDGE
RDDA Pg. 1.10
For Min Seals Change LCN to LCV.

XRDB - LCN - A

Custom or Specified Setting
Stamped on Hex

PORTS
See Chart above

General Information Section

All SUN catalogues contain a general information section for the customer's reference. This section includes:

- A charted listing, by function, of motor mount bodies for Danfoss, Eaton, and Staffa motors.
- Cavity drawings for all SUN cavities in the catalogue with model codes for cavity tooling.

- Model codes for various manufacturers of solenoid valves charted by ISO interface.
- Orifice size pressure drop curves to be used when applying flow controls.
- A complete alphabetical index for all products in all three SUN catalogues.



LINE MOUNT BODY LOCATOR

Cavity Size: T-13A



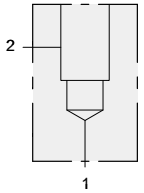





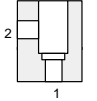
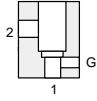

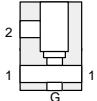
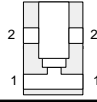
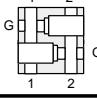
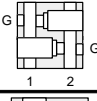
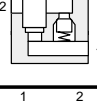
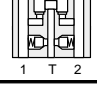
FUNCTIONS											
	Check Flow Control Shuttle Back-to-Back Check Flow Fuse										
Cartridge	CXDA	CXCD	NFCC	CNCC	NCCB	NCCC	FXCA	FCCB	FDBA	CSAA	CSAC
<i>Page</i>	5.08	5.10	5.12	5.14	5.16	5.18	5.20	5.22	5.24	10.09	10.09
<i>Hydraulic Control Function</i>											
Cartridge	CDAA	CDAC	FQCA								
<i>Page</i>	10.11	10.11	10.14								
<i>Hydraulic Control Function</i>											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange											
NPTF Port	up to .375	up to .50									
SAE Port	up to -8	up to -10									
BSPP Port	up to .375	up to .50									
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
	GA* 11.04										
	GC* 11.04										
	XW* 11.05										
	GN* 11.05										
		YS* 11.06									



LINE MOUNT BODY LOCATOR

Cavity Size: T-10A



FUNCTIONS											
	Relief										
Cartridge	RPEC	RPEE	RDDA	RQEB	RBAC						
Page	1.06	1.08	1.10	1.12	1.16						
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange				.75 C61	.75 C62	1.0 C61	1.0 C62				
NPTF Port	up to .50	up to .75	up to 1.0								
SAE Port	up to -10	up to -12	up to -16								
BSPP Port	up to .50	up to .75	up to 1.0								
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
		FA* 11.07									
				FAO 11.11	FA3 11.11	FAP 11.12	FA4 11.12				
	FC* 11.08										
		FE* 11.09									
	WN* 11.10										
			YF* 11.16								
				YFO 11.17	YF3 11.17	YFP 11.18	YF4 11.18				
	FN* 11.19										
	FM* 11.19										
								NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See pages 11.13 to 11.15.			



LINE MOUNT BODY LOCATOR

Cavity Size: T-11A



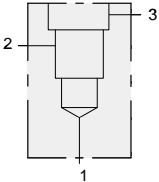
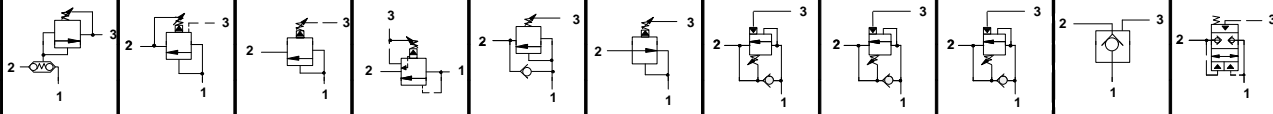
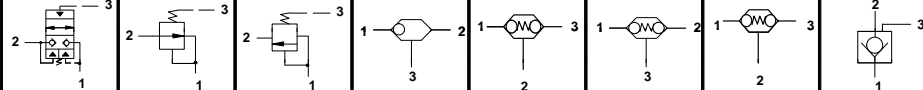
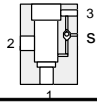
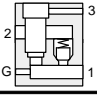
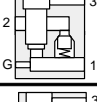
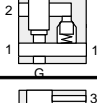
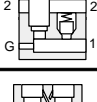
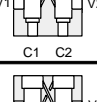
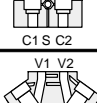
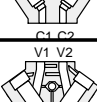

FUNCTIONS	
	Vented Relief Sequence Reducing Pilot-to-Open Check Counterbalance
	Logic Shuttle Back-to-Back Check Pilot-to-Close Check
Cartridge	FUNCTIONS
RBAD	RVCA
RSDC	SQDB
SCCA	PBDB
CBCA	CBCG
CBCH	CKCB
LODC	
Page	Page
1.17	1.18
2.06	2.08
2.12	3.06
4.10	4.12
4.14	4.16
9.08	
Hydraulic Control Function	Hydraulic Control Function
Cartridge	FUNCTIONS
LKDC	LPDC
LRDC	CSAB
CSAD	CSAD
CDAB	CDAD
CODA	
Page	Page
9.10	9.12
9.14	10.08
10.08	10.08
10.10	10.10
10.10	10.12
Hydraulic Control Function	Hydraulic Control Function
Main Port Type	MAIN PORT SIZE OPTIONS
SAE Flange	.75 C61
NPTF Port	up to .375
SAE Port	up to -8
BSPF Port	up to .50
Configuration	Model No.
	EC*
	11.20
	EF*
	11.22
	EJ*
	11.21
	WR*
	11.23
	EH*
	11.24
	ZT*
	11.24
	ZR*, ZT*, WPE
	11.25
	ZM*, WY*
	11.27
	ED*
	11.28
	NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See page 11.26.



LINE MOUNT BODY LOCATOR

Cavity Size: T-11A (Continued)



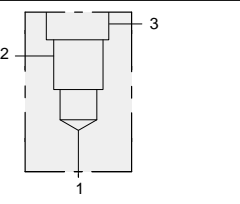
FUNCTIONS	
	Vented Relief Sequence Reducing Pilot-to-Open Check Counterbalance
	Logic Shuttle Back-to-Back Check Pilot-to-Close Check
Cartridge	RBAD RVCA RSDC SQDB SCCA PBDB CBCA CBCG CBCH CKCB LODC
Page	1.17 1.18 2.06 2.08 2.12 3.06 4.10 4.12 4.14 4.16 9.08
Hydraulic Control Function	
Cartridge	LKDC LPDC LRDC CSAB CSAD CDAB CDAD CODA
Page	9.10 9.12 9.14 10.08 10.08 10.10 10.10 10.12
Hydraulic Control Function	
Main Port Type	MAIN PORT SIZE OPTIONS
SAE Flange	.75 C61 .75 C62
NPTF Port	up to .375 up to .50
SAE Port	up to -8 up to -10
BSPP Port	up to .50 up to .50
Configuration	Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model No.
	EG* 11.28
	E2* 11.29
	E6* 11.30
	E7* 11.30
	E3* 11.31
	YE* 11.32
	YG* 11.32
	XV* XE* 11.33 11.34
	XG* 11.34
	NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See page 11.27.



LINE MOUNT BODY LOCATOR

Cavity Size: T-11A (Continued)



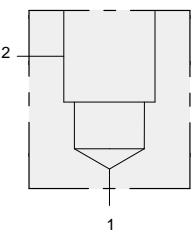
















		FUNCTIONS									
		Vented Relief	Logic	Sequence	Shuttle	Reducing	Back-to-Back Check	Pilot-to-Open Check	Pilot-to-Close Check	Counterbalance	
Cartridge	RBAD	RVCA	RSDC	SQDB	SCCA	PBDB	CBCA	CBCG	CBCH	CKCB	LODC
Page	1.17	1.18	2.06	2.08	2.12	3.06	4.10	4.12	4.14	4.16	9.08
Hydraulic Control Function											
Cartridge	LKDC	LPDC	LRDC	CSAB	CSAD	CDAB	CDAD	CODA			
Page	9.10	9.12	9.14	10.08	10.08	10.10	10.10	10.12			
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange											
NPTF Port	up to .25	up to .375	up to .50	up to .75							
SAE Port	up to -6	up to -6	up to -10	up to -12							
BSPF Port	up to .25	up to .375	up to .50	up to .75							
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
		YV* 11.35									
				XO* 11.35							
				EM* 11.36							
				EN* 11.36							
				EP* 11.37							
				EQ* 11.37							
				E8* 11.38							
				E9* 11.38							
	XV*										
NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See page 11.27.											



LINE MOUNT BODY LOCATOR

Cavity Size: T-5A



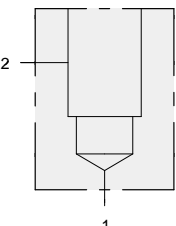
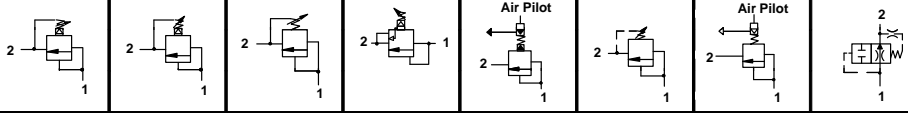
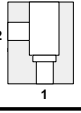

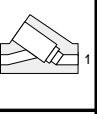
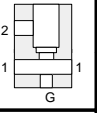
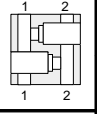
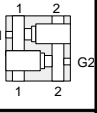
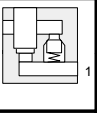
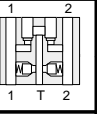
	FUNCTIONS										
	Check					Back-to-Back Check					
	Flow Control					Flow Fuse					
Cartridge	CXFA	CXED	NFDC	CNEC	NCEB	NCEC	FXDA	FCDB	FDCB	FQEA	
Page	5.08	5.10	5.12	5.14	5.16	5.18	5.20	5.22	5.24	10.14	
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange			.75 C61								
NPTF Port	up to .50	up to .75									
SAE Port	up to -10	up to -12									
BSPP Port	up to .50	up to .75									
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
	DA* 11.44										
			ZKS 11.44								
	DC* 11.45										
		XW* 11.45									
		YS* 11.46									
		DN* 11.46									



LINE MOUNT BODY LOCATOR

Cavity Size: T-3A



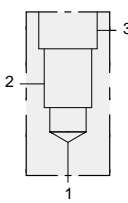
FUNCTIONS	
	Relief Air Bleed and Start-Up
Cartridge	RPGC RPGE RDFA RQGB RPGD RBAA RBAB NQEB
Page	1.06 1.08 1.10 1.12 1.14 1.16 11.14 10.16
Hydraulic Control Function	
Main Port Type	MAIN PORT SIZE OPTIONS
SAE Flange	.75 C61 .75 C61 1.0 C61 1.0 C62 1.25 C61 1.25 C62
NPTF Port	up to .75 up to .75 up to 1.0
SAE Port	up to -10 up to -12 up to -16
BSPP Port	up to .75 up to .75
Configuration	Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model No. Model No.
	CA* 11.47
	CA* 11.47 CAO 11.50 CA3 11.50 CAP 11.51 CA4 11.51 CAQ 11.52 CA5 11.52
	CG* 11.48
	CE* 11.48 CE* 11.49
	YB* 11.58
	YC* 11.58 YCP 11.59 YC4 11.59 YCQ 11.60 YC5 11.60
	CN* 11.61
	CM* 11.61
NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See pages 11.53 to 11.57	



LINE MOUNT BODY LOCATOR

Cavity Size: T-2A



		FUNCTIONS									
		Vented Relief Sequence Reducing Counterbalance Pilot-to-Open Check					Logic Pilot-to-Close Check				
Cartridge	RVEA	RSFC	SQFB	RSFE	SCEA	PBFB	PBFC	CBEA	CBEG	CBEH	CKEB
Page	1.18	2.06	2.08	2.10	2.12	3.06	3.08	4.10	4.12	4.14	4.16
Hydraulic Control Function											
Cartridge	LOFC	LKFC	LPFC	LRFC	COFA						
Page	9.08	9.10	9.12	9.14	10.12						
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIO.04.03NS										
SAE Flange				.75 to C61	.75 to C62						
NPTF Port	up to .50	up to .75	up to .75								
SAE Port	up to -8	up to -10	up to -12								
BSPP Port	up to .50	up to .75	up to .75								
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
			BC* 11.62								
			BF* 11.64								
			BV* 11.65								
				ZNV 11.69	ZDS 11.69						
			WS* 11.66								
			BH* 11.65								
	ZT* 11.71										
	ZTX, ZRM 11.71										
		BD* 11.63									
NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See pages 11.67 to 11.70.											



LINE MOUNT BODY LOCATOR

Cavity Size: T-2A (Continued)



		FUNCTIONS									
		Vented Relief	Logic	Sequence	Pilot-to-Close Check	Reducing	Counterbalance	Pilot-to-Open Check			
Cartridge	RVEA	RSFC	SQFB	RSFE	SCEA	PBFB	PBFC	CBEA	CBEG	CBEH	CKEB
Page	1.18	2.06	2.08	2.10	2.12	3.06	3.08	4.10	4.12	4.14	4.16
Hydraulic Control Function											
Cartridge	LOFC	LKFC	LPFC	LRFC	COFA						
Page	9.08	9.10	9.12	9.14	10.12						
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange											
NPTF Port	up to .75	up to .75									
SAE Port	up to -10	up to -12									
BSPF Port	up to .75	up to .75									
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
	BG* 11.70										
	B2* 11.72										
	B6* 11.74										
	B7* 11.74										
	B3* 11.73										
	YA* 11.78										
	YH* 11.78										
	WP*, VY* 11.75 XA* 11.76										
	XH* 11.76										
											NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See pages 11.67 to 11.70.



LINE MOUNT BODY LOCATOR

Cavity Size: T-2A (Continued)



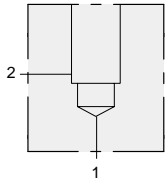
		FUNCTIONS									
		Vented Relief Sequence Reducing Counterbalance Pilot-to-Open Check					Logic Pilot-to-Close Check				
Cartridge	RVEA	RSFC	SQFB	RSFE	SCEA	PBFB	PBFC	CBEA	CBEG	CBEH	CKEB
Page	1.18	2.06	2.08	2.10	2.12	3.06	3.08	4.10	4.12	4.14	4.16
Hydraulic Control Function											
Cartridge	LOFC	LKFC	LPFC	LRFC	COFA						
Page	9.08	9.10	9.12	9.14	10.12						
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange											
NPTF Port	uo to .50	up to .75	up to .75	up to 1.0							
SAE Port	up to -8	up to -10	up to -12	up to -16							
BSPP Port	up to .50	up to .75	up to .75	up to 1.0							
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
	YV*										
	11.77										
				XB*							
				11.81							
			BM*								
			11.79								
			BN*								
			11.79								
			BP*								
			11.80								
			BQ*								
			11.80								
		B8*									
		11.81									
			YP*								
			11.82								
			YP*								
			11.82								
						NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See pages 11.67 to 11.70.					



LINE MOUNT BODY LOCATOR

Cavity Size: T-16A



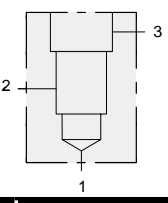
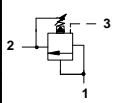
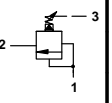
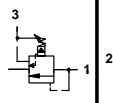
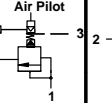
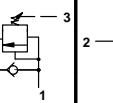
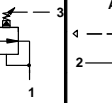
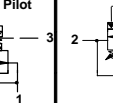
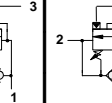
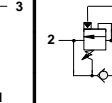
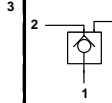
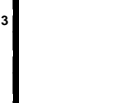
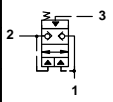
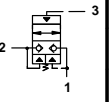
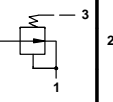
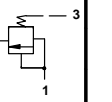
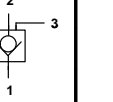
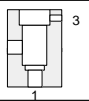
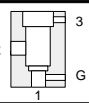
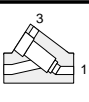
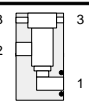
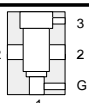
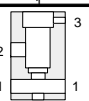
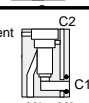
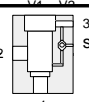
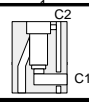
FUNCTIONS											
		Check					Flow Fuse				
		Flow Control					Relief				
Cartridge	RPIC	RPIE	RDHA	RQIB	RPID	CXHA	CXGD	NFEC	CNGC	NCFB	NCFC
Page	1.07	1.09	1.11	1.13	1.15	5.09	5.11	5.13	5.15	5.17	5.19
Hydraulic Control Function											
Cartridge	FXEA	FCEB	FDEA	FQGA							
Page	5.21	5.23	5.25	10.15							
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange		1.0 C61	1.0 C62	1.25 C61	1.25 C62	1.5 C61	1.5 C62	2.0 C61	2.0 C62		
NPTF Port	up to 1.25										
SAE Port	up to -20										
BSPP Port	up to 1.25										
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
	IA*	IAP	IA4	IAQ	IA5	IAR	IA6	IAS	IA8		
	11.87	11.89	11.89	11.90	11.90	11.91	11.91	11.93	11.93		
	IC*	ICP									
	11.87	11.87									
	IE*	IEP	IE4	IEQ	IE5	IER	IE6	IES	IE8		
	11.88	11.94	11.94	11.95	11.95	11.96	11.96	11.97	11.97		
	YI*					YIR	YI6	YIS	YI8		
	11.101					11.102	11.102	11.103	11.103		
	IN*	INP	IN4	INQ	IN5						
	11.104	11.105	11.105	11.106	11.106						
	YS*										
	11.104										
	IM*										
	11.107										
	WN*										
	11.107										
NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See pages 11.98 to 11.100.											



LINE MOUNT BODY LOCATOR

Cavity Size: T-17A



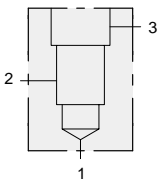
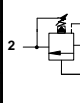
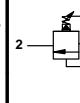

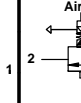
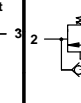
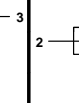
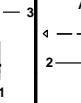
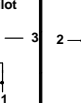
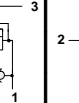
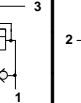
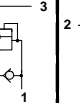
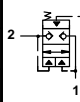
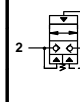
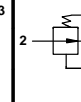
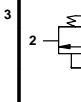
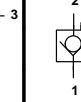
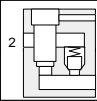
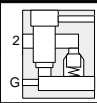
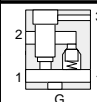
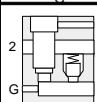
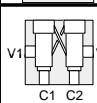
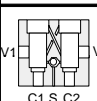
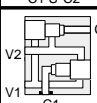
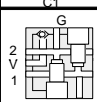
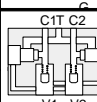
FUNCTIONS											
	Vented Relief Sequence Reducing Counterbalance Pilot-to-Open Check										
	Logic Pilot-to-Close Check										
Cartridge	RVGA	RSHC	SQHB	RSHE	SCGA	PBHB	PBHC	CBGA	CBGG	CBGH	CKGB
Page	1.19	2.07	2.09	2.11	2.13	3.07	3.09	4.11	4.13	4.15	4.17
Hydraulic Control Function											
Cartridge	LOHC	LKHC	LPHC	LRHC	COHA						
Page	9.09	9.11	9.13	9.15	10.13						
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange				.75 C61	.75 C62	1.0 C61	1.0 C62	1.25C61	1.25C62		
NPTF Port	up to .75	up to 1.0	up to 1.25								
SAE Port	up to -12	up to -16	up to -20								
BSPP Port	up to .75	up to 1.0	up to 1.25								
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
			HC*			HCP	HC4	HCQ	HC5		
			11.108			11.114	11.114	11.115	11.115		
			HF*			HFP	HF4	HFQ	HF5		
			11.108			11.116	11.116	11.117	11.117		
		HD*									
		11.109									
				WGL	WNG	ZNW	ZDR	ZJY			
				11.128	11.128	11.129	11.129	11.130			
		WS*, WT*									
		11.111									
		HH*				HHP	HH4	HHQ	HH5		
		11.110				11.120	11.120	11.121	11.121		
	ZT*										
	11.112										
			HG*			HGP		HGQ	HG5		
			11.123			11.123		11.124	11.124		
	ZRN, ZTW										
	11.122										
						NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See page 11.125 to 11.130.					



LINE MOUNT BODY LOCATOR

Cavity Size: T-17A (Continued)



		FUNCTIONS									
		Vented Relief	Logic								
		Sequence	Pilot-to-Close Check								
		Reducing									
		Counterbalance									
		Pilot-to-Open Check									
Cartridge	RVGA	RSHC	SQHB	RSHE	SCGA	PBHB	PBHC	CBGA	CBGG	CBGH	CKGB
Page	1.19	2.07	2.09	2.11	2.13	3.07	3.09	4.11	4.13	4.15	4.17
Hydraulic Control Function											
Cartridge	LOHC	LKHC	LPHC	LRHC	COHA						
Page	9.09	9.11	9.13	9.15	10.13						
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange			1.0 C61	1.0 C62	1.25 C61	1.25 C62					
NPTF Port	up to .75	up to 1.25									
SAE Port	up to -16	up to -20									
BSPP Port	up to .75	up to 1.25									
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
			H2P 11.140	H24 11.140	H2Q 11.142	H25 11.142					
		H6* 11.138		H64 11.137		H65 11.137					
		H7* 11.138									
		H3* 11.138	H3P 11.141								
		YJ* 11.131	YJP 11.132		YJQ 11.132						
		YK* 11.131	YKP 11.133		YKQ 11.133						
	YV* 11.113										
		XC* 11.147	XCP 11.148	XC4 11.148	XCQ 11.149	XC5 11.149					
		HM* 11.134									
							NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See page 11.125 to 11.130.				



LINE MOUNT BODY LOCATOR

Cavity Size: T-23A



FUNCTIONS											
	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Vented Relief</p> <p>Reducing/Relieving with Drain</p> <p>Reducing/Relieving with Vent</p> </div> <div style="width: 45%;"> <p>Vented Counterbalance</p> <p>Vented Pilot-to-Open Check</p> <p>Ventable Priority Flow Control</p> </div> </div>										
Cartridge	RVGD	PVHA	PVHB	CWGA	CWGG	CVGV	FVEA				
Page	1.21	3.15	3.17	4.19	4.21	4.23	6.05				
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange		1.0 C61	1.0 C62	1.25 C61	1.25 C62						
NPTF Port	up to 1.25										
SAE Port	up to -20										
BSPP Port	up to 1.25										
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
	PA*	PAP	PA4	PAQ	PA5						
	11.150	11.151	11.151	11.153	11.153						
	P4*	P4P	P44	P4Q	P45						
	11.159	11.160	11.160	11.161	11.161						
	XM*	XMP	XM4	XMQ	XM5						
	11.154	11.155	11.155	11.156	11.156						
	VA*	VAP	VA4	VAQ	VA5						
	11.154	11.157	11.157	11.158	11.158						
			WHA								
			11.152								

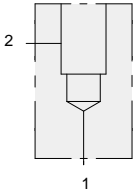
11



LINE MOUNT BODY LOCATOR

Cavity Size: T-18A



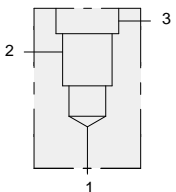
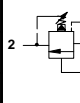
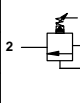
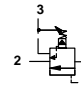
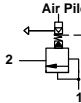
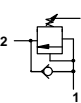
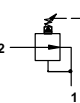
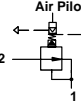
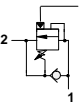
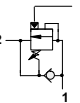
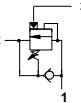
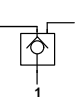
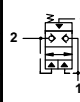
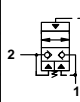
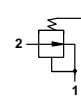
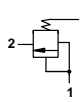
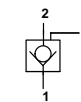
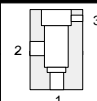
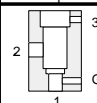
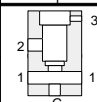
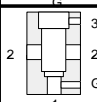
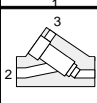
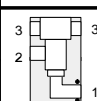
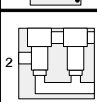
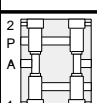
FUNCTIONS												
		Relief Check Flow Control Flow Fuse										
Cartridge	RPKC	RPKE	RDJA	RQKB	RPKD	CXJA	CXID	NFFC	CNIC	NCGB	NCGC	
Page	1.07	1.09	1.11	1.13	1.15	5.09	5.11	5.13	5.15	5.17	5.19	
Hydraulic Control Function												
Cartridge	FXFA	FCFB	FDFA	FQIA								
Page	5.21	5.23	5.25	10.15								
Hydraulic Control Function												
Main Port Type	MAIN PORT SIZE OPTIONS											
SAE Flange		1.0 C61	1.0 C62	1.25 C61	1.25 C62	1.50 C61	1.50 C62	2.0 C61	2.0 C62			
NPTF Port	up to 1.25											
SAE Port	up to -20											
BSP Port	up to 1.25											
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	
	LA* 11.167	LAP 11.167	LA4 11.167	LAQ 11.168	LA5 11.168	LAR 11.169	LA6 11.169	LAS 11.170	LA8 11.170			
	LE* 11.166	LEP 11.172	LE4 11.172	LEQ 11.173	LE5 11.173	LER 11.174	LE6 11.174	LES 11.175	LE8 11.175			
						ZLS 11.171		ZLR 11.171				
								XZY 11.179				
						YLR 11.180	YL6 11.180	YLS 11.181	YL8 11.181			
	LN* 11.182			LNQ 11.183	LN5 11.183	LNR 11.184	LN6 11.184	LNS 11.185	LN8 11.185			
NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See pages 11.176 to 11.178.												



LINE MOUNT BODY LOCATOR

Cavity Size: T-19A



		FUNCTIONS									
		Vented Relief Sequence Reducing Counterbalance					Logic Pilot-to-Open Check Pilot-to-Close Check				
Cartridge	RVIA	RSJC	SQJB	RSJE	SCIA	PBBJ	PBJC	CBIA	CBIG	CBIH	CKIB
Page	1.19	2.07	2.09	2.11	2.13	3.07	3.09	4.11	4.13	4.15	4.17
Hydraulic Control Function											
Cartridge	LOJC	LKJC	LPJC	LRJC	COJA						
Page	9.09	9.11	9.13	9.15	10.13						
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange		1.0 C61	1.0 C62	1.25 C61	1.25 C62	1.50 C61	1.50 C62	2.0 C61	2.0 C62		
NPTF Port	up to 1.25										
SAE Port	up to -20										
BSPP Port	up to 1.25										
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
	KC* 11.186	KCP 11.190	KC4 11.190	KCQ 11.192	KC5 1.192	KCR 11.195	KC6 11.195	KCS 11.198	KC8 11.198		
	KF* 11.186	KFP 11.191	KF4 11.191	KFQ 11.191	KF5 11.193	KFR 11.196	KF6 11.196	KFS 11.199	KF8 11.199		
	KH* 11.187	KHP 11.201	KH4 11.201	KHQ 11.202	KH5 11.202	KHR 11.203	KH6 11.203	KHS 11.204	KH8 11.204		
	WT* 11.188										
						ZLQ 11.189		ZLP 11.189			
				ZNX 11.205	ZFD 11.205	ZNY 11.206	ZDQ 11.206				
								XZZ,XVD 11.211			
						YRD 11.212		YRC 11.213			
<small>NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See pages 11.207 to 11.210.</small>											



LINE MOUNT BODY LOCATOR

Cavity Size: T-19A (Continued)



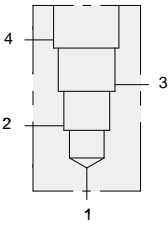
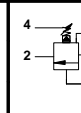
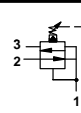
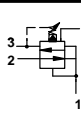
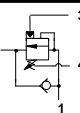
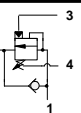
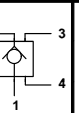
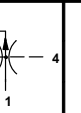
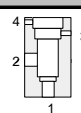
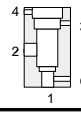
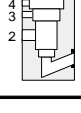
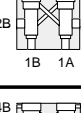
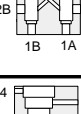
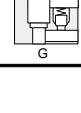
		FUNCTIONS									
		Vented Relief Sequence Reducing Counterbalance	Logic Pilot-to-Open Check Pilot-to-Close Check								
Cartridge	RVIA	RSJC	SQJB	RSJE	SCIA	PBJB	PBJC	CBIA	CBIG	CBIH	CKIB
Page	1.19	2.07	2.09	2.11	2.13	3.07	3.09	4.11	4.13	4.15	4.17
Hydraulic Control Function											
Cartridge	LOJC	LKJC	LPJC	LRJC	COJA						
Page	9.09	9.11	9.13	9.15	10.13						
Hydraulic Control Function											
Main Port Type	MAIN PORT SIZE OPTIONS										
SAE Flange		1.25 C61	1.25 C62	1.50 C61	1.50 C62	2.0 C61	2.0 C62				
NPTF Port	up to 1.25										
SAE Port	up to -20										
BSPP Port	up to 1.25										
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.
				YQD 11.212		YQC 11.213					
				KGR 11.214	KG6 11.214	KGS 11.215	KG8 11.215				
				XZP 11.216		XZR 11.217					
				XZQ 11.216		XZS 11.217					
				YMR 11.218	YM6 11.219	YMS 11.220					
				YNR 11.218	YN6 11.219	YNS 11.220					
	K6* 11.221	K6Q 11.222	K65 11.222	K6R 11.223	K66 11.223	K6S 11.224	K68 11.224				
	K2* 11.225	K2Q 11.226	K25 11.226	K2R 11.227	K26 11.227	K2S 11.230	K28 11.230				
								NOTE: Line and sandwich bodies are available with SAE flange inlets and threaded port outlets. See pages 11.207 to 11.210.			



LINE MOUNT BODY LOCATOR

Cavity Size: T-24A



		FUNCTIONS												
		Vented Relief Reducing/Relieving with Drain Reducing/Relieving with Vent					Vented Counterbalance Vented Pilot-to-Open Check Ventable Priority Flow Control							
Cartridge	RVID	PVJA	PVJB	CWIA	CWIG	CVIV	FVFA							
Page	1.21	3.15	3.17	4.19	4.21	4.23	6.05							
Hydraulic Control Function														
Main Port Type	MAIN PORT SIZE OPTIONS													
SAE Flange		1.0 C61	1.0 C62	1.25 C61	1.25 C62	1.50 C61	1.50 C62	2.0 C61	2.0 C62					
NPTF Port	up to 1.25													
SAE Port	up to -20													
BSPF Port	up to 1.25													
Configuration	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.	Model No.			
	QC*			QCQ	QC5	QCR	QC6	QCS	QC8					
	11.231			11.232	11.232	11.233	11.233	11.234	11.234					
	QA*			QAQ	QA5	QAR	QA6	QAS	QA8					
	11.231			11.235	11.235	11.236	11.236	11.237	11.237					
			WGY		WGZ		WGT							
			11.238		11.238		11.239							
	XL*					XLR	XL6	XLS	XL8					
	11.240					11.241	11.241	11.242	11.242					
	XS*					XSR	XS6	XSS	XS8					
	11.240					11.243	11.243	11.244	11.244					
	Q4*					Q4R	Q46	Q4S	Q48					
	11.245					11.246	11.246	11.247	11.247					



Sun offers many single and multiple cavity standard line mount manifolds, and many sandwich, motor mount bodies and subplates that are available in a choice of aluminum (3000 psi/210 bar) or ductile iron (5000 psi/350 bar). Ports include NPTF, SAE, BSPP and Code 61 and Code 62 flanges.

Go to www.sunhydraulics.com. Example: **Click Product: Manifolds: Line Mount: Flow Controls: Inline:** and a pop-up menu shows all the available **SAE Ported Bodies** within your selection (see below). When you click the body in the appropriate Cavity column, the **body page will show all measurements, Technical Data and full orientation views of all body faces.** See [Technical Information](#) section of web site for additional information.

Please hover over the manifolds in order to view porting information.

Port Size	T-162A	T-13A	T-5A	T-16A	T-18A
1/4" NPTF		GCA			
1/4" NPTF	ACA	GCA/S			
1/4" NPTF	ACA/S				
3/8" NPTF		GCB			
3/8" NPTF	ACB	GCB/S			
3/8" NPTF	ACB/S		DCB		
3/8" NPTF			DCB/S		
1/2" NPTF		GCC			
1/2" NPTF		GCC/S	DCC		
1/2" NPTF			DCC/S		
3/4" NPTF				ICD	
3/4" NPTF			VFJ	ICD/S	
3/4" NPTF			VFJ/S		
1" NPTF				ICE	
1" NPTF			VFK	ICE/S	
1" NPTF			VFK/S		
1 1/4" NPTF				ICF	
1 1/4" NPTF			VFL	ICF/S	
1 1/4" NPTF			VFL/S		
SAE 4		GCH			
SAE 4	ACH	GCH/S			
SAE 4	ACH/S				
SAE 6		GCI			
SAE 6	ACI	GCI/S			
SAE 6	ACI/S		DCI		
SAE 6			DCI/S		
SAE 8		GCJ			
SAE 8		GCJ/A			
SAE 8		GCJ/S	DCJ		
SAE 8			DCJ/S		
SAE 10			DCK		
SAE 10			DCK/S		
SAE 12				ICL	



Sun offers many single and multiple cavity standard line mount manifolds, and many sandwich, motor mount bodies and subplates that are available in a choice of aluminum (3000 psi/210 bar) or ductile iron (5000 psi/350 bar). Ports include NPTF, SAE, BSPP and Code 61 and Code 62 flanges.

Go to www.sunhydraulics.com. Example: **Click Product: Manifolds: Line Mount: Flow Controls: Inline:** and a pop-up menu shows all the available **SAE Ported Bodies** within your selection (see below). When you click the body in the appropriate Cavity column, the **body page will show all measurements, Technical Data and full orientation views of all body faces.** See [Technical Information](#) section of web site for additional information.

Please hover over the manifolds in order to view porting information.

Port Size	T-162A	T-13A	T-5A	T-16A	T-18A
1/4" NPTF		GCA			
1/4" NPTF	ACA	GCA/S			
1/4" NPTF	ACA/S				
3/8" NPTF		GCB			
3/8" NPTF	ACB	GCB/S			
3/8" NPTF	ACB/S		DCB		
3/8" NPTF			DCB/S		
1/2" NPTF		GCC			
1/2" NPTF		GCC/S	DCC		
1/2" NPTF			DCC/S		
3/4" NPTF				ICD	
3/4" NPTF			VFJ	ICD/S	
3/4" NPTF			VFJ/S		
1" NPTF				ICE	
1" NPTF			VFK	ICE/S	
1" NPTF			VFK/S		
1 1/4" NPTF				ICF	
1 1/4" NPTF			VFL	ICF/S	
1 1/4" NPTF			VFL/S		
SAE 4		GCH			
SAE 4	ACH	GCH/S			
SAE 4	ACH/S				
SAE 6		GCI			
SAE 6	ACI	GCI/S			
SAE 6	ACI/S		DCI		
SAE 6			DCI/S		
SAE 8		GCJ			
SAE 8		GCJ/A			
SAE 8		GCJ/S	DCJ		
SAE 8			DCJ/S		
SAE 10			DCK		
SAE 10			DCK/S		
SAE 12				ICL	

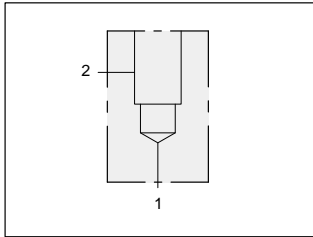


LINE MOUNT BODIES



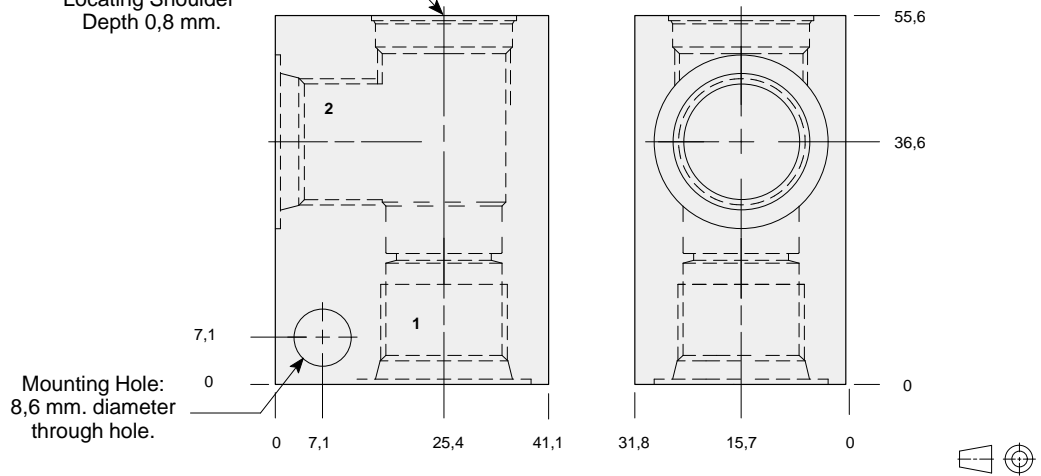
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 1 T-13A



90 degree body.

T-13A Cavity
Locating Shoulder
Depth 0,8 mm.

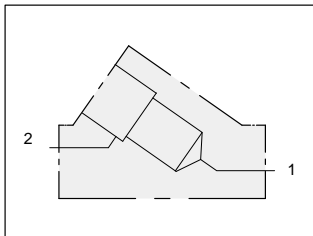


TYPICAL CARTRIDGES USED WITH THIS BODY

CXDA - ***	Page	5.08
CXCD - ***	Page	5.10
NFCC - ***	Page	5.12
CNCC - ***	Page	5.14
NCCB - ***	Page	5.16
NCCC - ***	Page	5.18
FXCA - ***	Page	5.20
FCCB - ***	Page	5.22
FDBA - ***	Page	5.24
CSAA - ***	Page	10.09
CSAC - ***	Page	10.09
CDAA - ***	Page	10.11
CDAC - ***	Page	10.11
FQCA - ***	Page	10.14

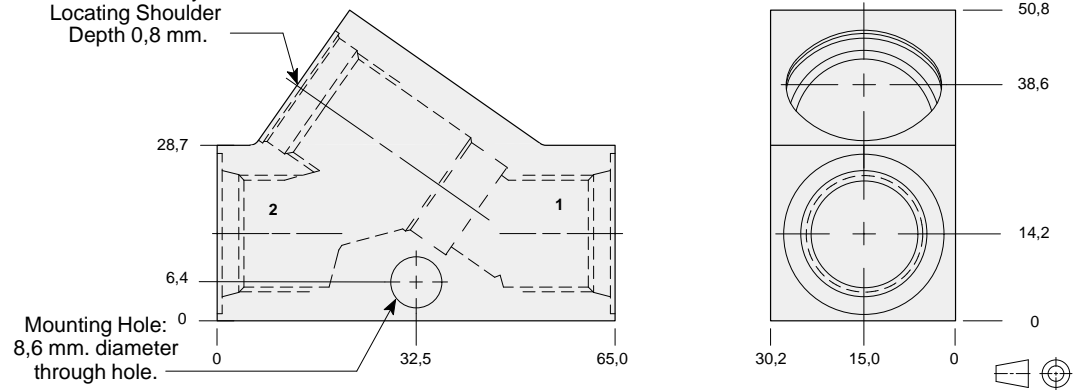
Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	GAA		GAA/S	
.375 NPTF	GAB		GAB/S	
SAE-4	GAH		GAH/S	
SAE-6	GAI		GAI/S	
SAE-8	GAJ		GAJ/S	
.25 BSPP	GAT		GAT/S	
.375 BSPP	GAU		GAU/S	



Inline body.

T-13A Cavity
Locating Shoulder
Depth 0,8 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

CXDA - ***	Page	5.08
CXCD - ***	Page	5.10
NFCC - ***	Page	5.12
CNCC - ***	Page	5.14
NCCB - ***	Page	5.16
NCCC - ***	Page	5.18
FXCA - ***	Page	5.20
FCCB - ***	Page	5.22
FDBA - ***	Page	5.24
CSAA - ***	Page	10.09
CSAC - ***	Page	10.09
CDAA - ***	Page	10.11
CDAC - ***	Page	10.11
FQCA - ***	Page	10.14

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

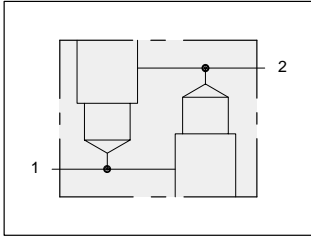
Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	GCA		GCA/S	
.375 NPTF	GCB		GCB/S	
SAE-4	GCH		GCH/S	
SAE-6	GCI		GCI/S	
SAE-8	GCJ		GCJ/S	
.25 BSPP	GCT		GCT/S	
.375 BSPP	GCU		GCU/S	



LINE MOUNT BODIES

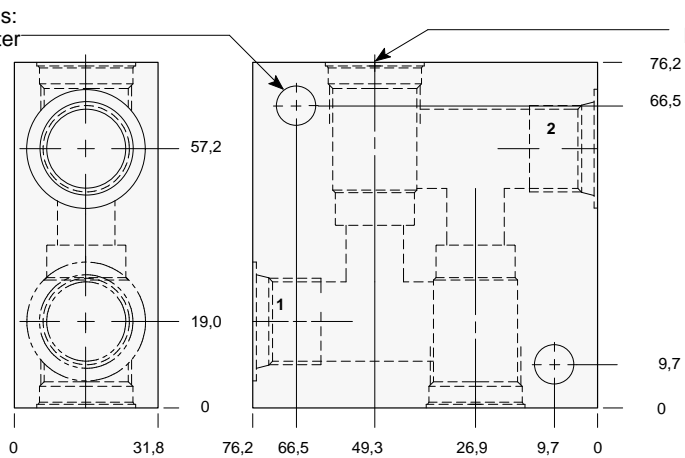


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity inline body.

Mounting Holes:
8,6 mm. diameter
through hole
2 places.



T-13A Cavity
Locating Shoulder
Depth 0,8 mm.
2 places

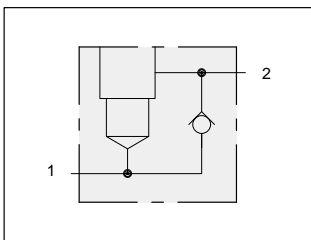
TYPICAL CARTRIDGES USED WITH THIS BODY

- CXDA - *** Page 5.08
- NFCC - *** Page 5.12
- FXCA - *** Page 5.20

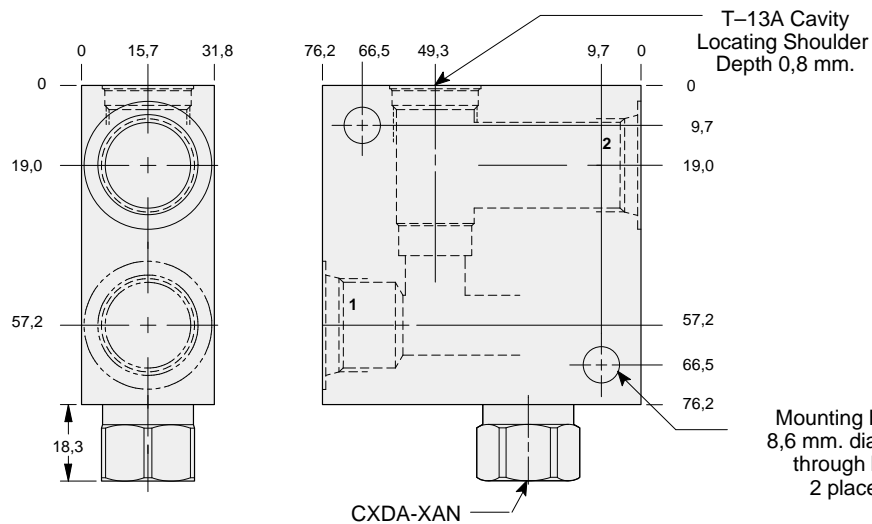
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	XWL		XWL/S	
.375 NPTF	XWM		XWM/S	
SAE-6	XWN		XWN/S	
SAE-8	XWP		XWP/S	
.25 BSPP	XWQ		XWQ/S	
.375 BSPP	XWR		XWR/S	



Inline body with reverse free flow check.



T-13A Cavity
Locating Shoulder
Depth 0,8 mm.

Mounting Holes:
8,6 mm. diameter
through hole
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

- NFCC - *** Page 5.12
- FXCA - *** Page 5.20

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	GNL		GNL/S	
.375 NPTF	GNM		GNM/S	
SAE-6	GNN		GNN/S	
SAE-8	GNP		GNP/S	
.25 BSPP	GNQ		GNQ/S	
.375 BSPP	GNR		GNR/S	

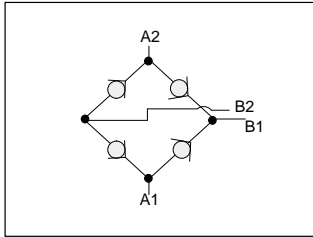
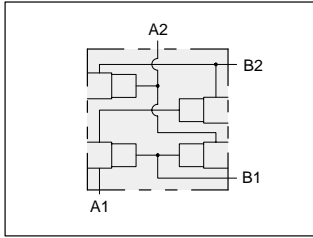


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

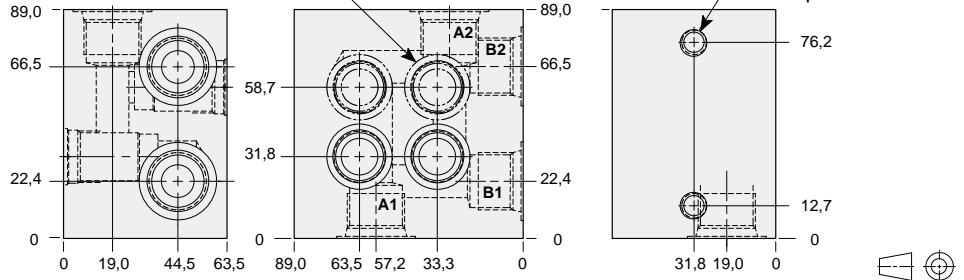
Series 1 T-13A



Rectifier body.

T-13A Cavity
Locating Shoulder
Depth 0,8 mm.
4 places.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

CXDA - *** Page 5.08

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

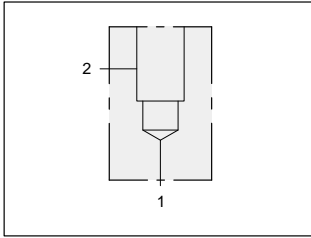
Mounting Hole Dimensions	Ports 1 & 2	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YSR		YSE/S	
Inch	.375 NPTF	YSS		YSS/S	
Inch	.50 NPTF	YST		YST/S	
Inch	SAE-6	YSU		YSU/S	
Inch	SAE-8	YSV		YSV/S	
Inch	SAE-10	YSW		YSW/S	
Metric	.25 BSPP	YSX		YSX/S	
Metric	.375 BSPP	YSY		YSY/S	
Metric	.50 BSPP	YSZ		YSZ/S	



LINE MOUNT BODIES

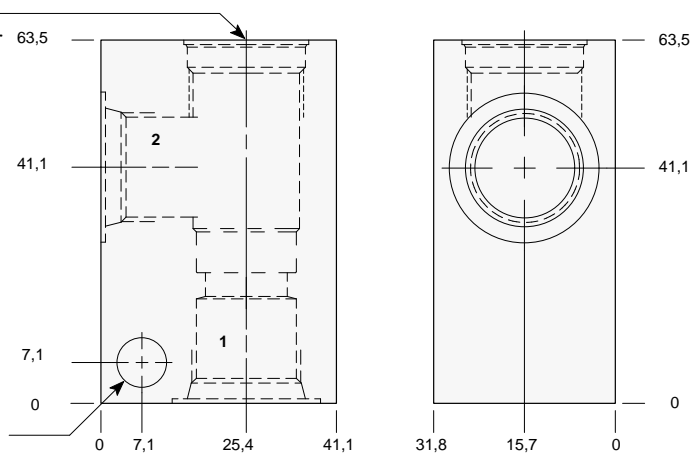


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.

T-10A Cavity
Locating Shoulder
Depth 0,8 mm.



Mounting Hole:
8,6 mm. diameter
through hole.

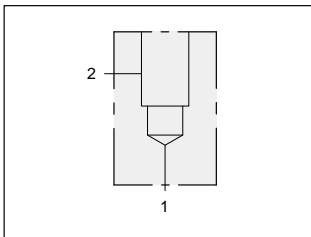
TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12
RBAC - ***	Page	1.16

Instructions for ordering complete cartridge and body assemblies. Page viii

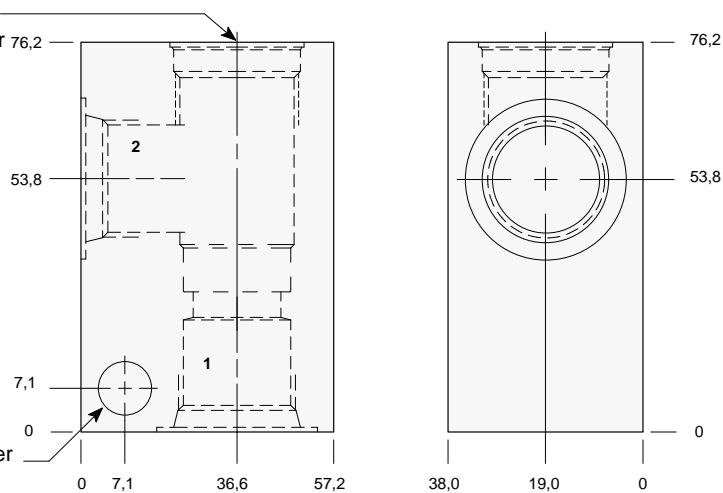
Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	FAA		FAA/S	
.375 NPTF	FAB		FAB/S	
SAE-4	FAH		FAH/S	
SAE-6	FAI		FAI/S	
SAE-8	FAJ		FAJ/S	
.25 BSPP	FAT		FAT/S	
.375 BSPP	FAU		FAU/S	



90 degree body.

T-10A Cavity
Locating Shoulder
Depth 1,5 mm.



Mounting Hole:
8,6 mm. diameter
through hole.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

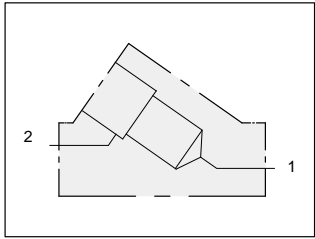
Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.50 NPTF	FAC		FAC/S	
.75 NPTF	FAD		FAD/S	
SAE-10	FAK		FAK/S	
SAE-12	FAL		FAL/S	
.50 BSPP	FAV		FAV/S	
.75 BSPP	FAW		FAW/S	



LINE MOUNT BODIES

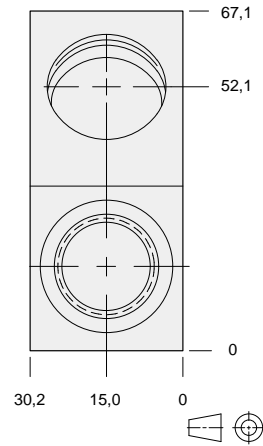
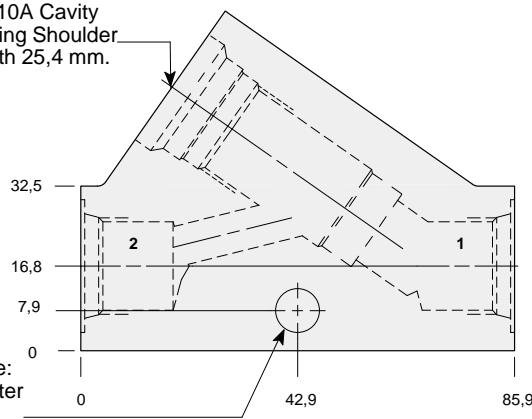


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline body.

T-10A Cavity
Locating Shoulder
Depth 25,4 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12
RBAC - ***	Page	1.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Mounting Hole:
8,6 mm. diameter
through hole.

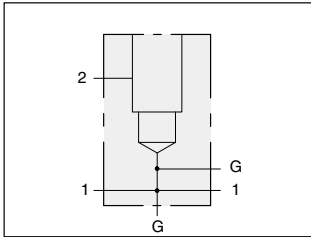
Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	FCA		FCA/S	
.375 NPTF	FCB		FCB/S	
.50 NPTF	FCC		FCC/S	
SAE-4	FCH		FCH/S	
SAE-6	FCI		FCI/S	
SAE-8	FCJ		FCJ/S	
.25 BSPP	FCT		FCT/S	
.375 BSPP	FCU		FCU/S	
.50 BSPP	FCV		FCV/S	



LINE MOUNT BODIES

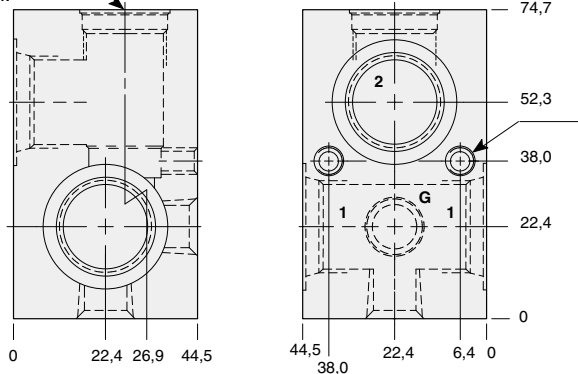


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Throughport body with gauge port.

T-10A Cavity
Locating Shoulder
Depth 0,8 mm.



Mounting Holes:
(opposite side)
Inch: .250-20 UNC-2B
x 12,7 mm. deep.
Metric: M6 x 1.00-6H
x 12,7 mm. deep.
2 places.

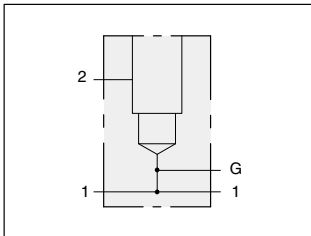
TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12
RBAC - ***	Page	1.16

Instructions for ordering complete cartridge and body assemblies. Page viii

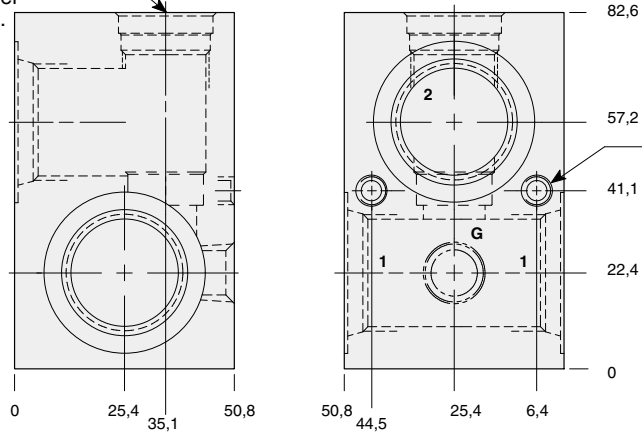
Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.25 NPTF	FEA		FEA/S	
Inch	.375 NPTF	.25 NPTF	FEB		FEB/S	
Inch	.50 NPTF	.25 NPTF	FEC		FEC/S	
Inch	SAE-6	.25 NPTF	FEI		FEI/S	
Inch	SAE-8	.25 NPTF	FEJ		FEJ/S	
Inch	SAE-10	.25 NPTF	FEK		FEK/S	
Metric	.25 BSPP	.25 BSPP	FET		FET/S	
Metric	.375 BSPP	.25 BSPP	FEU		FEU/S	
Metric	.50 BSPP	.25 BSPP	FEV		FEV/S	



Throughport body with gauge port.

T-10A Cavity
Locating Shoulder
Depth 4,8 mm.



Mounting Holes:
(opposite side)
Inch: .250-20 UNC-2B
x 12,7 mm. deep.
Metric: M6 x 1.00-6H
x 12,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

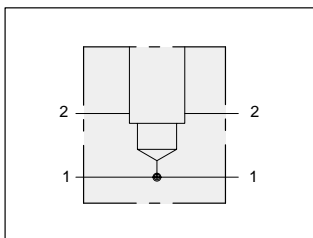
Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	FED		FED/S	
Inch	SAE-12	.25 NPTF	FEL		FEL/S	
Metric	.75 BSPP	.25 BSPP	FEW		FEW/S	



LINE MOUNT BODIES

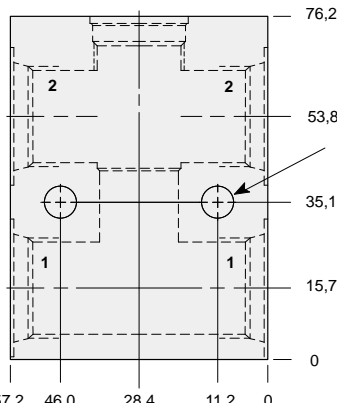
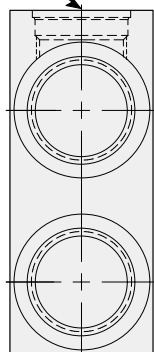


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Dual through port body.

T-10A Cavity
Locating Shoulder
Depth 1,5 mm.



Mounting Holes:
8,6 mm. diameter
through hole
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12
RBAC - ***	Page	1.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

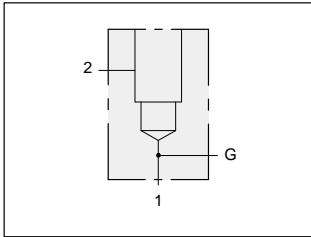
Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	WNR		WNR/S	
.375 NPTF	WNS		WNS/S	
.50 NPTF	WNT		WNT/S	
SAE-6	WNU		WNU/S	
SAE-8	WNV		WNV/S	
SAE-10	WNW		WNW/S	
.25 BSPP	WNX		WNX/S	
.375 BSPP	WNY		WNY/S	
.50 BSPP	WNZ		WNZ/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

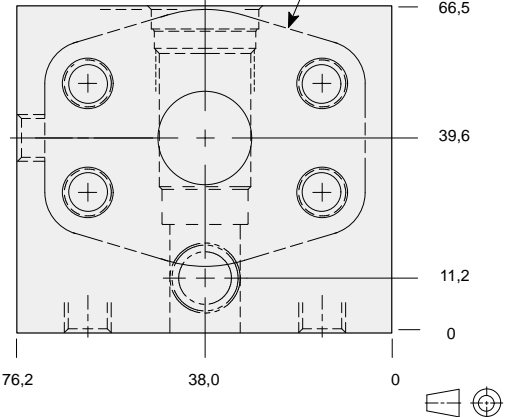
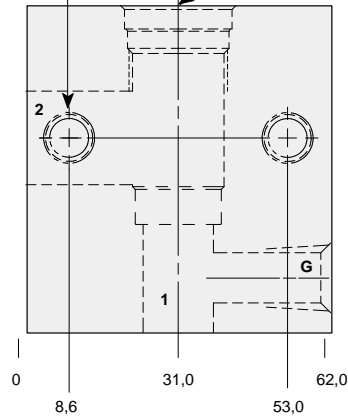


90 degree .75" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-10A Cavity
Locating Shoulder
Depth 4,8 mm.

.75" SAE Code 61
4-Bolt Flange Pattern
2 places.

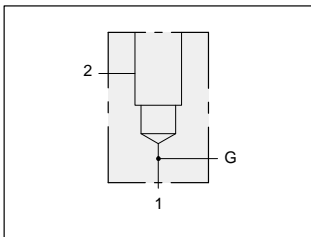


TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	FAO		FAO/S	
Metric	.25 BSPP	FAO/M		FAO/T	

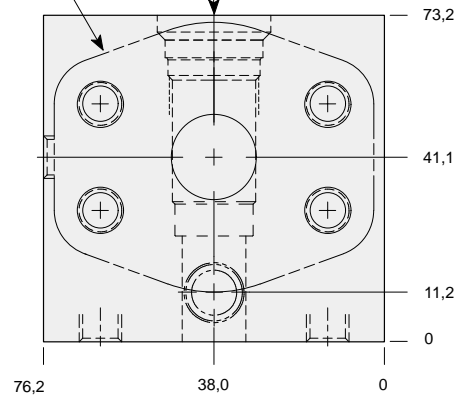
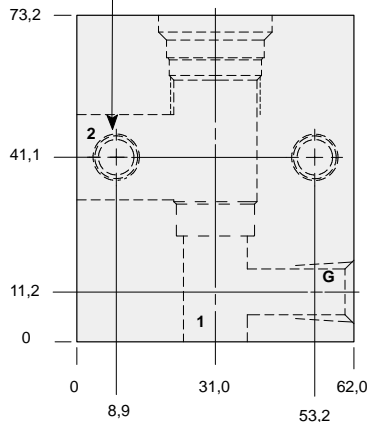


90 degree .75" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-10A Cavity
Locating Shoulder
Depth 9,7 mm.

.75" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	FA3		FA3/S	
Metric	.25 BSPP	FA3/M		FA3/T	

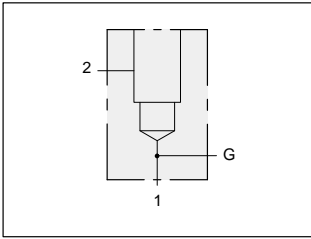


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 1 T-10A



90 degree 1.00" SAE Code 61 flange port body with gauge port.

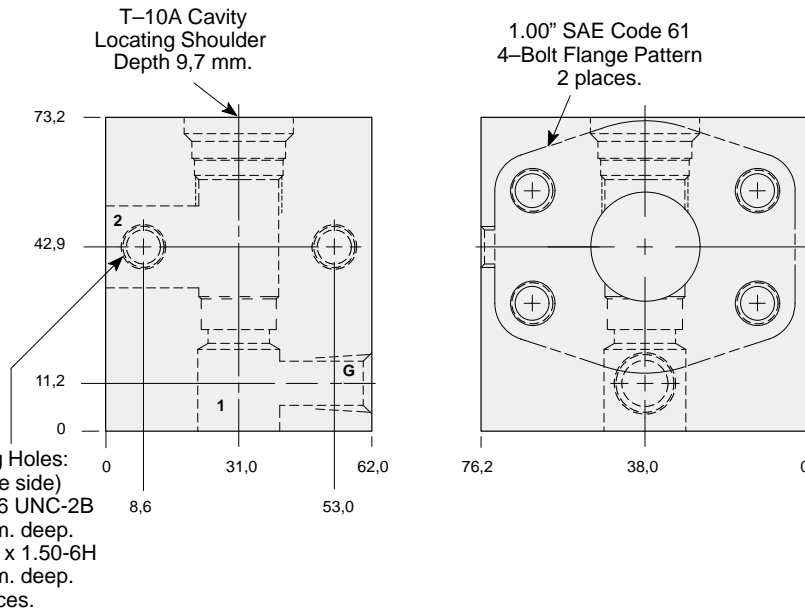
TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

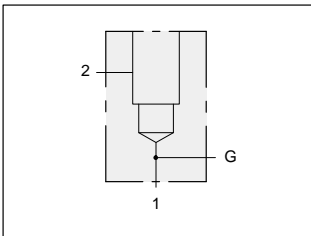
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	FAP		FAP/S	
Inch	.25 BSPP	FAP/M		FAP/T	



90 degree 1.00" SAE Code 62 flange port body with gauge port.

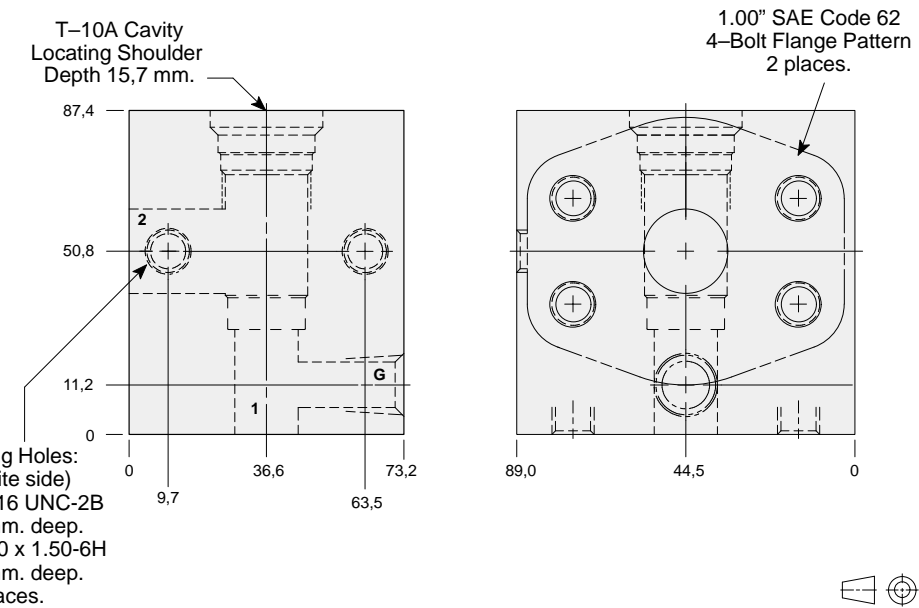
TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



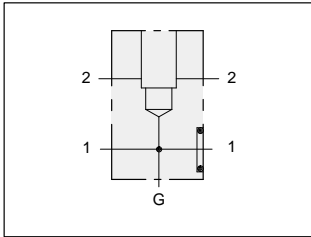
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	FA4		FA4/S	
Metric	.25 BSPP	FA4/M		FA4/T	



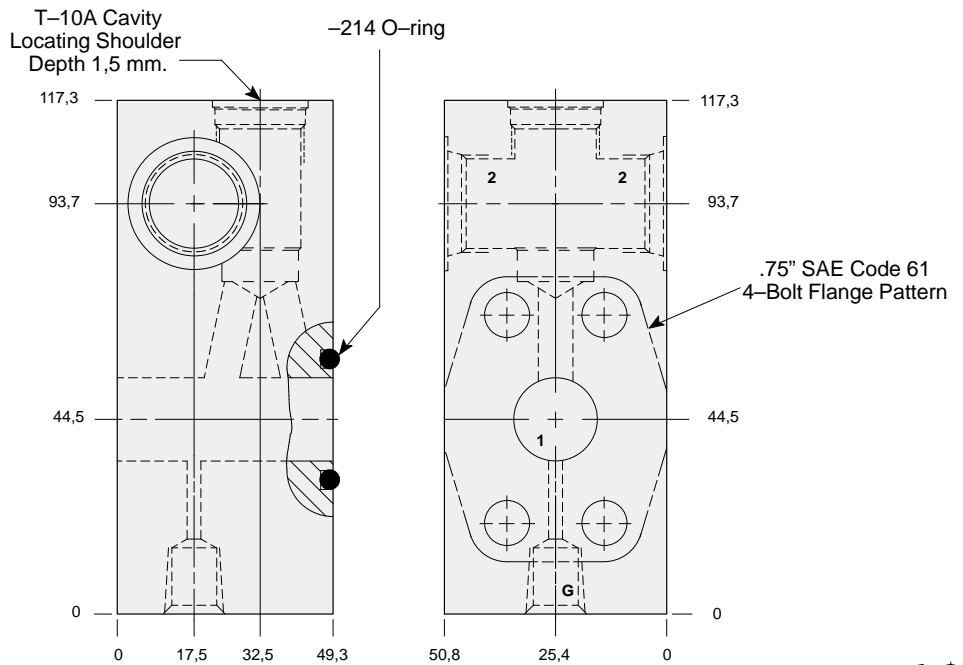
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Sandwich mount through port .75" SAE Code 61 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RPEC - *** Page 1.06
- RPEE - *** Page 1.08
- RDDA - *** Page 1.10
- RQEB - *** Page 1.12

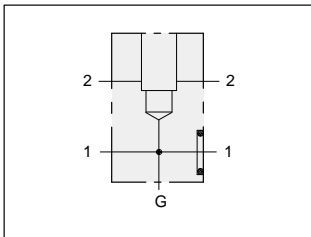
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page iii

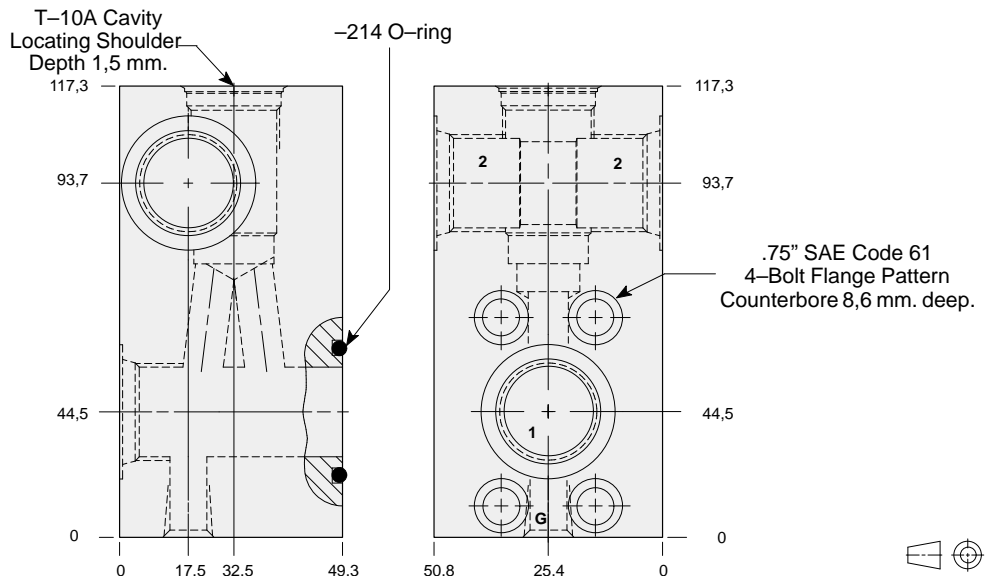
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-10	.25 NPTF	ZQN		ZQN/S	
Metric	.50 BSPP	.25 BSPP	ZQM		ZQM/S	



Flange mount through port .75" SAE Code 61 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RPEC - *** Page 1.06
- RPEE - *** Page 1.08
- RDDA - *** Page 1.10
- RQEB - *** Page 1.12

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-10	.25 NPTF	ZDG		ZDG/S	
Inch	.50 NPTF	.25 NPTF	ZDJ		ZDJ/S	
Metric	.50 BSPP	.25 BSPP	ZDD		ZDD/S	

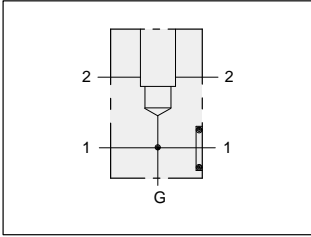


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 1 T-10A



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

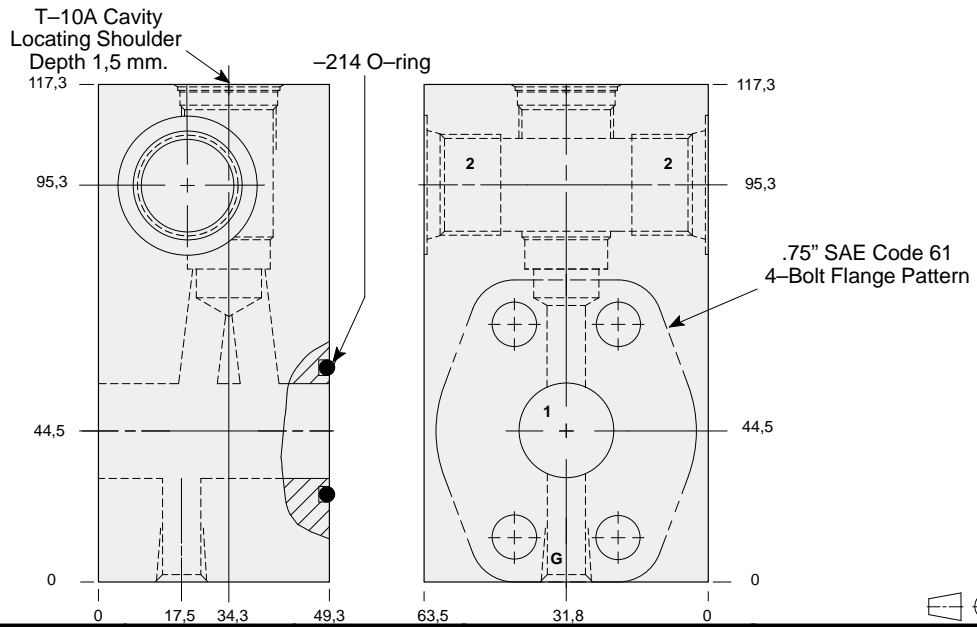
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page iii

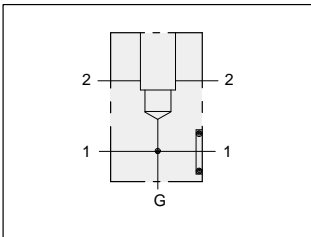
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Sandwich mount through port .75" SAE Code 61 body with gauge port.



Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-12	.25 NPTF	ZHB		ZHB/S	
Inch	.75 NPTF	.25 NPTF	ZHC		ZHC/S	
Metric	.75 BSPP	.25 BSPP	ZGZ		ZGZ/S	



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

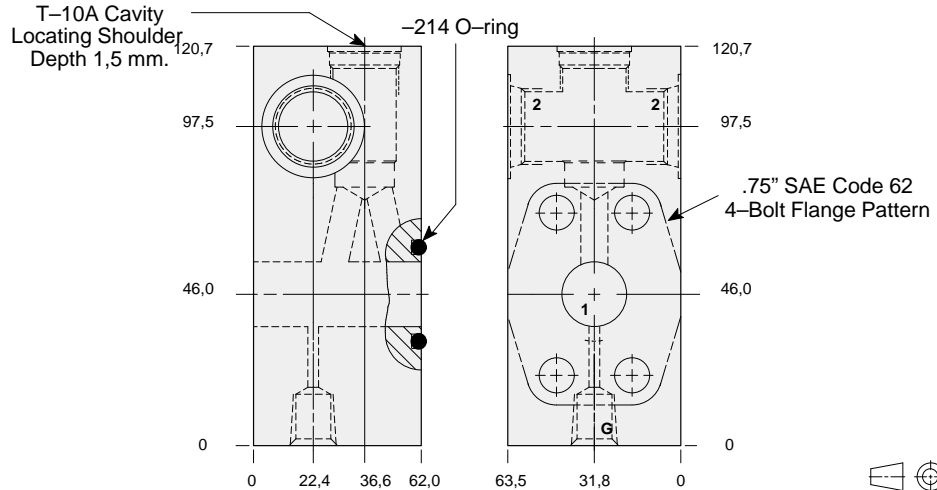
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Sandwich mount through port .75" SAE Code 62 body with gauge port.



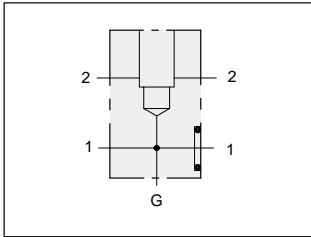
Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-12	.25 NPTF	ZCW		ZCW/S	
Inch	SAE-10	.25 NPTF	ZCX		ZCX/S	
Inch	.75 NPTF	.25 NPTF	ZCY		ZCY/S	
Inch	.50 NPTF	.25 NPTF	ZCZ		ZCZ/S	
Metric	.75 BSPP	.25 BSPP	ZCT		ZCT/S	
Metric	.50 BSPP	.25 BSPP	ZCV/M		ZCV/T	



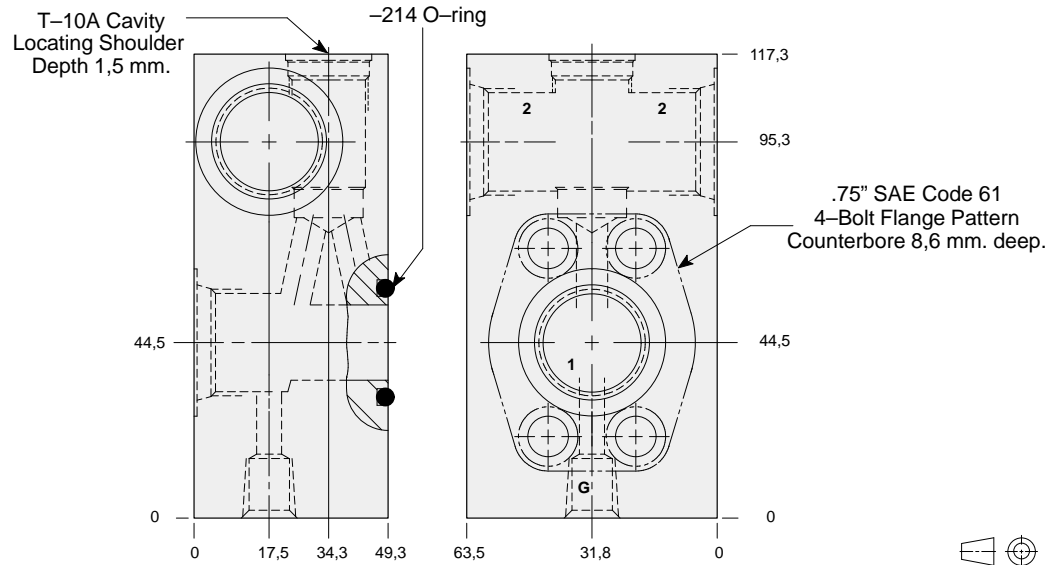
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Flange mount through port .75" SAE Code 61 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

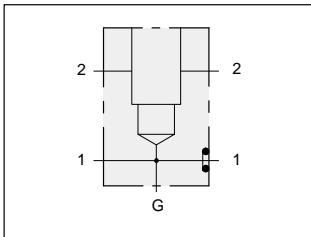
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page iii

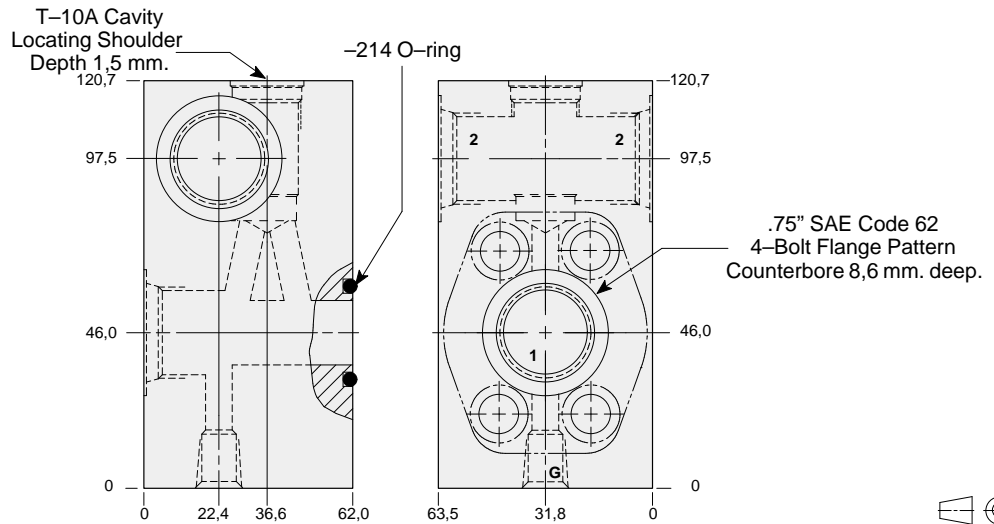
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-12	.25 NPTF	ZDF		ZDF/S	
Inch	.75 NPTF	.25 NPTF	ZDH		ZDH/S	
Metric	.75 BSPP	.25 BSPP	ZDC		ZDC/S	



Flange mount through port .75" SAE Code 62 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-12	.25 NPTF	ZCP		ZCP/S	
Inch	SAE-10	.25 NPTF	ZCQ		ZCQ/S	
Inch	.75 NPTF	.25 NPTF	ZCR		ZCR/S	
Inch	.50 NPTF	.25 NPTF	ZCS		ZCS/S	
Metric	.75 BSPP	.25 BSPP	ZCM		ZCM/S	
Metric	.50 BSPP	.25 BSPP	ZCN		ZCN/S	

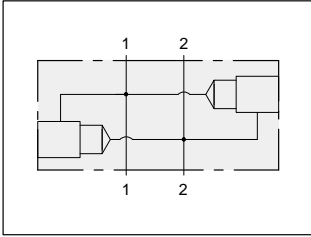


LINE MOUNT BODIES

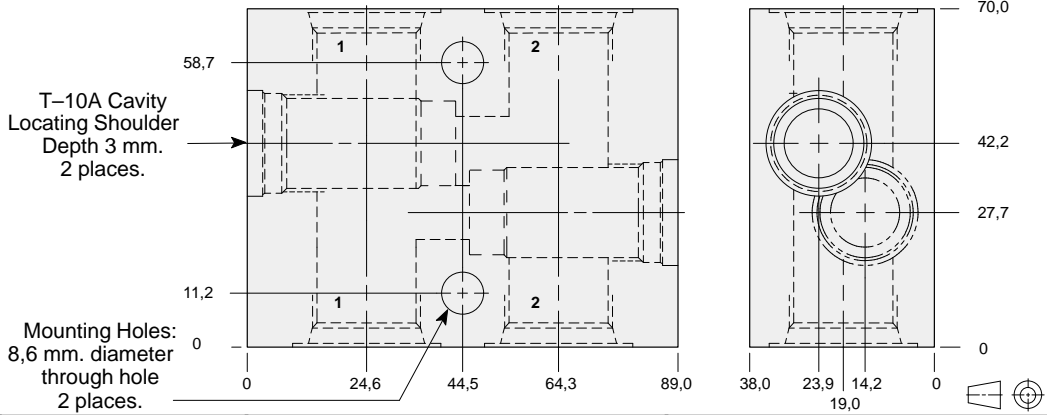


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 1 T-10A



Two cavity body for cross-port relief applications.



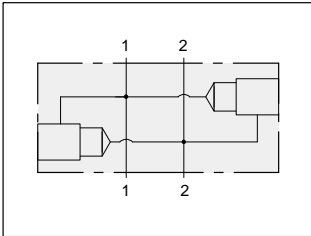
TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

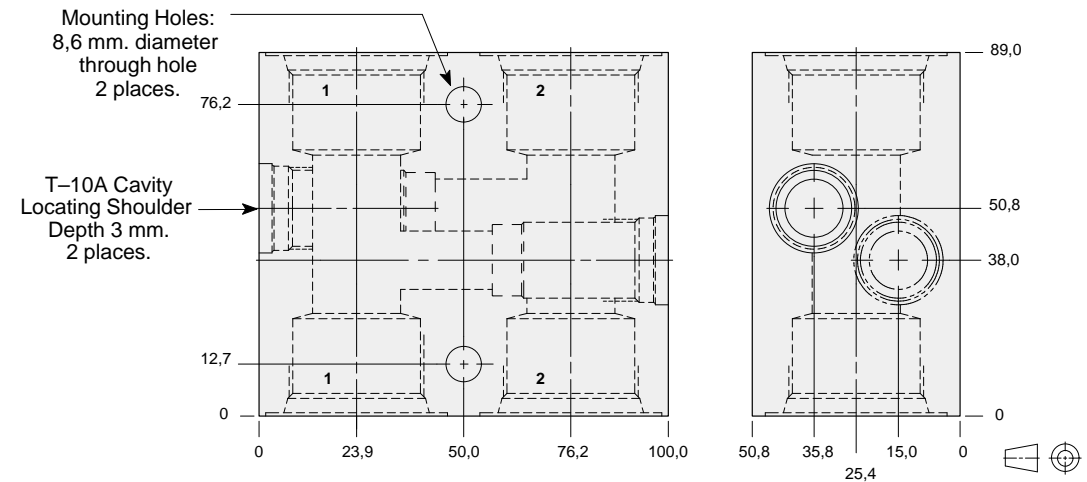
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	YFA		YFA/S	
.375 NPTF	YFB		YFB/S	
.50 NPTF	YFC		YFC/S	
SAE-4	YFH		YFH/S	
SAE-6	YFI		YFI/S	
SAE-8	YFJ		YFJ/S	
SAE-10	YFK		YFK/S	
.25 BSPP	YFT		YFT/S	
.375 BSPP	YFU		YFU/S	
.50 BSPP	YFV		YFV/S	



Two cavity body for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

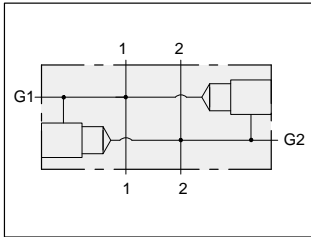
Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.75 NPTF	YFD		YFD/S	
1.00 NPTF	YFE		YFE/S	
SAE-12	YFL		YFL/S	
SAE-16	YFM		YFM/S	
.75 BSPP	YFW		YFW/S	
1.00 BSPP	YFX		YFX/S	



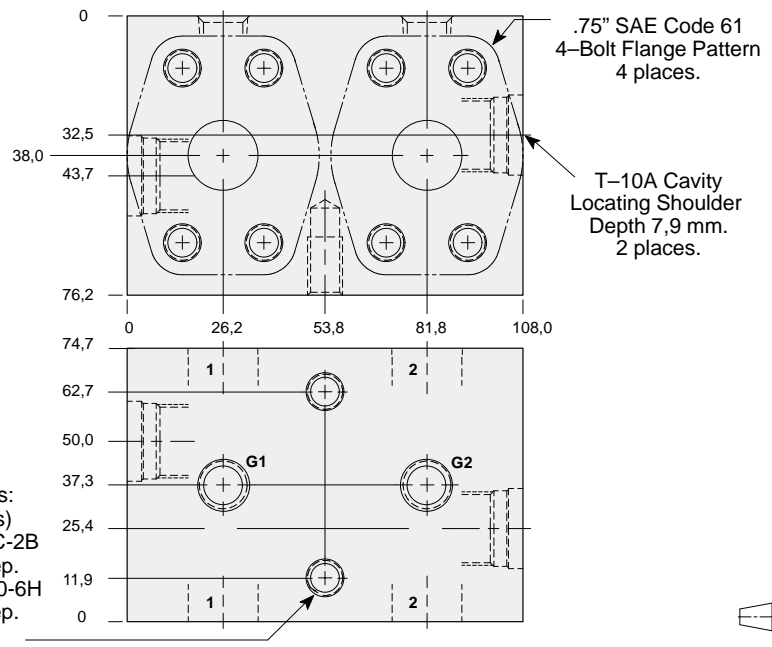
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity .75" SAE Code 61 flange port body for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

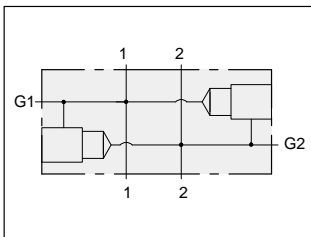
RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies. Page viii

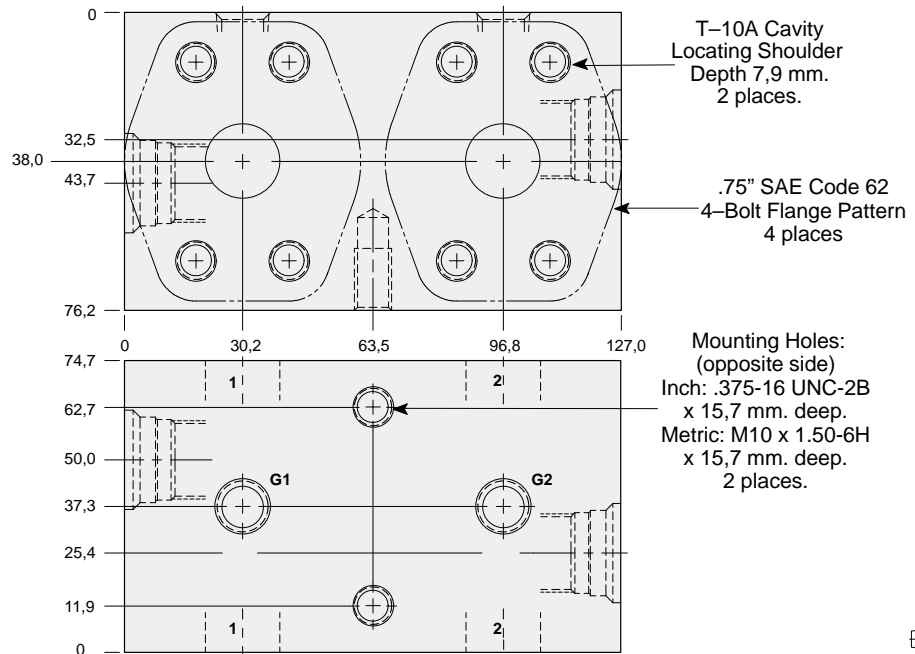
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports G1 & G2	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YFO		YFO/S	
Metric	.25 BSPP	YFO/M		YFO/T	



Two cavity .75" SAE Code 62 flange port body for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports G1 & G2	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YF3		YF3/S	
Metric	.25 BSPP	YF3/M		YF3/T	

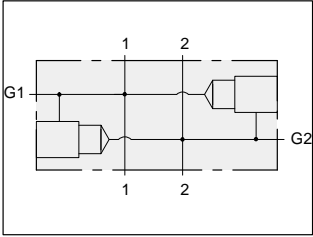


LINE MOUNT BODIES

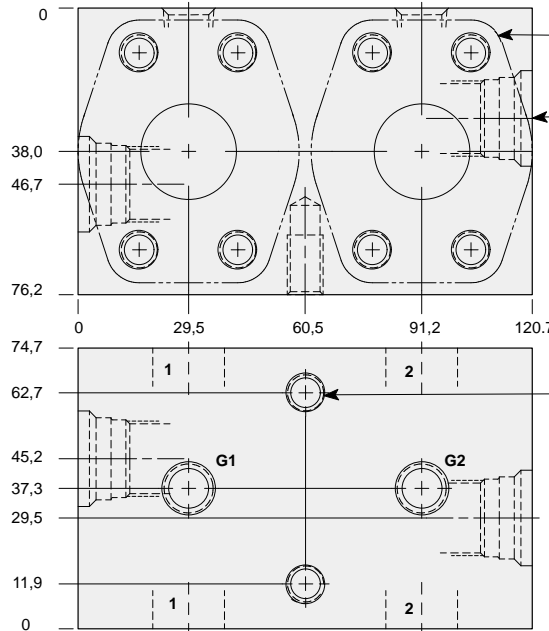


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 1 T-10A



Two cavity 1.00" SAE Code 61 flange port body with gauge ports for cross-port relief applications.



1.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

T-10A Cavity
Locating Shoulder
Depth 14,2 mm.
2 places.

Mounting Holes:
(opposite sides)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

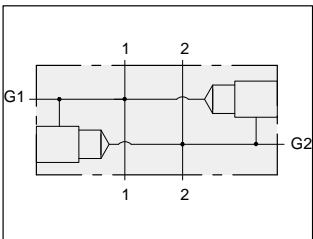


TYPICAL CARTRIDGES USED WITH THIS BODY

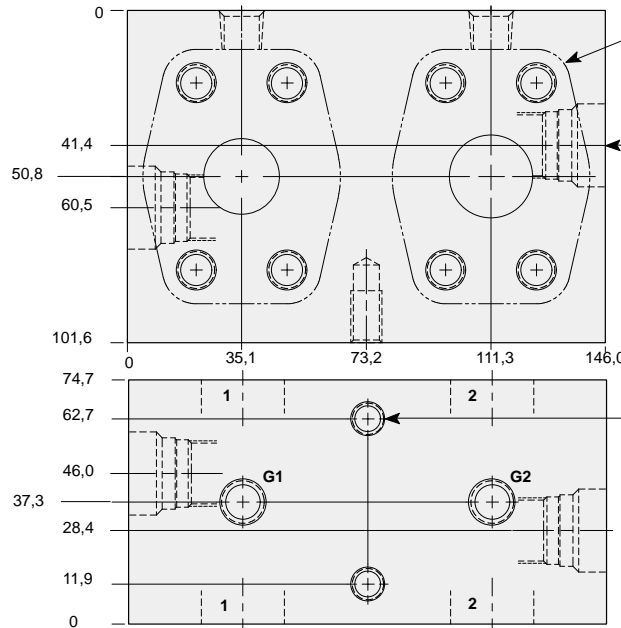
RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Ports G1 & G2	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YFP		YFP/S	
Metric	.25 BSPF	YFP/M		YFP/T	



Two cavity 1.00" SAE Code 62 flange port body with gauge ports for cross-port relief applications.



1.00" SAE Code 62
4-Bolt Flange Pattern
4 places.

T-10A Cavity
Locating Shoulder
Depth 14,2 mm.
2 places.

Mounting Holes:
(opposite sides)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

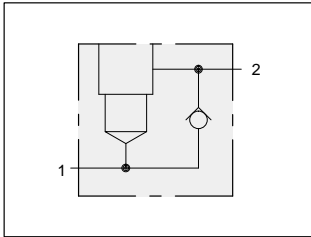
Mounting Hole Dimensions	Ports G1 & G2	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YF4		YF4/S	
Metric	.25 BSPF	YF4/M		YF4/T	



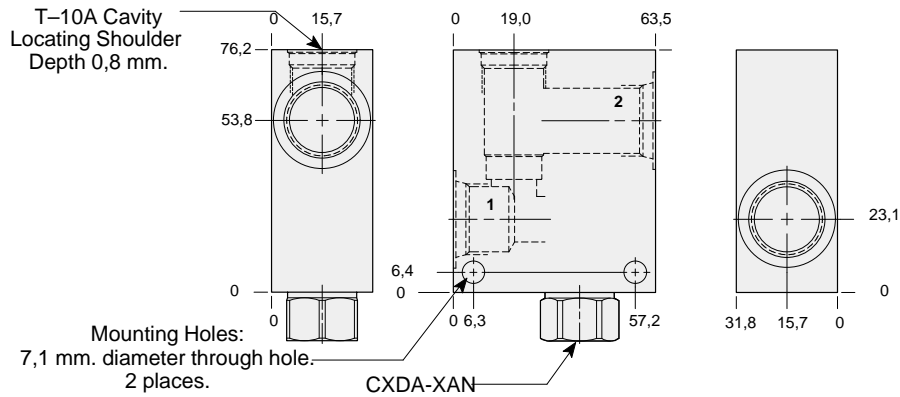
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with reverse free flow check.



TYPICAL CARTRIDGES USED WITH THIS BODY

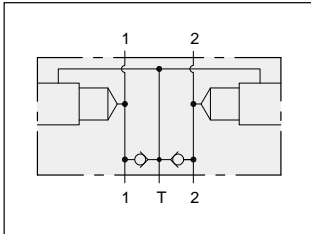
RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12
RBAC - ***	Page	1.16

Cartridge seal type determines check valve seal type.

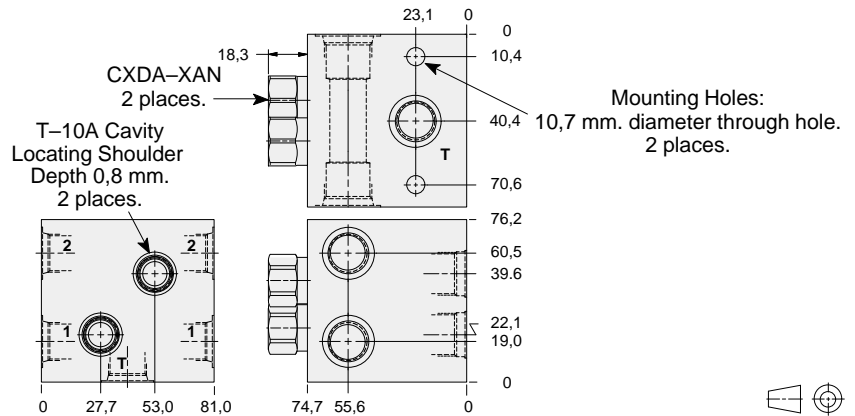
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	FNA		FNA/S	
.375 NPTF	FNB		FNB/S	
.50 NPTF	FNC		FNC/S	
SAE-6	FNI		FNI/S	
SAE-8	FNJ		FNJ/S	
SAE-10	FNK		FNK/S	
.25 BSPP	FNT		FNT/S	
.375 BSPP	FNU		FNU/S	
.50 BSPP	FNV		FNV/S	



Two cavity body with make-up checks for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPEC - ***	Page	1.06
RPEE - ***	Page	1.08
RDDA - ***	Page	1.10
RQEB - ***	Page	1.12

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

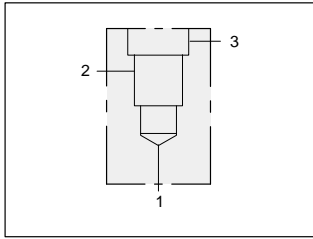
Ports 1,2,& T	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	FMA		FMA/S	
.375 NPTF	FMB		FMB/S	
.50 NPTF	FMC		FMC/S	
SAE-6	FMI		FMI/S	
SAE-8	FMJ		FMJ/S	
SAE-10	FMK		FMK/S	
.25 BSPP	FMT		FMT/S	
.375 BSPP	FMU		FMU/S	
.50 BSPP	FMV		FMV/S	



LINE MOUNT BODIES



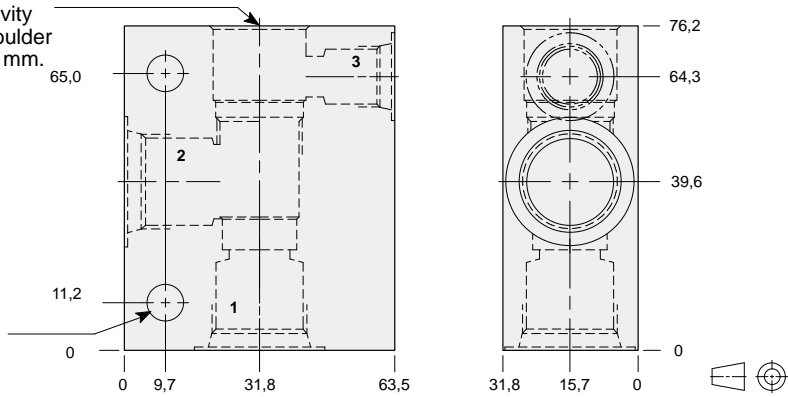
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.

T-11A Cavity
Locating Shoulder
Depth 17,5 mm.

Mounting Holes:
8,6 mm. diameter
through hole
2 places.

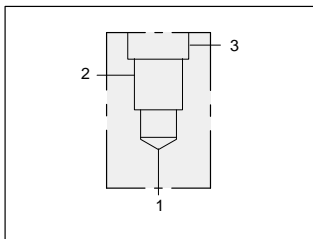


TYPICAL CARTRIDGES USED WITH THIS BODY

RBAD - ***	Page	1.17
RVCA - ***	Page	1.18
RSDC - ***	Page	2.06
SQDB - ***	Page	2.08
SCCA - ***	Page	2.12
PBDB - ***	Page	3.06
CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16
LODC - ***	Page	9.08
LKDC - ***	Page	9.10
LPDC - ***	Page	9.12
LRDC - ***	Page	9.14
CSAB - ***	Page	10.08
CDAB - ***	Page	10.10
CODA - ***	Page	10.12

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

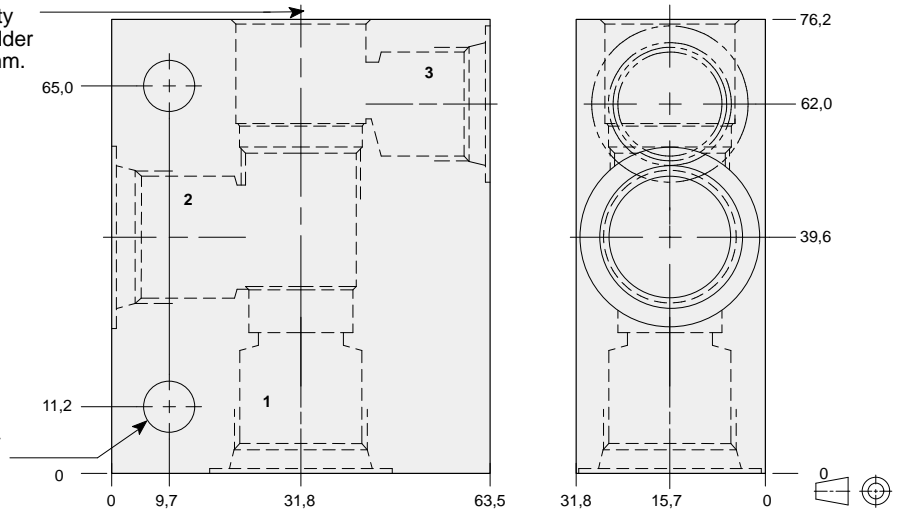
Ports 1 & 2	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	ECA		ECA/S	
.375 NPTF	.25 NPTF	ECB		ECB/S	
.50 NPTF	.25 NPTF	ECC		ECC/S	
SAE-4	SAE-4	ECH		ECH/S	
SAE-6	SAE-6	ECI		ECI/S	
SAE-8	SAE-6	ECJ		ECJ/S	
SAE-10	SAE-6	ECK		ECK/S	
.25 BSPP	.25 BSPP	ECT		ECT/S	
.375 BSPP	.25 BSPP	ECU		ECU/S	
.50 BSPP	.25 BSPP	ECV		ECV/S	



90 degree body with high capacity port 3.

T-11A Cavity
Locating Shoulder
Depth 17,5 mm.

Mounting Holes:
8,6 mm. diameter
through hole
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPDB - ***	Page	3.10
FRCA - ***	Page	6.02
DPBA - ***	Page	8.06
DPBB - ***	Page	8.07
DPBC - ***	Page	8.08
DPBD - ***	Page	8.09

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

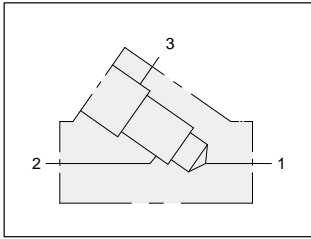
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.375 NPTF	.375 NPTF	EAB		EAB/S	
.50 NPTF	.375 BSPP	EAC		EAC/S	
SAE-8	SAE-8	EAJ		EAJ/S	
SAE-10	SAE-8	EAK		EAK/S	
.375 BSPP	.375 BSPP	EAU		EAU/S	
.50 BSPP	.375 BSPP	EAV		EAV/S	



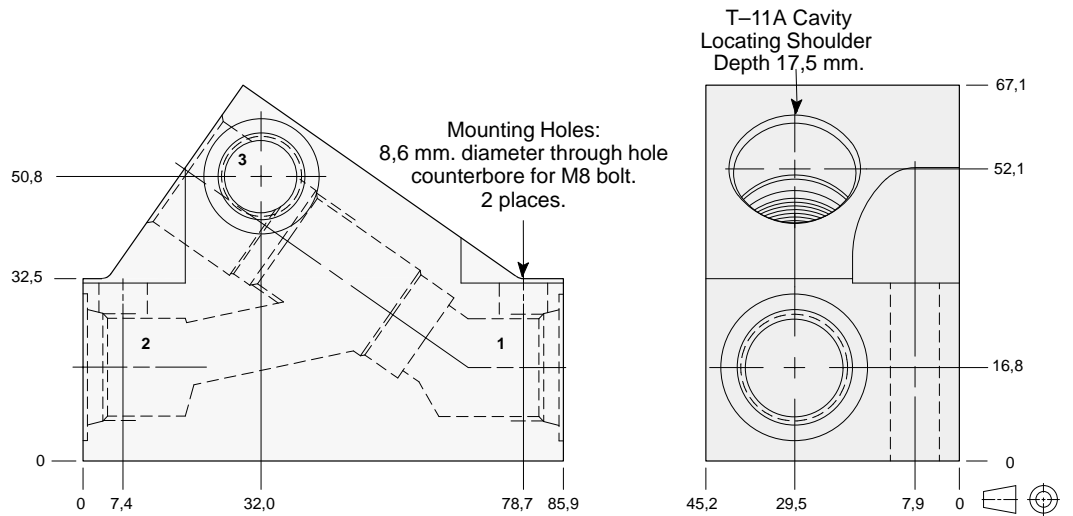
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline body.



TYPICAL CARTRIDGES USED WITH THIS BODY

RBAD - ***	Page	1.17
RVCA - ***	Page	1.18
RSDC - ***	Page	2.06
SQDB - ***	Page	2.08
SCCA - ***	Page	2.12
PBDB - ***	Page	3.06
CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16
LODC - ***	Page	9.08
LKDC - ***	Page	9.10
LPDC - ***	Page	9.12
LRDC - ***	Page	9.14
CSAB - ***	Page	10.08
CDAB - ***	Page	10.10
CODA - ***	Page	10.12

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

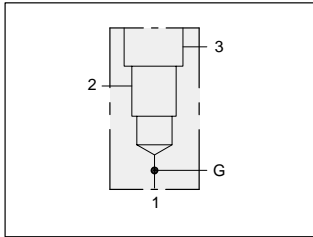
Ports 1 & 2	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	EJA		EJA/S	
.375 NPTF	.25 NPTF	EJB		EJB/S	
SAE-6	SAE-6	EJI		EJI/S	
SAE-8	SAE-8	EJJ		EJJ/S	
.25 BSPP	.25 BSPP	EJT		EJT/S	
.375 BSPP	.25 BSPP	EJU		EJU/S	
.50 BSPP	.25 BSPP	EJV		EJV/S	



LINE MOUNT BODIES



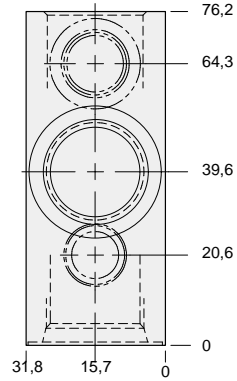
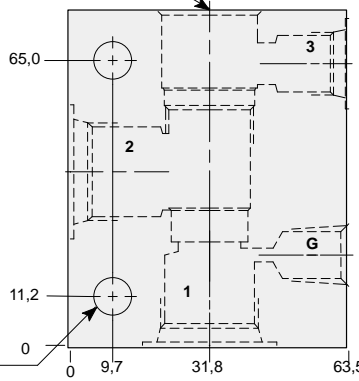
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body with gauge port.

T-11A Cavity
Locating Shoulder
Depth 17,5 mm.

Mounting Holes:
8,6 mm. diameter
through hole
2 places.



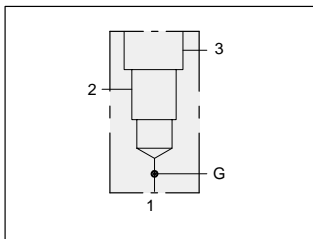
TYPICAL CARTRIDGES USED WITH THIS BODY

RBAD - ***	Page	1.17
RVCA - ***	Page	1.18
RSDC - ***	Page	2.06
SQDB - ***	Page	2.08
SCCA - ***	Page	2.12
PBDB - ***	Page	3.06
LODC - ***	Page	9.08
LKDC - ***	Page	9.10
LPDC - ***	Page	9.12
LRDC - ***	Page	9.14
CSAB - ***	Page	10.08
CDAB - ***	Page	10.10
CODA - ***	Page	10.12

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

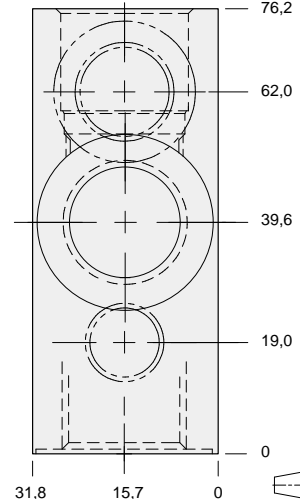
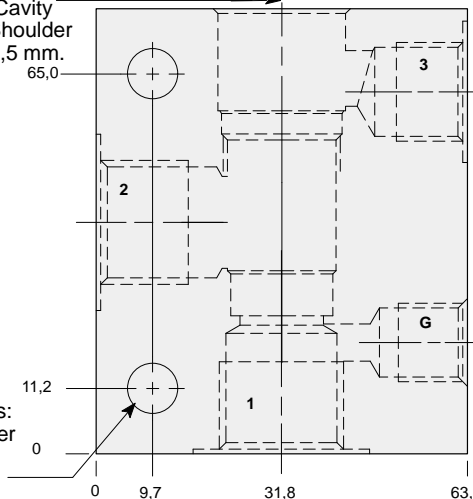
Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	EFA		EFA/S	
.375 NPTF	.25 NPTF	.25 NPTF	EFB		EFB/S	
.50 NPTF	.25 NPTF	.25 NPTF	EFC		EFC/S	
SAE-4	SAE-4	.25 NPTF	EFH		EFH/S	
SAE-6	SAE-6	.25 NPTF	EFI		EFI/S	
SAE-8	SAE-6	.25 NPTF	EFJ		EFJ/S	
SAE-10	SAE-6	.25 NPTF	EFK		EFK/S	
.25 BSPP	.25 BSPP	.25 BSPP	EFT		EFT/S	
.375 BSPP	.25 BSPP	.25 BSPP	EFU		EFU/S	
.50 BSPP	.25 BSPP	.25 BSPP	EFV		EFV/S	



90 degree body with high capacity port 3 and gauge port.

T-11A Cavity
Locating Shoulder
Depth 17,5 mm.

Mounting Holes:
8,6 mm. diameter
through hole
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPDB - ***	Page	3.10
FRCA - ***	Page	6.02
DPBA - ***	Page	8.06
DPBB - ***	Page	8.07
DPBC - ***	Page	8.08
DPBD - ***	Page	8.09

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

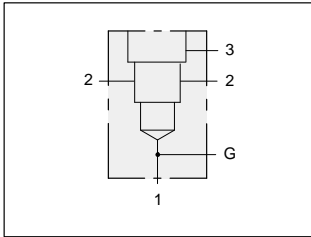
Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.375 NPTF	.375 NPTF	.25 NPTF	ELB		ELB/S	
.50 NPTF	.375 NPTF	.25 NPTF	ELC		ELC/S	
SAE-6	SAE-6	.25 NPTF	ELI		ELI/S	
SAE-8	SAE-8	.25 NPTF	ELJ		ELJ/S	
SAE-10	SAE-8	.25 NPTF	ELK		ELK/S	
.50 BSPP	.375 BSPP	.25 BSPP	ELV		ELV/S	



LINE MOUNT BODIES

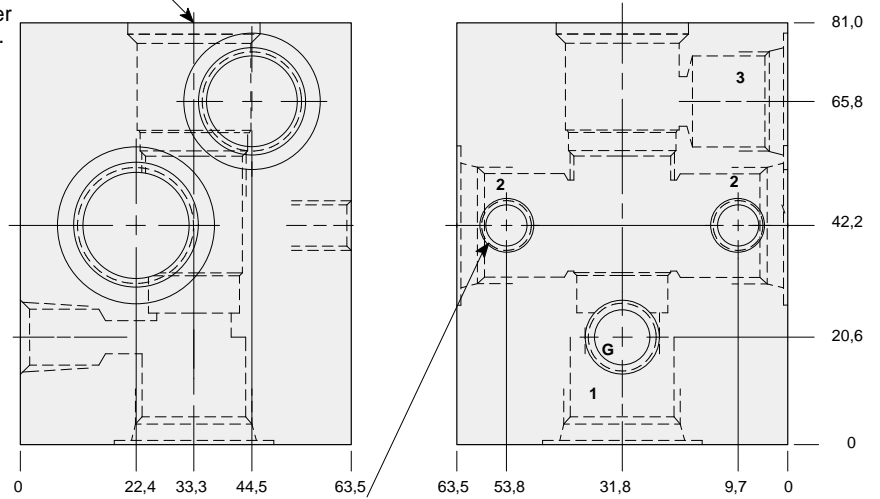


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port body with gauge port for reducing applications.

T-11A Cavity
Locating Shoulder
Depth 20,6 mm.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PBDB - *** Page 3.06

Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

Series 1 T-11A

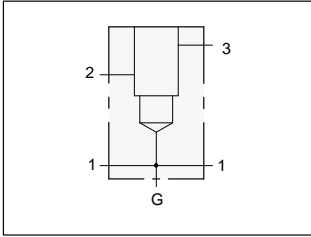
Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	WRM		WRM/S	
.375 NPTF	.25 NPTF	.25 NPTF	WRN		WRN/S	
.50 NPTF	.25 NPTF	.25 NPTF	WRO		WRO/S	
SAE-6	SAE-6	.25 NPTF	WRP		WRP/S	
SAE-8	SAE-6	.25 NPTF	WRQ		WRQ/S	
SAE-10	SAE-6	.25 NPTF	WRR		WRR/S	
.25 BSPP	.25 BSPP	.25 BSPP	WRS		WRS/S	
.375 BSPP	.25 BSPP	.25 BSPP	WRT		WRT/S	
.50 BSPP	.25 BSPP	.25 BSPP	WRU		WRU/S	
.375 NPTF	.375 NPTF	.25 NPTF	WRX		WRX/S	
.50 NPTF	.375 NPTF	.25 NPTF	WRY		WRY/S	
SAE-8	SAE-8	.25 NPTF	WRZ		WRZ/S	
SAE-10	SAE-8	.25 NPTF	WSB		WSB/S	
.375 BSPP	.375 BSPP	.25 BSPP	WSC		WSC/S	
.50 BSPP	.375 BSPP	.25 BSPP	WSD		WSD/S	



LINE MOUNT BODIES



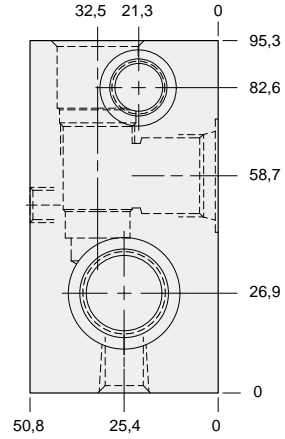
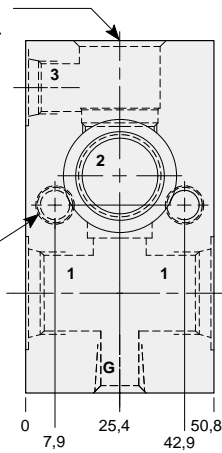
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port body with gauge port.

T-11A Cavity
Locating Shoulder
Depth 18,3 mm.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

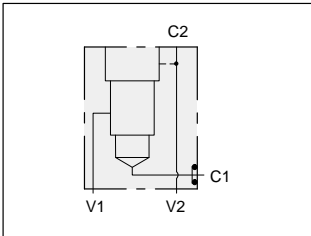


TYPICAL CARTRIDGES USED WITH THIS BODY

RBAD - ***	Page	1.17
RVCA - ***	Page	1.18
RSDC - ***	Page	2.06
SQDB - ***	Page	2.08
SCCA - ***	Page	2.12
PBDB - ***	Page	3.06
LODC - ***	Page	9.08

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch .25 NPTF	.25 NPTF	.25 NPTF	.25 NPTF	EHA		EHA/S	
Inch .375 NPTF	.25 NPTF	.25 NPTF	.25 NPTF	EHB		EHB/S	
Inch .50 NPTF	.25 NPTF	.25 NPTF	.25 NPTF	EHC		EHC/S	
Inch SAE-6	SAE-6	SAE-6	.25 NPTF	EHI		EHI/S	
Inch SAE-8	SAE-6	SAE-6	.25 NPTF	EHI		EHI/S	
Inch SAE-10	SAE-6	SAE-6	.25 NPTF	EHI		EHI/S	
Metric .25 BSPP	.25 BSPP	.25 BSPP	.25 BSPP	EHT		EHT/S	
Metric .375 BSPP	.25 BSPP	.25 BSPP	.25 BSPP	EHU		EHU/S	
Metric .50 BSPP	.25 BSPP	.25 BSPP	.25 BSPP	EHV		EHV/S	

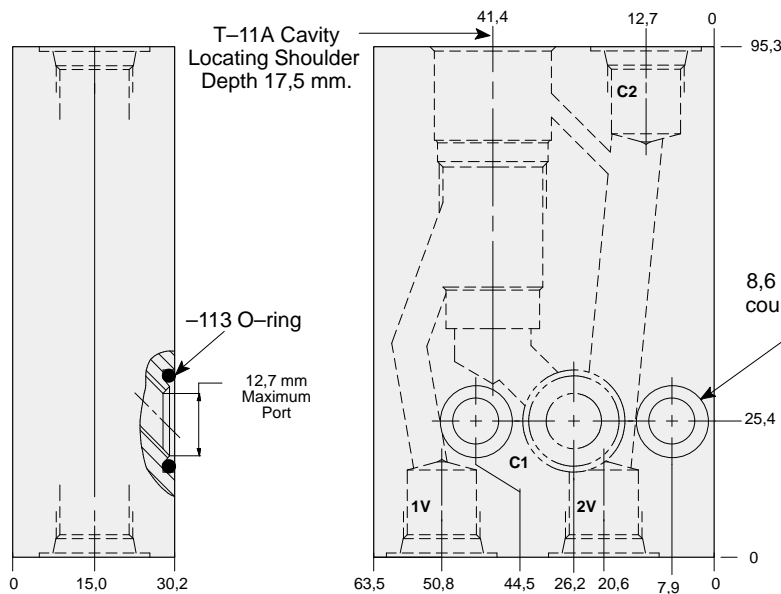


Gasket mount body for load control applications.

T-11A Cavity
Locating Shoulder
Depth 17,5 mm.

-113 O-ring
12,7 mm Maximum Port

Mounting Holes:
8,6 mm. diameter through hole,
counterbore 12,7 mm. diameter
x 6,4 mm. deep.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBGA - ***	Page	4.11
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16

Cartridge seal type determines O-ring type.
Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

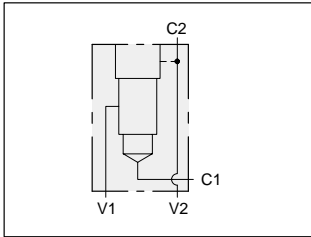
Ports C2, V1, V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	ZTN		ZTN/S	
SAE-6	ZTC		ZTC/S	
.375 BSPP	ZTD		ZTD/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



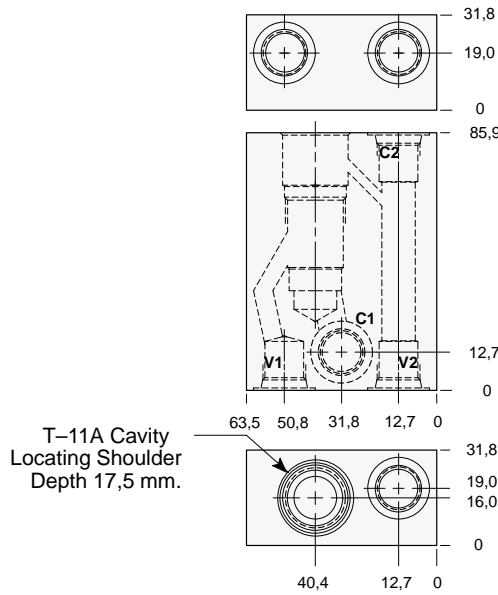
Nipple mount body for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

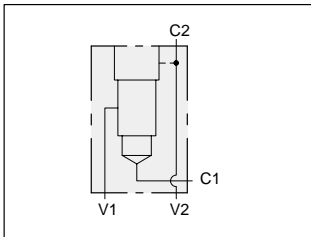
CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



Port C1	Ports C2, V1, V2	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
SAE-6	SAE-6	ZRK		ZRK/S	
.375 NPTF	SAE-6	ZTS		ZTS/S	
.375 NPTF	.375 NPTF	ZTZ		ZTZ/S	



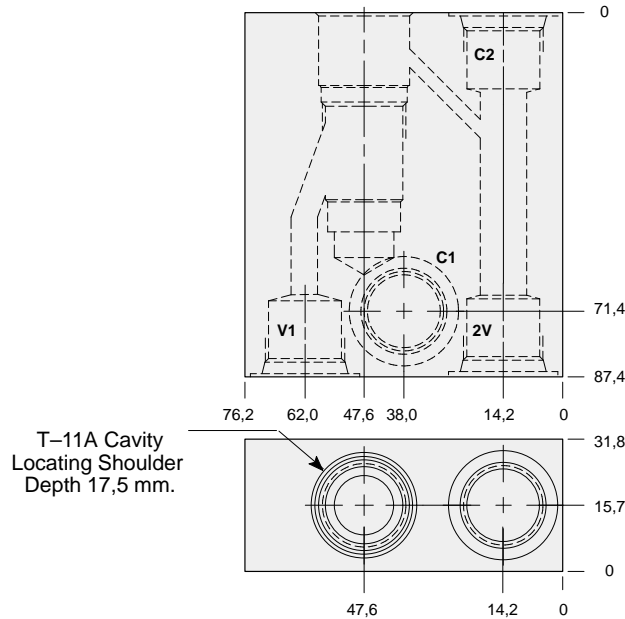
Nipple mount body for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



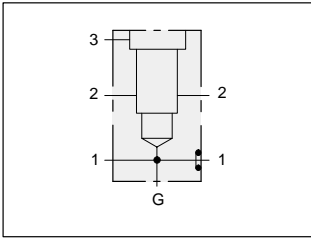
Port C1	Ports C2, V1, V2	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
SAE-8	SAE-8	WPE		WPE/S	
SAE-8	SAE-6	ZRL		ZRL/S	
.50 NPTF	.375 NPTF	ZTY		ZTY/S	



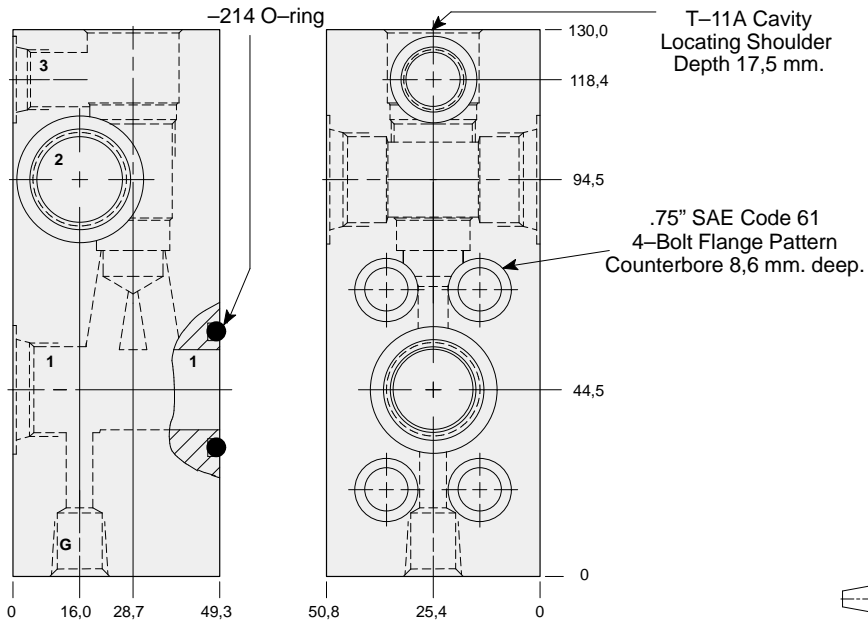
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Flange mount through port .75" SAE Code 61 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVCA - ***	Page	1.18
RSDC - ***	Page	2.06
SQDB - ***	Page	2.08
SCCA - ***	Page	2.12
LODC - ***	Page	9.08
LKDC - ***	Page	9.10
LPDC - ***	Page	9.12
LRDC - ***	Page	9.14

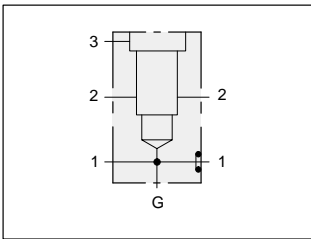
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

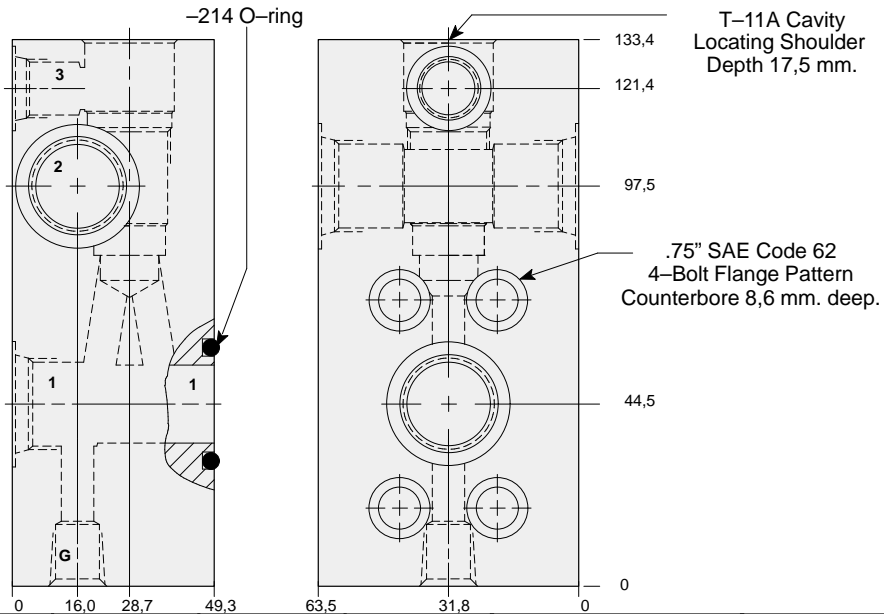
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Threaded Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	SAE-10	SAE-6	.25 NPTF	WYY		WYY/S	
Inch	.50 NPTF	.25 NPTF	.25 NPTF	WYZ		WYZ/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	WYX/M		WYX/T	



Flange mount through port .75" SAE Code 62 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVCA - ***	Page	1.18
RSDC - ***	Page	2.06
SQDB - ***	Page	2.08
SCCA - ***	Page	2.12
LODC - ***	Page	9.08
LKDC - ***	Page	9.10
LPDC - ***	Page	9.12
LRDC - ***	Page	9.14

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

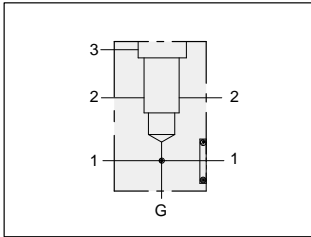
Mounting Hole Dimensions	Threaded Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	.25 NPTF	.25 NPTF	WYK		WYK/S	
Inch	SAE-10	SAE-6	.25 NPTF	WYJ		WYJ/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	WYI/M		WYI/T	



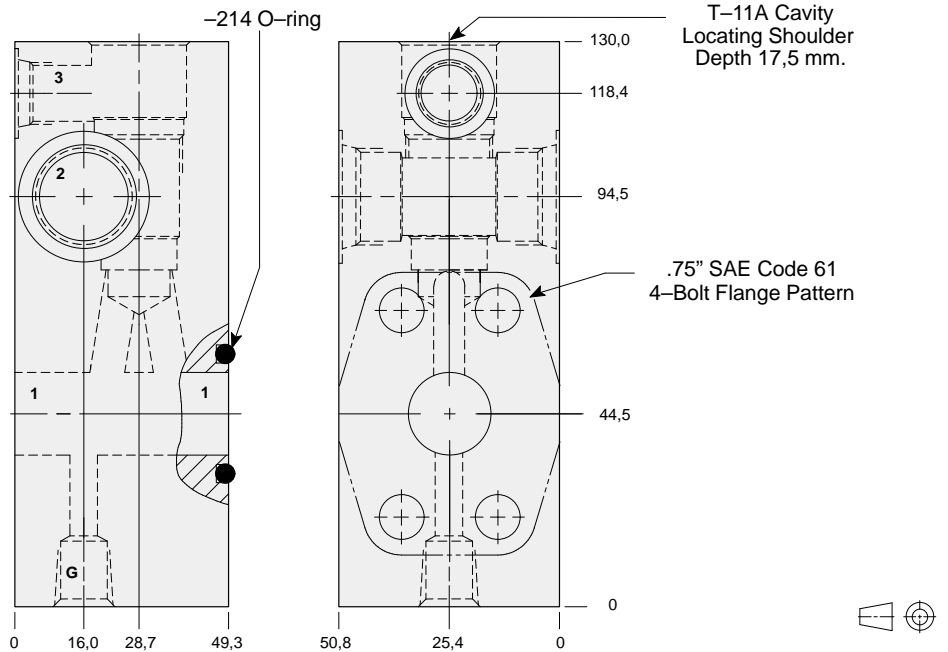
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Sandwich mount through port .75" SAE Code 61 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVCA - ***	Page	1.18
RSDC - ***	Page	2.06
SQDB - ***	Page	2.08
SCCA - ***	Page	2.12
LODC - ***	Page	9.08
LKDC - ***	Page	9.10
LPDC - ***	Page	9.12
LRDC - ***	Page	9.14

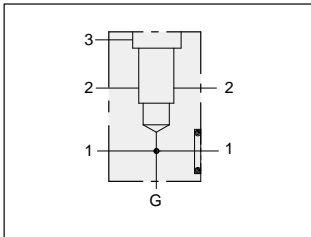
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

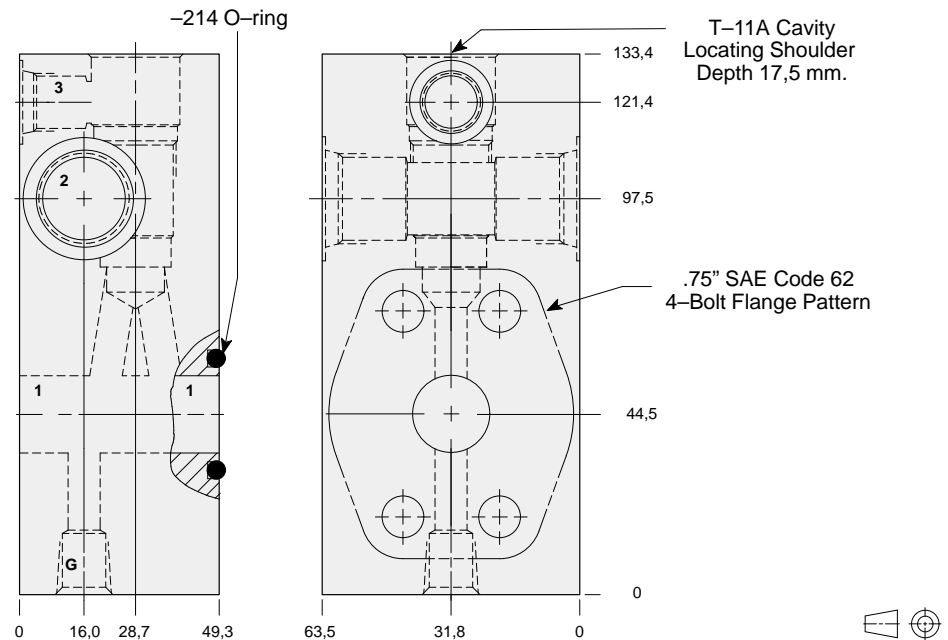
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	SAE-10	SAE-6	.25 NPTF	ZML		ZML/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	ZMK/M		ZMK/T	



Sandwich mount through port .75" SAE Code 62 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVCA - ***	Page	1.18
RSDC - ***	Page	2.06
SQDB - ***	Page	2.08
SCCA - ***	Page	2.12
LODC - ***	Page	9.08
LKDC - ***	Page	9.10
LPDC - ***	Page	9.12
LRDC - ***	Page	9.14

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

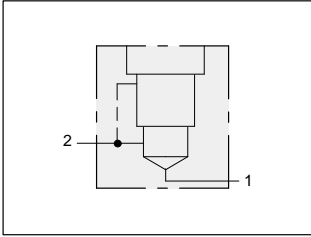
Mounting Hole Dimensions	Port 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	.25 NPTF	.25 NPTF	WYN		WYN/S	
Inch	SAE-10	SAE-6	.25 NPTF	WYM		WYM/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	WYL/M		WYL/T	



LINE MOUNT BODIES

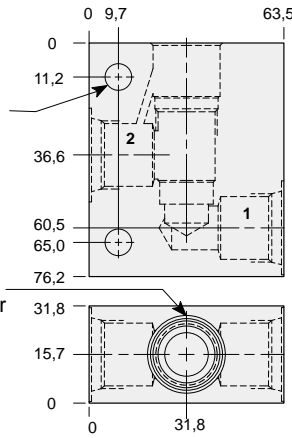


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline body with port 3 connected to port 2.

Mounting Holes:
8,6 mm. diameter
through hole
2 places.



T-11A Cavity
Locating Shoulder
Depth 17,5 mm.

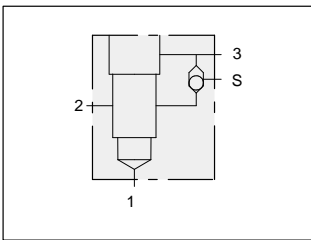


TYPICAL CARTRIDGES USED WITH THIS BODY

- CBCA - *** Page 4.10
- CBCG - *** Page 4.12
- CBCH - *** Page 4.14

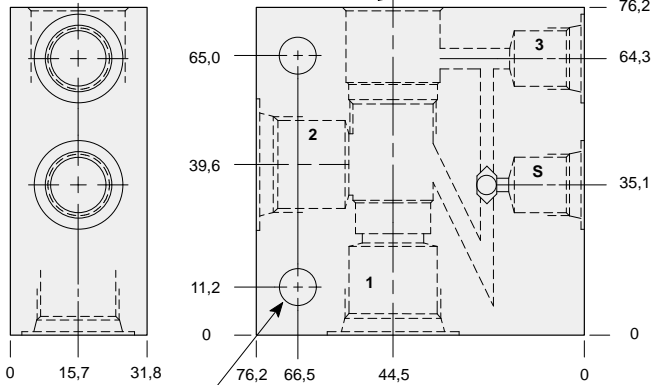
Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	EDA		EDA/S	
.375 NPTF	EDB		EDB/S	
.50 NPTF	EDC		EDC/S	
SAE-6	EDI		EDI/S	
SAE-8	EDJ		EDJ/S	
SAE-10	EDK		EDK/S	
.25 BSPP	EDT		EDT/S	
.375 BSPP	EDU		EDU/S	
.50 BSPP	EDV		EDV/S	



90 degree body with integral shuttle

T-11A Cavity
Locating Shoulder
Depth 17,5 mm.



Mounting Holes:
8,6 mm. diameter
through hole
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBCA - *** Page 4.10
- CBCG - *** Page 4.12
- CBCH - *** Page 4.14
- CKCB - *** Page 4.16

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

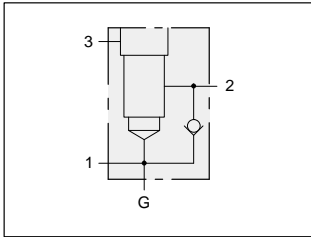
Ports 1 & 2	Ports S & 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	EGA		EGA/S	
.375 NPTF	.25 NPTF	EGB		EGB/S	
.50 NPTF	.25 NPTF	EGC		EGC/S	
SAE-6	SAE-6	EGI		EGI/S	
SAE-8	SAE-6	EGJ		EGJ/S	
SAE-10	SAE-6	EGK		EGK/S	
.25 BSPP	.25 BSPP	EGT		EGT/S	
.375 BSPP	.25 BSPP	EGU		EGU/S	
.50 BSPP	.25 BSPP	EGV		EGV/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



TYPICAL CARTRIDGES USED WITH THIS BODY

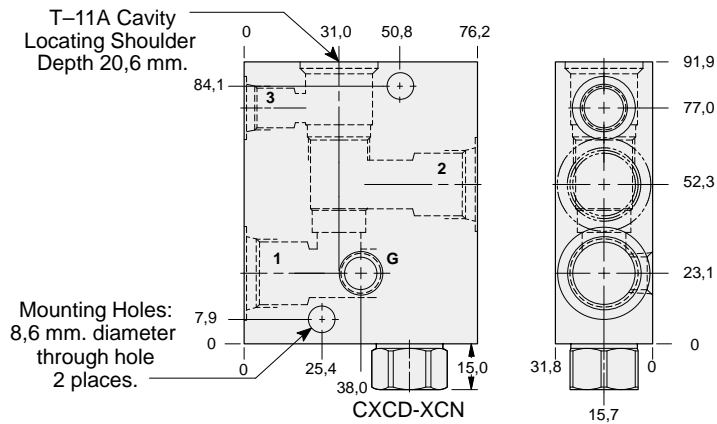
PBDB - *** Page 3.06

Cartridge seal type determines check valve seal type.

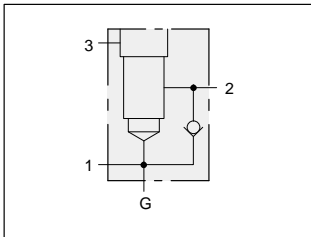
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Body with reverse free flow check and gauge port for reducing applications.



Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	E2A		E2A/S	
.375 NPTF	.25 NPTF	.25 NPTF	E2B		E2B/S	
.50 NPTF	.25 NPTF	.25 NPTF	E2C		E2C/S	
SAE-6	SAE-6	.25 NPTF	E2I		E2I/S	
SAE-8	SAE-6	.25 NPTF	E2J		E2J/S	
SAE-10	SAE-6	.25 NPTF	E2K		E2K/S	
.25 BSPP	.25 BSPP	.25 BSPP	E2T		E2T/S	
.375 BSPP	.25 BSPP	.25 BSPP	E2U		E2U/S	
.50 BSPP	.25 BSPP	.25 BSPP	E2V		E2V/S	



TYPICAL CARTRIDGES USED WITH THIS BODY

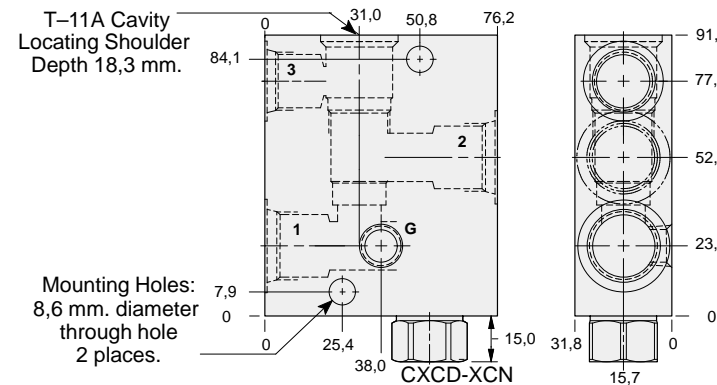
PBDB - *** Page 3.06

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.



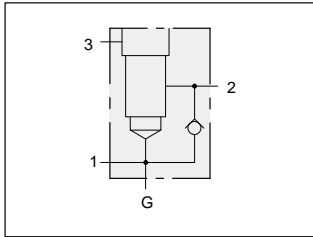
Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	E4A		E4A/S	
.375 NPTF	.375 NPTF	.25 NPTF	E4B		E4B/S	
.50 NPTF	.375 NPTF	.25 NPTF	E4C		E4C/S	
SAE-6	SAE-6	.25 NPTF	E4I		E4I/S	
SAE-8	SAE-8	.25 NPTF	4EJ		E4J/S	
SAE-10	SAE-8	.25 NPTF	E4K		E4K/S	
.25 BSPP	.25 BSPP	.25 BSPP	E4T		E4T/S	
.375 BSPP	.375 BSPP	.25 BSPP	E4U		E4U/S	
.50 BSPP	.375 BSPP	.25 BSPP	E4V		E4V/S	



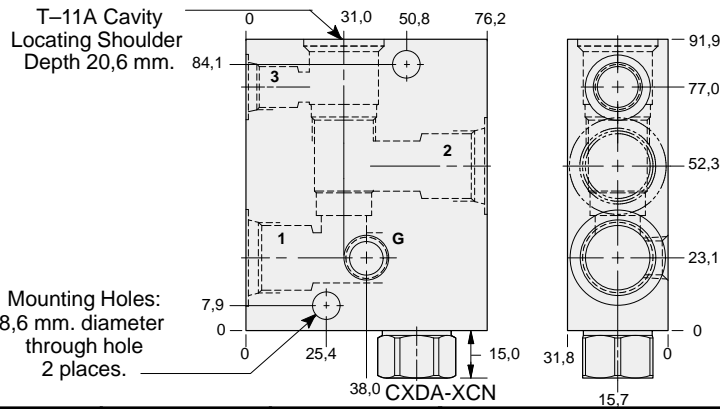
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with reverse free flow check and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

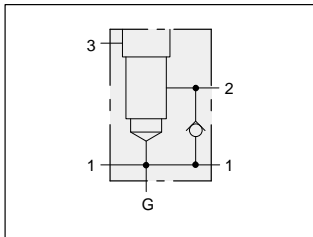
- RVCA - *** Page 1.18
- RSDC - *** Page 2.06
- SQDB - *** Page 2.08

Cartridge seal type determines check valve seal type.

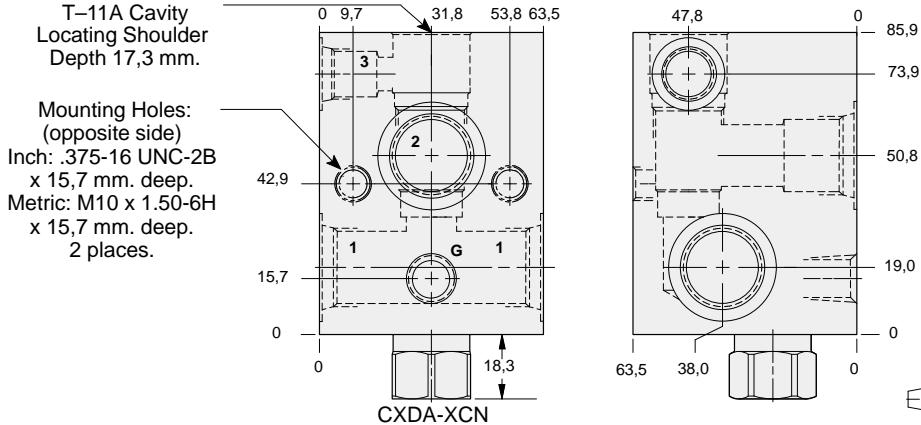
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	E6A		E6A/S	
.375 NPTF	.25 NPTF	.25 NPTF	E6B		E6B/S	
.50 NPTF	.25 NPTF	.25 NPTF	E6C		E6C/S	
SAE-6	SAE-6	.25 NPTF	E6I		E6I/S	
SAE-8	SAE-6	.25 NPTF	E6J		E6J/S	
SAE-10	SAE-6	.25 NPTF	E6K		E6K/S	
.25 BSPP	.25 BSPP	.25 BSPP	E6T		E6T/S	
.375 BSPP	.25 BSPP	.25 BSPP	E6U		E6U/S	
.50 BSPP	.25 BSPP	.25 BSPP	E6V		E6V/S	



Through port body with reverse free flow check and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RSDC - *** Page 2.06
- SQDB - *** Page 2.08

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

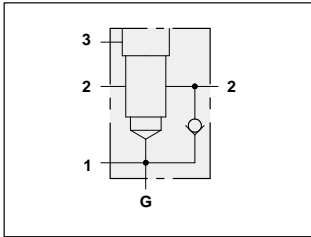
Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.25 NPTF	.25 NPTF	E7A		E7A/S	
Inch	.375 NPTF	.25 NPTF	.25 NPTF	E7B		E7B/S	
Inch	.50 NPTF	.25 NPTF	.25 NPTF	E7C		E7C/S	
Inch	SAE-6	SAE-6	.25 NPTF	E7I		E7I/S	
Inch	SAE-8	SAE-6	.25 NPTF	E7J		E7J/S	
Inch	SAE-10	SAE-6	.25 NPTF	E7K		E7K/S	
Metric	.25 BSPP	.25 BSPP	.25 BSPP	E7T		E7T/S	
Metric	.375 BSPP	.25 BSPP	.25 BSPP	E7U		E7U/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	E7V		E7V/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



TYPICAL CARTRIDGES USED WITH THIS BODY

PBDB - *** Page 3.06

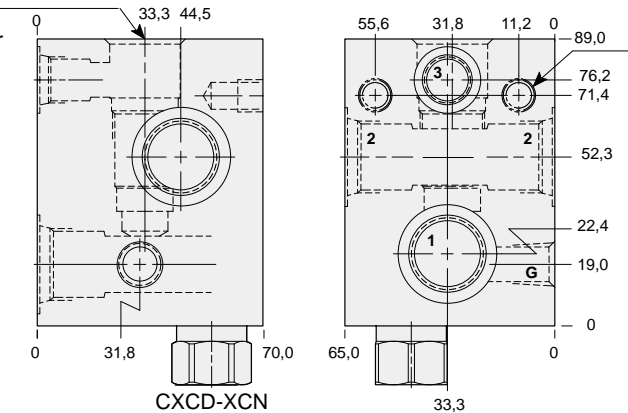
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

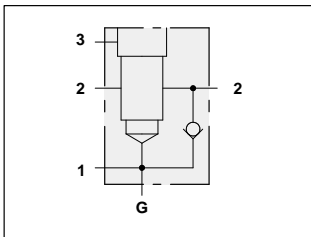
Through port body with reverse free flow check and gauge port for reducing applications.

T-11A Cavity Locating Shoulder Depth 18,3 mm.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep.
2 places.

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.25 NPTF	.25 NPTF	E3A		E3A/S	
Inch	.375 NPTF	.25 NPTF	.25 NPTF	E3B		E3B/S	
Inch	.50 NPTF	.25 NPTF	.25 NPTF	E3C		E3C/S	
Inch	SAE-6	SAE-6	.25 NPTF	E3I		E3I/S	
Inch	SAE-8	SAE-6	.25 NPTF	E3J		E3J/S	
Inch	SAE-10	SAE-6	.25 NPTF	E3K		E3K/S	
Metric	.25 BSPP	.25 BSPP	.25 BSPP	E3T		E3T/S	
Metric	.375 BSPP	.25 BSPP	.25 BSPP	E3U		E3U/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	E3V		ESV/S	



TYPICAL CARTRIDGES USED WITH THIS BODY

PBDB - *** Page 3.06

Cartridge seal type determines check valve seal type.

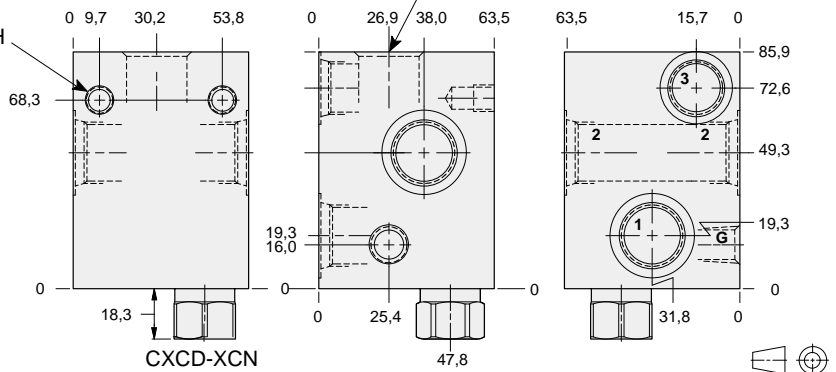
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Through port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.

Mounting Holes:
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep.
2 places.

T-11A Cavity Locating Shoulder Depth 18,3 mm.



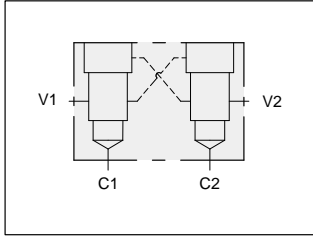
Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	.375 NPTF	.25 NPTF	E5B		E5B/S	
Inch	.50 NPTF	.375 NPTF	.25 NPTF	E5C		E5C/S	
Inch	SAE-8	SAE-8	.25 NPTF	E5J		E5J/S	
Inch	SAE-10	SAE-8	.25 NPTF	E5K		E5K/S	
Metric	.375 BSPP	.375 BSPP	.25 BSPP	E5U		E5U/S	
Metric	.50 BSPP	.375 BSPP	.25 BSPP	E5V		E5V/S	



LINE MOUNT BODIES



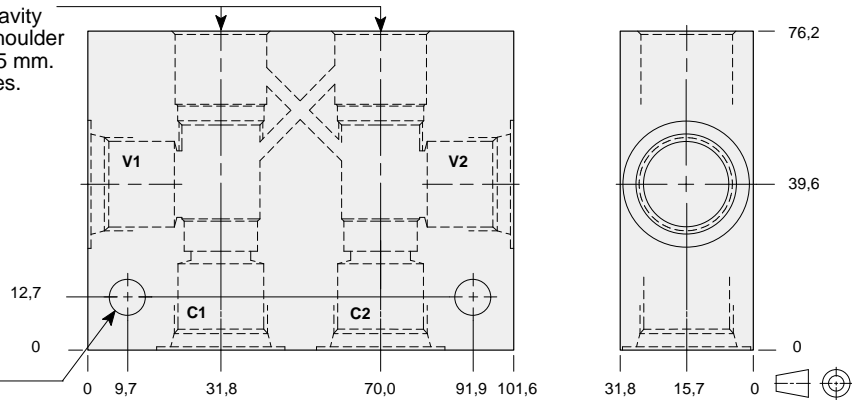
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 90 degree cross-piloted body for load control applications.

T-11A Cavity Locating Shoulder Depth 17,5 mm. 2 places.

Mounting Holes: 8,6 mm. diameter through hole 2 places.



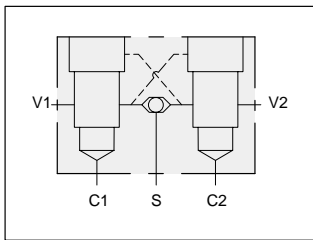
TYPICAL CARTRIDGES USED WITH THIS BODY

CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

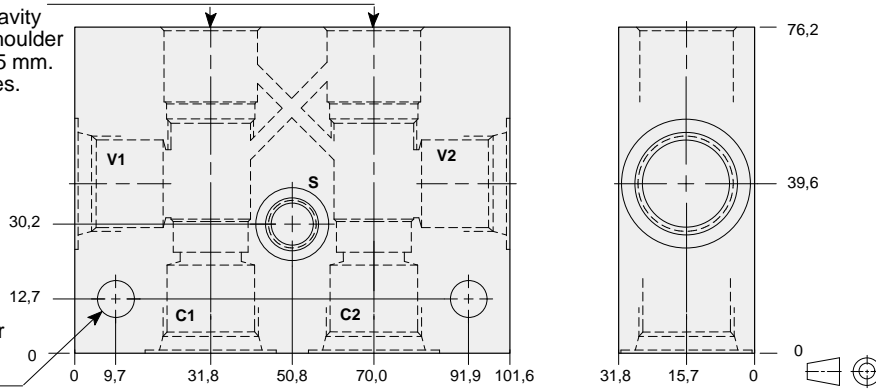
Ports C1, C2, & V1, V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	YEA		YEA/S	
.375 NPTF	YEB		YEB/S	
.50 NPTF	YEC		YEC/S	
SAE-6	YEI		YEI/S	
SAE-8	YEJ		YEJ/S	
SAE-10	YEK		YEK/S	
.25 BSPP	YET		YET/S	
.375 BSPP	YEU		YEU/S	
.50 BSPP	YEV		YEV/S	



Two cavity 90 degree cross-piloted body with shuttle for load control applications.

T-11A Cavity Locating Shoulder Depth 17,5 mm. 2 places.

Mounting Holes: 8,6 mm. diameter through hole 2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

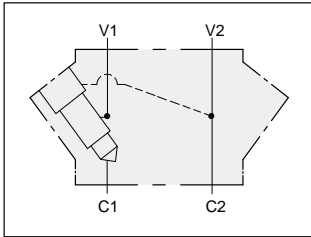
Ports C1, C2, & V1, V2	Port S	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	YGA		YGA/S	
.375 NPTF	.25 NPTF	YGB		YGB/S	
.50 NPTF	.25 NPTF	YGC		YGC/S	
SAE-6	SAE-4	YGI		YGI/S	
SAE-8	SAE-4	YGJ		YGJ/S	
SAE-10	SAE-4	YGK		YGK/S	
.25 BSPP	.25 BSPP	YGT		YGT/S	
.375 BSPP	.25 BSPP	YGU		YGU/S	
.50 BSPP	.25 BSPP	YGV		YGV/S	



LINE MOUNT BODIES

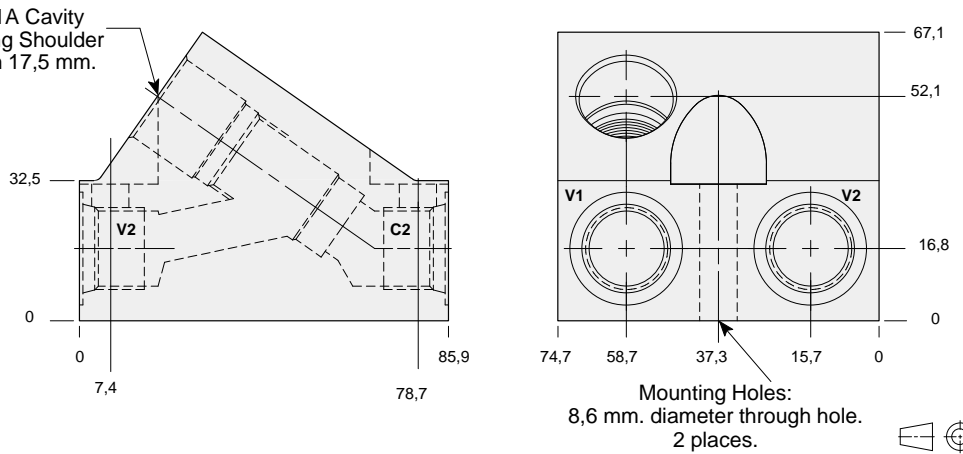


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline body for load control applications.

T-11A Cavity
Locating Shoulder
Depth 17,5 mm.



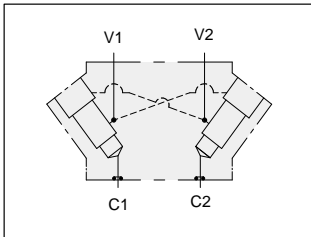
TYPICAL CARTRIDGES USED WITH THIS BODY

CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16

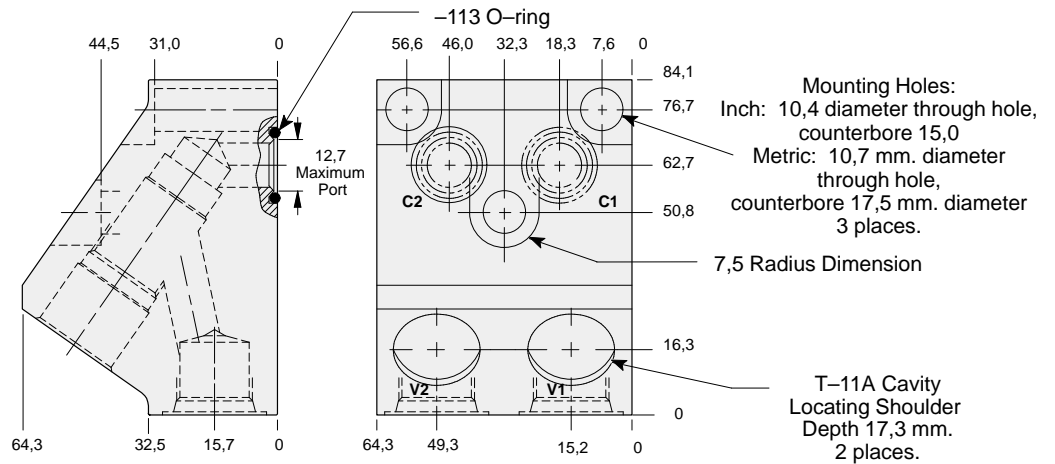
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports C1, C2, & V1, V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	XVF		XVF/S	
.375 NPTF	XVG		XVG/S	
SAE-6	XVH		XVH/S	
SAE-8	XVI		XVI/S	
.25 BSPP	XVJ		XVJ/S	
.375 BSPP	XVK		XVK/S	



Two cavity inline gasket mount cross-piloted body for load control applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

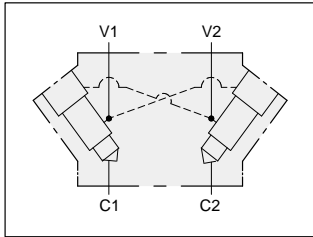
Mounting Hole Dimensions	Ports V1, & V2	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	XVL		XVL/S	
Inch	.375 NPTF	XVM		XVM/S	
Inch	SAE-6	XVN		XVN/S	
Inch	SAE-8	XVO		XVO/S	
Metric	.25 BSPP	XVP		XVP/S	
Metric	.375 BSPP	XVQ		XVQ/S	



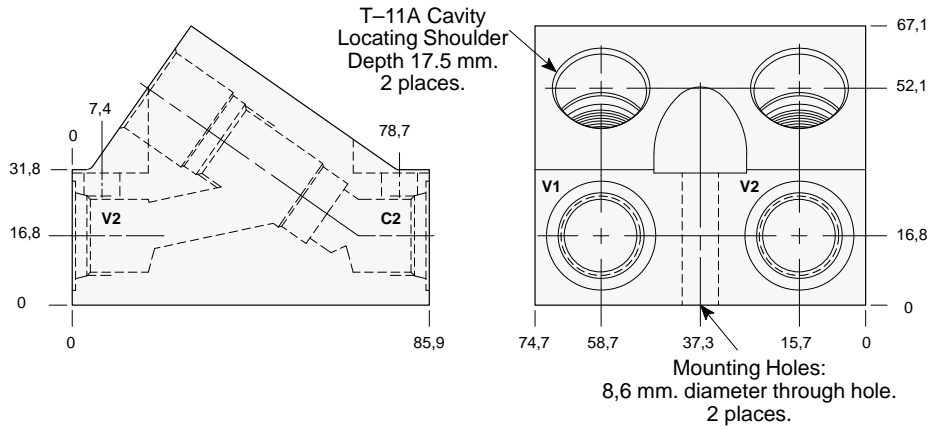
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity inline cross-piloted body for load control applications.



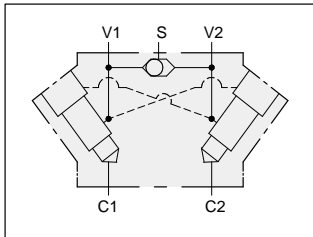
TYPICAL CARTRIDGES USED WITH THIS BODY

- CBCA - *** Page 4.10
- CBCG - *** Page 4.12
- CBCH - *** Page 4.14
- CKCB - *** Page 4.16

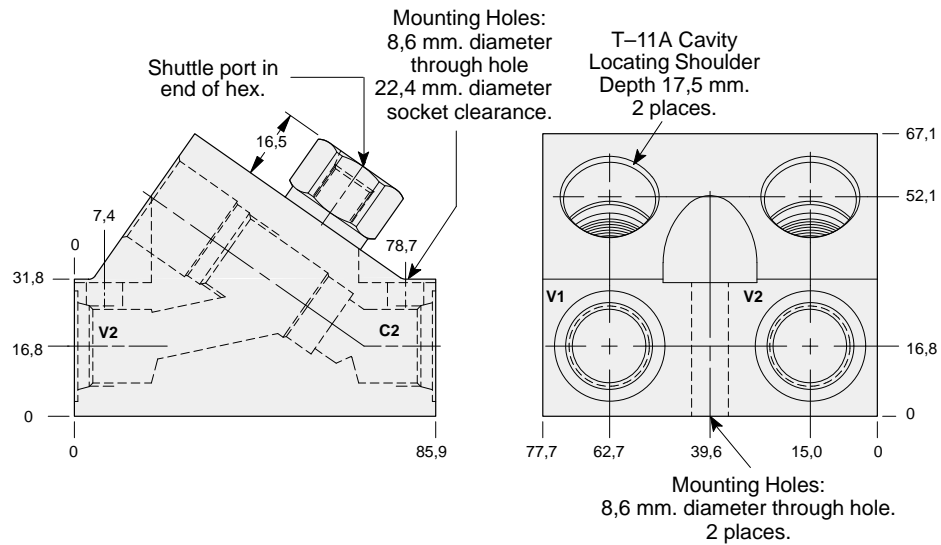
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports C1, C2, & V1, V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	XEA		XEA/S	
.375 NPTF	XEB		XEB/S	
SAE-6	XEI		XEI/S	
SAE-8	XEJ		XEJ/S	
.25 BSPP	XET		XET/S	
.375 BSPP	XEU		XEU/S	
.50 BSPP	XEV		XEV/S	



Two cavity inline cross-piloted body with shuttle for load control applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBCA - *** Page 4.10
- CBCG - *** Page 4.12
- CBCH - *** Page 4.14
- CKCB - *** Page 4.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

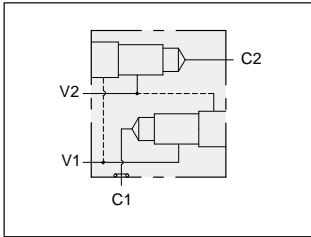
Ports C1, C2, & V1, V2	Shuttle Cartridge	Shuttle Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	CSAA - EXN	SAE-4	XGA		XGA/S	
.375 NPTF	CSAA - EXN	SAE-4	XGB		XGB/S	
SAE-6	CSAA - EXN	SAE-4	XGI		XGI/S	
SAE-8	CSAA - EXN	SAE-4	XGJ		XGJ/S	
.25 BSPP	CSAA - BXN	.25 BSPP	XGT		XGT/S	
.375 BSPP	CSAA - BXN	.25 BSPP	XGU		XGU/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity gasket mount body for load control applications.

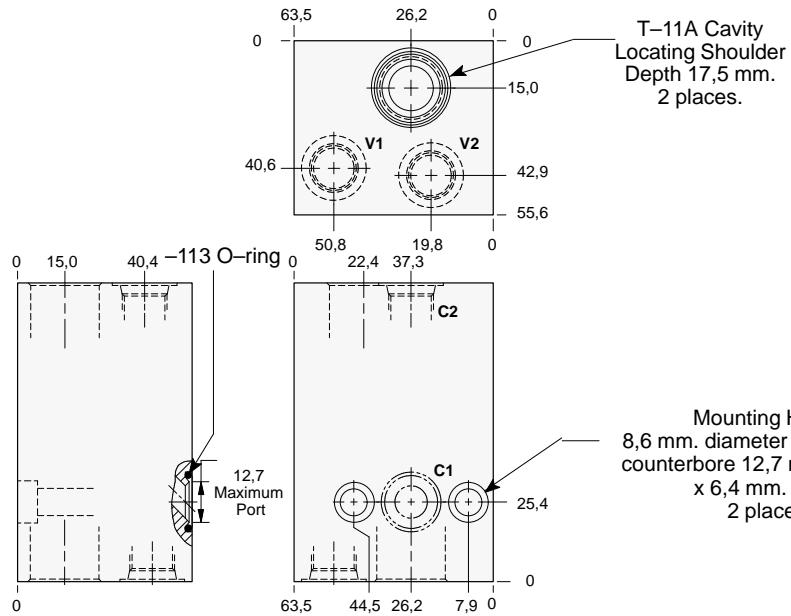
TYPICAL CARTRIDGES USED WITH THIS BODY

CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14
CKCB - ***	Page	4.16

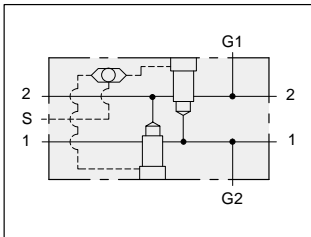
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



Ports C1, C2, & V1, V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	YVM		YVM/S	
SAE-6	YVY		YVY/S	
.375 BSPP	YVX		YVX/S	



Two cavity through port body with shuttle and gauge ports.

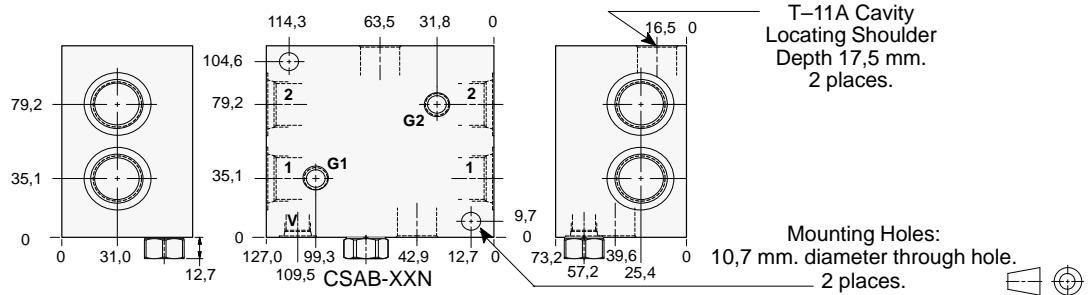
TYPICAL CARTRIDGES USED WITH THIS BODY

RVCA - ***	Page	1.18
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Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



Ports 1 & 2	Port V	Ports G1 & G2	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	XOA		XOA/S	
.375 NPTF	.25 NPTF	.25 NPTF	XOB		XOB/S	
.50 NPTF	.25 NPTF	.25 NPTF	XOC		XOC/S	
.75 NPTF	.25 NPTF	.25 NPTF	XOD		XOD/S	
SAE-6	SAE-6	.25 NPTF	XOI		XOI/S	
SAE-8	SAE-6	.25 NPTF	XOJ		XOJ/S	
SAE-10	SAE-6	.25 NPTF	XOK		XOK/S	
SAE-12	SAE-6	.25 NPTF	XOL		XOL/S	
.25 BSPP	.25 BSPP	.25 BSPP	XOT		XOT/S	
.375 BSPP	.25 BSPP	.25 BSPP	XOU		XOU/S	
.50 BSPP	.25 BSPP	.25 BSPP	XOV		XOV/S	
.75 BSPP	.25 BSPP	.25 BSPP	XOW		XOW/S	

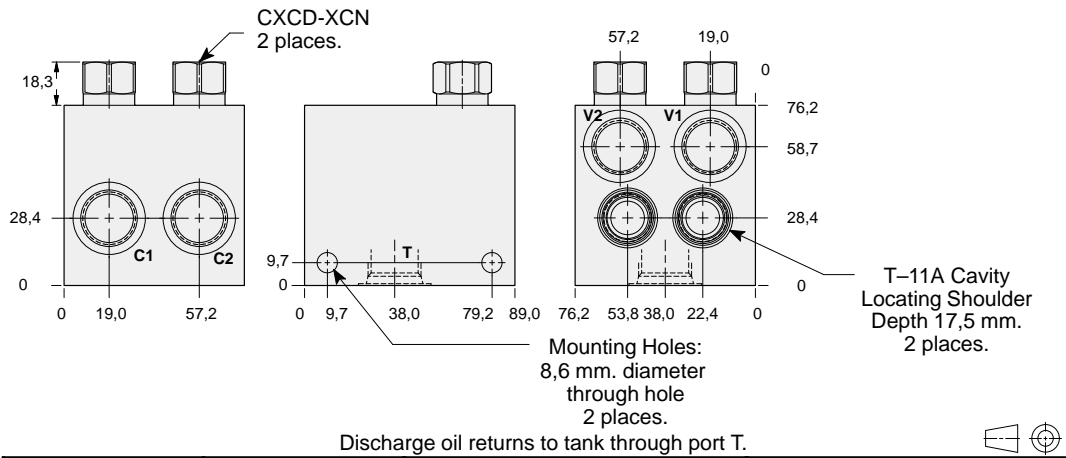
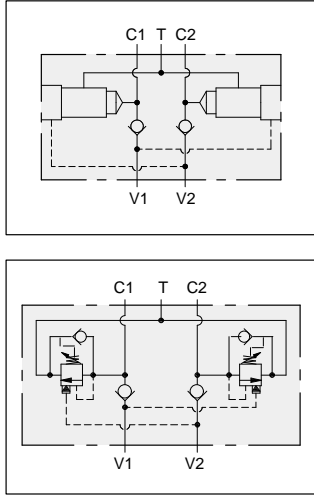


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Two cavity dual load control body with checks.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBCA - *** Page 4.10
- CBCG - *** Page 4.12
- CBCH - *** Page 4.14

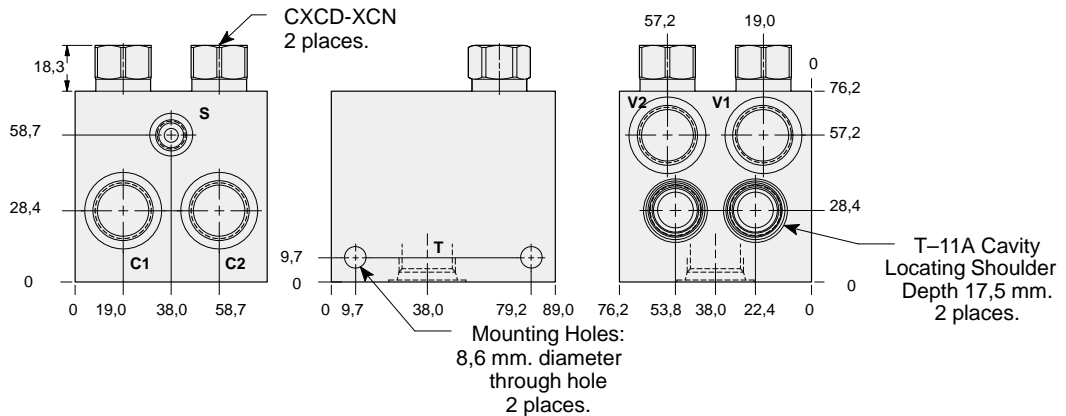
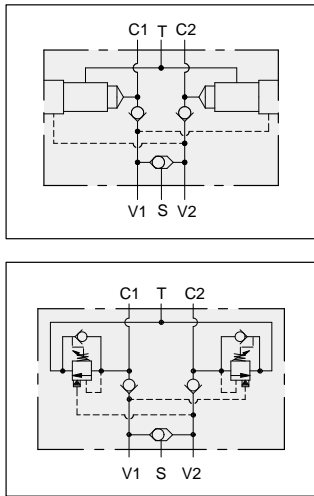
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

Ports C1, C2, & V1, V2	Port T	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.375 NPTF	.50 NPTF	EMB		EMB/S	
.50 NPTF	.50 NPTF	EMC		EMC/S	
SAE-8	SAE-10	EMJ		EMJ/S	
SAE-10	SAE-10	EMK		EMK/S	
.375 BSPP	.50 BSPP	EMU		EMU/S	
.50 BSPP	.50 BSPP	EMV		EMV/S	

Two cavity dual load control body with checks and shuttle.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBCA - *** Page 4.10
- CBCG - *** Page 4.12
- CBCH - *** Page 4.14

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

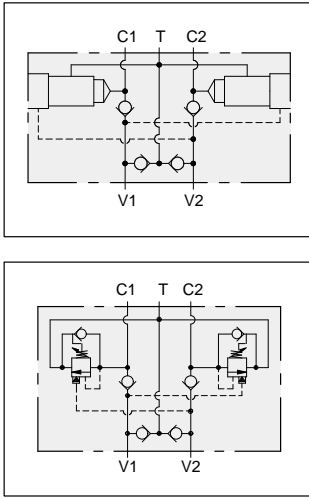
Ports C1, C2, & V1, V2	Port S	Port T	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.375 NPTF	.25 NPTF	.50 NPTF	ENB		ENB/S	
.50 NPTF	.25 NPTF	.50 NPTF	ENC		ENC/S	
SAE-8	SAE-4	SAE-10	ENJ		ENJ/S	
SAE-10	SAE-4	SAE-10	ENK		ENK/S	
.375 BSPP	.25 BSPP	.50 BSPP	ENU		ENU/S	
.50 BSPP	.25 BSPP	.50 BSPP	ENV		ENV/S	



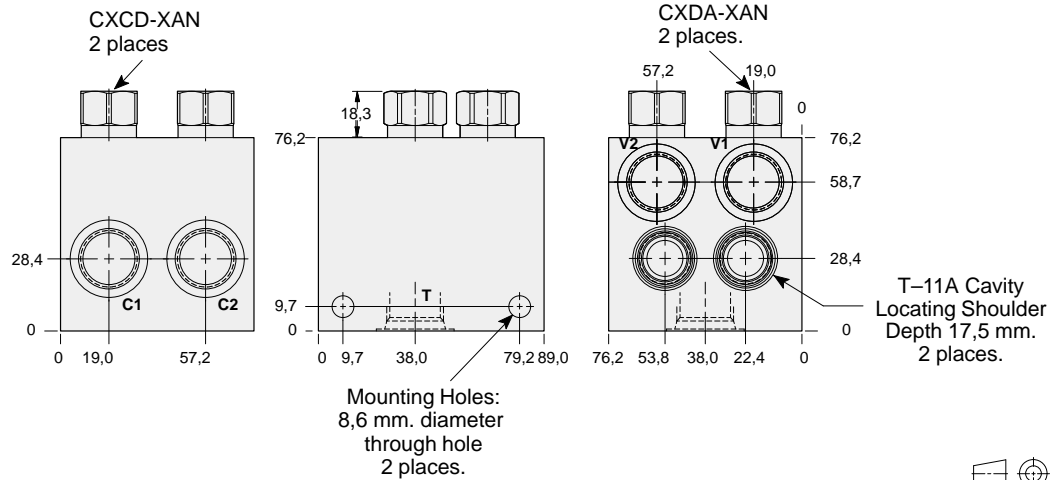
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity dual load control body with make-up checks.



TYPICAL CARTRIDGES USED WITH THIS BODY

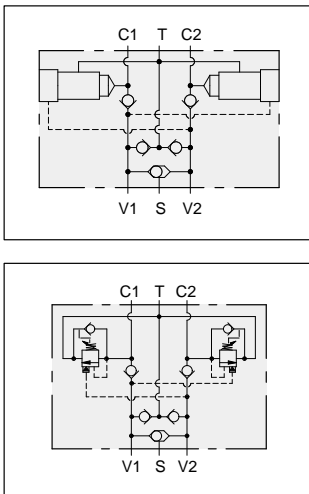
CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14

Cartridge seal type determines check valve seal type.

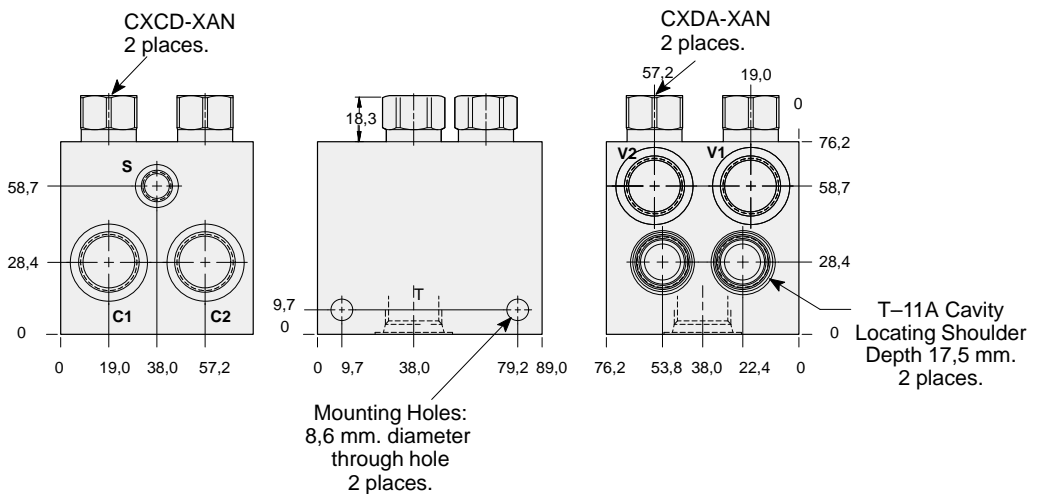
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports C1, C2, & V1, V2	Port T	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.375 NPTF	.50 NPTF	EPB		EPB/S	
.50 NPTF	.50 NPTF	EPC		EPC/S	
SAE-8	SAE-10	EPJ		EPJ/S	
SAE-10	SAE-10	EPK		EPK/S	
.375 BSPP	.50 BSPP	EPU		EPU/S	
.50 BSPP	.50 BSPP	EPV		EPV/S	



Two cavity dual load control body with make-up checks and shuttle.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBCA - ***	Page	4.10
CBCG - ***	Page	4.12
CBCH - ***	Page	4.14

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports C1, C2, & V1, V2	Port S	Port T	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.375 NPTF	.25 NPTF	.50 NPTF	EQB		EQB/S	
.50 NPTF	.25 NPTF	.50 NPTF	EQC		EQC/S	
SAE-8	SAE-4	SAE-10	EQJ		EQJ/S	
SAE-10	SAE-4	SAE-10	EQK		EQK/S	
.375 BSPP	.25 BSPP	.50 BSPP	EQU		EQU/S	
.50 BSPP	.25 BSPP	.50 BSPP	EQV		EQV/S	

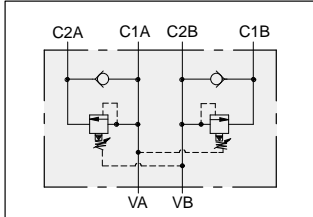
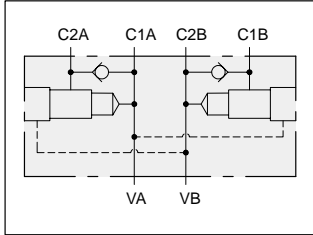


LINE MOUNT BODIES

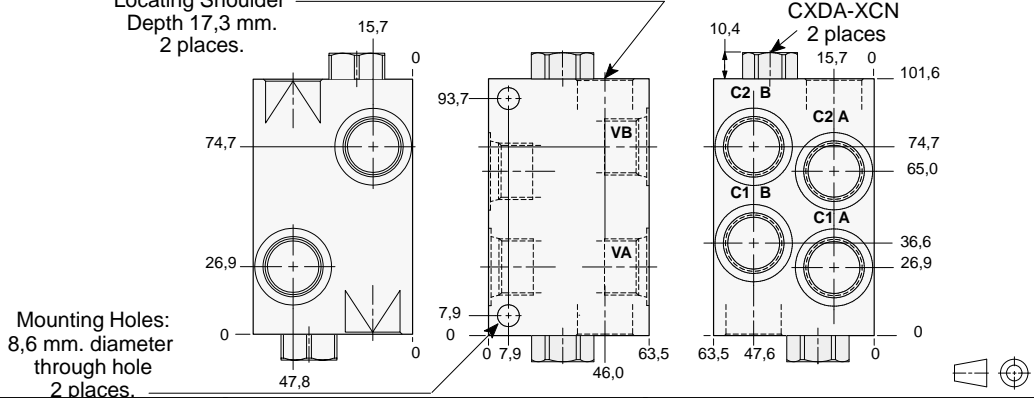


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Two cavity dual sequence body with reverse free flow checks.



T-11A Cavity
Locating Shoulder
Depth 17,3 mm.
2 places.



Mounting Holes:
8,6 mm. diameter
through hole
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

- RSDC - *** Page 2.06
- SQDB - *** Page 2.08

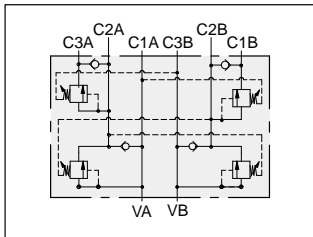
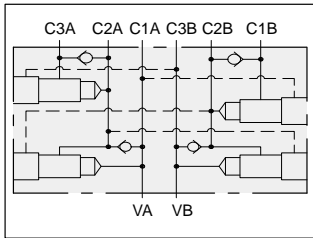
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

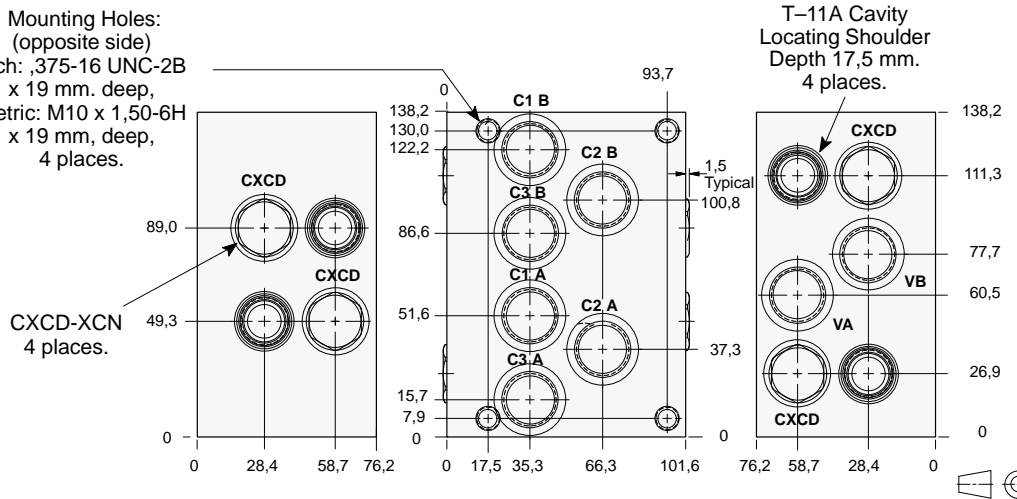
Pressure ratings, material specifications. Page 11.02

All Ports	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	E8A		E8A/S	
.375 NPTF	E8B		E8B/S	
.50 NPTF	E8C		E8C/S	
SAE-6	E8I		E8I/S	
SAE-8	E8J		E8J/S	
SAE-10	E8K		E8K/S	
.25 BSPP	E8T		E8T/S	
.375 BSPP	E8U		E8U/S	
.50 BSPP	E8V		E8V/S	

Four cavity triple sequence body with reverse free flow checks.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19 mm. deep,
Metric: M10 x 1,50-6H
x 19 mm. deep,
4 places.



CXCD-XCN
4 places.

T-11A Cavity
Locating Shoulder
Depth 17,5 mm.
4 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

- RSDC - *** Page 2.06
- SQDB - *** Page 2.08

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

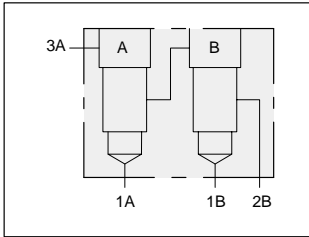
Mounting Hole Dimensions	All Ports	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	E9B		E9B/S	
Inch	.50 NPTF	E9C		E9C/S	
Inch	SAE-8	E9J		E9J/S	
Inch	SAE-10	E9K		E9K/S	
Metric	.375 BSPP	E9U		E9U/S	
Metric	.50 BSPP	E9V		E9V/S	



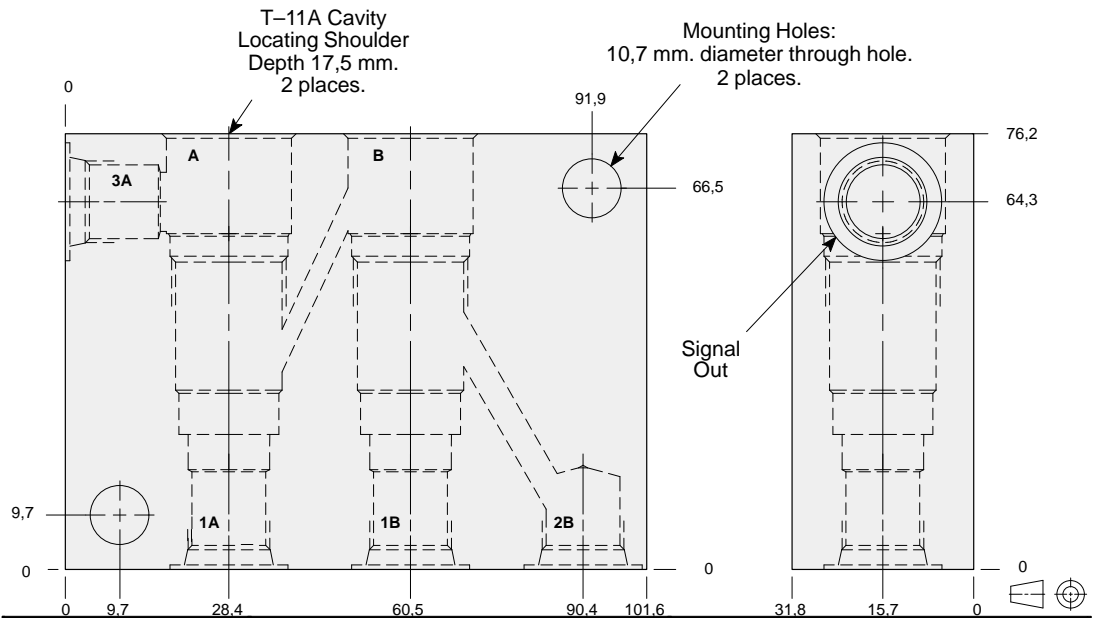
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity load-sensing body with three signal input.



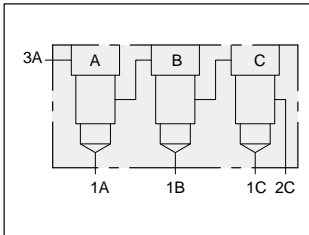
TYPICAL CARTRIDGES USED WITH THIS BODY

CSAB - *** Page 10.08
 CDAB - *** Page 10.10

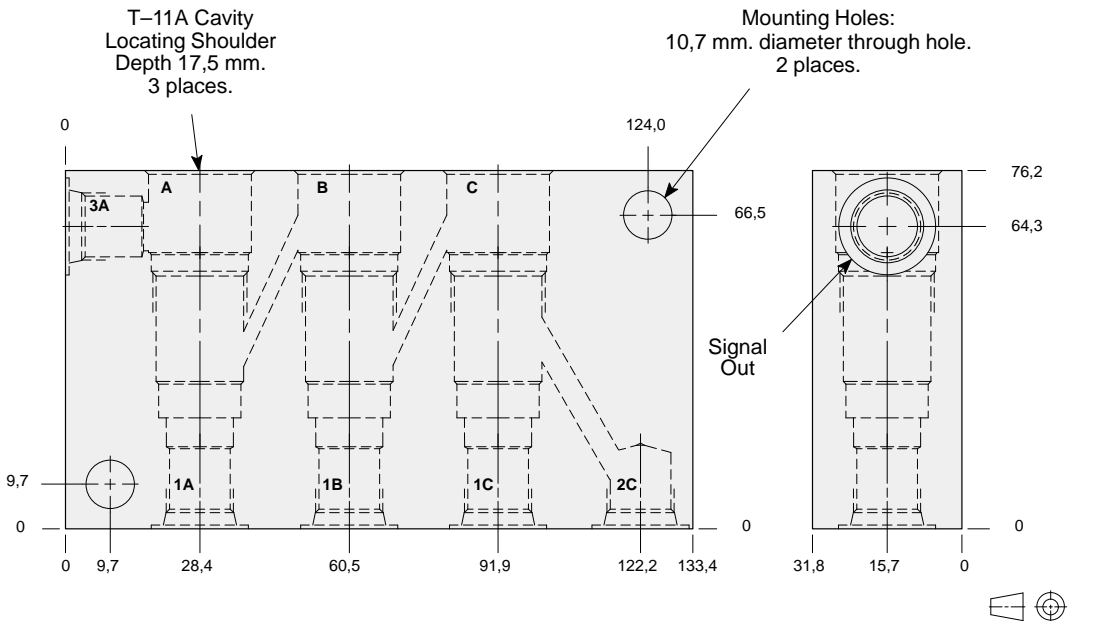
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

All Ports	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	XVV		XVV/X	
SAE-6	XVW		XVW/S	
.25 BSPP	XVX		XVX/S	



Three cavity load-sensing body with four signal input.



TYPICAL CARTRIDGES USED WITH THIS BODY

CSAB - *** Page 10.08
 CDAB - *** Page 10.10

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

All Ports	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	XVR		XVR/S	
SAE-6	XVS		XVS/S	
.25 BSPP	XVT		XVT/S	



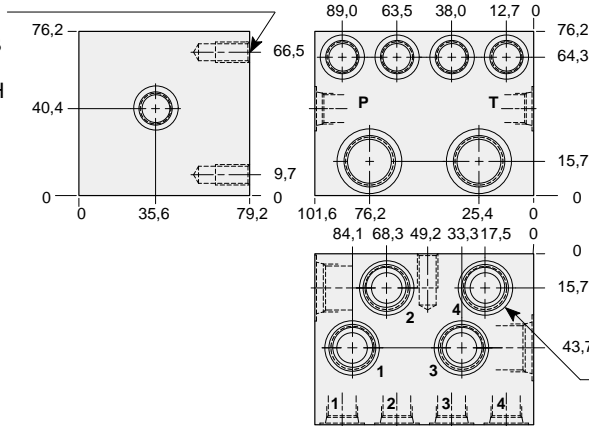
LINE MOUNT BODIES



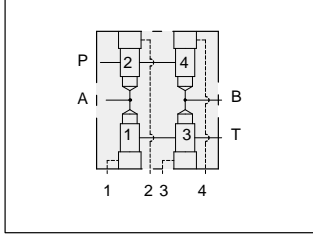
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Four cavity four-way logic body for directional applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.



Mounting Hole Dimensions	Ports 1 & 2, 3 & 4	Ports A & B P & T	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.25 NPTF	YRZ		YRZ/S	
Inch	.25 NPTF	.375 NPTF	YRY		YRY/S	
Inch	.25 NPTF	.50 NPTF	YRX		YRX/S	
Inch	SAE-6	SAE-6	YRW		YRW/S	
Inch	SAE-6	SAE-8	YRV		YRV/S	
Inch	SAE-6	SAE-10	YRT		YRT/S	
Metric	.25 BSPP	.25 BSPP	YRP		YRP/S	
Metric	.25 BSPP	.375 BSPP	YRM		YRM/S	
Metric	.25 BSPP	.50 BSPP	YRQ		YRQ/S	



TYPICAL CARTRIDGES USED WITH THIS BODY

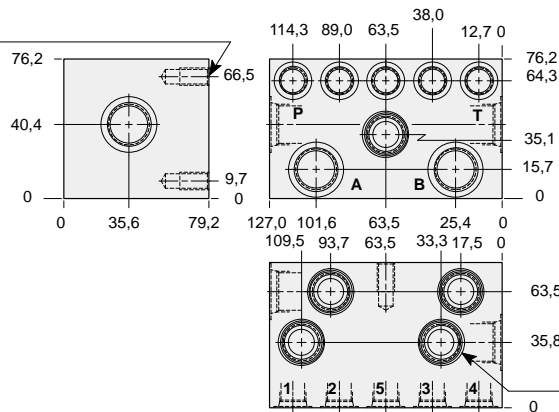
- LODC - *** Page 9.08
- LKDC - *** Page 9.10
- LPDC - *** Page 9.12
- LRDC - *** Page 9.14

Instructions for ordering complete cartridge and body assemblies. Page viii

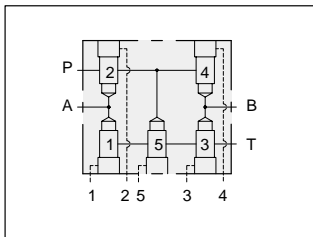
Pressure ratings, material specifications. Page 11.02

Five cavity four-way logic body for directional applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.



Mounting Hole Dimensions	Ports 1, 2, 3, 4 & 5	Ports A & B P & T	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.25 NPTF	YQZ		YQZ/S	
Inch	.25 NPTF	.375 NPTF	YQY		YQY/S	
Inch	.25 NPTF	.50 NPTF	YQX		YQX/S	
Inch	SAE-6	SAE-6	YQW		YQW/S	
Inch	SAE-6	SAE-8	YQV		YQV/S	
Inch	SAE-6	SAE-10	YQT		YQT/S	
Metric	.25 BSPP	.25 BSPP	YQP		YQP/S	
Metric	.25 BSPP	.375 BSPP	YQM		YQM/S	
Metric	.25 BSPP	.50 BSPP	YQQ		YQQ/S	



TYPICAL CARTRIDGES USED WITH THIS BODY

- LODC - *** Page 9.08
- LKDC - *** Page 9.10
- LPDC - *** Page 9.12
- LRDC - *** Page 9.14

Instructions for ordering complete cartridge and body assemblies. Page viii

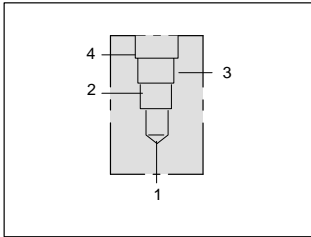
Pressure ratings, material specifications. Page 11.02



LINE MOUNT BODIES



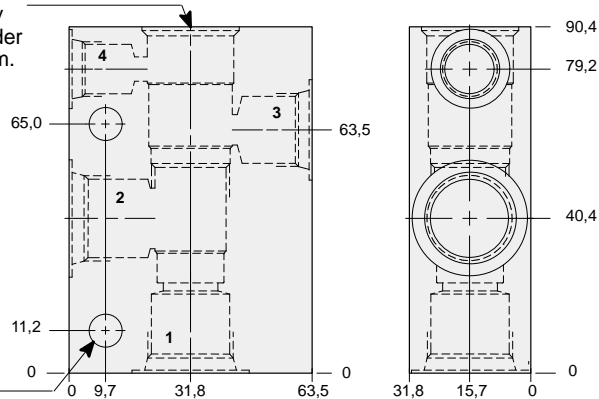
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.

T-21A Cavity
Locating Shoulder
Depth 31,8 mm.

Mounting Holes:
8,6 mm. diameter
through hole
2 places.



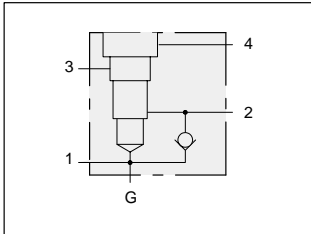
TYPICAL CARTRIDGES USED WITH THIS BODY

RVCD - ***	Page	1.20
PVDA - ***	Page	3.14
PVDB - ***	Page	3.16
CWCA - ***	Page	4.18
CWCG - ***	Page	4.20
CVCV - ***	Page	4.22
FVCA - ***	Page	6.04
DPBM - ***	Page	8.10
DPBN - ***	Page	8.11
DPBO - ***	Page	8.12
DPBP - ***	Page	8.13

Instructions for ordering complete cartridge and body assemblies. Page viii

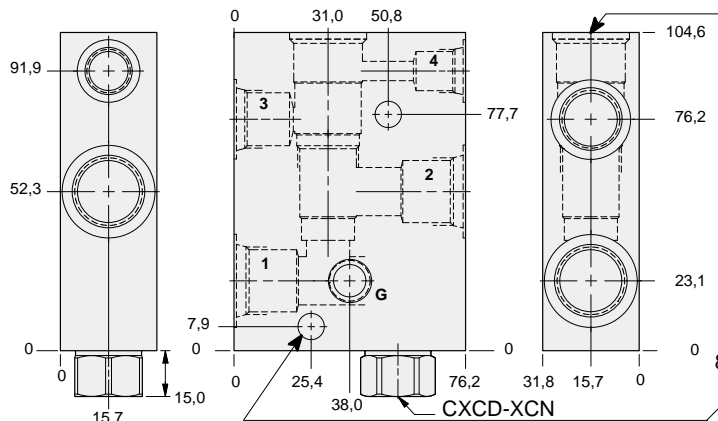
Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Port 4	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	MAA		MAA/S	
.375 NPTF	.375 NPTF	.25 NPTF	MAB		MAB/S	
.50 NPTF	.375 NPTF	.25 NPTF	MAC		MAC/S	
SAE-6	SAE-6	SAE-6	MAI		MAI/S	
SAE-8	SAE-8	SAE-6	MAJ		MAJ/S	
SAE-10	SAE-8	SAE-6	MAK		MAK/S	
.25 BSPP	.25 BSPP	.25 BSPP	MAT		MAT/S	
.375 BSPP	.375 BSPP	.25 BSPP	MAU		MAU/S	
.50 BSPP	.375 BSPP	.25 BSPP	MAV		MAV/S	



Body with reverse free flow check and gauge port for reducing/relieving applications.

T-21A Cavity
Locating Shoulder
Depth 33,3 mm.



Mounting Holes:
8,6 mm. diameter
through hole
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

PVDA - ***	Page	3.14
PVDB - ***	Page	3.16

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

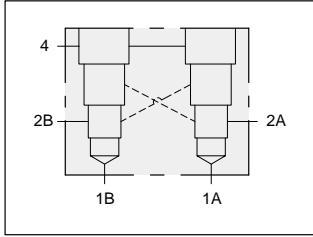
Ports 1 & 2	Port 3	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	.25 NPTF	M4A		M4A/S	
.375 NPTF	.375 NPTF	.375 NPTF	.25 NPTF	M4B		M4B/S	
.50 NPTF	.50 NPTF	.50 NPTF	.25 NPTF	M4C		M4C/S	
SAE-6	SAE-6	SAE-6	.25 NPTF	M4I		M4I/S	
SAE-8	SAE-8	SAE-6	.25 NPTF	M4J		M4J/S	
SAE-10	SAE-8	SAE-6	.25 NPTF	M4K		M4K/S	
.25 BSPP	.25 BSPP	.25 BSPP	.25 BSPP	M4T		M4T/S	
.375 BSPP	.375 BSPP	.25 BSPP	.25 BSPP	M4U		M4U/S	
.50 BSPP	.375 BSPP	.25 BSPP	.25 BSPP	M4V		M4V/S	



LINE MOUNT BODIES



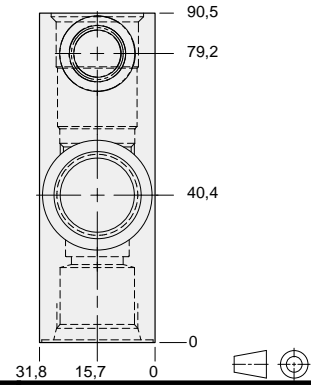
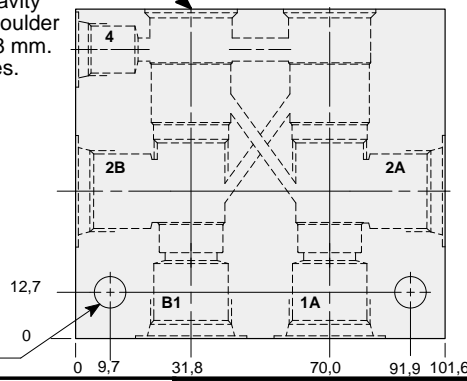
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 90 degree cross-piloted body with common port 4 for load control applications.

T-21A Cavity Locating Shoulder Depth 31,8 mm. 2 places.

Mounting Holes: 8,6 mm. diameter through hole 2 places.



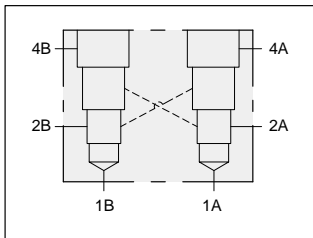
TYPICAL CARTRIDGES USED WITH THIS BODY

- CWCA - *** Page 4.18
- CWCG - *** Page 4.20
- CVCV - *** Page 4.22

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

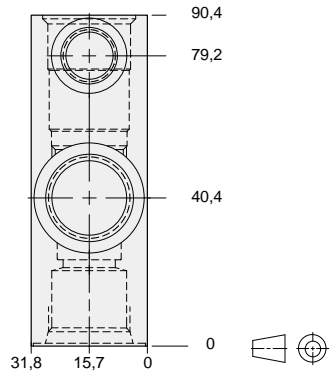
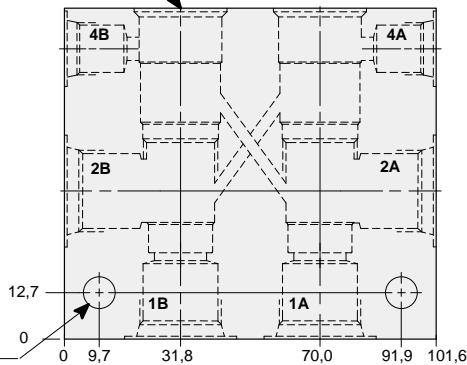
Main Ports 1A,1B & 2A,2B	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	XPA		XPA/S	
.375 NPTF	.25 NPTF	XPB		XPB/S	
.50 NPTF	.25 NPTF	XPC		XPC/S	
SAE-6	SAE-6	XPI		XPI/S	
SAE-8	SAE-6	XPJ		XPJ/S	
SAE-10	SAE-6	XPK		XPK/S	
.25 BSPP	.25 BSPP	XPT		XPT/S	
.375 BSPP	.25 BSPP	XPU		XPU/S	
.50 BSPP	.25 BSPP	XPV		XPV/S	



Two cavity 90 degree cross-piloted body with independent port 4 for load control applications.

T-21A Cavity Locating Shoulder Depth 31,8 mm. 2 places.

Mounting Holes: 8,6 mm. diameter through hole 2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CWCA - *** Page 4.18
- CWCG - *** Page 4.20
- CVCV - *** Page 4.22

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

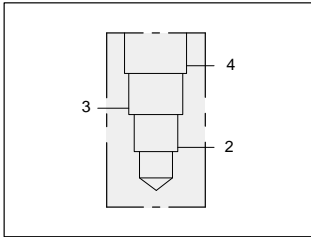
Main Ports 1A,1B & 2A,2B	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	XFA		XFA/S	
.375 NPTF	.25 NPTF	XFB		XFB/S	
.50 NPTF	.25 NPTF	XFC		XFC/S	
SAE-6	SAE-6	XFI		XFI/S	
SAE-8	SAE-6	XFJ		XFJ/S	
SAE-10	SAE-6	XFK		XFK/S	
.25 BSPP	.25 BSPP	XFT		XFT/S	
.375 BSPP	.25 BSPP	XFU		XFU/S	
.50 BSPP	.25 BSPP	XFV		XFV/S	



LINE MOUNT BODIES

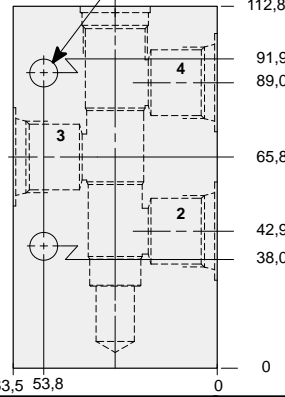
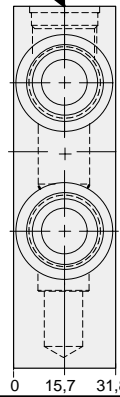


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body for flow divider/combiner applications.

T-31A Cavity
Locating Shoulder
Depth 2,0 mm.



Mounting Holes:
8,6 mm. diameter
through hole
2 places.

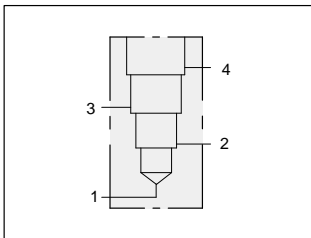
TYPICAL CARTRIDGES USED WITH THIS BODY

FSDB - ***	Page	7.08
FSCD - ***	Page	7.08
FSBA - ***	Page	7.10
FSCA - ***	Page	7.10
FSBS - ***	Page	7.12
FSCS - ***	Page	7.12
FSCH - ***	Page	7.14
DSCH - ***	Page	10.06

Instructions for ordering complete cartridge and body assemblies. Page viii

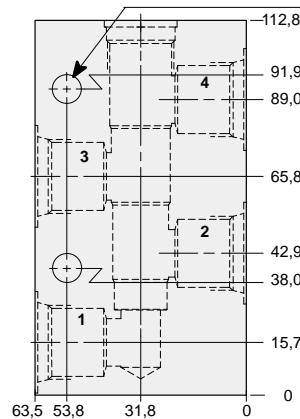
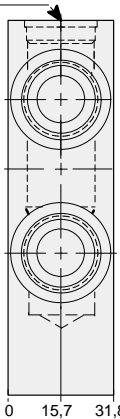
Pressure ratings, material specifications. Page 11.02

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	MMA		MMA/S	
.375 NPTF	MMB		MMB/S	
.50 NPTF	MMC		MMC/S	
SAE-6	MMI		MMI/S	
SAE-8	MMJ		MMJ/S	
SAE-10	MMK		MMK/S	
.25 BSPP	MMT		MMT/S	
.375 BSPP	MMU		MMU/S	
.50 BSPP	MMV		MMV/S	



Four port body.

T-31A Cavity
Locating Shoulder
Depth 2,0 mm.



Mounting Holes:
8,6 mm. diameter
through hole
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

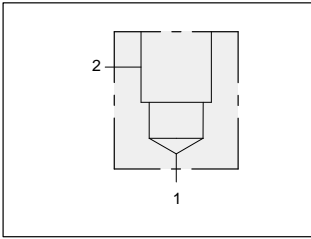
Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	MNA		MNA/S	
.375 NPTF	MNB		MNB/S	
.50 NPTF	MNC		MNC/S	
SAE-6	MNI		MNI/S	
SAE-8	MNJ		MNJ/S	
SAE-10	MNK		MNK/S	
.25 BSPP	MNT		MNT/S	
.375 BSPP	MNU		MNU/S	
.50 BSPP	MNV		MNV/S	



LINE MOUNT BODIES

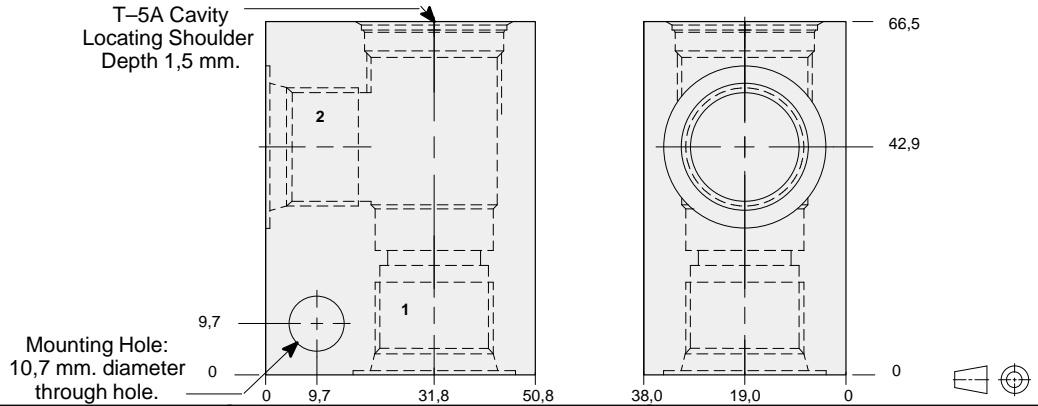


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.

T-5A Cavity
Locating Shoulder
Depth 1,5 mm.

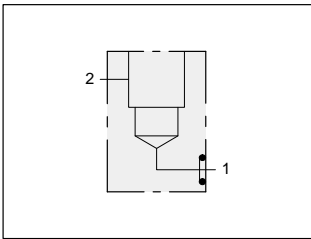


TYPICAL CARTRIDGES USED WITH THIS BODY

CXFA - ***	Page	5.08
CXED - ***	Page	5.10
NFDC - ***	Page	5.12
CNEC - ***	Page	5.14
NCEB - ***	Page	5.16
NCEC - ***	Page	5.18
FXDA - ***	Page	5.20
FCDB - ***	Page	5.22
FDCB - ***	Page	5.24
FQEA - ***	Page	10.14

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	DAA		DAA/S	
.375 NPTF	DAB		DAB/S	
.50 NPTF	DAC		DAC/S	
SAE-6	DAI		DAI/S	
SAE-8	DAJ		DAJ/S	
SAE-10	DAK		DAK/S	
.25 BSPP	DAT		DAT/S	
.375 BSPP	DAU		DAU/S	
.50 BSPP	DAV		DAV/S	

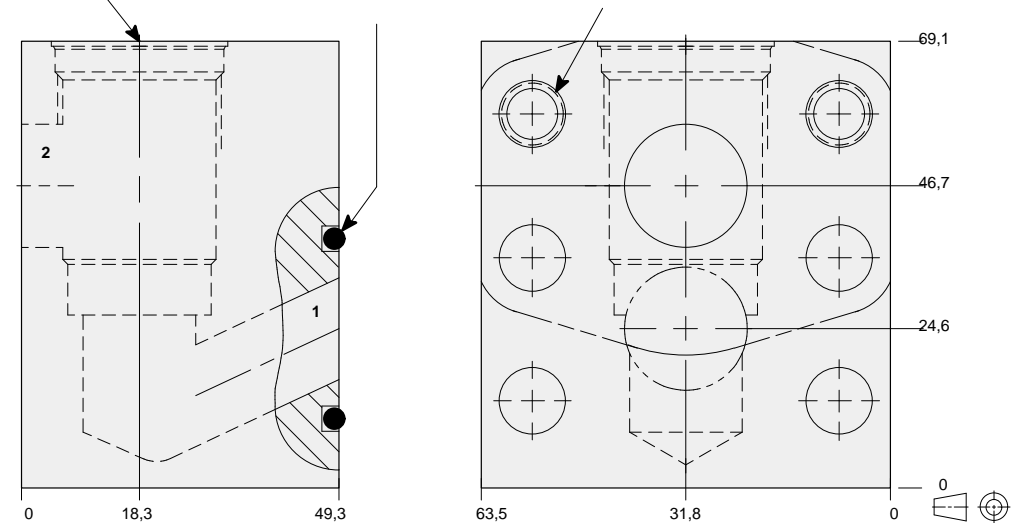


Direct mount .75" SAE Code 61 body

T-5A Cavity
Locating Shoulder
Depth 0,8 mm.

-214 O-ring

.75" SAE Code 61
4-Bolt Flange Pattern
2 holes tapped
4 holes through.



TYPICAL CARTRIDGES USED WITH THIS BODY

CXFA - ***	Page	5.08
CXED - ***	Page	5.10
NFDC - ***	Page	5.12
CNEC - ***	Page	5.14
NCEB - ***	Page	5.16
NCEC - ***	Page	5.18
FXDA - ***	Page	5.20
FCDB - ***	Page	5.22
FDCB - ***	Page	5.24
FQEA - ***	Page	10.14

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

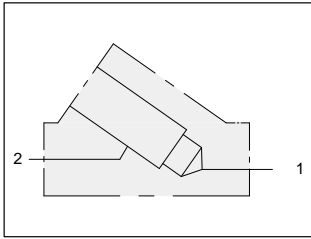
Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	ZKS		ZKS/S	
Metric	ZKS/M		ZKS/T	



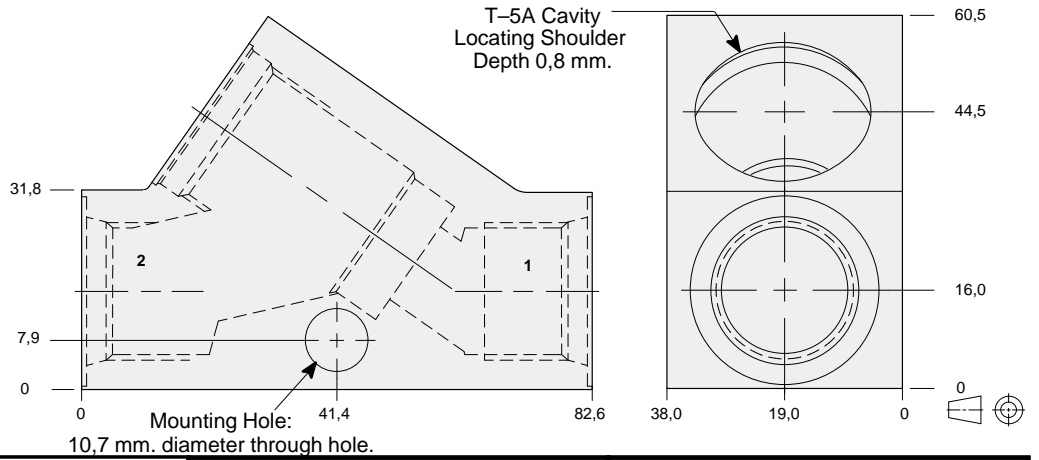
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline body.

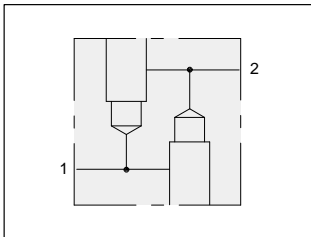


TYPICAL CARTRIDGES USED WITH THIS BODY

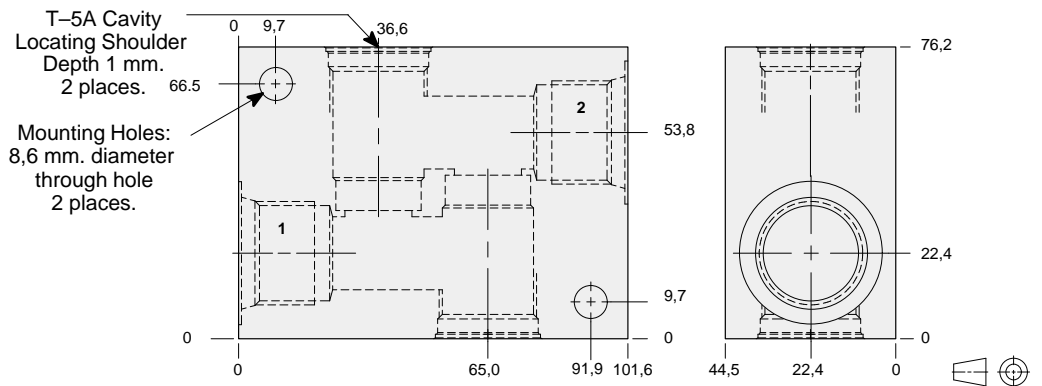
CXFA - ***	Page	5.08
CXED - ***	Page	5.10
NFDC - ***	Page	5.12
CNEC - ***	Page	5.14
NCEB - ***	Page	5.16
NCEC - ***	Page	5.18
FXDA - ***	Page	5.20
FCDB - ***	Page	5.22
FDCB - ***	Page	5.24
FQEA - ***	Page	10.14

Instructions for ordering complete cartridge and body assemblies. Page viii
 Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	DCB		DCB/S	
.50 NPTF	DCC		DCC/S	
SAE-6	DCI		DCI/S	
SAE-8	DCJ		DCJ/S	
SAE-10	DCK		DCK/S	
.375 BSPP	DCU		DCU/S	
.50 BSPP	DCV		DCV/S	



Two cavity body.



TYPICAL CARTRIDGES USED WITH THIS BODY

CXFA - ***	Page	5.08
NFDC - ***	Page	5.12
FXDA - ***	Page	5.20

Instructions for ordering complete cartridge and body assemblies. Page viii
 Pressure ratings, material specifications. Page 11.02

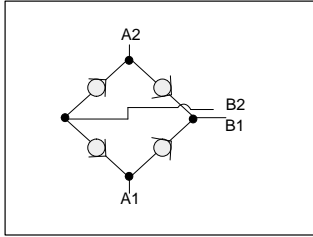
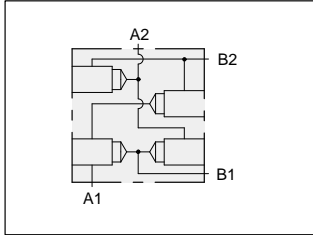
Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	XWA		XWA/S	
.50 NPTF	XWB		XWB/S	
.75 NPTF	XWC		XWC/S	
SAE-8	XWD		XWD/S	
SAE-10	XWF		XWF/S	
SAE-12	XWG		XWG/S	
.375 BSPP	XWH		XWH/S	
.50 BSPP	XWJ		XWJ/S	
.75 BSPP	XWK		XWK/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



TYPICAL CARTRIDGES USED WITH THIS BODY

CXFA - *** Page 5.08

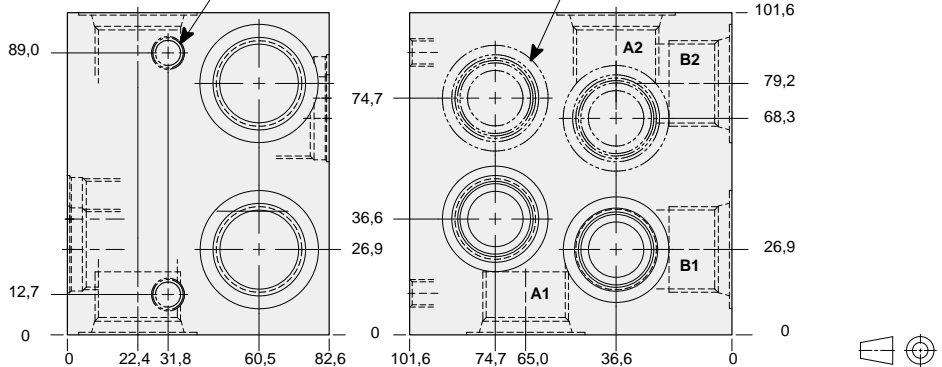
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

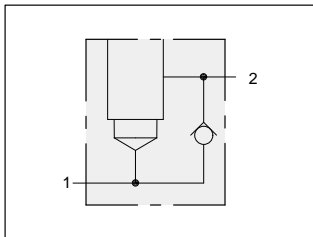
Rectifier body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.

T-5A Cavity
Locating Shoulder
Depth 0,8 mm.
4 places.



Mounting Hole Dimensions	All Ports	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	YSL		YSL/S	
Inch	.75 NPTF	YSM		YSM/S	
Inch	SAE-10	YSN		YSN/S	
Inch	SAE-12	YSO		YSO/S	
Metric	.50 BSPP	YSP		YSP/S	
Metric	.75 BSPP	YSQ		YSQ/S	



TYPICAL CARTRIDGES USED WITH THIS BODY

NFDC - *** Page 5.12

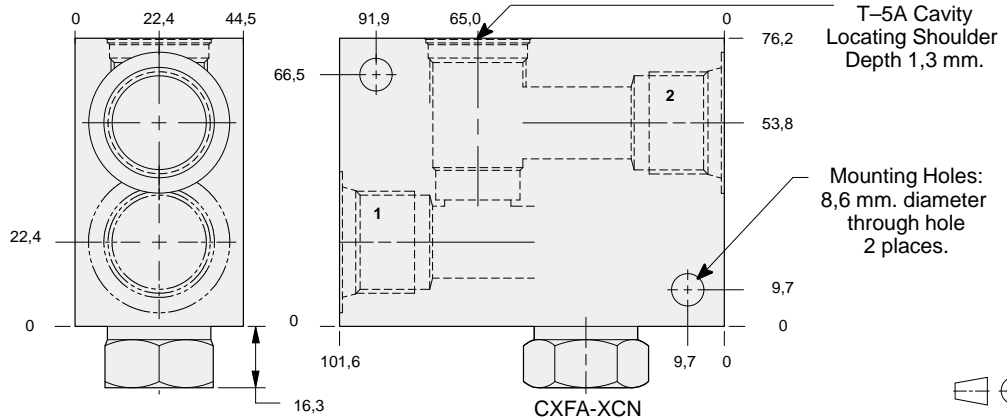
FXDA - *** Page 5.20

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Body with reverse free flow check.



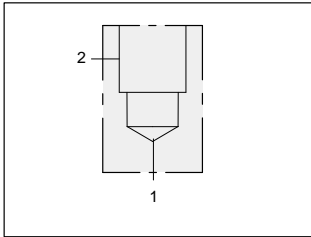
Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	DNB		DNB/S	
.50 NPTF	DNC		DNC/S	
.75 NPTF	DND		DND/S	
SAE-8	DNJ		DNJ/S	
SAE-10	DNK		DNK/S	
SAE-12	DNL		DNL/S	
.375 BSPP	DNU		DNU/S	
.50 BSPP	DNV		DNV/S	
.75 BSPP	DNW		DNW/S	



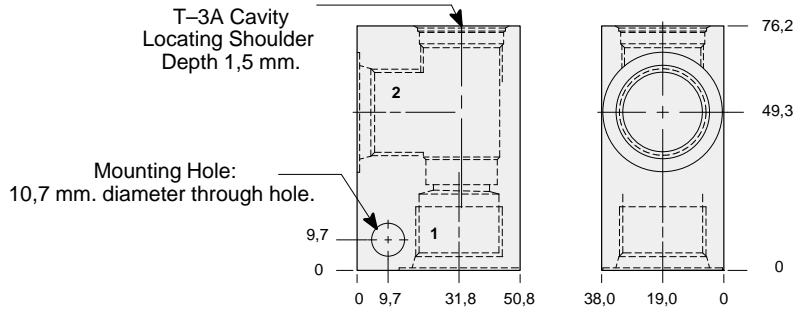
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.



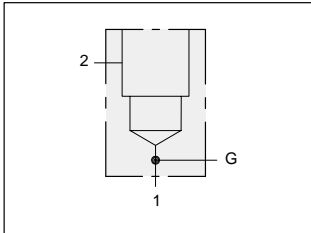
TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
RBAA - ***	Page	1.16
RBAB - ***	Page	1.14
NQEB - ***	Page	10.16

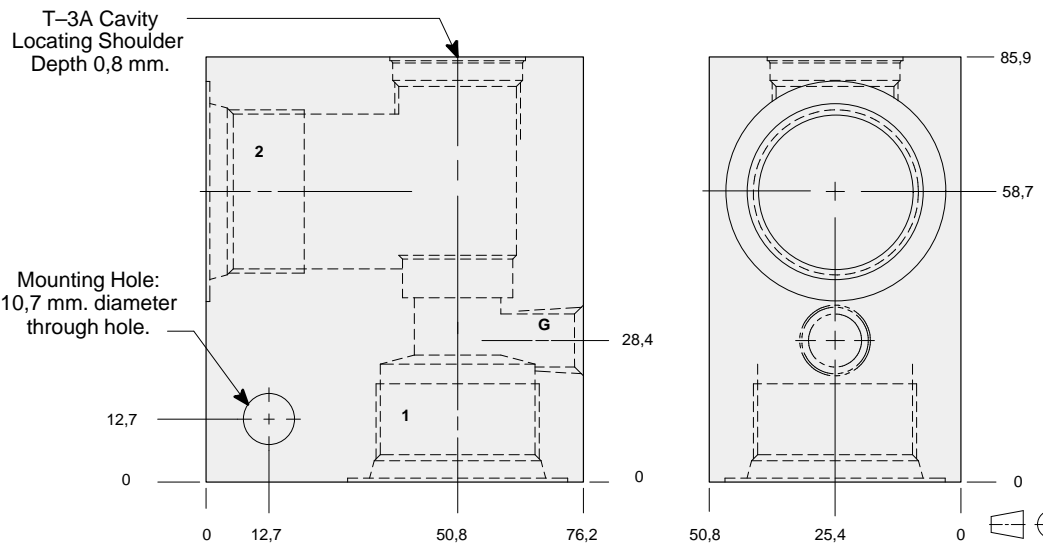
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CAA		CAA/S	
.375 NPTF	CAB		CAB/S	
.50 NPTF	CAC		CAC/S	
.75 NPTF	CAD		CAD/S	
SAE-4	CAH		CAH/S	
SAE-6	CAI		CAI/S	
SAE-8	CAJ		CAJ/S	
SAE-10	CAK		CAK/S	
SAE-12	CAL		CAL/S	
.25 BSPP	CAT		CAT/S	
.375 BSPP	CAU		CAU/S	
.50 BSPP	CAV		CAV/S	
.75 BSPP	CAW		CAW/S	



90 degree body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
1.00 NPTF	.25 NPTF	CAE		CAE/S	
SAE-16	.25 NPTF	CAM		CAM/S	
1.00 BSPP	.25 BSPP	CAX		CAX/S	

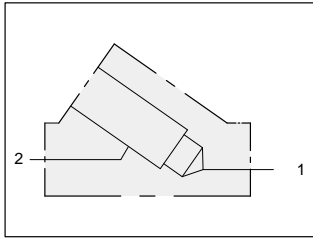
Series 2 T-3A



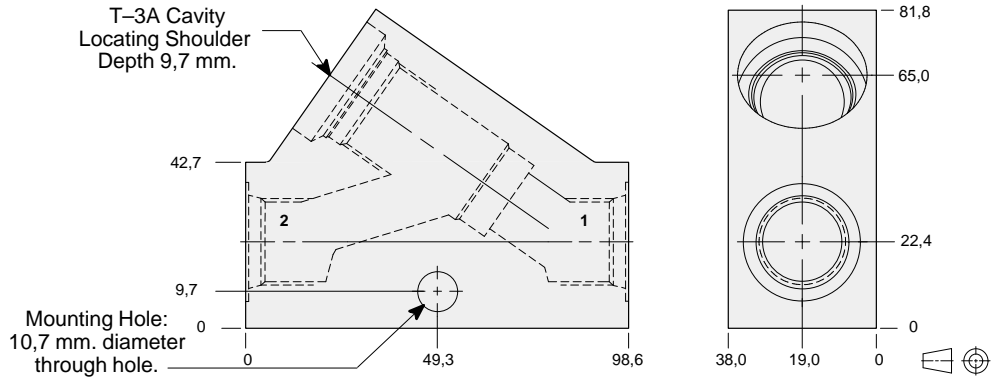
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline body.



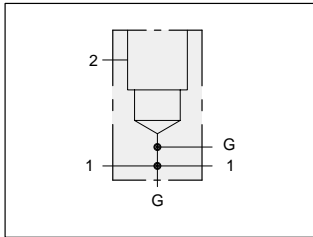
TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
RBAB - ***	Page	1.14
RBAA - ***	Page	1.16
NQEB - ***	Page	10.16

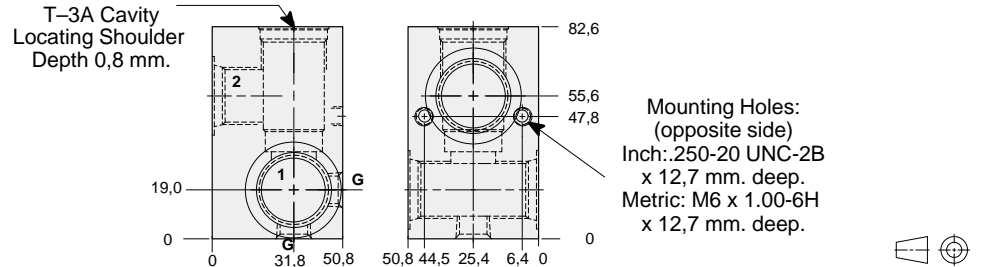
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	CGB		CGB/S	
.50 NPTF	CGC		CGC/S	
.75 NPTF	CGD		CGD/S	
SAE-6	CGI		CGI/S	
SAE-8	CGJ		CGJ/S	
SAE-10	CGK		CGK/S	
.375 BSPP	CGU		CGU/S	
.50 BSPP	CGV		CGV/S	
.75 BSPP	CGW		CGW/S	



Through port body with gauge ports.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
RBAB - ***	Page	1.14
RBAA - ***	Page	1.16
NQEB - ***	Page	10.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

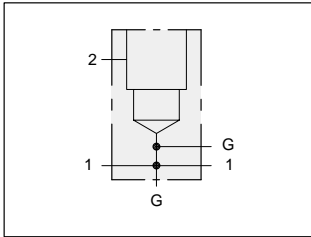
Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.25 NPTF	CEA		CEA/S	
Inch	.375 NPTF	.25 NPTF	CEB		CEB/S	
Inch	.50 NPTF	.25 NPTF	CEC		CEC/S	
Inch	.75 NPTF	.25 NPTF	CED		CED/S	
Inch	SAE-4	.25 NPTF	CEH		CEH/S	
Inch	SAE-6	.25 NPTF	CEI		CEI/S	
Inch	SAE-8	.25 NPTF	CEJ		CEJ/S	
Inch	SAE-10	.25 NPTF	CEK		CEK/S	
Inch	SAE-12	.25 NPTF	CEL		CEL/S	
Metric	.25 BSPP	.25 BSPP	CET		CET/S	
Metric	.375 BSPP	.25 BSPP	CEU		CEU/S	
Metric	.50 BSPP	.25 BSPP	CEV		CEV/S	
Metric	.75 BSPP	.25 BSPP	CEW		CEW/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



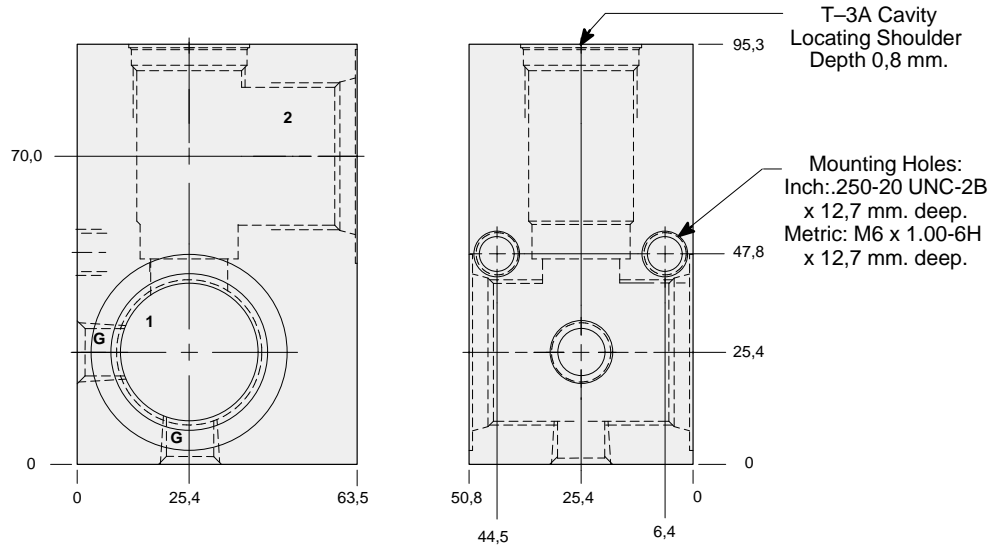
Through port body with gauge ports.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



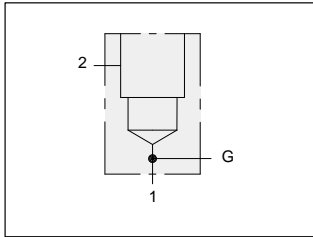
Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	CEE		CEE/S	
Inch	SAE-16	.25 NPTF	CEM		CEM/S	
Metric	1.00 BSPP	.25 BSPP	CEX		CEX/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

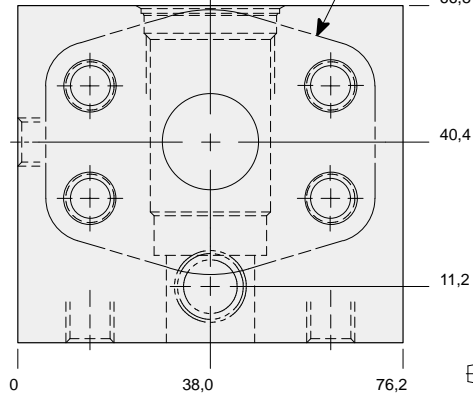
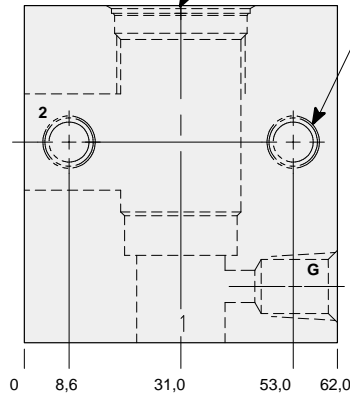


90 degree .75" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-3A Cavity
Locating Shoulder
Depth 1,5 mm.

.75" SAE Code 61
4-Bolt Flange Pattern
2 places

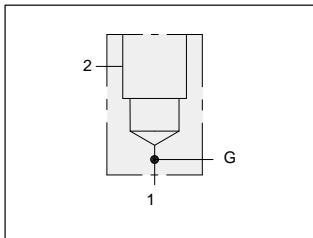


TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	CAO		CAO/S	
Metric	.25 BSPP	CAO/M		CAO/T	

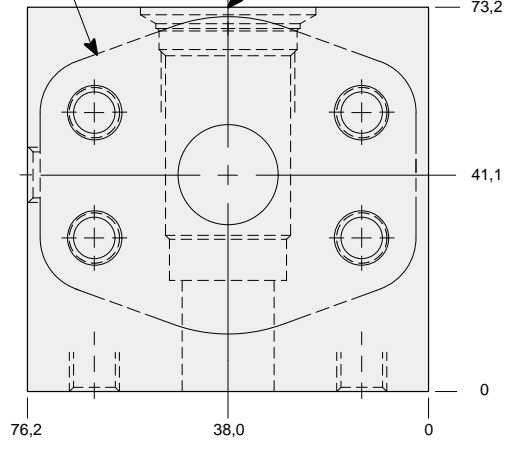
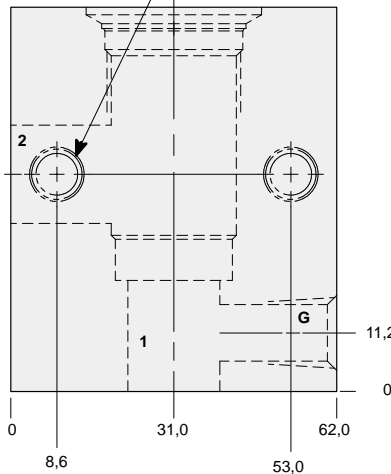


90 degree .75" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

.75" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-3A Cavity
Locating Shoulder
Depth 1,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

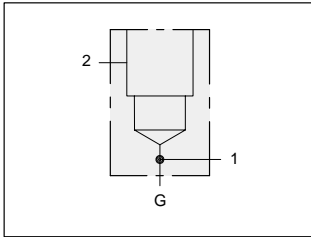
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	CA3		CA3/S	
Metric	.25 BSPP	CA3/M		CA3/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

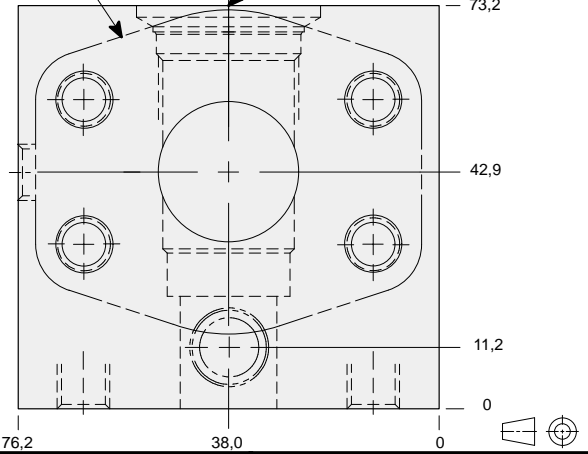
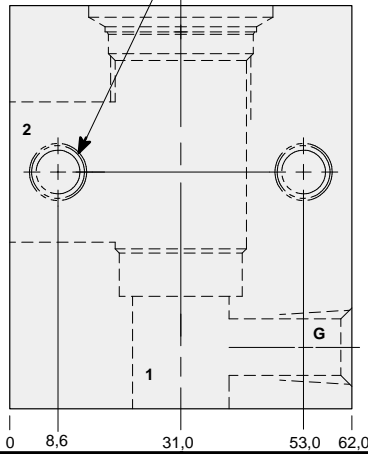


90 degree 1.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-3A Cavity
Locating Shoulder
Depth 4,8 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

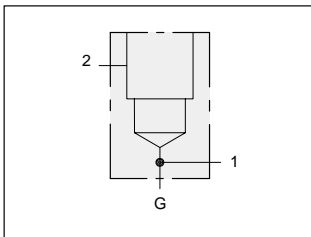
RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	CAP		CAP/S	
Metric	.25 BSPP	CAP/M		CAP/T	

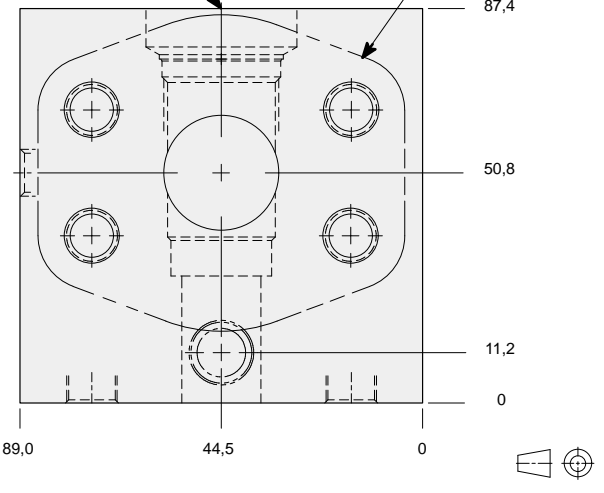
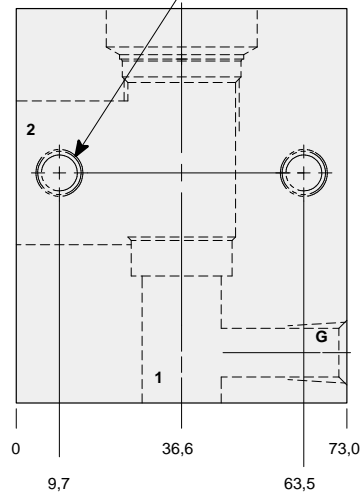


90 degree 1.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-3A Cavity
Locating Shoulder
Depth 11,2 mm.

1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	CA4		CA4/S	
Metric	.25 BSPP	CA4/M		CA4/T	

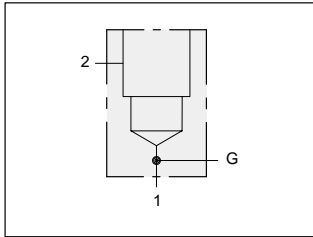
Series 2 T-3A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

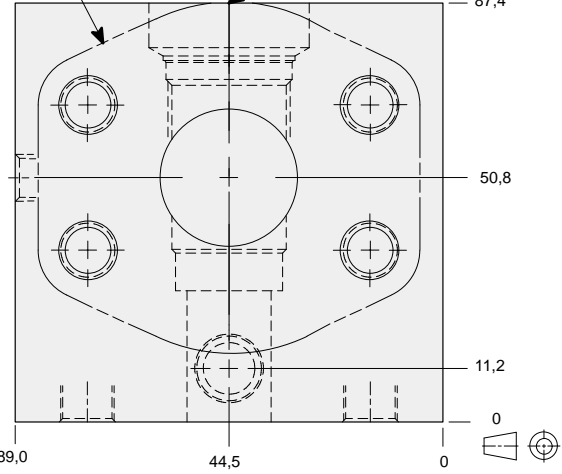
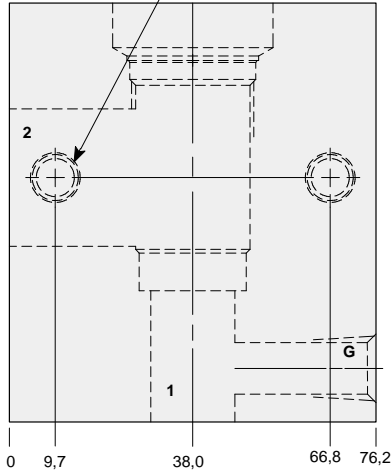


90 degree 1.25" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-3A Cavity
Locating Shoulder
Depth 7,1 mm.

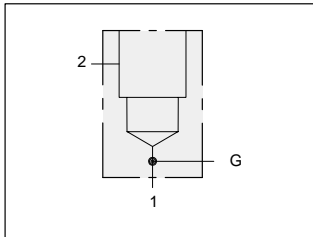


TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RQGB - ***	Page	1.12
NQEB - ***	Page	10.16

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	CAQ		CAQ/S	
Metric	.25 BSPP	CAQ/M		CAQ/T	

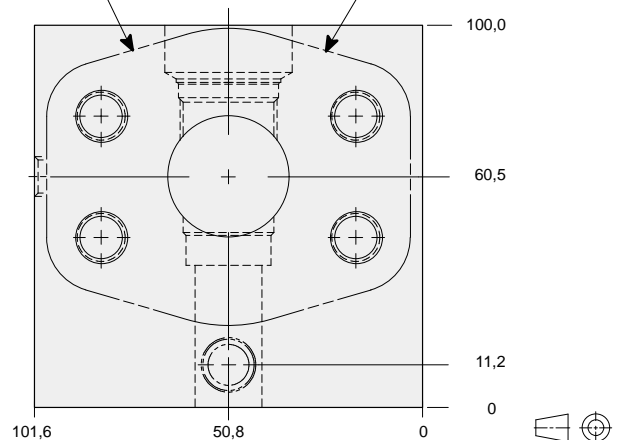
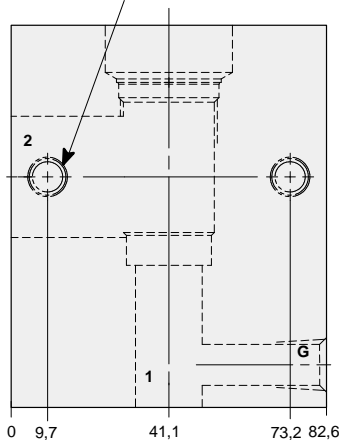


90 degree 1.25" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-3A Cavity
Locating Shoulder
Depth 15 mm.

1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	CA5		CA5/S	
Metric	.25 BSPP	CA5/M		CA5/T	

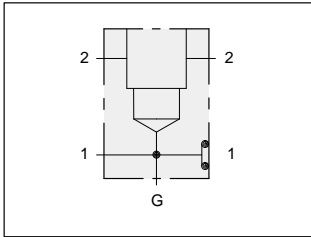
Series 2 T-3A



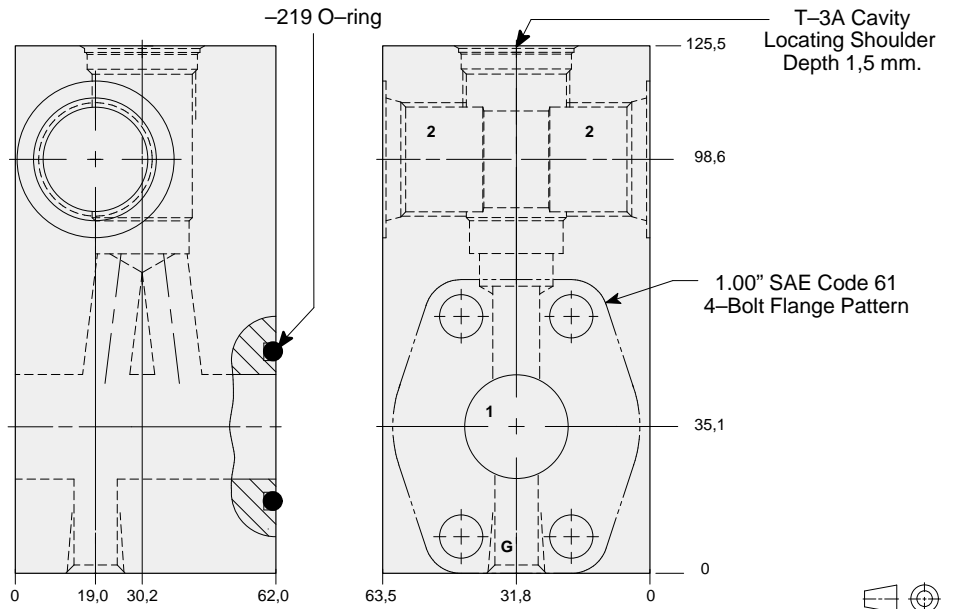
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Sandwich mount through port 1.00" SAE Code 61 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

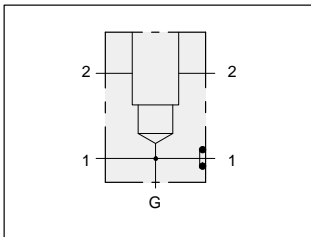
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

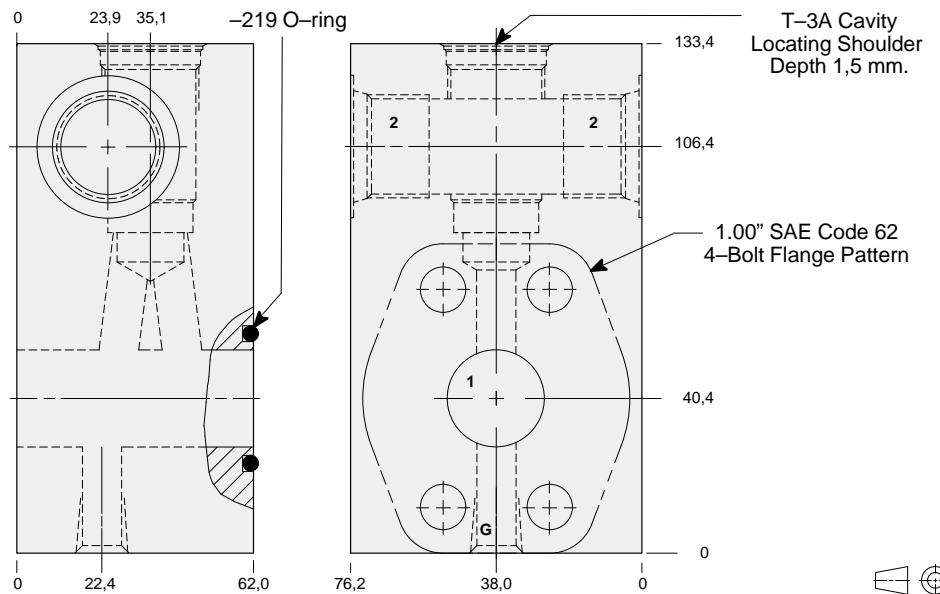
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	ZQL		ZQL/S	
Inch	SAE-12	.25 NPTF	ZQK		ZQK/S	
Metric	.75 BSPP	.25 BSPP	ZQJ/M		ZQJ/T	



Sandwich mount through port 1.00" SAE Code 62 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	ZCH		ZCH/S	
Inch	SAE-12	.25 NPTF	ZCG		ZCG/S	
Metric	.75 BSPP	.25 BSPP	ZCF/M		ZCF/T	

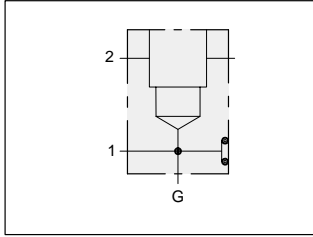
Series 2 T-3A



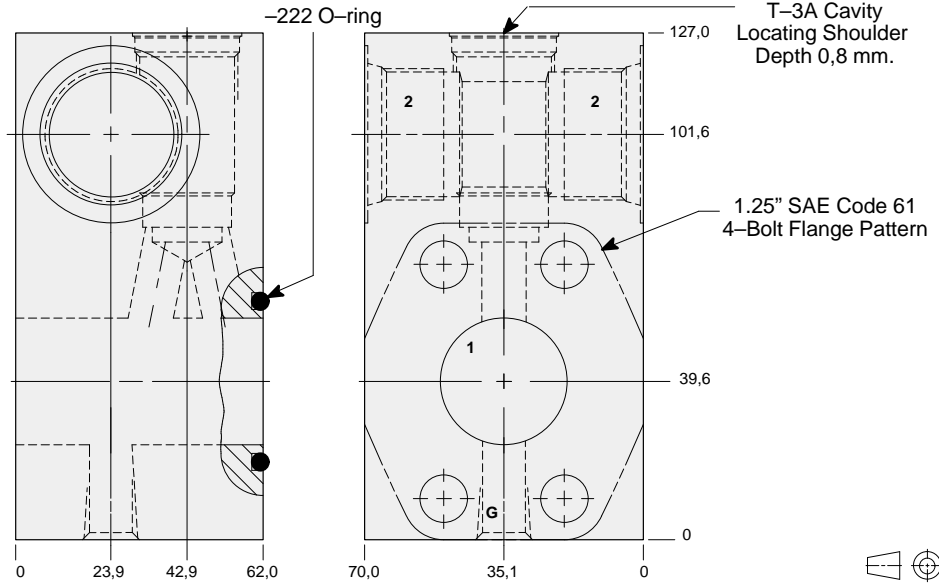
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Sandwich mount through port 1.25" SAE Code 61 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

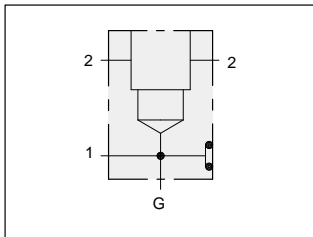
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

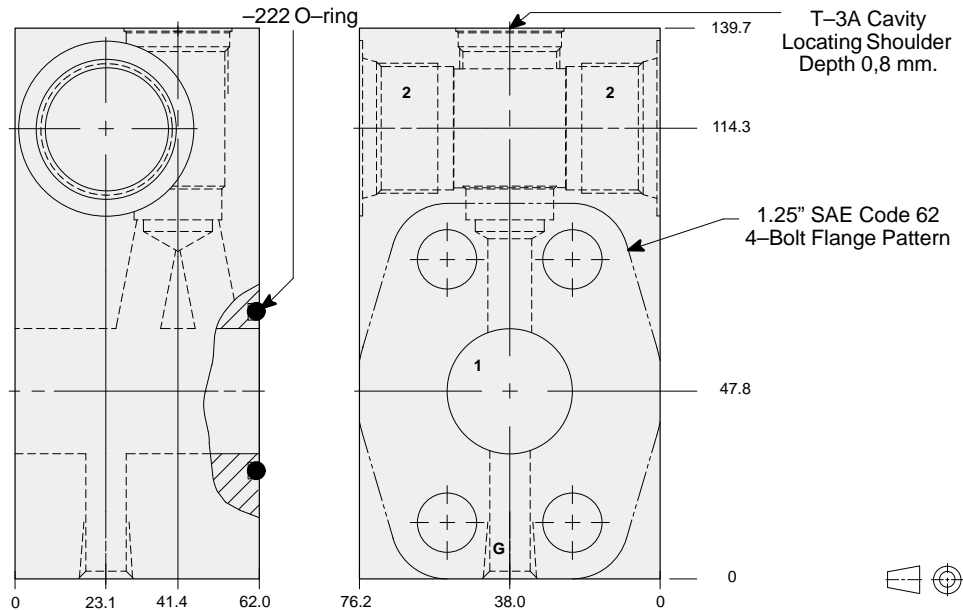
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	ZQH		ZQH/S	
Inch	SAE-16	.25 NPTF	ZQG		ZQG/S	
Metric	1.00 BSPP	.25 BSPP	ZQF/M		ZQF/T	



Sandwich mount through port 1.25" SAE Code 62 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

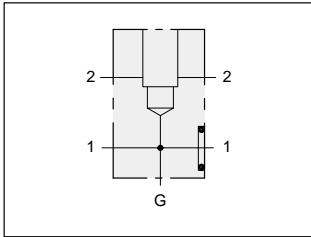
Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	ZBX		ZBX/S	
Inch	SAE-16	.25 NPTF	ZBW		ZBW/S	
Metric	1.00 BSPP	.25 BSPP	ZBV/M		ZBV/T	



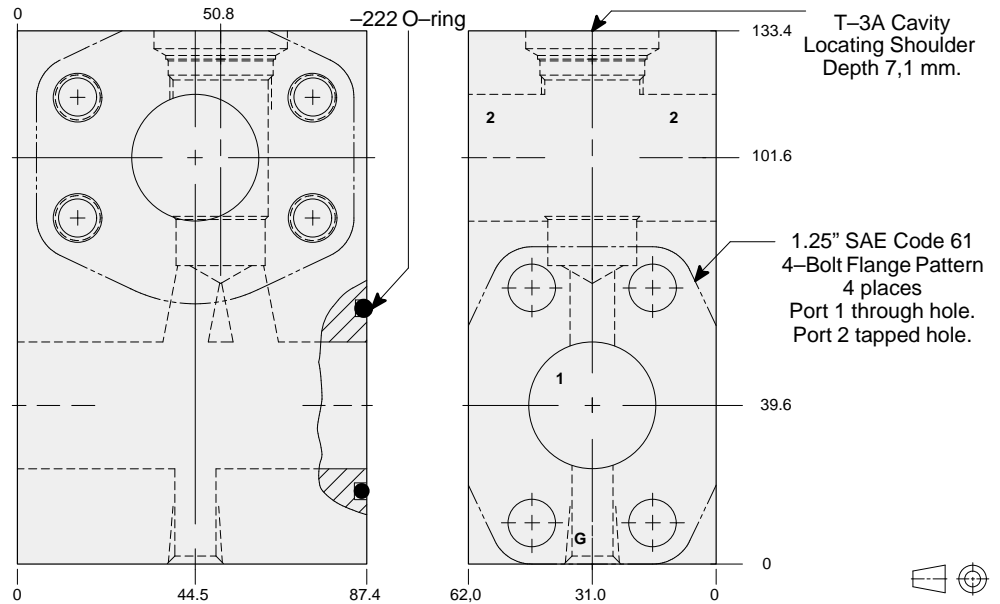
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Sandwich mount through port 1.25" SAE Code 61 flange port body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

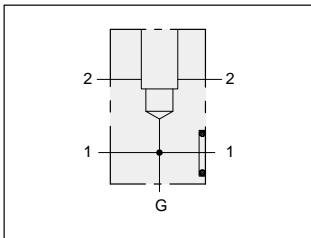
RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Cartridge seal type determines O-ring type.

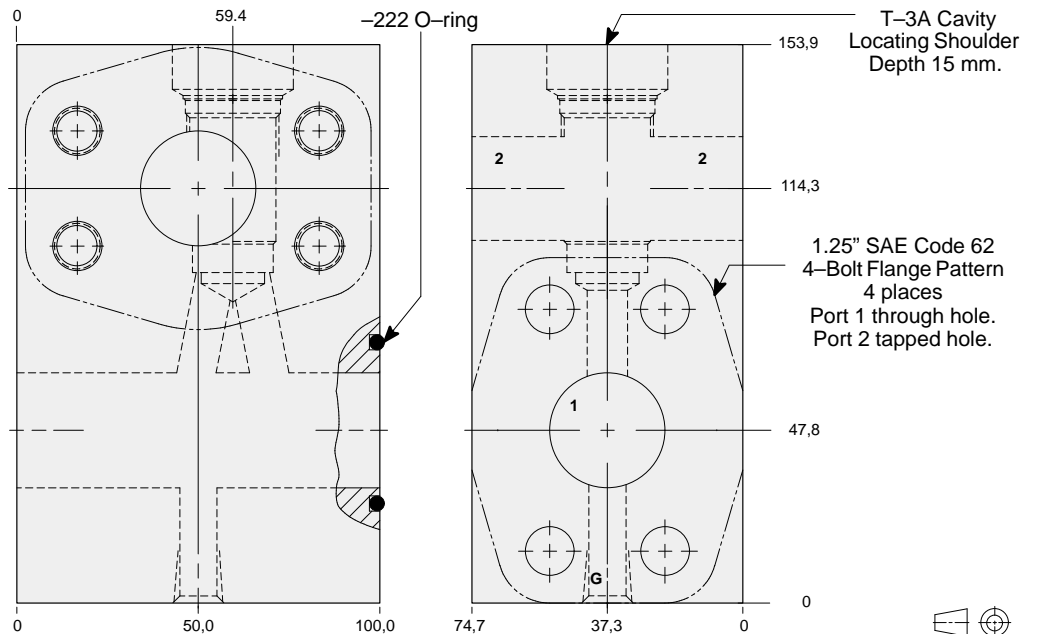
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	ZQE		ZQE/S	
Metric	.25 BSPP	ZQE/M		ZQE/T	



Sandwich mount through port 1.25" SAE Code 62 flange port body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	ZDB		ZDB/S	
Metric	.25 BSPP	ZDB/M		ZDB/T	

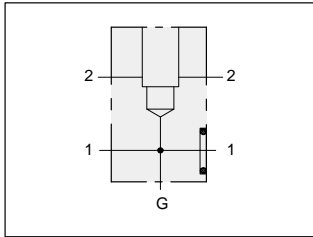
Series 2 T-3A



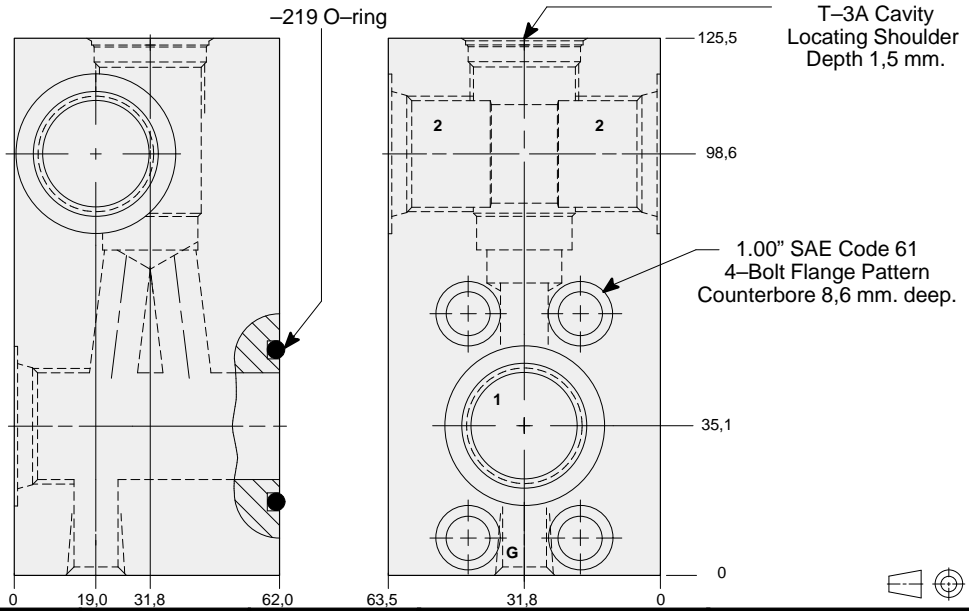
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Flange mount through port 1.00" SAE Code 61 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

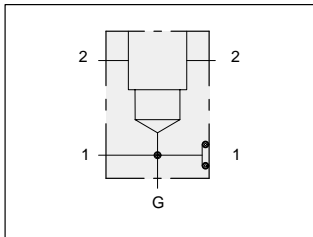
RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Cartridge seal type determines O-ring seal.

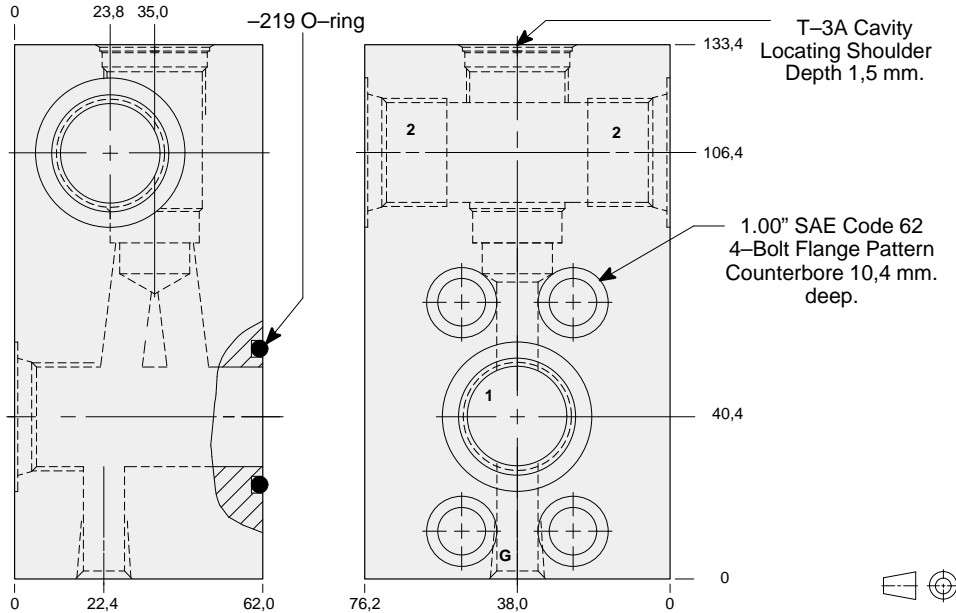
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	ZCL		ZCL/S	
Inch	SAE-12	.25 NPTF	ZCK		ZCK/S	
Metric	.75 BSPP	.25 BSPP	ZCJ/M		ZCJ/T	



Flange mount through port 1.00" SAE Code 62 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Cartridge seal type determines O-ring seal.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

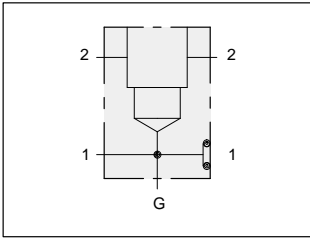
Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	ZCD		ZCD/S	
Inch	SAE-12	.25 NPTF	ZCC		ZCC/S	
Metric	.75 BSPP	.25 BSPP	ZCB/M		ZCB/T	



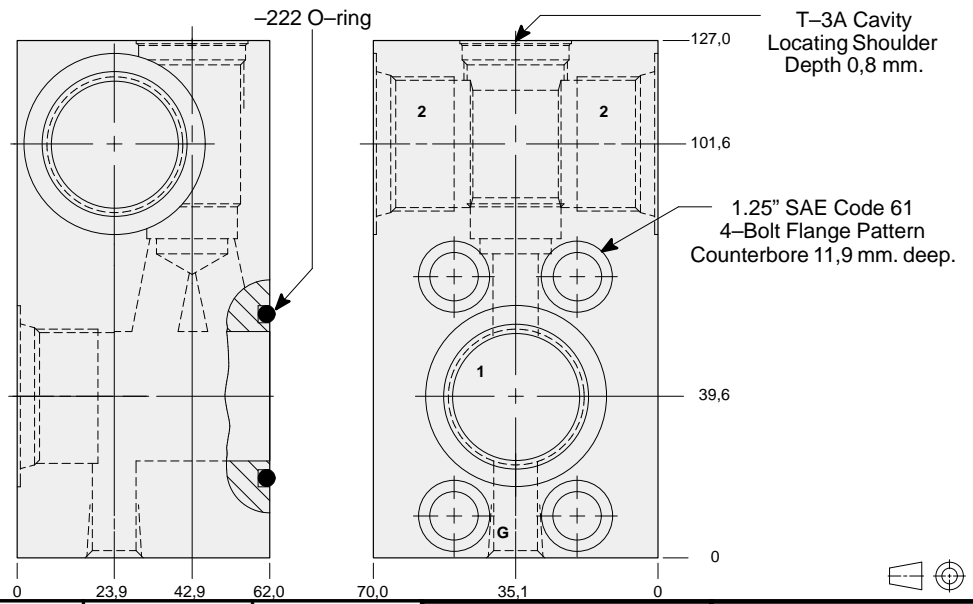
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Flange mount through port 1.25" SAE Code 61 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

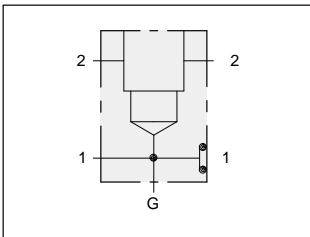
RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Cartridge seal type determines O-ring type.

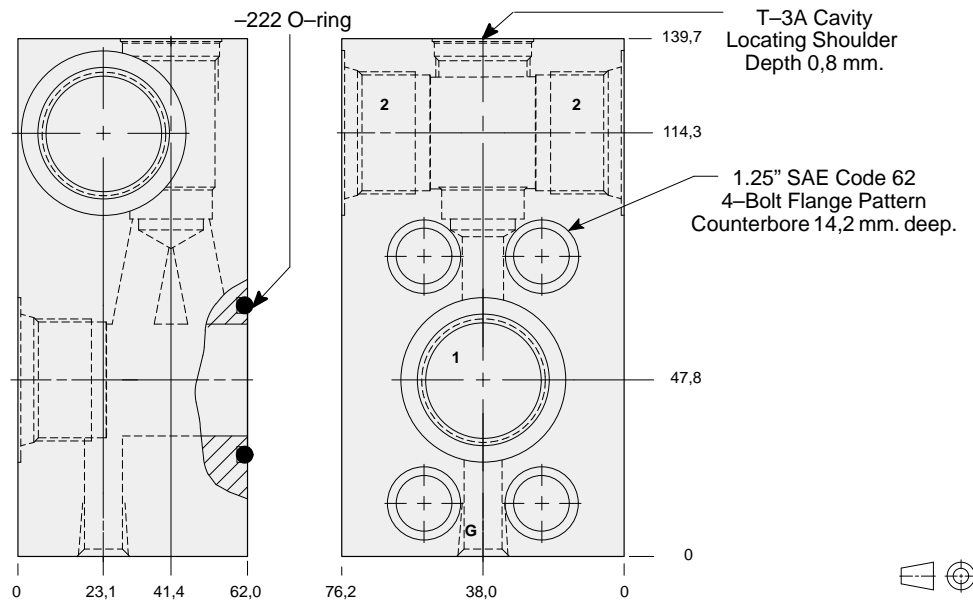
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	ZBZ		ZBZ/S	
Inch	SAE-16	.25 NPTF	ZKE		ZKE/S	
Metric	1.00 BSPP	.25 BSPP	ZBY/M		ZBY/T	



Flange mount through port 1.25" SAE Code 62 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14
NQEB - ***	Page	10.16

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	ZBT		ZBT/S	
Inch	SAE-16	.25 NPTF	ZBS		ZBS/S	
Metric	1.00 BSPP	.25 BSPP	ZBR/M		ZBR/T	

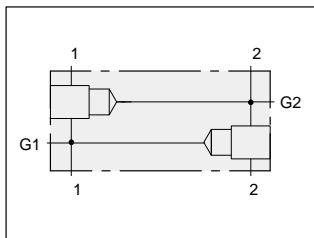
Series 2 T-3A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



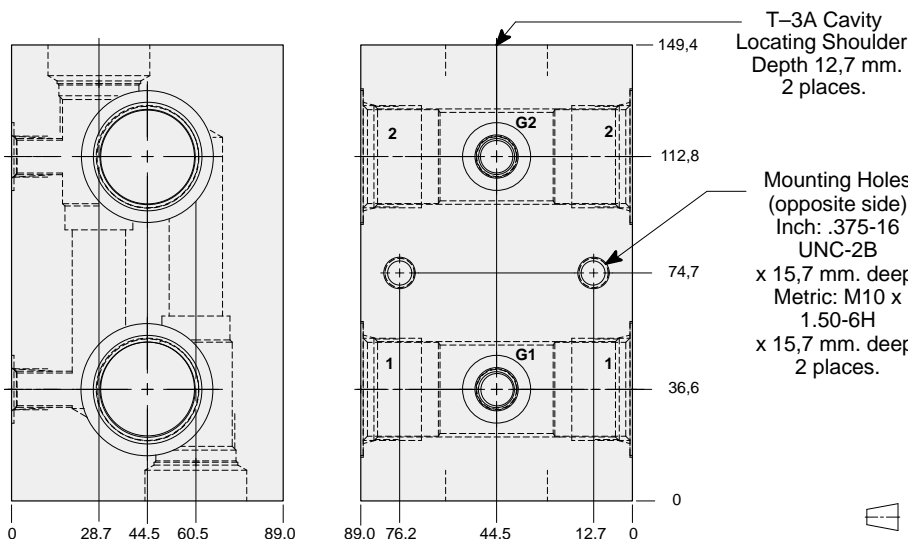
TYPICAL CARTRIDGES USED WITH THIS BODY

- RPGC - *** Page 1.06
- RPGE - *** Page 1.08
- RDFA - *** Page 1.10
- RQGB - *** Page 1.12

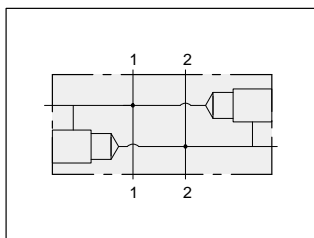
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Two cavity body with gauge ports for cross-port relief applications.



Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	YCD		YCD/S	
Inch	1.00 NPTF	.25 NPTF	YCE		YCE/S	
Inch	SAE-12	.25 NPTF	YCL		YCL/S	
Inch	SAE-16	.25 NPTF	YCM		YCM/S	
Metric	.75 BSPP	.25 BSPP	YCW		YCW/S	
Metric	1.00 BSPP	.25 BSPP	YCX		YCX/S	



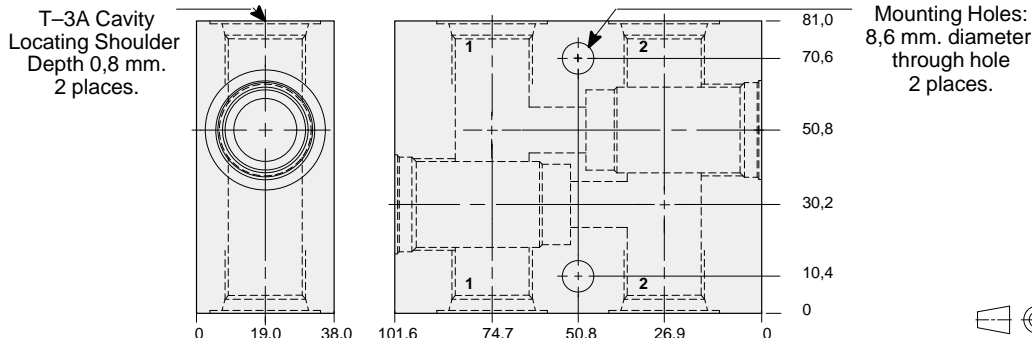
TYPICAL CARTRIDGES USED WITH THIS BODY

- RPGC - *** Page 1.06
- RPGE - *** Page 1.08
- RDFA - *** Page 1.10
- RQGB - *** Page 1.12

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Two cavity body for cross-port relief applications.



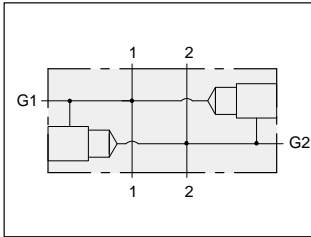
Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	YBA		YBA/S	
.375 NPTF	YBB		YBB/S	
.50 NPTF	YBC		YBC/S	
.75 NPTF	YBD		YBD/S	
SAE-6	YBI		YBI/S	
SAE-8	YBJ		YBJ/S	
SAE-10	YBK		YBK/S	
.75 BSPP	YBO		YBO/S	
.25 BSPP	YBT		YBT/S	
.375 BSPP	YBU		YBU/S	
.50 BSPP	YBV		YBV/S	



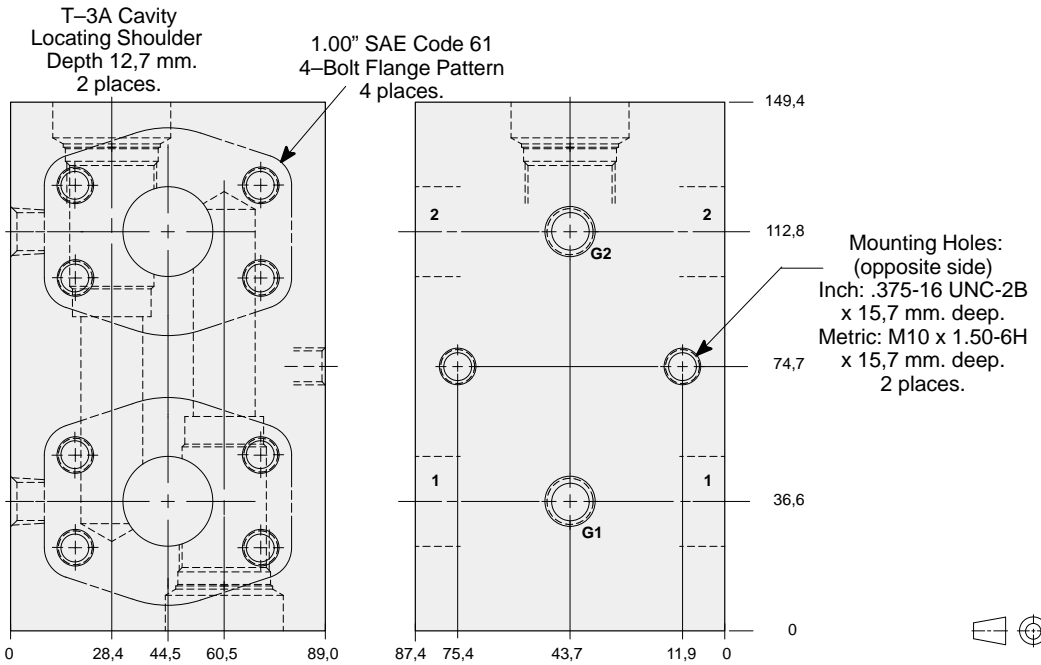
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 1.00" SAE Code 61 flange port body with gauge ports for cross-port relief applications.

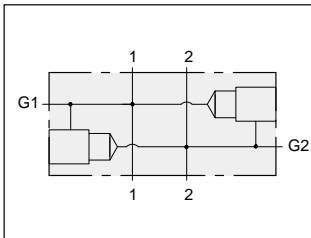


TYPICAL CARTRIDGES USED WITH THIS BODY

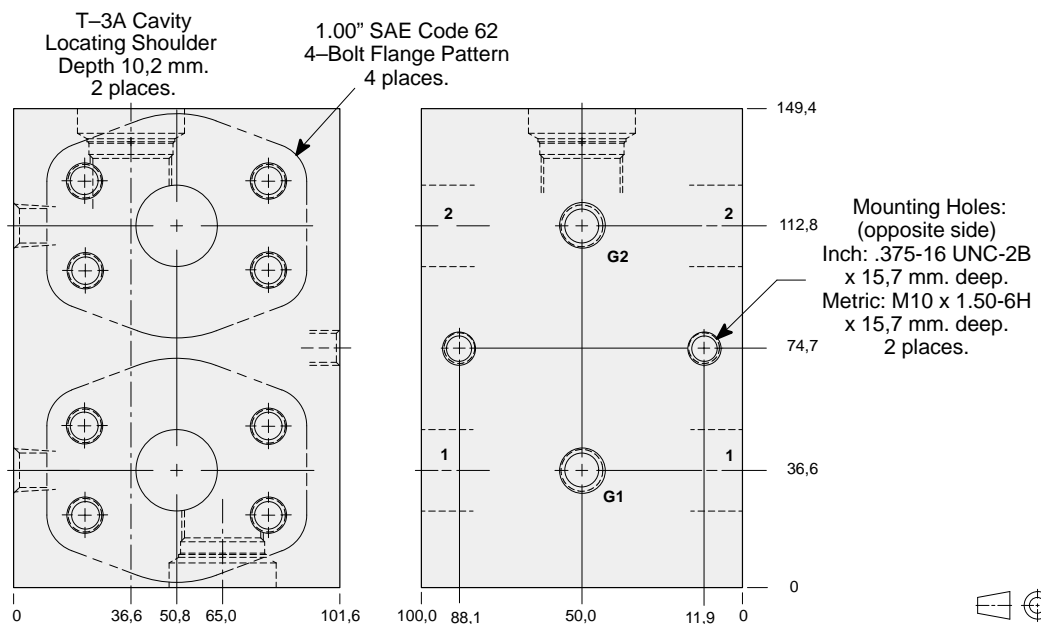
- RPGC - *** Page 1.06
- RPGE - *** Page 1.08
- RDFA - *** Page 1.10
- RQGB - *** Page 1.12

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YCP		YCP/S	
Metric	.25 BSPP	YCP/M		YCP/T	



Two cavity 1.00" SAE Code 62 flange port body with gauge ports for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RPGC - *** Page 1.06
- RPGE - *** Page 1.08
- RDFA - *** Page 1.10
- RQGB - *** Page 1.12

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YC4		YC4/S	
Metric	.25 BSPP	YC4/M		YC4/T	

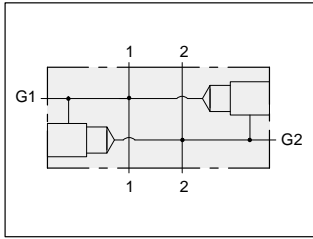
Series 2 T-3A



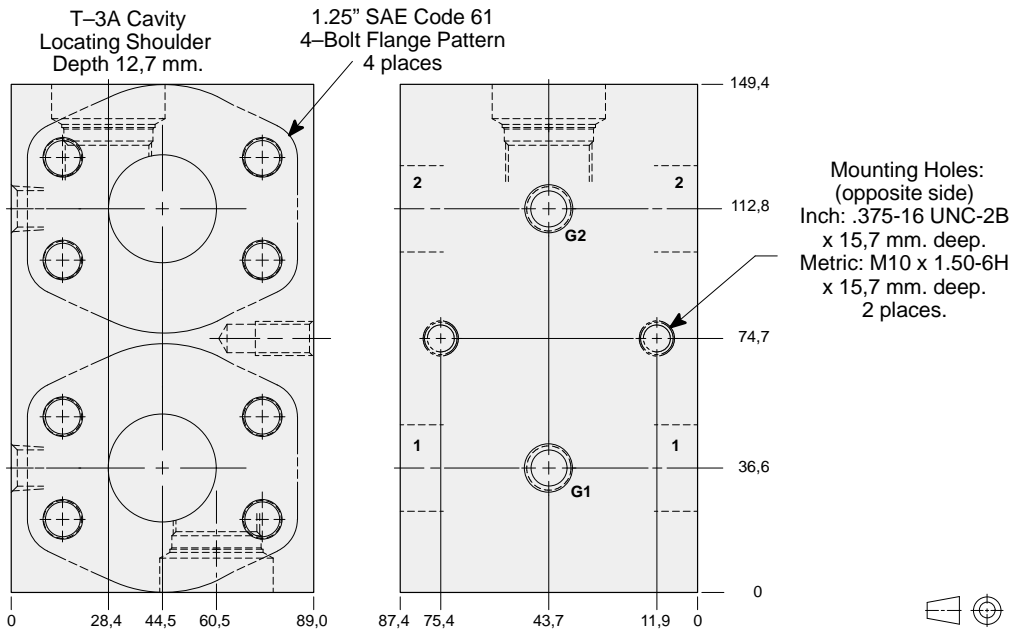
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 1.25" SAE Code 61 flange port body with gauge ports for cross-port relief applications.

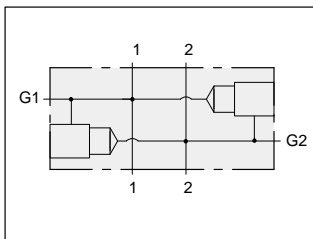


TYPICAL CARTRIDGES USED WITH THIS BODY

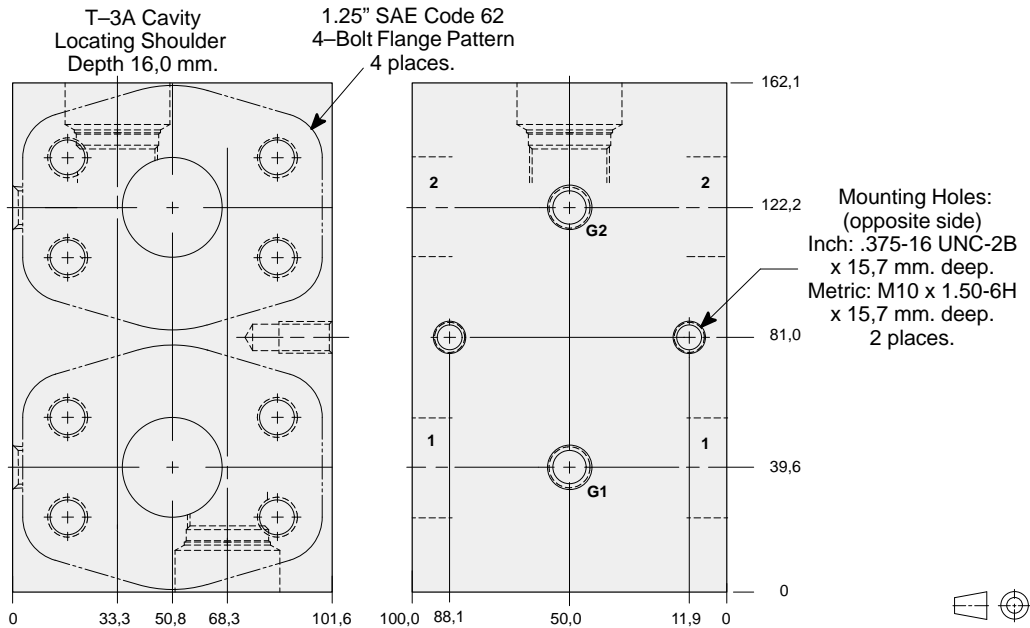
- RPGC - *** Page 1.06
- RPGE - *** Page 1.08
- RDFA - *** Page 1.10
- RQGB - *** Page 1.12

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YCQ		YCQ/S	
Metric	.25 BSPP	YCQ/M		YCQ/T	



Two cavity 1.25" SAE Code 62 flange port body with gauge ports for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RPGC - *** Page 1.06
- RPGE - *** Page 1.08
- RDFA - *** Page 1.10
- RQGB - *** Page 1.12

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

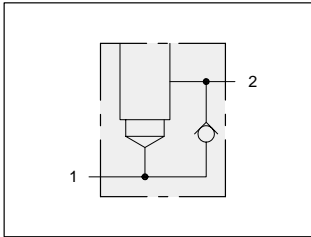
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YC5		YC5/S	
Metric	.25 BSPP	YC5/M		YC5/T	



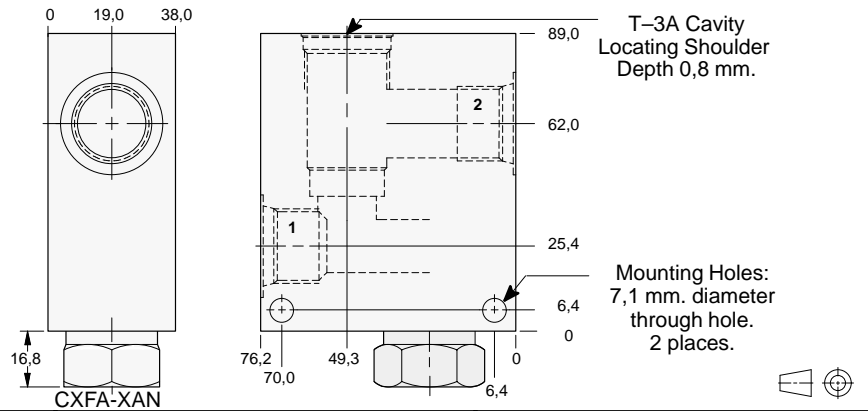
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with reverse free flow check.



TYPICAL CARTRIDGES USED WITH THIS BODY

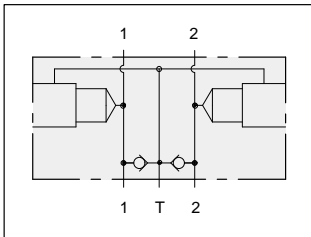
RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12
RPGD - ***	Page	1.14

Cartridge seal type determines check valve seal type.

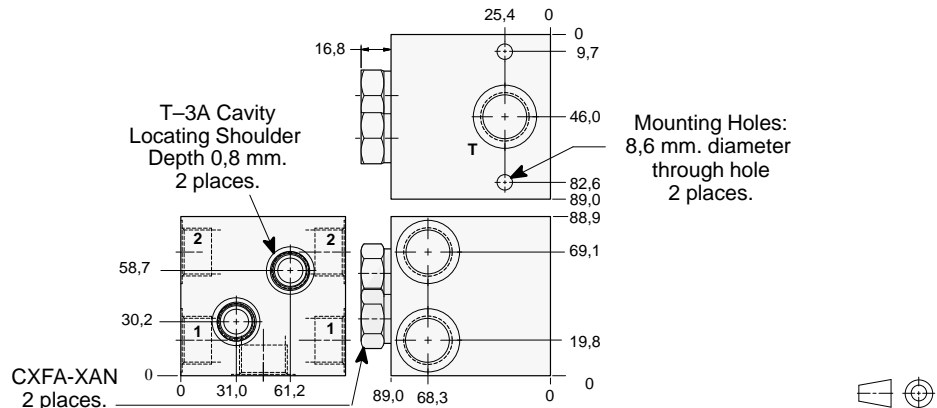
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	CNB		CNB/S	
.50 NPTF	CNC		CNC/S	
.75 NPTF	CND		CND/S	
SAE-6	CNI		CNI/S	
SAE-8	CNJ		CNJ/S	
SAE-10	CNK		CNK/S	
.375 BSPP	CNU		CNU/S	
.50 BSPP	CNV		CNV/S	
.75 BSPP	CNW		CNW/S	



Two cavity body with make-up checks for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPGC - ***	Page	1.06
RPGE - ***	Page	1.08
RDFA - ***	Page	1.10
RQGB - ***	Page	1.12

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

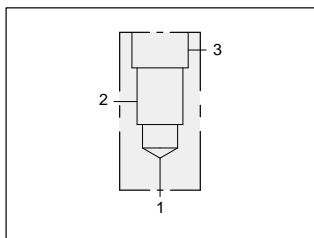
Ports 1, 2 & T	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	CMB		CMB/S	
.50 NPTF	CMC		CMC/S	
.75 NPTF	CMD		CMD/S	
SAE-8	CMJ		CMJ/S	
SAE-10	CMK		CMK/S	
SAE-12	CML		CML/S	
.375 BSPP	CMU		CMU/S	
.50 BSPP	CMV		CMV/S	
.75 BSPP	CMW		CMW/S	



LINE MOUNT BODIES



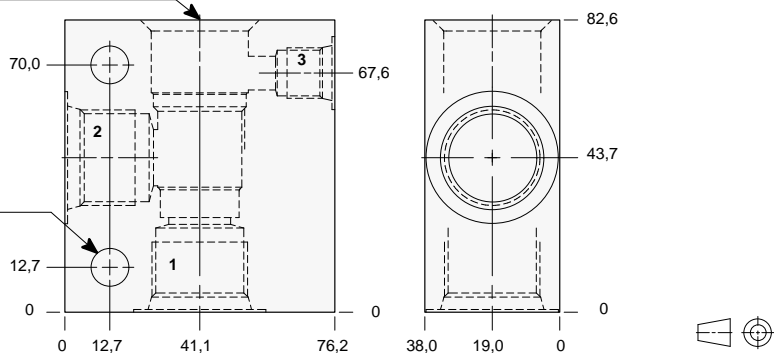
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.

T-2A Cavity
Locating Shoulder
Depth 20,6 mm.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



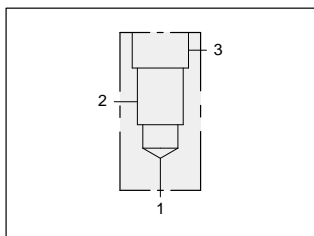
TYPICAL CARTRIDGES USED WITH THIS BODY

RVEA - ***	Page	1.18
RSFC - ***	Page	2.06
SQFB - ***	Page	2.08
RSFE - ***	Page	2.10
SCEA - ***	Page	2.12
PBFB - ***	Page	3.06
PBFC - ***	Page	3.08
CBEA - ***	Page	4.10
CBEG - ***	Page	4.12
CBEH - ***	Page	4.14
CKEB - ***	Page	4.14
LOFC - ***	Page	9.08
LKFC - ***	Page	9.10
LPFC - ***	Page	9.12
LRFC - ***	Page	9.14
COFA - ***	Page	10.12

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

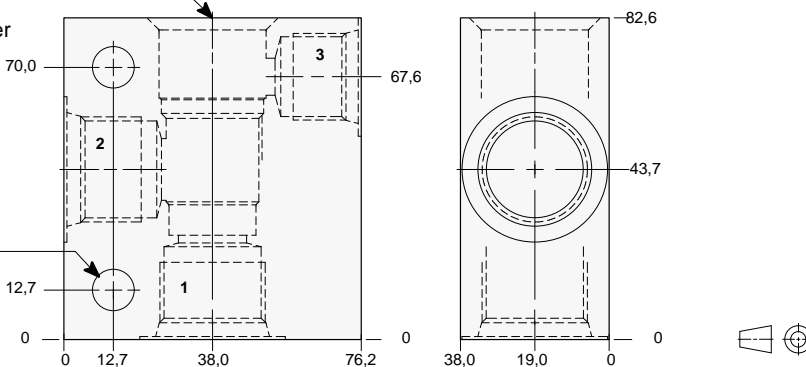
Ports 1 & 2	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	BCA		BCA/S	
.375 NPTF	.25 NPTF	BCB		BCB/S	
.50 NPTF	.25 NPTF	BCC		BCC/S	
.75 NPTF	.25 NPTF	BCD		BCD/S	
SAE-6	SAE-6	BCI		BCI/S	
SAE-8	SAE-6	BCJ		BCJ/S	
SAE-10	SAE-6	BCK		BCK/S	
SAE-12	SAE-6	BCL		BCL/S	
.25 BSPP	.25 BSPP	BCT		BCT/S	
.375 BSPP	.25 BSPP	BCU		BCU/S	
.50 BSPP	.25 BSPP	BCV		BCV/S	
.75 BSPP	.25 BSPP	BCW		BCW/S	



90 degree body with high capacity port 3.

T-2A Cavity
Locating Shoulder
Depth 20,6 mm.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPFB - ***	Page	3.10
PPFC - ***	Page	3.12
FRDA - ***	Page	6.02
DPCA - ***	Page	8.06
DPCB - ***	Page	8.07
DPCC - ***	Page	8.08
DPCD - ***	Page	8.09

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

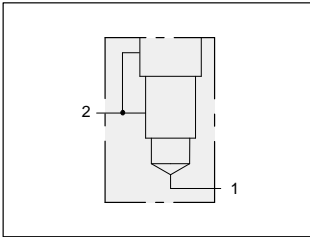
Ports 1 & 2	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.375 NPTF	.375 NPTF	BAB		BAB/S	
.50 NPTF	.50 NPTF	BAC		BAC/S	
.75 NPTF	.50 NPTF	BAD		BAD/S	
SAE-8	SAE-8	BAJ		BAJ/S	
SAE-10	SAE-10	BAK		BAK/S	
SAE-12	SAE-10	BAL		BAL/S	
.375 BSPP	.375 BSPP	BAU		BAU/S	
.50 BSPP	.50 BSPP	BAV		BAV/S	
.75 BSPP	.50 BSPP	BAW		BAW/S	



LINE MOUNT BODIES



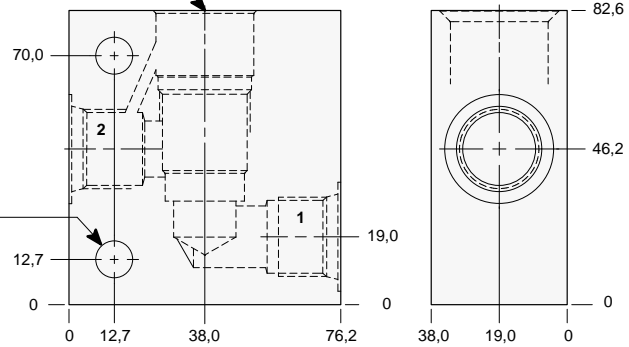
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with port 3 connected to port 2.

T-2A Cavity
Locating Shoulder
Depth 18,3 mm.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBEA - ***	Page	4.10
CBEG - ***	Page	4.12
CBEH - ***	Page	4.14

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

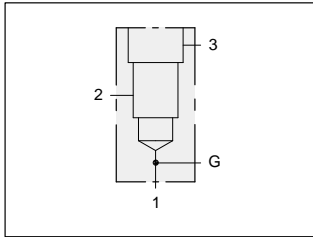
All Ports	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BDA		BDA/S	
.375 NPTF	BDB		BDB/S	
.50 NPTF	BDC		BDC/S	
.75 NPTF	BDD		BDD/S	
SAE-6	BDI		BDI/S	
SAE-8	BDJ		BDJ/S	
SAE-10	BDK		BDK/S	
.25 BSPP	BDT		BDT/S	
.375 BSPP	BDU		BDU/S	
.50 BSPP	BDV		BDV/S	
.75 BSPP	BDW		BDW/S	



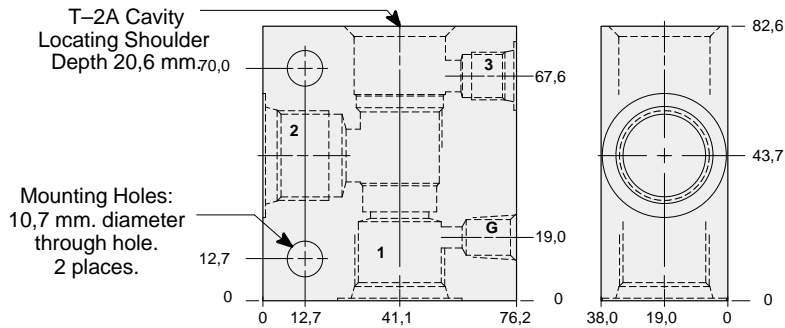
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body with gauge port.



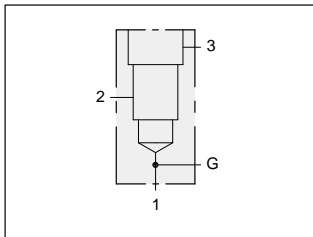
TYPICAL CARTRIDGES USED WITH THIS BODY

RVEA - ***	Page	1.18
RSFC - ***	Page	2.06
SQFB - ***	Page	2.08
RSFE - ***	Page	2.10
SCEA - ***	Page	2.12
PBFB - ***	Page	3.06
PBFC - ***	Page	3.08
LOFC - ***	Page	9.08
LKFC - ***	Page	9.10
LPFC - ***	Page	9.12
LRFC - ***	Page	9.14
COFA - ***	Page	10.12

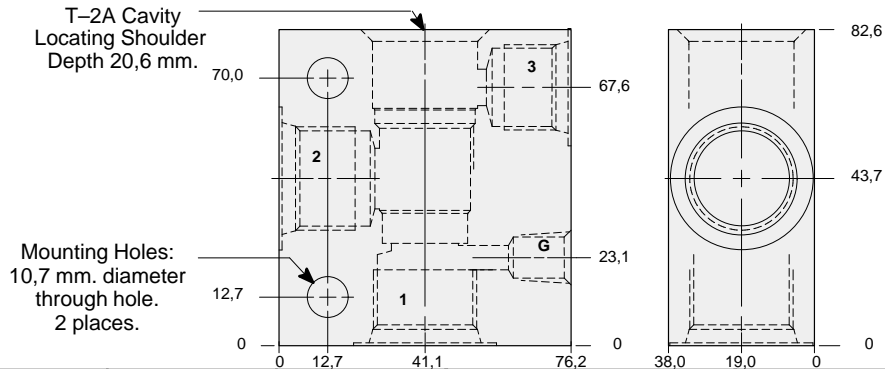
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	BFA		BFA/S	
.375 NPTF	.25 NPTF	.25 NPTF	BFB		BFB/S	
.50 NPTF	.25 NPTF	.25 NPTF	BFC		BFC/S	
.75 NPTF	.25 NPTF	.25 NPTF	BFD		BFD/S	
SAE-6	SAE-6	.25 NPTF	BFI		BFI/S	
SAE-8	SAE-6	.25 NPTF	BFJ		BFJ/S	
SAE-10	SAE-6	.25 NPTF	BFK		BFK/S	
SAE-12	SAE-6	.25 NPTF	BFL		BFL/S	
.25 BSPP	.25 BSPP	.25 BSPP	BFT		BFT/S	
.375 BSPP	.25 BSPP	.25 BSPP	BFU		BFU/S	
.50 BSPP	.25 BSPP	.25 BSPP	BFV		BFV/S	
.75 BSPP	.25 BSPP	.25 BSPP	BFW		BFW/S	



90 degree body with high capacity port 3 and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPFB - ***	Page	3.10
PPFC - ***	Page	3.12
DPCA - ***	Page	8.06
DPCB - ***	Page	8.07
DPCC - ***	Page	8.08
DPCD - ***	Page	8.09

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

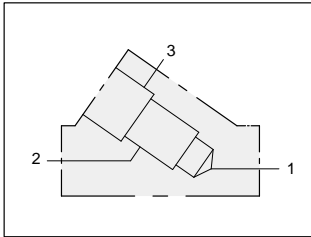
Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.375 NPTF	.375 NPTF	.25 NPTF	BLB		BLB/S	
.50 NPTF	.50 NPTF	.25 NPTF	BLC		BLC/S	
.75 NPTF	.50 NPTF	.25 NPTF	BLD		BLD/S	
SAE-6	SAE-6	.25 NPTF	BLI		BLI/S	
SAE-8	SAE-8	.25 NPTF	BLJ		BLJ/S	
SAE-10	SAE-10	.25 NPTF	BLK		BLK/S	
SAE-12	SAE-10	.25 NPTF	BLL		BLL/S	
.375 BSPP	.375 BSPP	.25 BSPP	BLU		BLU/S	
.50 BSPP	.50 BSPP	.25 BSPP	BLV		BLV/S	
.75 BSPP	.50 BSPP	.25 BSPP	BLW		BLW/S	



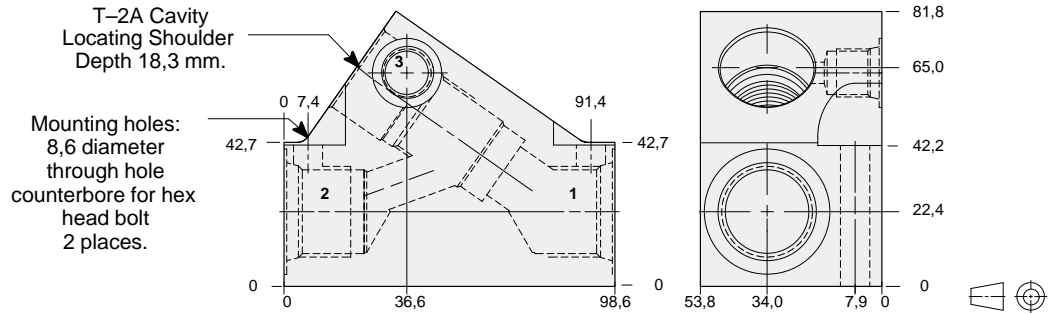
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline body.

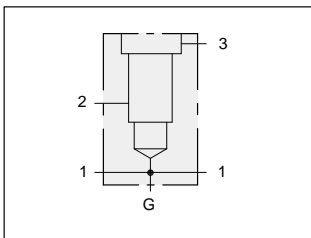


TYPICAL CARTRIDGES USED WITH THIS BODY

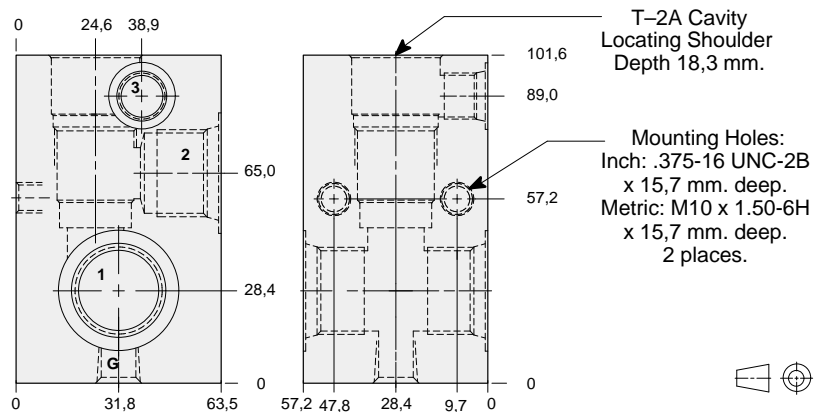
RVEA - ***	Page	1.18
RSFC - ***	Page	2.06
SQFB - ***	Page	2.08
RSFE - ***	Page	2.10
SCEA - ***	Page	2.12
PBFB - ***	Page	3.06
PBFC - ***	Page	3.08
CBEA - ***	Page	4.10
CBEG - ***	Page	4.12
CBEH - ***	Page	4.14
CKEB - ***	Page	4.14
LOFC - ***	Page	9.08
LKFC - ***	Page	9.10
LPFC - ***	Page	9.12
LRFC - ***	Page	9.14
COFA - ***	Page	10.12

Instructions for ordering complete cartridge and body assemblies. Page viii
 Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	BVA		BVA/S	
.375 NPTF	.25 NPTF	BVB		BVB/S	
.50 NPTF	.25 NPTF	BVC		BVC/S	
.75 NPTF	.25 NPTF	BVD		BVD/S	
SAE-6	SAE-6	BVI		BVI/S	
SAE-8	SAE-6	BVJ		BVJ/S	
SAE-10	SAE-6	BVK		BVK/S	
SAE-12	SAE-6	BVL		BVL/S	
.25 BSPP	.25 BSPP	BVT		BVT/S	
.375 BSPP	.25 BSPP	BVU		BVU/S	
.50 BSPP	.25 BSPP	BVV		BVV/S	
.75 BSPP	.25 BSPP	BVW		BVW/S	



Through port body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVEA - ***	Page	1.18
RSFC - ***	Page	2.06
SQFB - ***	Page	2.08
RSFE - ***	Page	2.10
SCEA - ***	Page	2.12
PBFB - ***	Page	3.06
PBFC - ***	Page	3.08

Instructions for ordering complete cartridge and body assemblies. Page viii
 Pressure ratings, material specifications. Page 11.02

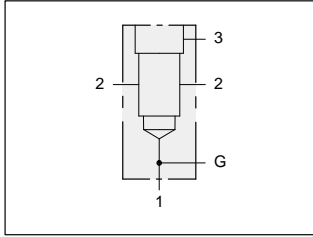
Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	.25 NPTF	.25 NPTF	BHB		BHB/S	
Inch	.50 NPTF	.25 NPTF	.25 NPTF	BHC		BHC/S	
Inch	.75 NPTF	.25 NPTF	.25 NPTF	BHD		BHD/S	
Inch	SAE-8	SAE-6	.25 NPTF	BHJ		BHJ/S	
Inch	SAE-10	SAE-6	.25 NPTF	BHK		BHK/S	
Inch	SAE-12	SAE-6	.25 NPTF	BHL		BHL/S	
Metric	.375 BSPP	.25 BSPP	.25 BSPP	BHU		BHU/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	BHV		BHV/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	BHW		BHW/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



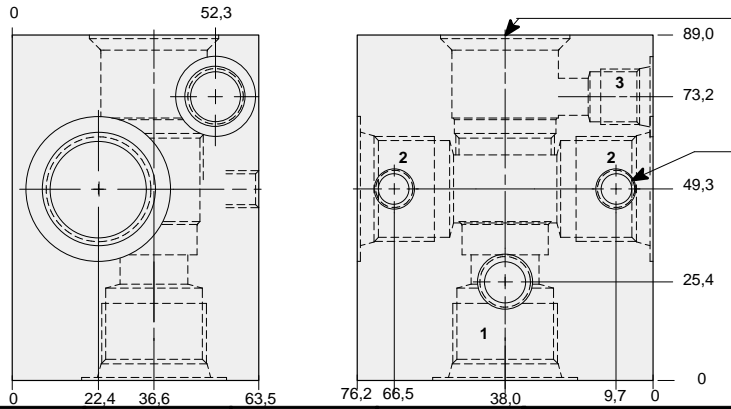
TYPICAL CARTRIDGES USED WITH THIS BODY

- PBFB - *** Page 3.06
- PBFC - *** Page 3.08

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

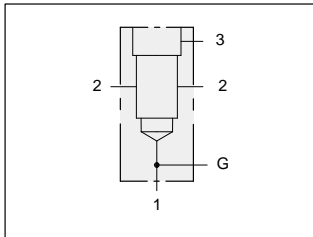
Through port body with gauge port.



T-2A Cavity Locating Shoulder Depth 21,3 mm.

Mounting Holes: (opposite side)
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep.
2 places.

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	.25 NPTF	.25 NPTF	WSE		WSE/S	
Inch	.50 NPTF	.25 NPTF	.25 NPTF	WSF		WSF/S	
Inch	.75 NPTF	.25 NPTF	.25 NPTF	WSG		WSG/S	
Inch	SAE-8	SAE-6	.25 NPTF	WSH		WSH/S	
Inch	SAE-10	SAE-6	.25 NPTF	WSI		WSI/S	
Inch	SAE-12	SAE-6	.25 NPTF	WSJ		WSJ/S	
Metric	.375 BSPP	.25 BSPP	.25 BSPP	WSK		WSK/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	WSL		WSL/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	WSM		WSM/S	



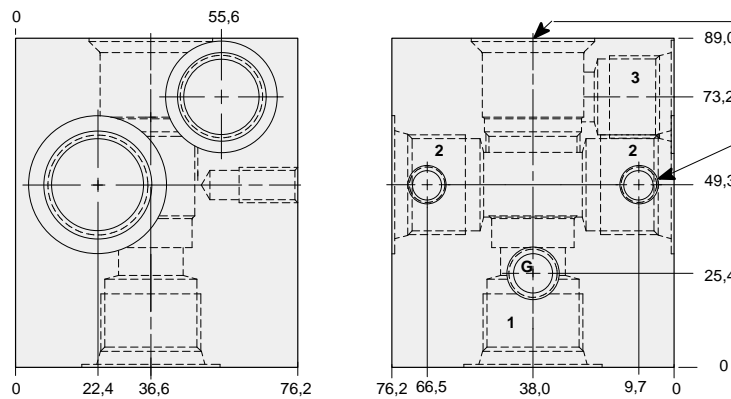
TYPICAL CARTRIDGES USED WITH THIS BODY

- PBFB - *** Page 3.06
- PBFC - *** Page 3.08
- DPCA - *** Page 8.06
- DPCB - *** Page 8.07
- DPPC - *** Page 8.08
- DPCD - *** Page 8.09

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Through port body with high capacity port 3 and gauge port.



T-2A Cavity Locating Shoulder Depth 21,3 mm.

Mounting Holes: (opposite side)
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep.
2 places.

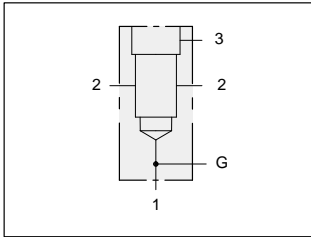
Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	.375 NPTF	.25 NPTF	WSN		WSN/S	
Inch	.50 NPTF	.50 NPTF	.25 NPTF	WSO		WSO/S	
Inch	.75 NPTF	.50 NPTF	.25 NPTF	WSP		WSP/S	
Inch	SAE-8	SAE-8	.25 NPTF	WSQ		WSQ/S	
Inch	SAE-10	SAE-10	.25 NPTF	WSR		WSR/S	
Inch	SAE-12	SAE-10	.25 NPTF	WSS		WSS/S	
Metric	.375 BSPP	.375 BSPP	.25 BSPP	WST		WST/S	
Metric	.50 BSPP	.50 BSPP	.25 BSPP	WSU		WSU/S	
Metric	.75 BSPP	.50 BSPP	.25 BSPP	WSV		WSV/S	



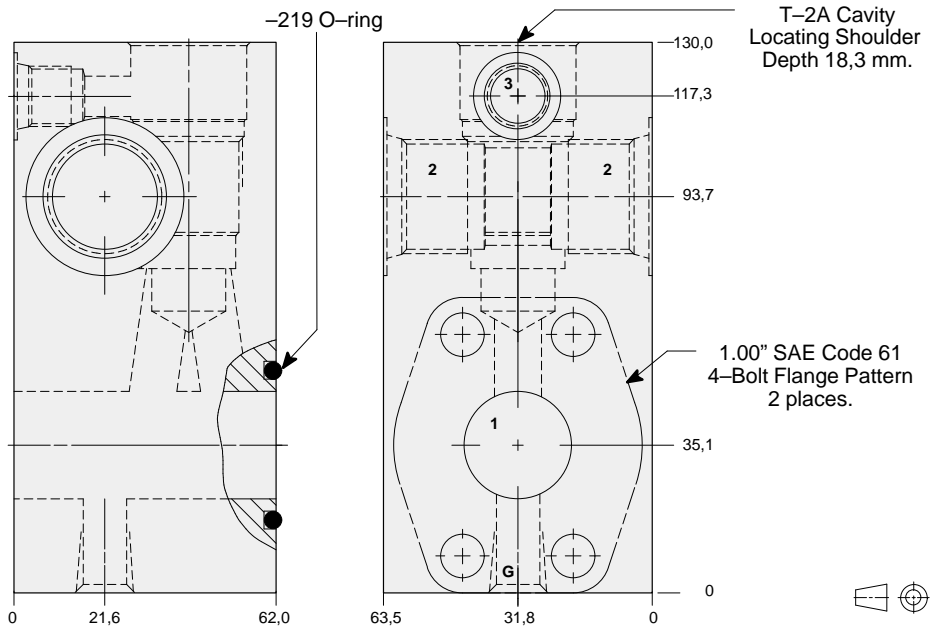
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Sandwich mount through port 1.00" SAE Code 61 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVEA - ***	Page	1.18
RSFC - ***	Page	2.06
SQFB - ***	Page	2.08
RSFE - ***	Page	2.10
SCEA - ***	Page	2.12

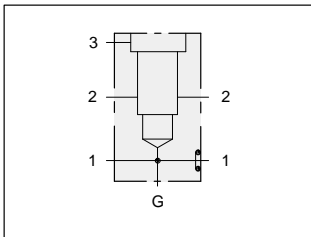
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

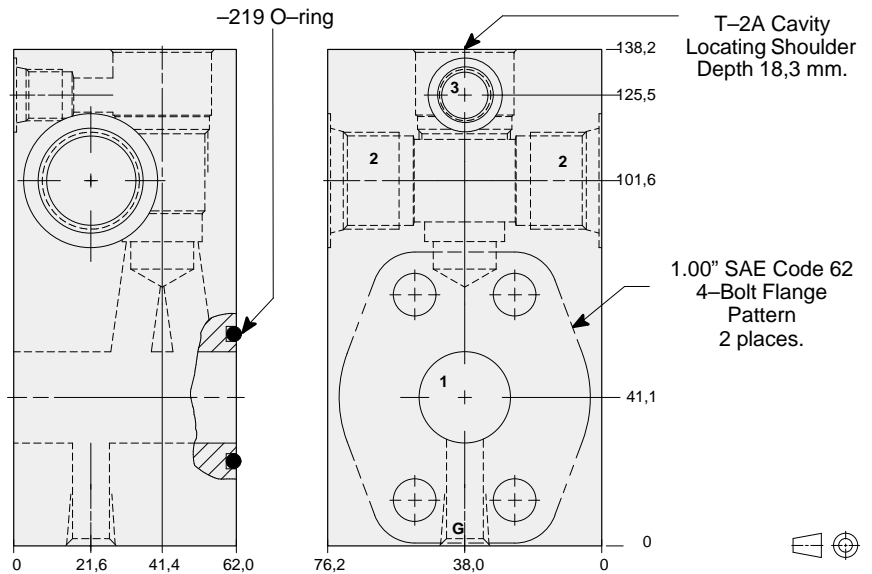
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	.25 NPTF	ZMN		ZMN/S	
Inch	SAE-12	SAE-6	.25 NPTF	ZMP		ZMP/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	ZMR/M		ZMR/T	



Sandwich mount through port 1.00" SAE Code 62 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVEA - ***	Page	1.18
RSFC - ***	Page	2.06
SQFB - ***	Page	2.08
RSFE - ***	Page	2.10
SCEA - ***	Page	2.12

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

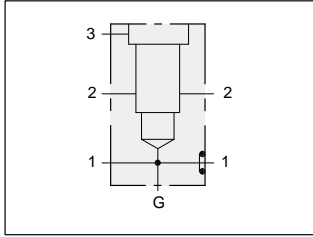
Mounting Hole Dimensions	Port 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	SAE-12	SAE-6	.25 NPTF	WYG		WYG/S	
Inch	.75 NPTF	.25 NPTF	.25 NPTF	WYH		WYH/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	WYF/M		WYF/T	



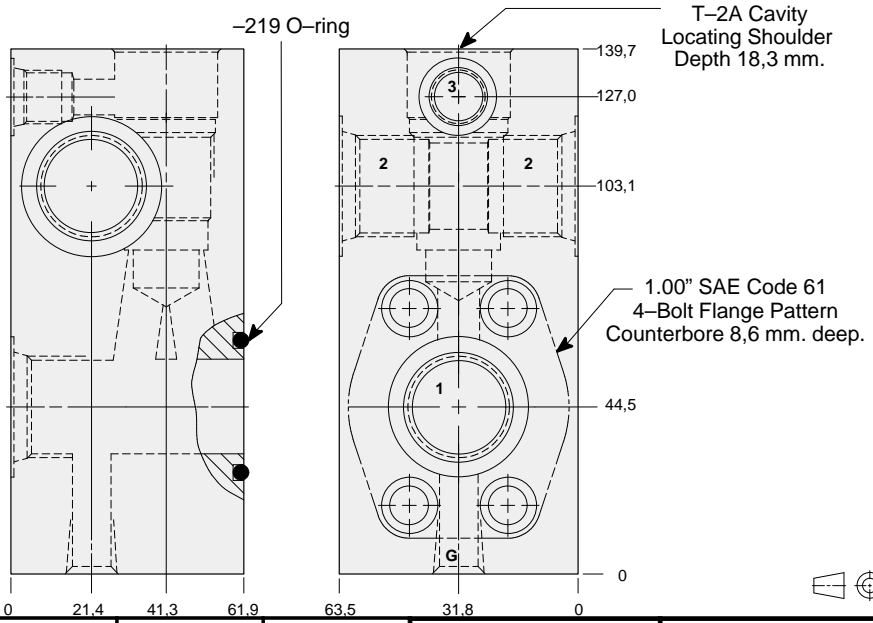
LINE MOUNT BODIES



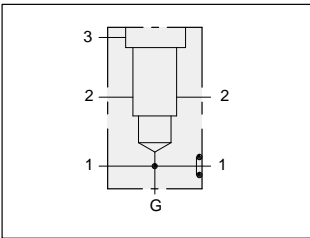
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



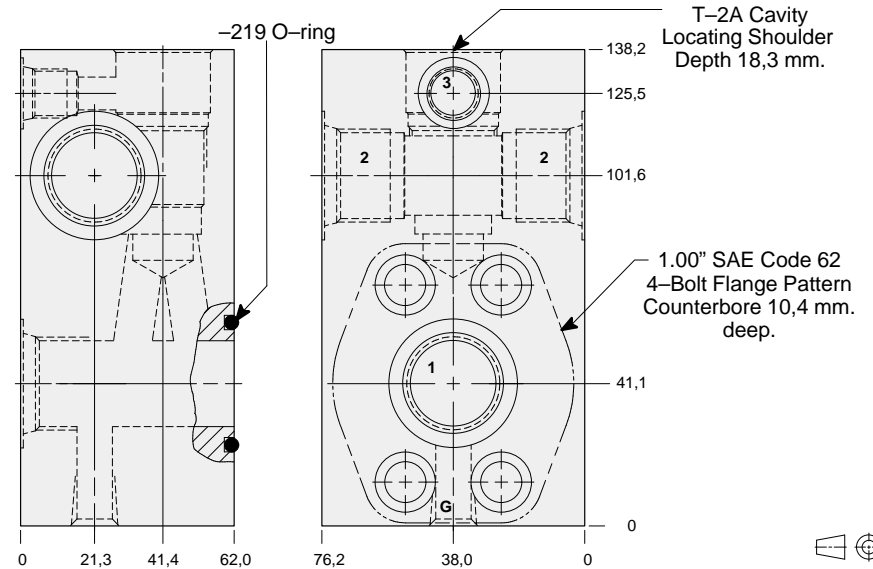
Flange mount through port 1.00" SAE Code 61 body with threaded outlet and gauge port.



Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	.25 NPTF	WYW		WYW/S	
Inch	SAE-12	SAE-6	.25 NPTF	WYV		WYV/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	WYU/M		WYU/T	



Flange mount through port 1.00" SAE Code 62 body with threaded outlet and gauge port.



Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	.25 NPTF	WYE		WYE/S	
Inch	SAE-12	SAE-6	.25 NPTF	WYD		WYD/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	WYC/M		WYC/T	

TYPICAL CARTRIDGES USED WITH THIS BODY

- RVEA - *** Page 1.18
- RSFC - *** Page 2.06
- SQFB - *** Page 2.08
- RSFE - *** Page 2.10
- SCEA - *** Page 2.12

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

TYPICAL CARTRIDGES USED WITH THIS BODY

- RVEA - *** Page 1.18
- RSFC - *** Page 2.06
- SQFB - *** Page 2.08

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

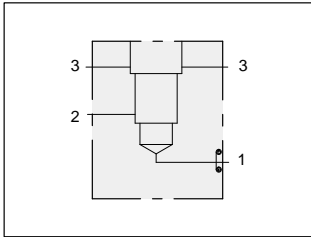
Series 2 T-2A



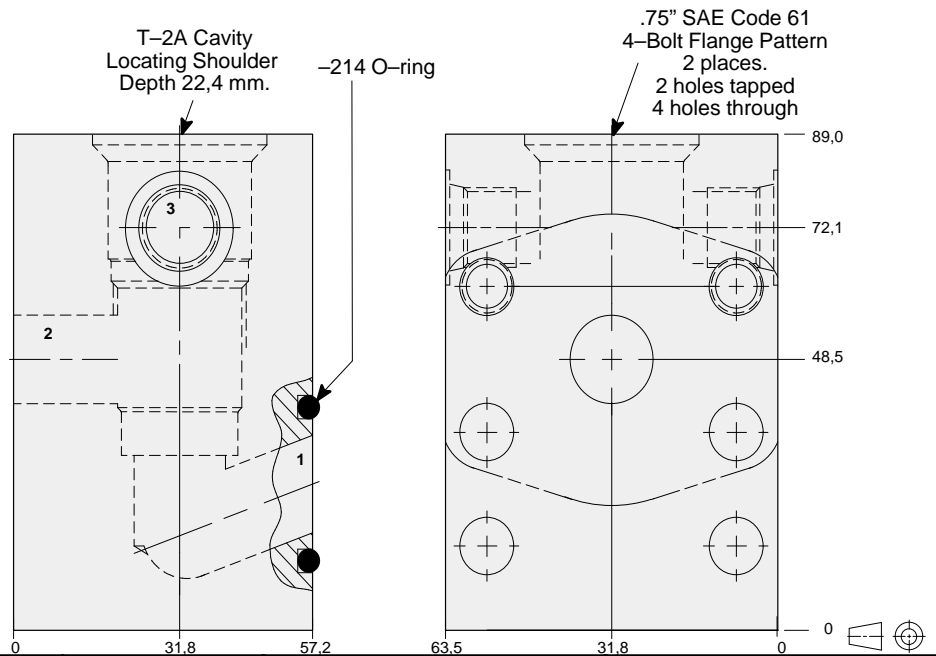
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Direct mount .75" SAE Code 61 body with through pilot/drain port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVEA - ***	Page	1.18
RSFC - ***	Page	2.06
SQFB - ***	Page	2.08
RSFE - ***	Page	2.10
SCEA - ***	Page	2.12
CBEA - ***	Page	4.10
CBEG - ***	Page	4.12
CBEH - ***	Page	4.14
CKEB - ***	Page	4.14
LOFC - ***	Page	9.08
LKFC - ***	Page	9.10
LPFC - ***	Page	9.12
LRFC - ***	Page	9.14
COFA - ***	Page	10.12

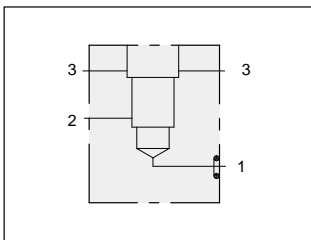
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

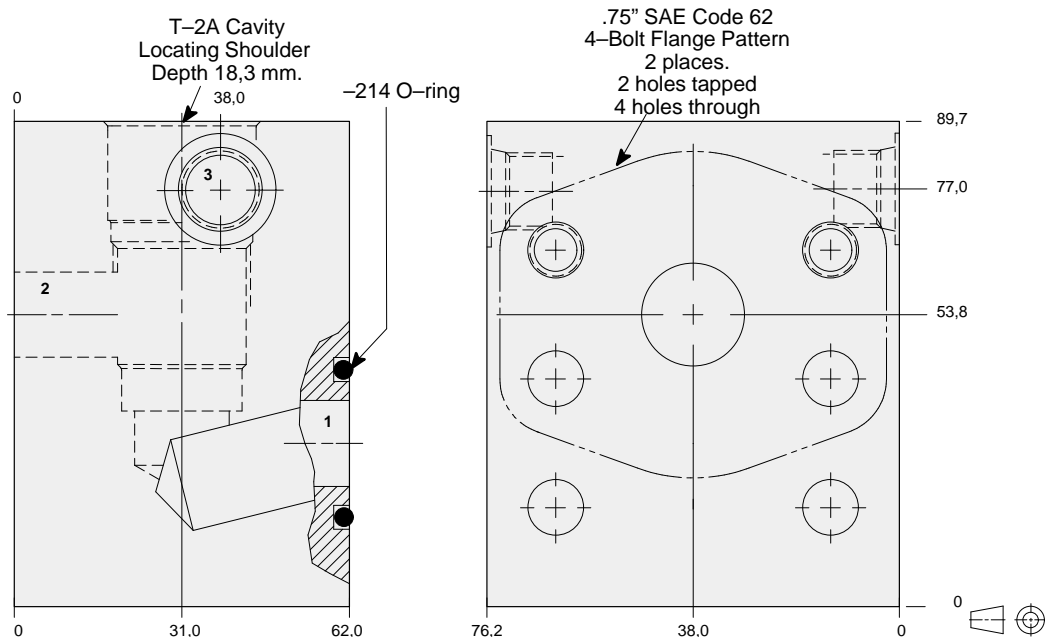
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZNV		ZNV/S	
Metric	.25 BSPP	ZNV/M		ZNV/T	



Direct mount .75" SAE Code 62 body with through pilot/drain port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVEA - ***	Page	1.18
RSFC - ***	Page	2.06
SQFB - ***	Page	2.08
RSFE - ***	Page	2.10
SCEA - ***	Page	2.12
CBEA - ***	Page	4.10
CBEG - ***	Page	4.12
CBEH - ***	Page	4.14
CKEB - ***	Page	4.14
LOFC - ***	Page	9.08
LKFC - ***	Page	9.10
LPFC - ***	Page	9.12
LRFC - ***	Page	9.14
COFA - ***	Page	10.12

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

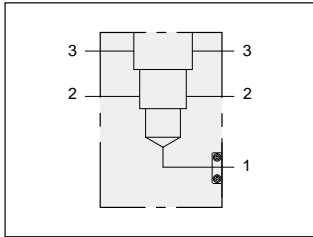
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZDS		ZDS/S	
Metric	.25 BSPP	ZDS/M		ZDS/T	



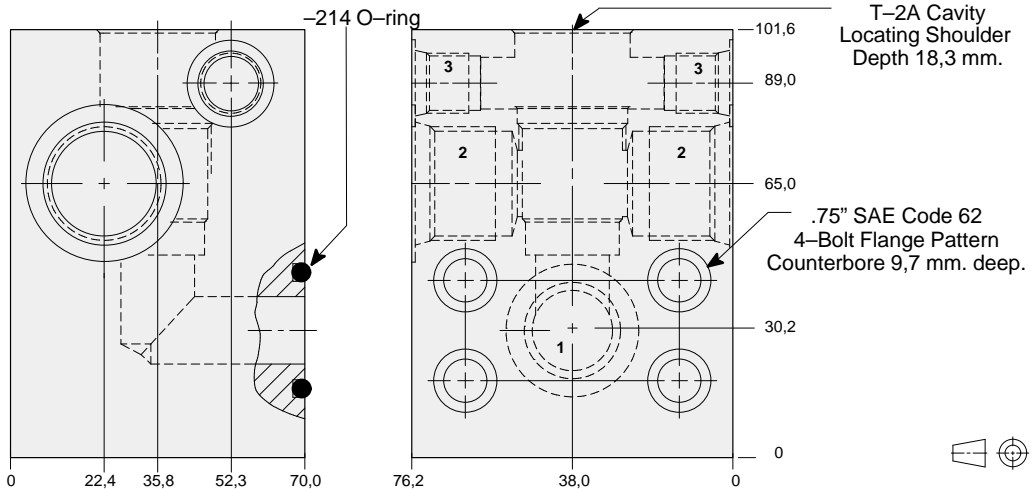
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Flange mount through port .75" SAE Code 62 body with through pilot/drain port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVEA - ***	Page	1.18
RSFC - ***	Page	2.06
SQFB - ***	Page	2.08
RSFE - ***	Page	2.10
SCEA - ***	Page	2.12

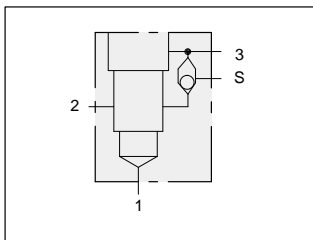
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page iii

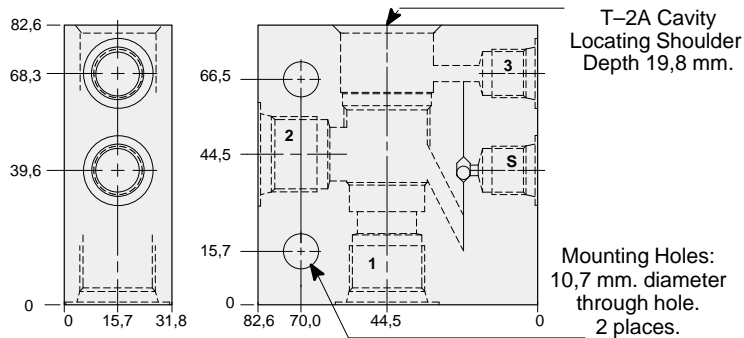
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page NO TAG

Mounting Hole Dimensions	Port 2	Port 3	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	.25 NPTF	WRA		WRA/S	
Inch	.75 NPTF	.25 NPTF	WRB		WRB/S	
Inch	SAE-10	SAE-6	WRC		WRC/S	
Inch	SAE-12	SAE-6	WRD		WRD/S	
Metric	.50 BSPP	.25 BSPP	WRE/M		WRE/T	
Metric	.75 BSPP	.25 BSPP	WRF/M		WRF/T	



90 degree body with shuttle.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBEA - ***	Page	4.10
CBEG - ***	Page	4.12
CBEH - ***	Page	4.14
CKEB - ***	Page	4.14

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

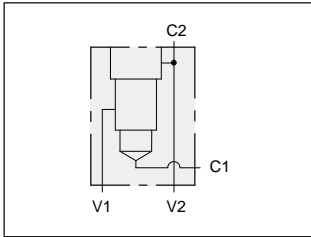
Ports 1 & 2	Ports 3 & S	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	BGA		BGA/S	
.375 NPTF	.25 NPTF	BGB		BGB/S	
.50 NPTF	.25 NPTF	BGC		BGC/S	
.75 NPTF	.25 NPTF	BGD		BGB/S	
SAE-6	SAE-6	BGI		BGI/S	
SAE-8	SAE-6	BGJ		BGJ/S	
SAE-10	SAE-6	BGK		BGK/S	
.25 BSPP	.25 BSPP	BGT		BGT/S	
.375 BSPP	.25 BSPP	BGU		BGU/S	
.50 BSPP	.25 BSPP	BGV		BGV/S	
.75 BSPP	.25 BSPP	BGW		BGW/S	



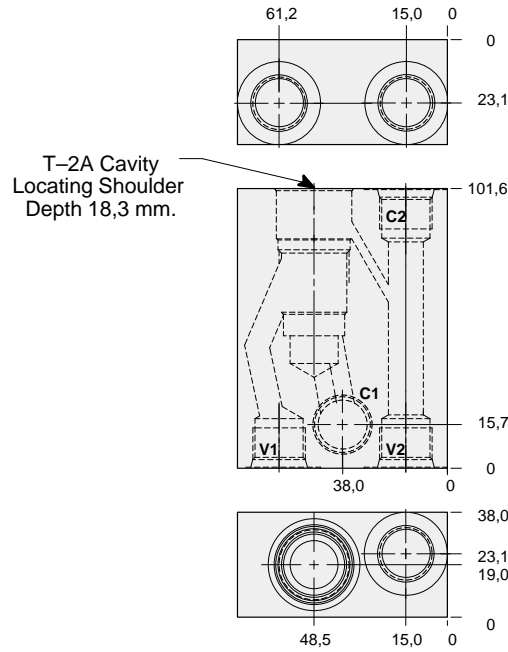
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Nipple mount body for load control applications.



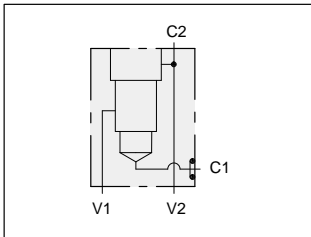
TYPICAL CARTRIDGES USED WITH THIS BODY

- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14
- CKEB - *** Page 4.14

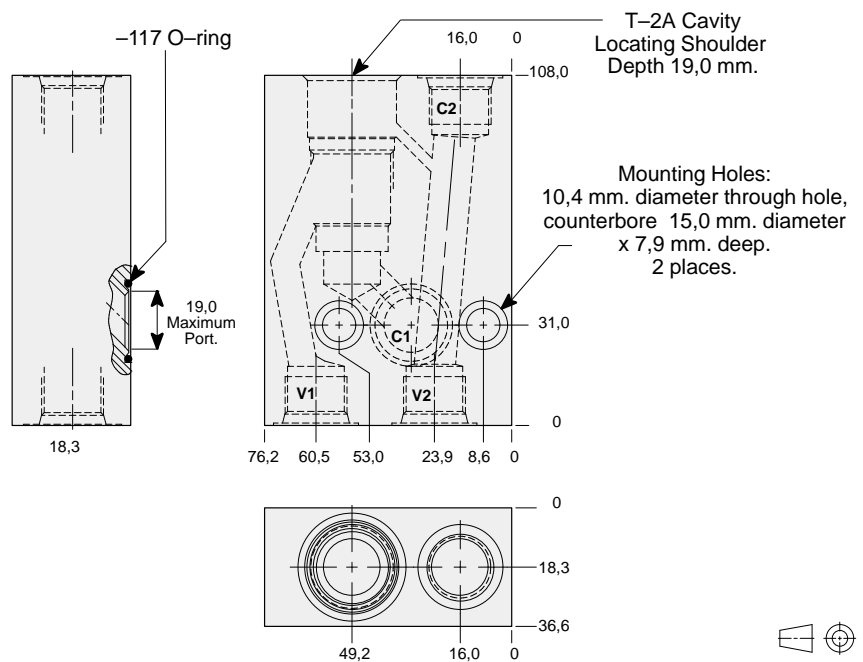
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

All Ports	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.50 NPTF	ZTX		ZTX/S	
SAE-8	ZRM		ZRM/S	



Gasket mount body for load control applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14
- CKEB - *** Page 4.14

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

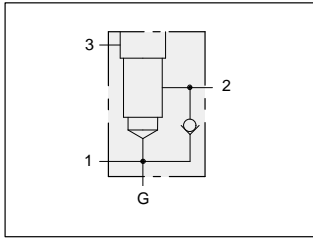
Ports C2, V1, & V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.50 NPTF	ZTF		ZTF/S	
SAE-8	ZTG		ZTG/S	
.50 BSPP	ZTH		ZTH/S	



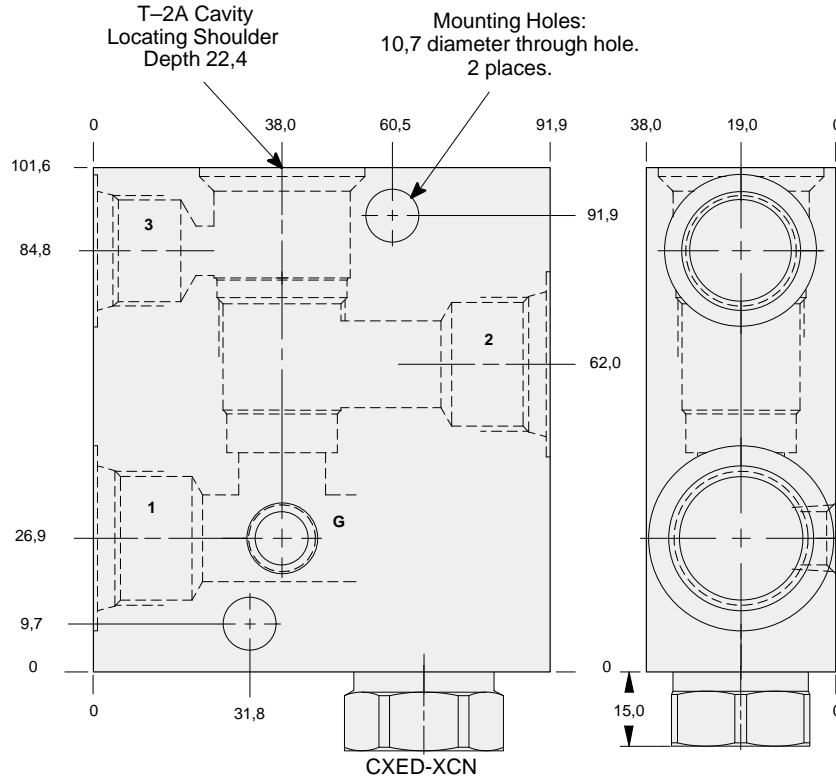
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with reverse free flow check and gauge port for reducing and reducing/relieving applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

- PBFB - *** Page 3.06
- PBFC - *** Page 3.08
- PPFB - *** Page 3.10
- PPFC - *** Page 3.12

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	B2A		B2A/S	
.375 NPTF	.25 NPTF	.25 NPTF	B2B		B2B/S	
.50 NPTF	.25 NPTF	.25 NPTF	B2C		B2C/S	
.75 NPTF	.25 NPTF	.25 NPTF	B2D		B2D/S	
SAE-6	SAE-6	.25 NPTF	B2I		B2I/S	
SAE-8	SAE-6	.25 NPTF	B2J		B2J/S	
SAE-10	SAE-6	.25 NPTF	B2K		B2K/S	
.375 BSPP	.25 BSPP	.25 BSPP	B2U		B2U/S	
.50 BSPP	.25 BSPP	.25 BSPP	B2V		B2V/S	
.75 BSPP	.25 BSPP	.25 BSPP	B2W		B2W/S	
.375 NPTF	.375 NPTF	.25 NPTF	B4B		B4B/S	
.50 NPTF	.50 NPTF	.25 NPTF	B4C		B4C/S	
.75 NPTF	.50 NPTF	.25 NPTF	B4D		B4D/S	
SAE-8	SAE-8	.25 NPTF	B4J		B4J/S	
SAE-10	SAE-10	.25 NPTF	B4K		B4K/S	
SAE-12	SAE-10	.25 NPTF	B4L		B4L/S	
.375 BSPP	.375 BSPP	.25 BSPP	B4U		B4U/S	
.50 BSPP	.50 BSPP	.25 BSPP	B4V		B4V/S	
.75 BSPP	.50 BSPP	.25 BSPP	B4W		B4W/S	

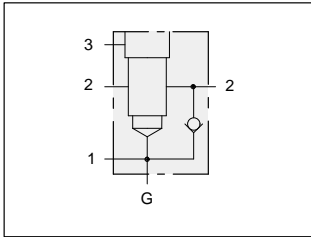
Series 2 T-2A



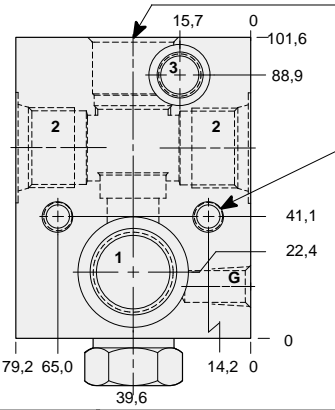
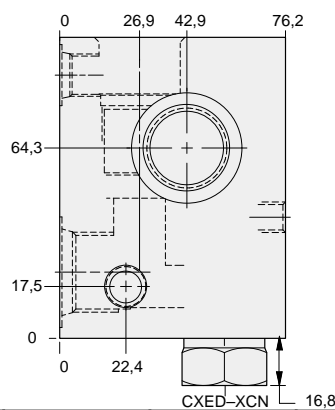
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port body with reverse free flow check and gauge port for reducing applications.



T-2A Cavity
Locating Shoulder
Depth 19,0 mm.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

**TYPICAL CARTRIDGES
USED WITH THIS BODY**

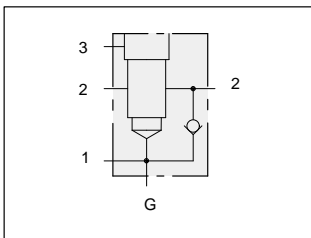
- PBFB - *** Page 3.06
- PBFC - *** Page 3.08

Cartridge seal type determines
check valve seal type.

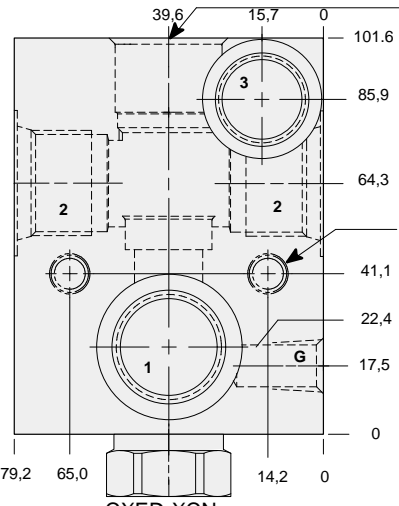
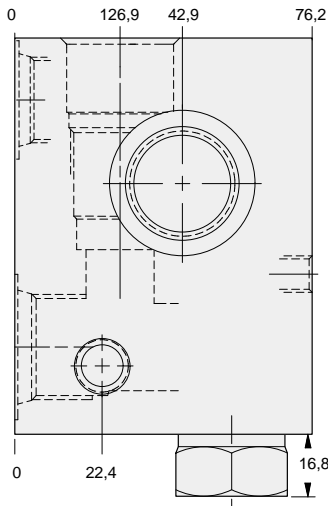
Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	.25 NPTF	.25 NPTF	B3B		B3B/S	
Inch	.50 NPTF	.25 NPTF	.25 NPTF	B3C		B3C/S	
Inch	.75 NPTF	.25 NPTF	.25 NPTF	B3D		B3D/S	
Inch	SAE-8	SAE-6	.25 NPTF	B3J		B3J/S	
Inch	SAE-10	SAE-6	.25 NPTF	B3K		B3K/S	
Inch	SAE-12	SAE-6	.25 NPTF	B3L		B3L/S	
Metric	.375 BSPP	.25 BSPP	.25 BSPP	B3U		B3U/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	B3V		B3V/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	B3W		B3W/S	



Through port body with high capacity port 3.



T-2A Cavity
Locating Shoulder
Depth 19,0

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
X 15,7 deep.
Metric: M10 x 1.50-6H
x 15,7 deep.
2 places.

**TYPICAL CARTRIDGES
USED WITH THIS BODY**

- PBFB - *** Page 3.06
- PBFC - *** Page 3.08

Cartridge seal type determines
check valve seal type.

Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	.50 NPTF	.25 NPTF	B5C		B5C/S	
Inch	.75 NPTF	.50 NPTF	.25 NPTF	B5D		B5D/S	
Inch	SAE-10	SAE-10	.25 NPTF	B5K		B5K/S	
Inch	SAE-12	SAE-10	.25 NPTF	B5L		B5L/S	
Metric	.50 BSPP	.50 BSPP	.25 BSPP	B5V		B5V/S	
Metric	.75 BSPP	.50 BSPP	.25 BSPP	B5W		B5W/S	

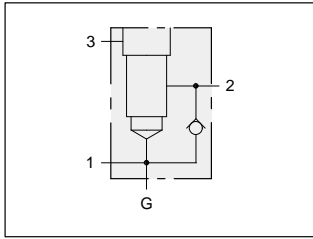
Series 2 T-2A



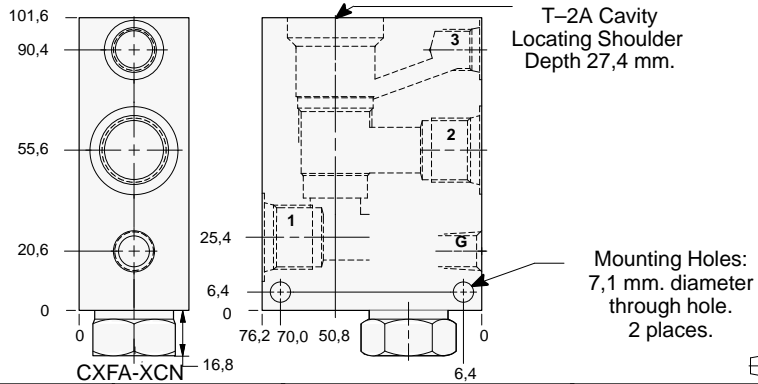
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with reverse free flow check and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

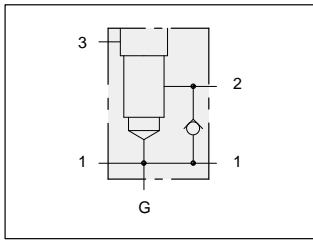
- RVEA - *** Page 1.18
- RSFC - *** Page 2.06
- SQFB - *** Page 2.08
- RSFE - *** Page 2.10

Cartridge seal type determines check valve seal type.

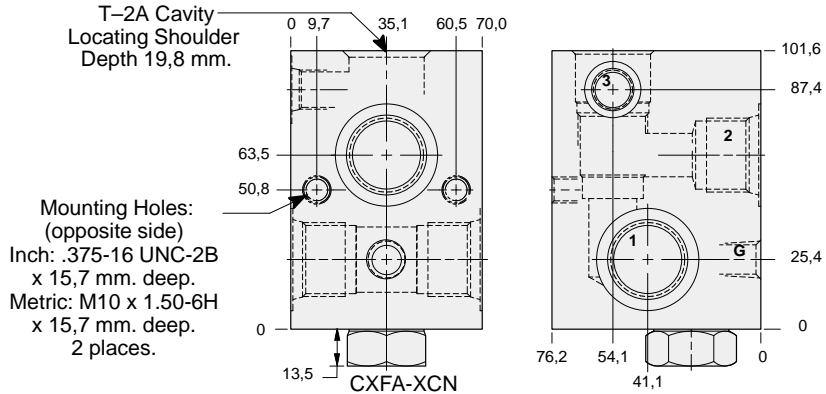
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	B6A		B6A/S	
.375 NPTF	.25 NPTF	.25 NPTF	B6B		B6B/S	
.50 NPTF	.25 NPTF	.25 NPTF	B6C		B6C/S	
.75 NPTF	.25 NPTF	.25 NPTF	B6D		B6D/S	
SAE-6	SAE-6	.25 NPTF	B6I		B6I/S	
SAE-8	SAE-6	.25 NPTF	B6J		B6J/S	
SAE-10	SAE-6	.25 NPTF	B6K		B6K/S	
.375 BSPP	.25 BSPP	.25 BSPP	B6U		B6U/S	
.50 BSPP	.25 BSPP	.25 BSPP	B6V		B6V/S	
.75 BSPP	.25 BSPP	.25 BSPP	B6W		B6W/S	



Through port body with reverse free flow check and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RVEA - *** Page 1.18
- RSFC - *** Page 2.06
- SQFB - *** Page 2.08
- RSFE - *** Page 2.10

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

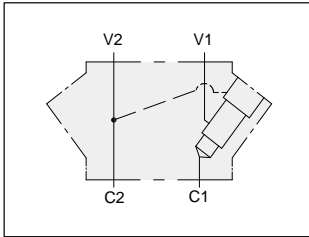
Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	.25 NPTF	.25 NPTF	B7B		B7B/S	
Inch	.50 NPTF	.25 NPTF	.25 NPTF	B7C		B7C/S	
Inch	.75 NPTF	.25 NPTF	.25 NPTF	B7D		B7D/S	
Inch	SAE-8	SAE-6	.25 NPTF	B7J		B7J/S	
Inch	SAE-10	SAE-6	.25 NPTF	B7K		B7K/S	
Inch	SAE-12	SAE-6	.25 NPTF	B7L		B7L/S	
Metric	.375 BSPP	.25 BSPP	.25 BSPP	B7U		B7U/S	
Metric	.50 BSPP	.25 BSPP	.25 BSPP	B7V		B7V/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	B7W		B7W/S	



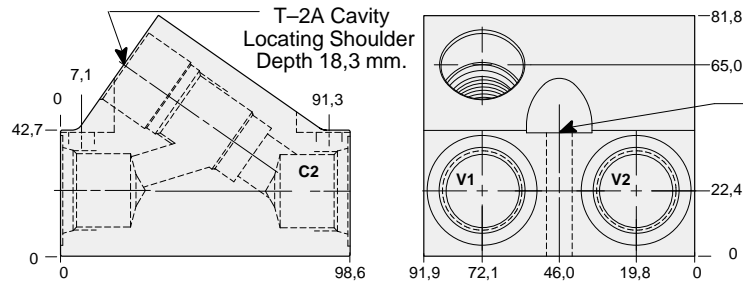
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline body for load control applications.



Mounting Holes:
8,6 mm. diameter through hole
22,4 mm. diameter socket clearance
2 places.

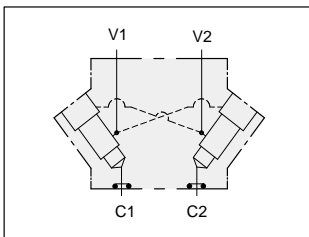
TYPICAL CARTRIDGES USED WITH THIS BODY

CBEA - ***	Page	4.10
CBEG - ***	Page	4.12
CBEH - ***	Page	4.14
CKEB - ***	Page	4.14

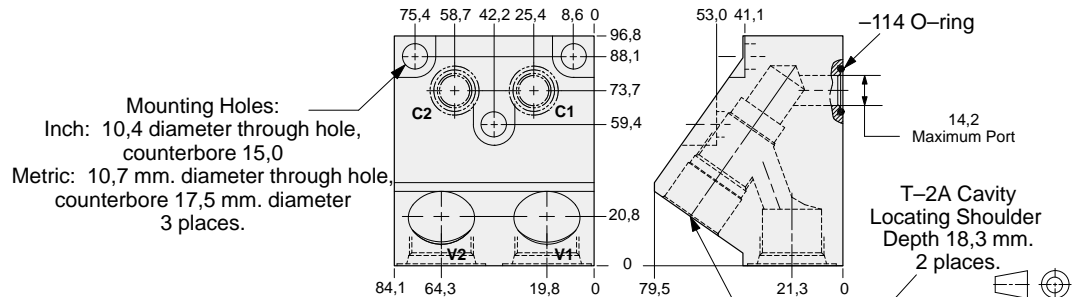
Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

Ports C1, C2 & V1, V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	WPO		WPO/S	
.375 NPTF	WPP		WPP/S	
.50 NPTF	WPQ		WPQ/S	
.75 NPTF	WPR		WPR/S	
SAE-6	WPS		WPS/S	
SAE-8	WPT		WPT/S	
SAE-10	WPU		WPU/S	
SAE-12	WPV		WPV/S	
.25 BSPP	WPW		WPW/S	
.375 BSPP	WPX		WPX/S	
.50 BSPP	WPY		WPY/S	
.75 BSPP	WPZ		WPZ/S	



Two cavity inline gasket mount cross-piloted body for load control applications.



Mounting Holes:
Inch: 10,4 diameter through hole, counterbore 15,0
Metric: 10,7 mm. diameter through hole, counterbore 17,5 mm. diameter
3 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

CBEA - ***	Page	4.10
CBEG - ***	Page	4.12
CBEH - ***	Page	4.14
CKEB - ***	Page	4.14

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

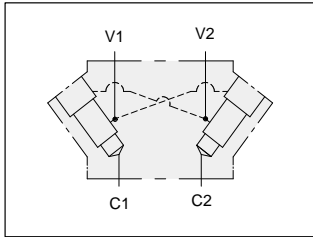
Ports V1, & V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	VYA		VYA/S	
.375 NPTF	VYB		VYB/S	
.50 NPTF	VYC		VYC/S	
.75 NPTF	VYD		VYD/S	
SAE-6	VYI		VYI/S	
SAE-8	VYJ		VYJ/S	
SAE-10	VYK		VYK/S	
SAE-12	VYL		VYL/S	
.25 BSPP	VYT		VYT/S	
.375 BSPP	VYU		VYU/S	
.50 BSPP	VYV		VYV/S	
.75 BSPP	VYW		VYW/S	



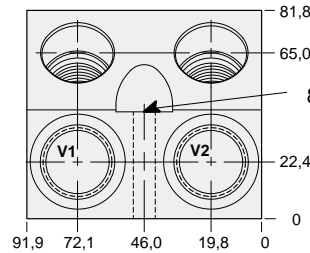
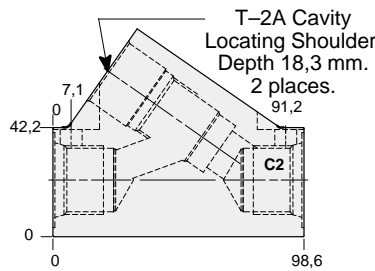
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity inline cross-piloted body for load control applications.



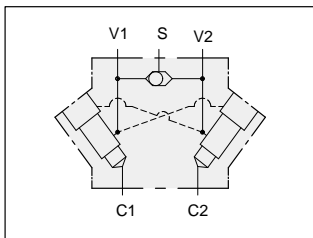
TYPICAL CARTRIDGES USED WITH THIS BODY

- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14
- CKEB - *** Page 4.14

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports C1, C2, & V1, V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	XAA		XAA/S	
.375 NPTF	XAB		XAB/S	
.50 NPTF	XAC		XAC/S	
.75 NPTF	XAD		XAD/S	
SAE-6	XAI		XAI/S	
SAE-8	XAJ		XAJ/S	
SAE-10	XAK		XAK/S	
SAE-12	XAL		XAL/S	
.25 BSPP	XAT		XAT/S	
.375 BSPP	XAU		XAU/S	
.50 BSPP	XAV		XAV/S	
.75 BSPP	XAW		XAW/S	

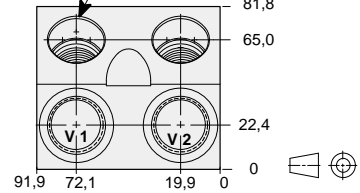
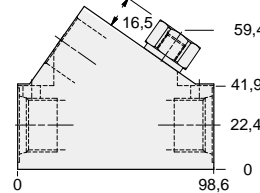
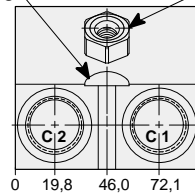


Two cavity inline cross-piloted body with shuttle for load control applications.

Mounting Holes:
8,6 diameter through hole.
2 places.

Shuttle port in
end of hex.

T-2A Cavity Locatin Shoulder
Depth 27,2 mm. 2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14
- CKEB - *** Page 4.14

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

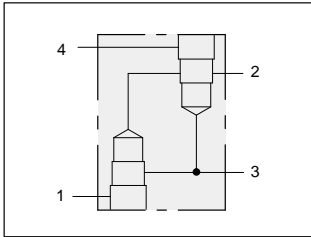
Ports C1, C2, & V1, V2	Shuttle Cartridge	Shuttle Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.25 NPTF	CSAA - EXN	SAE-4	XHA		XHA/S	
.375 NPTF	CSAA - EXN	SAE-4	XHB		XHB/S	
.50 NPTF	CSAA - EXN	SAE-4	XHC		XHC/S	
.75 NPTF	CSAA - EXN	SAE-4	XHD		XHD/S	
SAE-6	CSAA - EXN	SAE-4	XHI		XHI/S	
SAE-8	CSAA - EXN	SAE-4	XHJ		XHJ/S	
SAE-10	CSAA - EXN	SAE-4	XHK		XHK/S	
SAE-12	CSAA - EXN	SAE-4	XHL		XHL/S	
.25 BSPP	CSAA - BXN	.25 BSPP	XHT		XHT/S	
.375 BSPP	CSAA - BXN	.25 BSPP	XHU		XHU/S	
.50 BSPP	CSAA - BXN	.25 BSPP	XHV		XHV/S	
.75 BSPP	CSAA - BXN	.25 BSPP	XHW		XHW/S	



LINE MOUNT BODIES

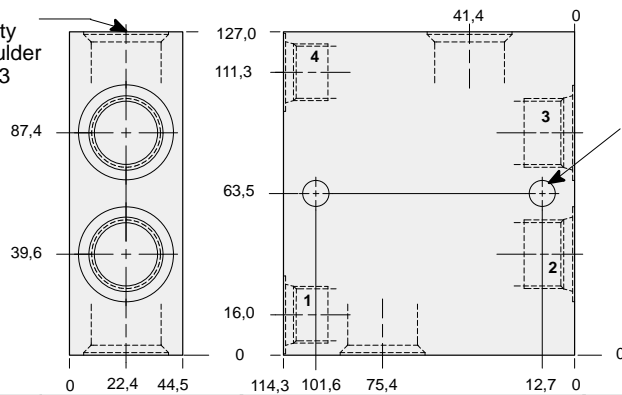


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity body for flow control applications.

T-2A Cavity
Locating Shoulder
Depth 21,3
2 places.



Mounting Holes:
10,7 diameter through hole.
2 places.

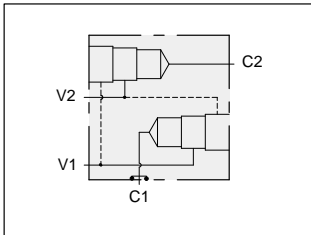
TYPICAL CARTRIDGES USED WITH THIS BODY

FRDA - *** Page 6.02

Instructions for ordering complete cartridge and body assemblies. Page viii

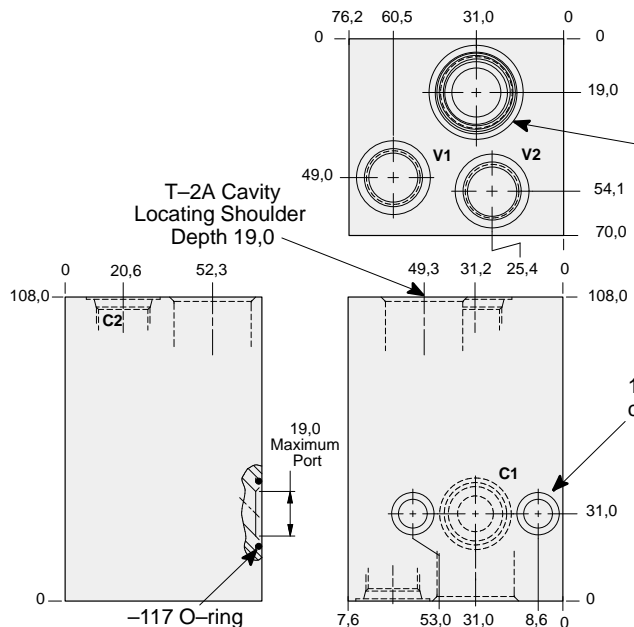
Pressure ratings, material specifications. Page 11.02

Port 2 & 3	Port 1 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.375 NPTF	.375 NPTF	VXN		VXN/S	
.50 NPTF	.50 NPTF	VXP		VXP/S	
.75 NPTF	.50 NPTF	VXQ		VXQ/S	
SAE-8	SAE-8	VXR		VXR/S	
SAE-10	SAE-10	VXS		VXS/S	
SAE-12	SAE-10	VXT		VXT/S	
.375 BSPP	.375 BSPP	VXU		VXU/S	
.50 BSPP	.50 BSPP	VXV		VXV/S	
.75 BSPP	.50 BSPP	VXW		VXW/S	



Two cavity gasket mount body for load control applications.

T-2A Cavity
Locating Shoulder
Depth 19,0



T-2A Cavity
Locating Shoulder
Depth 26,9 mm.

Mounting Holes:
10,4 diameter through hole,
counterbore 15,0 diameter
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

CBEA - *** Page 4.10

CBEH - *** Page 4.12

CKEB - *** Page 4.14

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports C2, V1, & V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.50 NPTF	YVW		YVW/S	
SAE-8	YVV		YVV/S	
.50 BSPP	YVU		YVU/S	

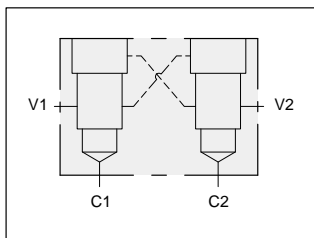
Series 2 T-2A



LINE MOUNT BODIES



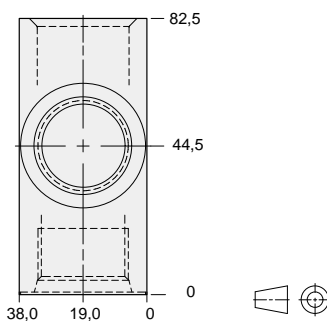
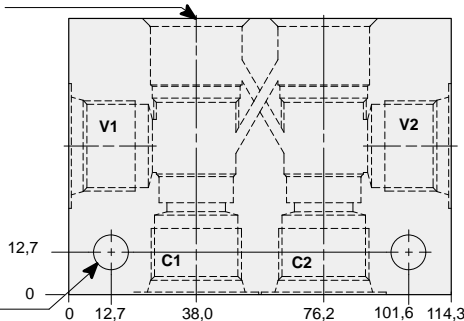
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 90 degree cross-piloted body for load control applications.

T-2A Cavity Locating Shoulder
Depth 19,8 mm.
2 places.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



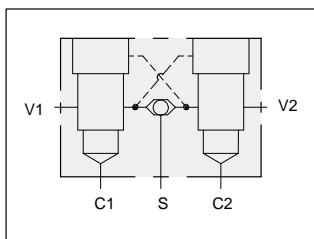
TYPICAL CARTRIDGES USED WITH THIS BODY

- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14
- CKEB - *** Page 4.14

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

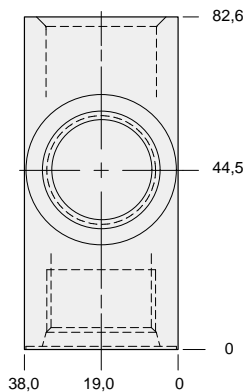
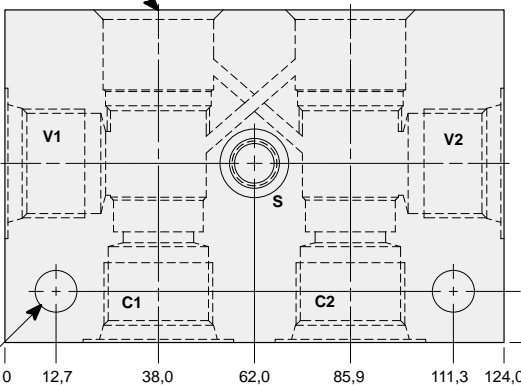
Ports C1, C2, & V1, V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	YAA		YAA/S	
.375 NPTF	YAB		YAB/S	
.50 NPTF	YAC		YAC/S	
.75 NPTF	YAD		YAD/S	
SAE-6	YAI		YAI/S	
SAE-8	YAJ		YAJ/S	
SAE-10	YAK		YAK/S	
SAE-12	YAL		YAL/S	
.25 BSPP	YAT		YAT/S	
.375 BSPP	YAU		YAU/S	
.50 BSPP	YAV		YAV/S	



Two cavity 90 degree cross-piloted body with shuttle for load control applications.

T-2A Cavity Locating Shoulder
Depth 19,8 mm.
2 places.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14
- CKEB - *** Page 4.14

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports C1, C2, & V1, V2	Port S	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.50 NPTF	.25 NPTF	YHC		YHC/S	
.75 NPTF	.25 NPTF	YHD		YHD/S	
SAE-10	SAE-4	YHK		YHK/S	
SAE-12	SAE-4	YHL		YHL/S	
.50 BSPP	.25 BSPP	YHV		YHV/S	
.75 BSPP	.25 BSPP	YHW		YHW/S	

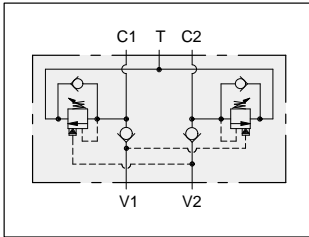
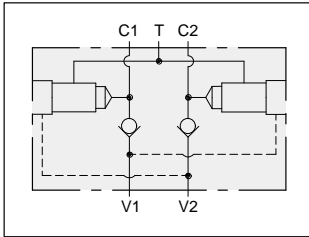


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Two cavity dual load control body with checks.



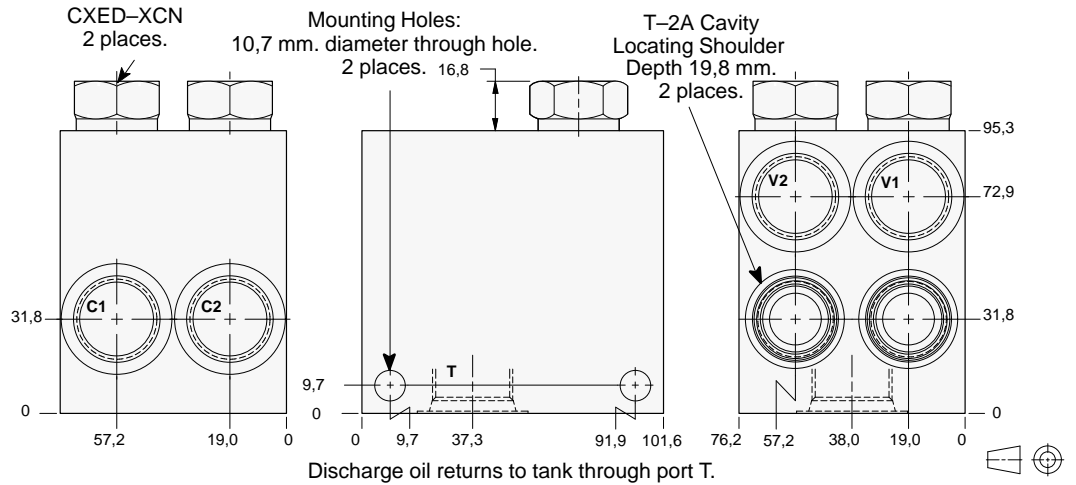
TYPICAL CARTRIDGES USED WITH THIS BODY

- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14

Cartridge seal type determines check valve seal type.

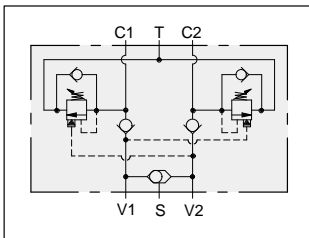
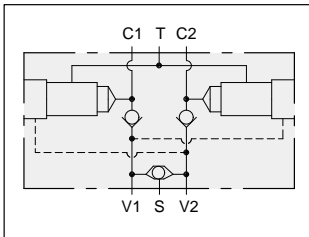
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



Ports C1, C2, & V1, V2	Port T	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.50 NPTF	.75 NPTF	BMC		BMC/S	
.75 NPTF	.75 NPTF	BMD		BMD/S	
SAE-10	SAE-12	BMK		BMK/S	
SAE-12	SAE-12	BML		BML/S	
.50 BSPP	.75 BSPP	BMV		BMV/S	
.75 BSPP	.75 BSPP	BMW		BMW/S	

Two cavity dual load control body with checks and shuttle.



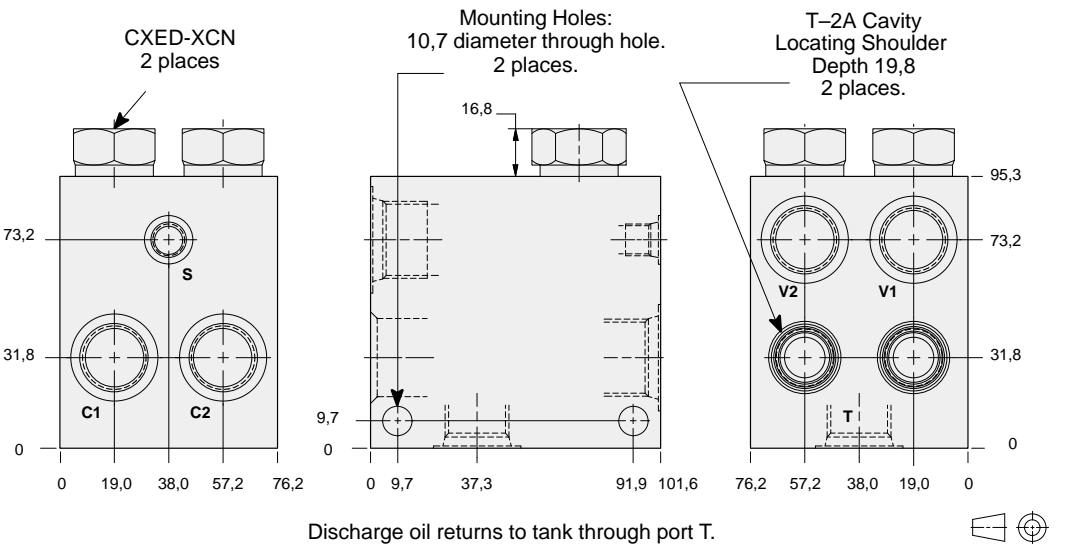
TYPICAL CARTRIDGES USED WITH THIS BODY

- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



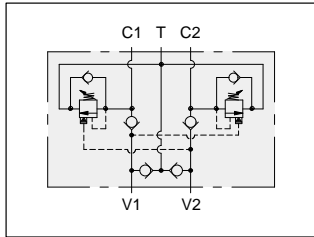
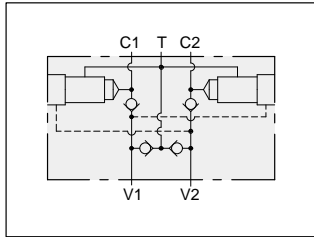
Ports C1, C2, & V1, V2	Port T	Port S	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.50 NPTF	.75 NPTF	.25 NPTF	BNC		BNC/S	
.75 NPTF	.75 NPTF	.25 NPTF	BND		BND/S	
SAE-10	SAE-12	SAE-4	BNK		BNK/S	
SAE-12	SAE-12	SAE-4	BNL		BNL/S	
.50 BSPP	.75 BSPP	.25 BSPP	BNV		BNV/S	
.75 BSPP	.75 BSPP	.25 BSPP	BNW		BNW/S	



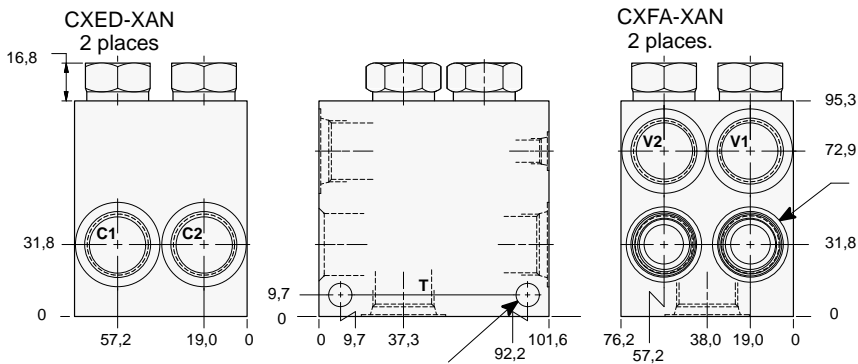
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity dual load control body with make-up checks.



T-2A Cavity Locating Shoulder Depth 19,8 mm. 2 places.

Mounting Holes:
10,7 mm. diameter through hole.
2 places.

Discharge oil returns to tank through directional valve or port T.



TYPICAL CARTRIDGES USED WITH THIS BODY

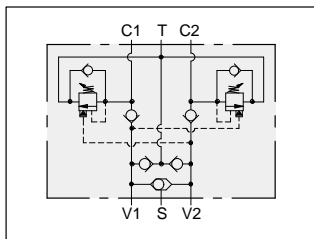
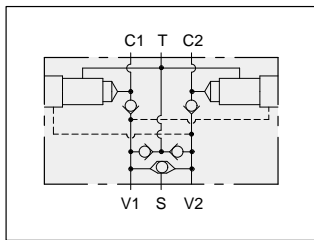
- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14

Cartridge seal type determines check valve seal type.

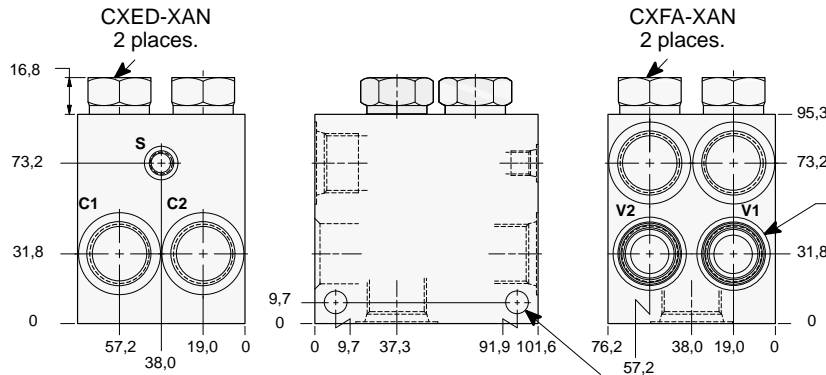
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports C1, C2, & V1, V2	Port T	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.50 NPTF	.75 NPTF	BPC		BPC/S	
.75 NPTF	.75 NPTF	BPD		BPD/S	
SAE-10	SAE-12	BPK		BPK/S	
SAE-12	SAE-12	BPL		BPL/S	
.50 BSPP	.75 BSPP	BPV		BPV/S	
.75 BSPP	.75 BSPP	BPW		BPW/S	



Two cavity dual load control body with make-up checks and shuttle.



T-2A Cavity Locating Shoulder Depth 19,8 mm. 2 places.

Mounting Holes:
10,7 mm. diameter through hole.
2 places.

Discharge oil returns to tank through directional valve or port T.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBEA - *** Page 4.10
- CBEG - *** Page 4.12
- CBEH - *** Page 4.14

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

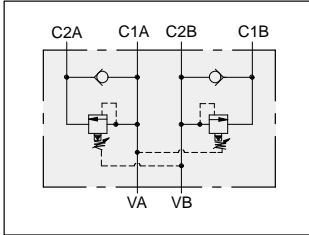
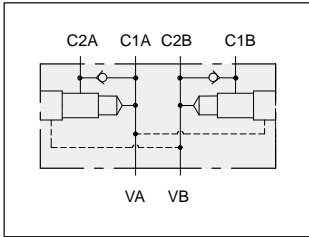
Ports C1, C2, & V1, V2	Port T	Port S	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.50 NPTF	.75 NPTF	.25 NPTF	BQC		BQC/S	
.75 NPTF	.75 NPTF	.25 NPTF	BQD		BQD/S	
SAE-10	SAE-12	SAE-4	BQK		BQK/S	
SAE-12	SAE-12	SAE-4	BQL		BQL/S	
.50 BSPP	.75 BSPP	.25 BSPP	BQV		BQV/S	
.75 BSPP	.75 BSPP	.25 BSPP	BQW		BQW/S	



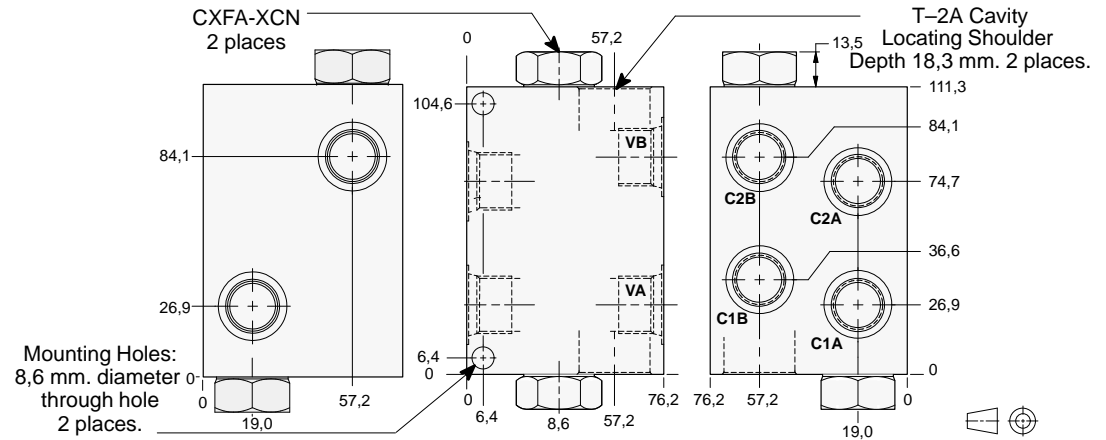
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity dual sequence body with reverse free flow checks.



TYPICAL CARTRIDGES USED WITH THIS BODY

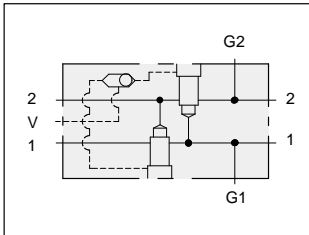
RSFC - *** Page 2.06
SQFB - *** Page 2.08

Cartridge seal type determines check valve seal type.

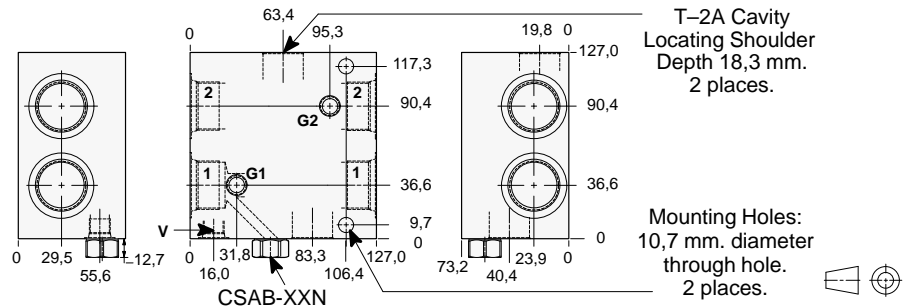
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

All Ports	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	B8B		B8B/S	
.50 NPTF	B8C		B8C/S	
.75 NPTF	B8D		B8D/S	
SAE-8	B8J		B8J/S	
SAE-10	B8K		B8K/S	
.375 BSPP	B8U		B8U/S	
.50 BSPP	B8V		B8V/S	
.75 BSPP	B8W		B8W/S	



Two cavity through port body with shuttle and gauge ports.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVEA - *** Page 1.18

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

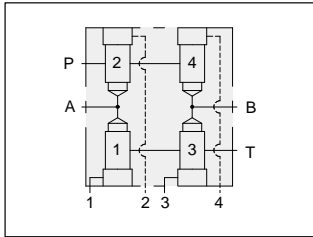
Ports 1 & 2	Ports G1 & G2	Port V	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.375 NPTF	.25 NPTF	.25 NPTF	XBB		XBB/S	
.50 NPTF	.25 NPTF	.25 NPTF	XBC		XBC/S	
.75 NPTF	.25 NPTF	.25 NPTF	XBD		XBD/S	
1.00 NPTF	.25 NPTF	.25 NPTF	XBE		XBE/S	
SAE-6	.25 NPTF	SAE-6	XBI		XBI/S	
SAE-8	.25 NPTF	SAE-6	XBJ		XBJ/S	
SAE-10	.25 NPTF	SAE-6	XBK		XBK/S	
SAE-12	.25 NPTF	SAE-6	XBL		XBL/S	
SAE-16	.25 NPTF	SAE-6	XBM		XBM/S	
.375 BSPP	.25 BSPP	.25 BSPP	XBU		XBU/S	
.50 BSPP	.25 BSPP	.25 BSPP	XBV		XBV/S	
.75 BSPP	.25 BSPP	.25 BSPP	XBW		XBW/S	
1.00 BSPP	.25 BSPP	.25 BSPP	XBX		XBX/S	



LINE MOUNT BODIES

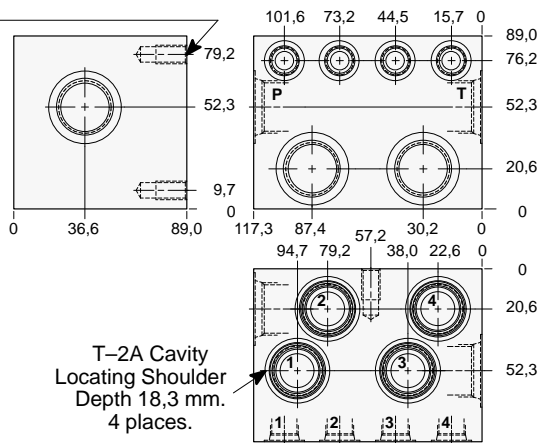


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Four cavity four-way logic body for directional applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.



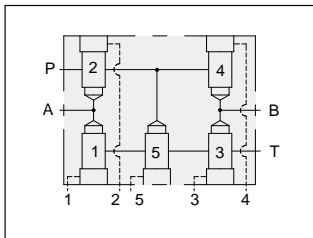
TYPICAL CARTRIDGES USED WITH THIS BODY

- LOFC - *** Page 9.08
- LKFC - *** Page 9.10
- LPFC - *** Page 9.12
- LRFC - *** Page 9.14

Instructions for ordering complete cartridge and body assemblies. Page viii

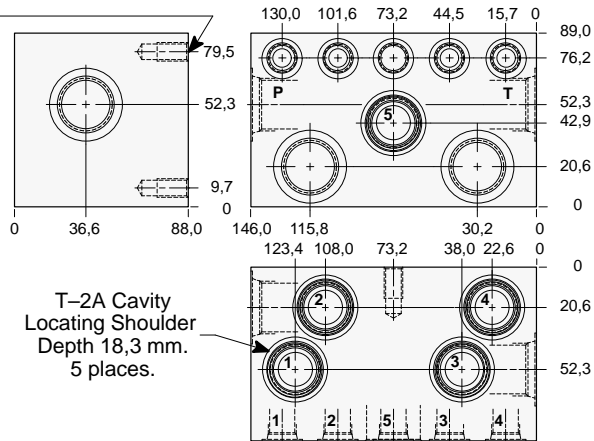
Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Ports A & B P & T	Ports 1 & 2, 3 & 4	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	.25 NPTF	YPZ		YPZ/S	
Inch	.50 NPTF	.25 NPTF	YPY		YPY/S	
Inch	.75 NPTF	.25 NPTF	YPX		YPX/S	
Inch	SAE-8	SAE-6	YPW		YPW/S	
Inch	SAE-10	SAE-6	YPV		YPV/S	
Inch	SAE-12	SAE-6	YPT		YPT/S	
Metric	.375 BSPP	.25 BSPP	YPP		YPP/S	
Metric	.50 BSPP	.25 BSPP	YPM		YPM/S	
Metric	.75 BSPP	.25 BSPP	YPQ		YPQ/S	



Five cavity four-way logic body for directional applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- LOFC - *** Page 9.08
- LKFC - *** Page 9.10
- LPFC - *** Page 9.12
- LRFC - *** Page 9.14

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Ports A & B P & T	Ports 1, 2, 3, 4 & 5	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	.25 NPTF	YPO		YPO/S	
Inch	.50 NPTF	.25 NPTF	YPN		YPN/S	
Inch	.75 NPTF	.25 NPTF	YPS		YPS/S	
Inch	SAE-8	SAE-6	YPL		YPL/S	
Inch	SAE-10	SAE-6	YPK		YPK/S	
Inch	SAE-12	SAE-6	YPJ		YPJ/S	
Metric	.375 BSPP	.25 BSPP	YPH		YPH/S	
Metric	.50 BSPP	.25 BSPP	YPG		YPG/S	
Metric	.75 BSPP	.25 BSPP	YPF		YPF/S	

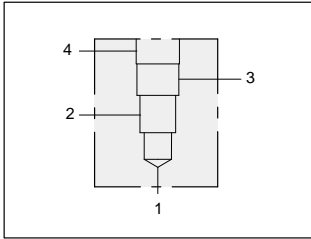
Series 2 T-2A



LINE MOUNT BODIES



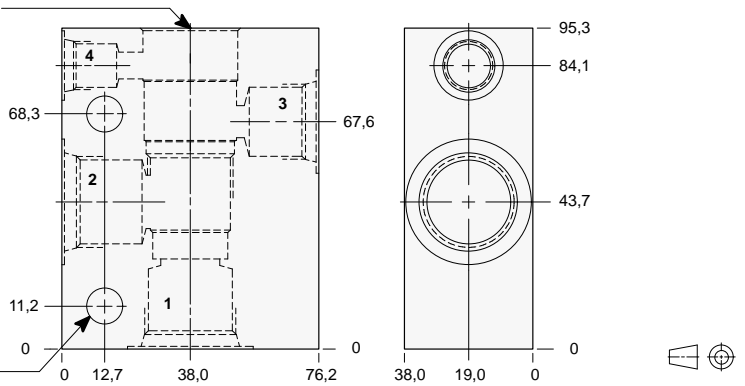
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.

T-22A Cavity
Locating Shoulder
Depth 33,3 mm.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



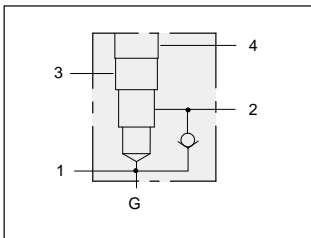
TYPICAL CARTRIDGES USED WITH THIS BODY

RVED - ***	Page	1.20
PVFA - ***	Page	3.14
PVFB - ***	Page	3.16
CWEA - ***	Page	4.18
CWEG - ***	Page	4.20
CVEV - ***	Page	4.22
FVDA - ***	Page	6.04
DPCM - ***	Page	8.10
DPCN - ***	Page	8.11
DPCO - ***	Page	8.12
DPCP - ***	Page	8.13

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

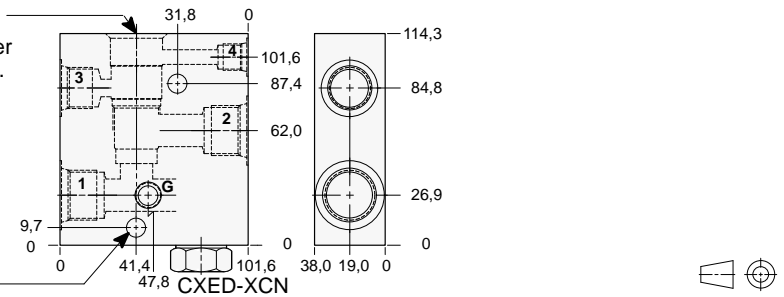
Ports 1 & 2	Port 3	Port 4	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.375 NPTF	.375 NPTF	.25 NPTF	NAB		NAB/S	
.50 NPTF	.50 NPTF	.25 NPTF	NAC		NAC/S	
.75 NPTF	.50 NPTF	.25 NPTF	NAD		NAD/S	
SAE-8	SAE-8	SAE-6	NAJ		NAJ/S	
SAE-10	SAE-10	SAE-6	NAK		NAK/S	
SAE-12	SAE-10	SAE-6	NAL		NAL/S	
.375 BSPP	.375 BSPP	.25 BSPP	NAU		NAU/S	
.50 BSPP	.50 BSPP	.25 BSPP	NAV		NAV/S	
.75 BSPP	.50 BSPP	.25 BSPP	NAW		NAW/S	



Body with reverse free flow check and gauge port.

T-22A Cavity
Locating Shoulder
Depth 35,1 mm.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PVFA - ***	Page	3.14
PVFB - ***	Page	3.16

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

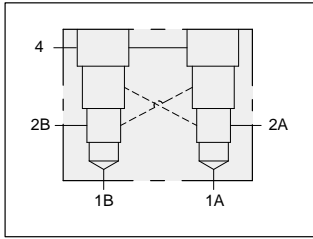
Ports 1 & 2	Port 3	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	.25 NPTF	.25 NPTF	N4A		N4A/S	
.375 NPTF	.375 NPTF	.25 NPTF	.25 NPTF	N4B		N4B/S	
.50 NPTF	.50 NPTF	.25 NPTF	.25 NPTF	N4C		N4C/S	
.75 NPTF	.50 NPTF	.25 NPTF	.25 NPTF	N4D		N4D/S	
SAE-6	SAE-6	SAE-6	.25 NPTF	N4I		N4I/S	
SAE-8	SAE-8	SAE-6	.25 NPTF	N4J		N4J/S	
SAE-10	SAE-10	SAE-6	.25 NPTF	N4K		N4K/S	
SAE-12	SAE-10	SAE-6	.25 NPTF	N4L		N4L/S	
.25 BSPP	.25 BSPP	.25 BSPP	.25 BSPP	N4T		N4T/S	
.375 BSPP	.375 BSPP	.25 BSPP	.25 BSPP	N4U		N4U/S	
.50 BSPP	.50 BSPP	.25 BSPP	.25 BSPP	N4V		N4V/S	
.75 BSPP	.50 BSPP	.25 BSPP	.25 BSPP	N4W		N4W/S	



LINE MOUNT BODIES



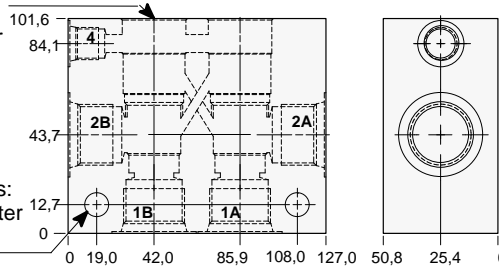
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 90 degree cross-piloted body with common port 4 for load control applications.

T-22A Cavity
Locating Shoulder
Depth 33,3 mm.
2 places.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.

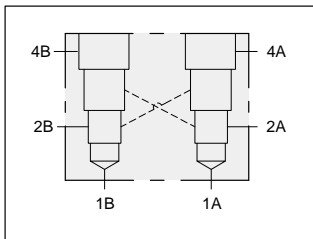


TYPICAL CARTRIDGES USED WITH THIS BODY

- CWEA - *** Page 4.18
- CWEG - *** Page 4.20
- CVEV - *** Page 4.22

Instructions for ordering complete cartridge and body assemblies. Page iii
Pressure ratings, material specifications. Page 11.02

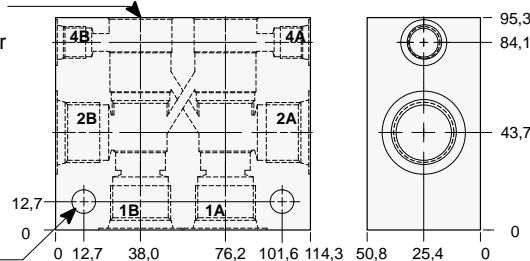
Ports 1A, 1B, 2A, & 2B	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	XIA		XIA/S	
.375 NPTF	.25 NPTF	XIB		XIB/S	
.50 NPTF	.25 NPTF	XIC		XIC/S	
.75 NPTF	.25 NPTF	XID		XID/S	
SAE-6	SAE-6	XII		XII/S	
SAE-8	SAE-6	XIJ		XIJ/S	
SAE-10	SAE-6	XIK		XIK/S	
SAE-12	SAE-6	XIL		XIL/S	
.25 BSPP	.25 BSPP	XIT		XIT/S	
.375 BSPP	.25 BSPP	XIU		XIU/S	
.50 BSPP	.25 BSPP	XIV		XIV/S	
.75 BSPP	.25 BSPP	XIW		XIW/S	



Two cavity 90 degree cross-piloted body with independent port 4 for load control applications.

T-22A Cavity
Locating Shoulder
Depth 33,3 mm.
2 places.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CWEA - *** Page 4.18
- CWEG - *** Page 4.20
- CVEV - *** Page 4.22

Instructions for ordering complete cartridge and body assemblies. Page iii
Pressure ratings, material specifications. Page 11.02

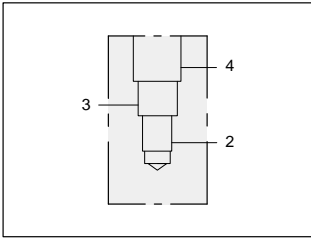
Ports 1A, 1B, 2A, & 2B	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	.25 NPTF	XRA		XRA/S	
.375 NPTF	.25 NPTF	XRJ		XRJ/S	
.50 NPTF	.25 NPTF	XRC		XRC/S	
.75 NPTF	.25 NPTF	XRD		XRD/S	
SAE-6	SAE-6	XRI		XRI/S	
SAE-8	SAE-6	XRJ		XRJ/S	
SAE-10	SAE-6	XRK		XRK/S	
SAE-12	SAE-6	XRL		XRL/S	
.25 BSPP	.25 BSPP	XRT		XRT/S	
.375 BSPP	.25 BSPP	XRU		XRU/S	
.50 BSPP	.25 BSPP	XRV		XRV/S	
.75 BSPP	.25 BSPP	XRW		XRW/S	



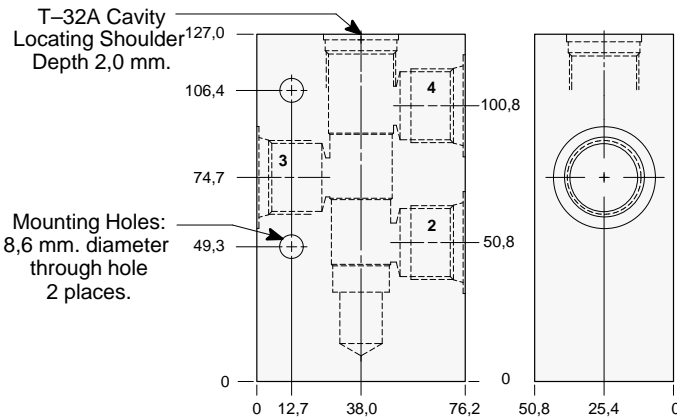
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body for flow divider/combiner applications.

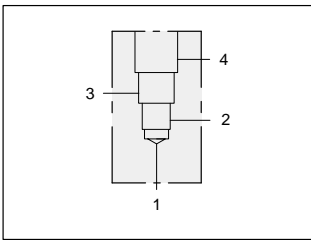


TYPICAL CARTRIDGES USED WITH THIS BODY

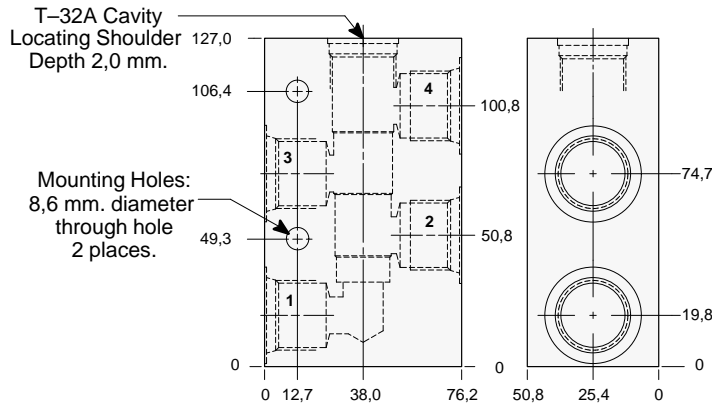
FSDD - ***	Page	7.08
FSDA - ***	Page	7.10
FSDS - ***	Page	7.12
FSDH - ***	Page	7.14

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	NMB		NMB/S	
.50 NPTF	NMC		NMC/S	
.75 NPTF	NMD		NMD/S	
SAE-6	NMJ		NMJ/S	
SAE-8	NMK		NMK/S	
SAE-10	NML		NML/S	
.375 BSPP	NMU		NMU/S	
.50 BSPP	NMV		NMV/S	
.75 BSPP	NMW		NMW/S	



Four port body.



Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02

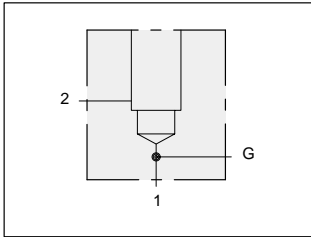
Ports 1, 2, 3, 4 & 5	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.375 NPTF	NNB		NNB/S	
.50 NPTF	NNC		NNC/S	
.75 NPTF	NND		NND/S	
SAE-8	NNJ		NNJ/S	
SAE-10	NNK		NNK/S	
SAE-12	NNL		NNL/S	
.375 BSPP	NNU		NNU/S	
.50 BSPP	NNV		NNV/S	
.75 BSPP	NNW		NNW/S	



LINE MOUNT BODIES



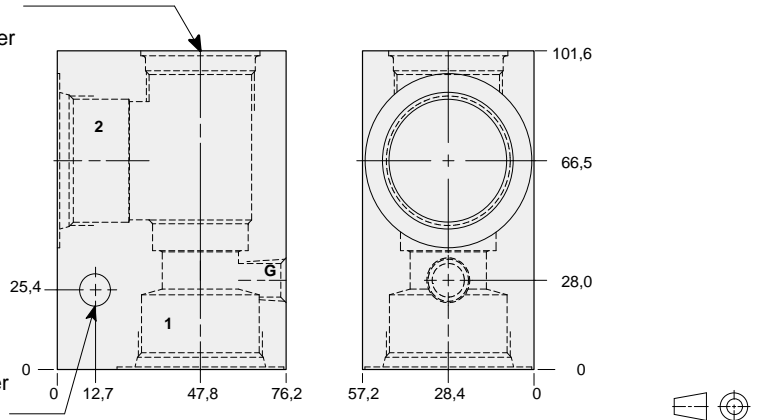
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body with gauge port.

T-16A Cavity
Locating Shoulder
Depth 1,5 mm.

Mounting Hole:
10,7 mm. diameter
through hole.

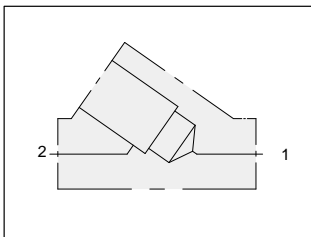


TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page iii
Pressure ratings, material specifications. Page 11.02

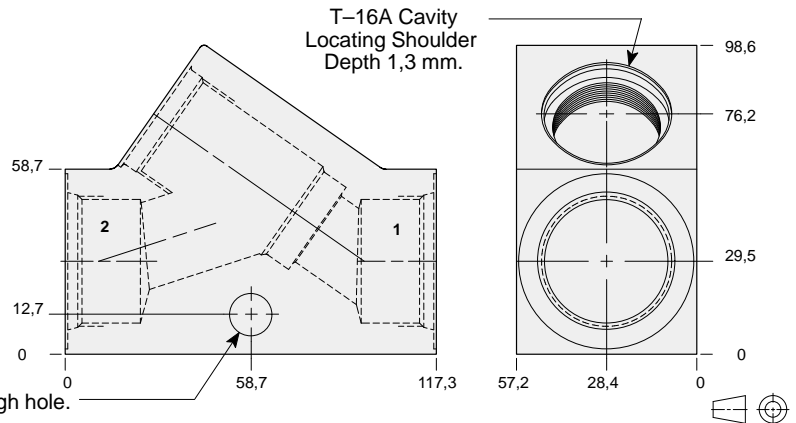
Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	IAD		IAD/S	
1.00 NPTF	.25 NPTF	IAE		IAE/S	
1.25 NPTF	.25 NPTF	IAF		IAF/S	
SAE-12	.25 NPTF	IAL		IAL/S	
SAE-16	.25 NPTF	IAM		IAM/S	
SAE-20	.25 NPTF	IAN		IAN/S	
.75 BSPP	.25 BSPP	IAW		IAW/S	
1.00 BSPP	.25 BSPP	IAX		IAX/S	
1.25 BSPP	.25 BSPP	IAY		IAY/S	



Inline body.

T-16A Cavity
Locating Shoulder
Depth 1,3 mm.

Mounting Holes:
13,5 mm. diameter
through hole.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page iii
Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.75 NPTF	ICD		ICD/S	
1.00 NPTF	ICE		ICE/S	
1.25 NPTF	ICF		ICF/S	
SAE-12	ICL		ICL/S	
SAE-16	ICM		ICM/S	
SAE-20	ICN		ICN/S	
.75 BSPP	ICW		ICW/S	
1.00 BSPP	ICX		ICX/S	
1.25 BSPP	ICY		ICY/S	

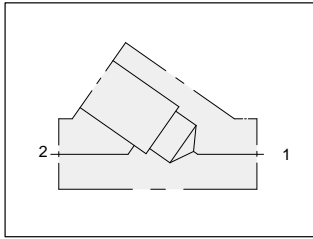


LINE MOUNT BODIES

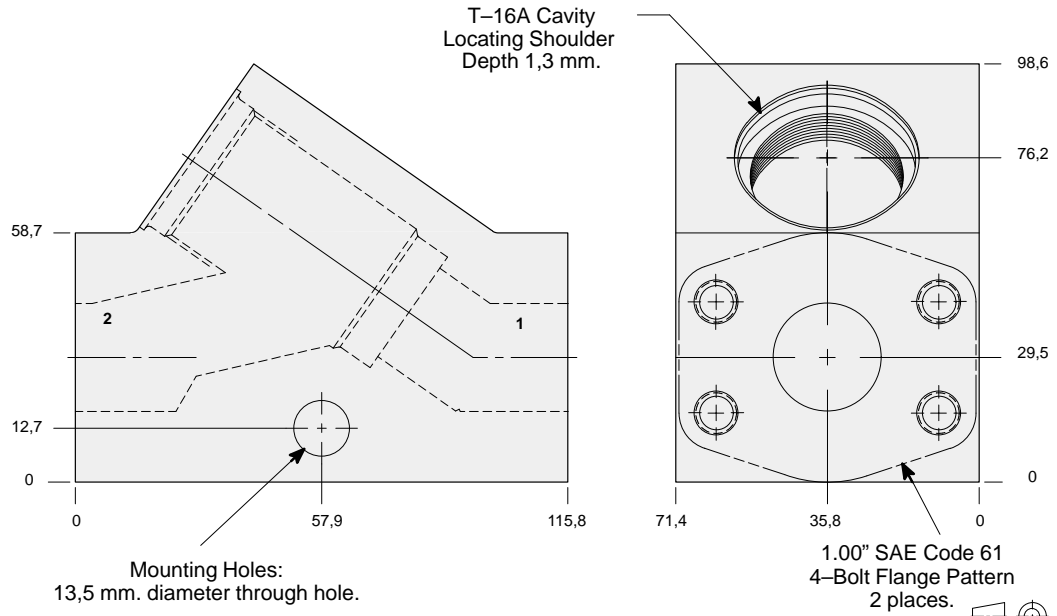


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-16A



Inline 1.00" SAE Code 61 flange port body.



TYPICAL CARTRIDGES USED WITH THIS BODY

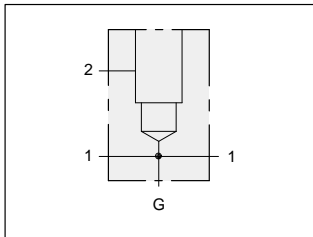
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RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii

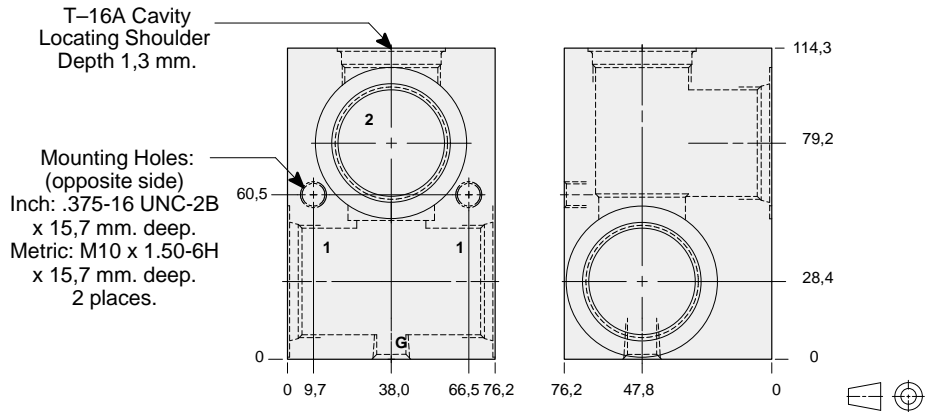
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	ICP		ICP/S	
Metric	ICP/M		ICP/T	



Through port body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

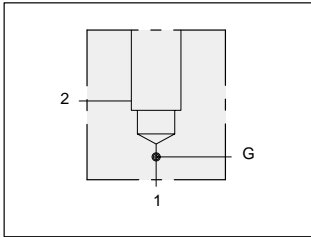
Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	IED		IED/S	
Inch	1.00 NPTF	.25 NPTF	IEE		IEE/S	
Inch	1.25 NPTF	.25 NPTF	IEF		IEF/S	
Inch	SAE-12	.25 NPTF	IEL		IEL/S	
Inch	SAE-16	.25 NPTF	IEM		IEM/S	
Inch	SAE-20	.25 NPTF	IEN		IEN/S	
Metric	.75 BSPP	.25 BSPP	IEW		IEW/S	
Metric	1.00 BSPP	.25 BSPP	IEX		IEX/S	
Metric	1.25 BSPP	.25 BSPP	IEY		IEY/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

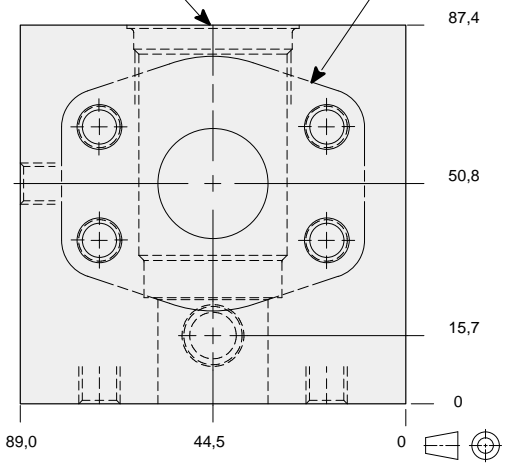
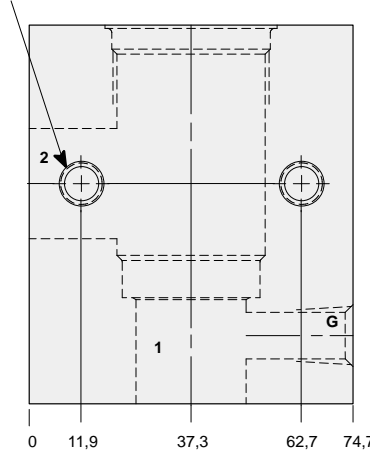


90 degree 1.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 1,5 mm.

1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

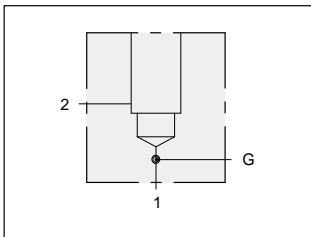
RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IAP		IAP/S	
Metric	.25 BSPP	IAP/M		IAP/T	

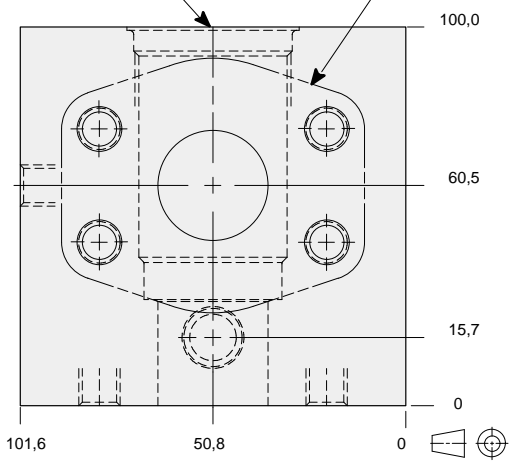
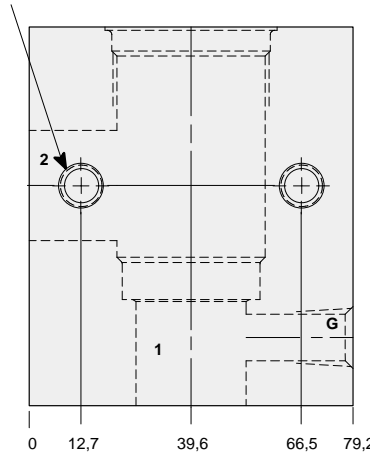


90 degree 1.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 4,1 mm.

1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IA4		IA4/S	
Metric	.25 BSPP	IA4/M		IA4/T	

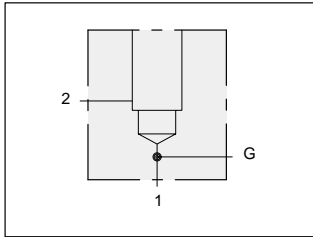


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-16A

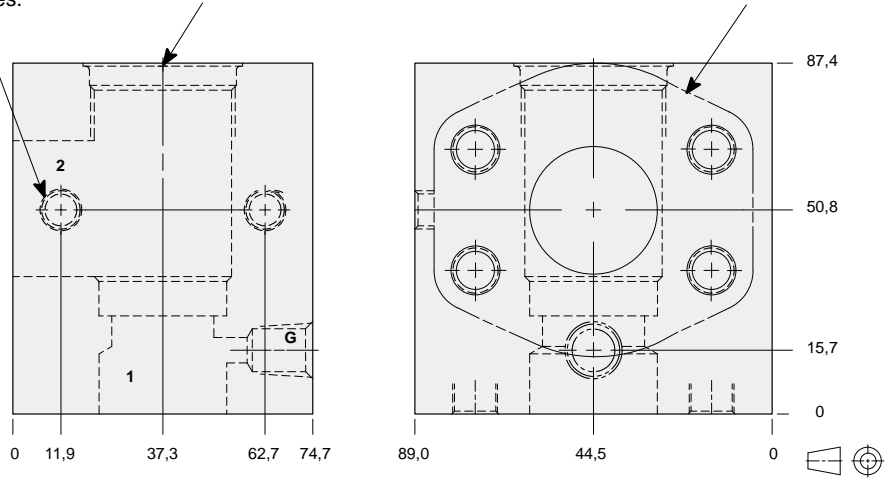


90 degree 1.25" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 1,5 mm.

1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.

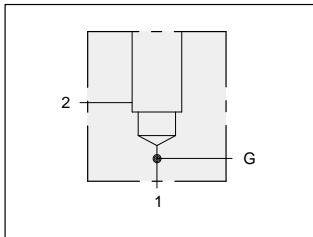


TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IAQ		IAQ/S	
Metric	.25 BSPP	IAQ/M		IAQ/T	

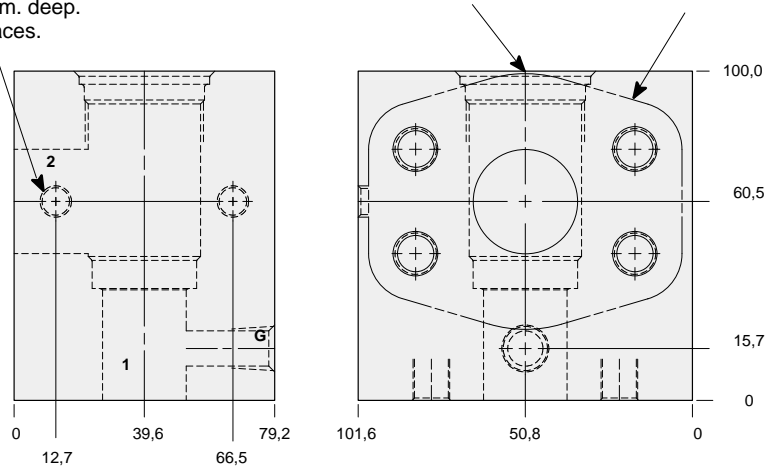


90 degree 1.25" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 4,1 mm.

1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

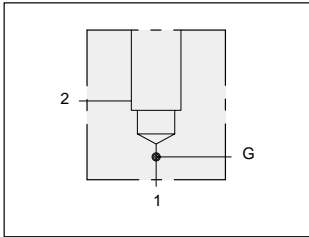
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IA5		IA5/S	
Metric	.25 BSPP	IA5/M		IA5/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

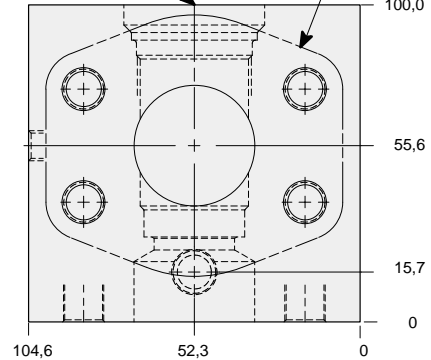
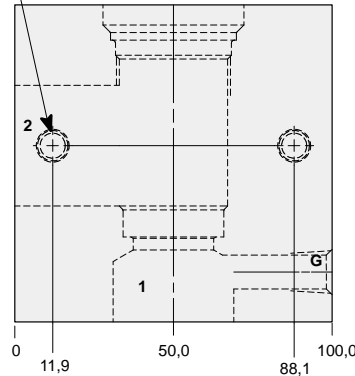


90 degree 1.50" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 11,2 mm.

1.50" SAE Code 61
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

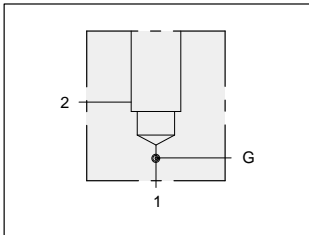
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RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IA6		IA6/S	
Metric	.25 BSPP	IA6/M		IA6/T	

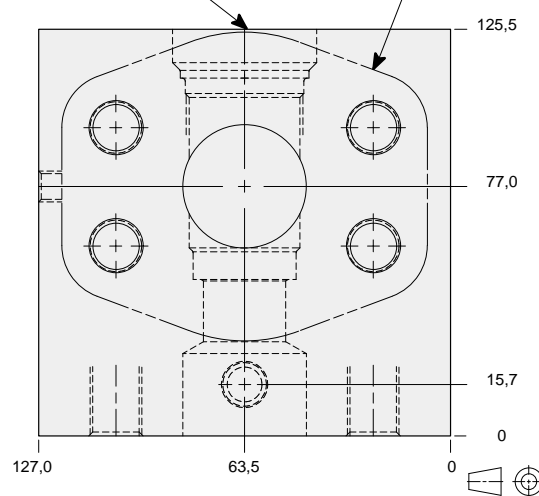
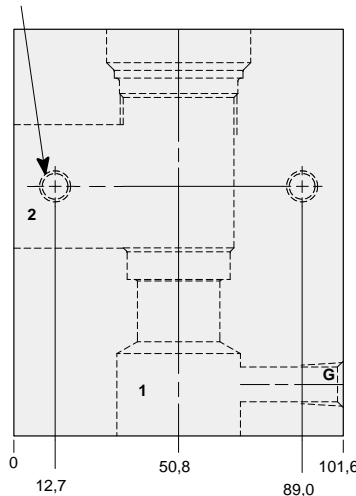


90 degree 1.50" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 11,2 mm.

1.50" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IA6		IA6/S	
Metric	.25 BSPP	IA6/M		IA6/T	



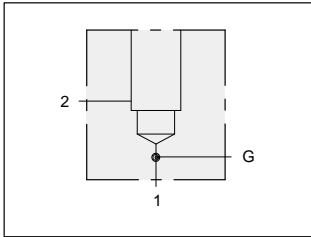


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

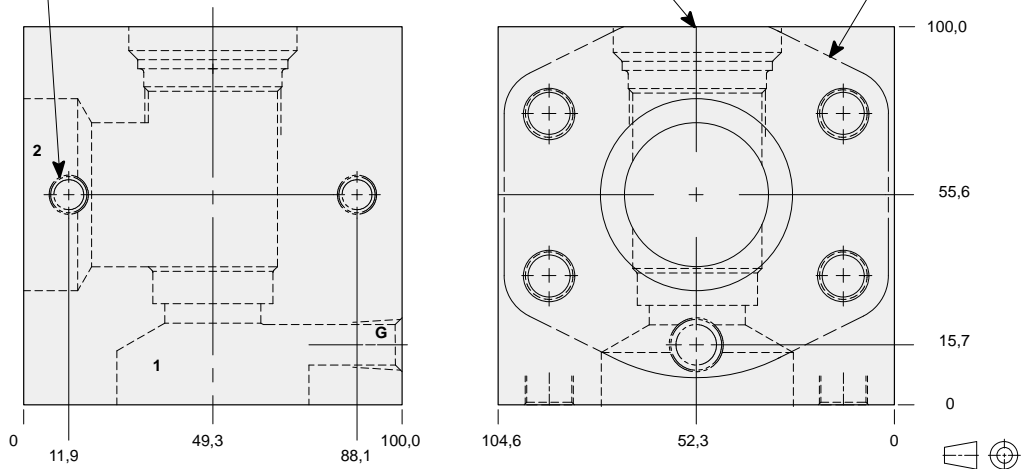
Series 3 T-16A



90 degree 2.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 11,2 mm.
2.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

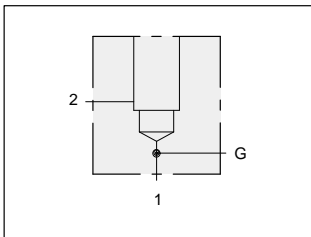


TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCGB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

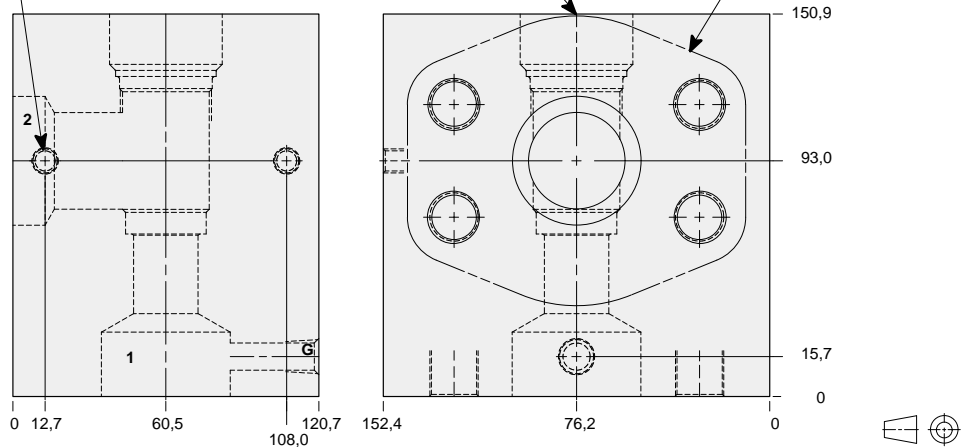
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IAS		IAS/S	
Metric	.25 BSPP	IAS/M		IAS/T	



90 degree 2.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 24,6 mm.
2.00" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
CXHA - ***	Page	5.09
CXGD - ***	Page	5.11
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCGB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25
FQGA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IA8		IA8/S	
Metric	.25 BSPP	IA8/M		IA8/T	

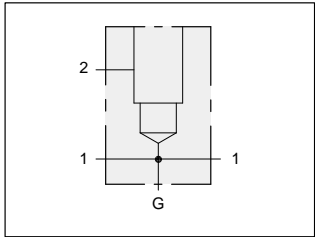


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-16A

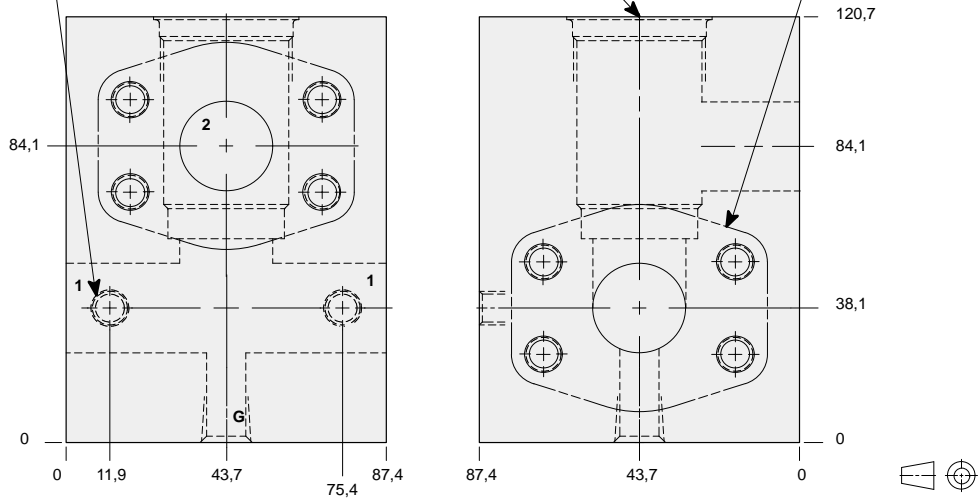


Through port 1.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 0,8 mm.

1.00" SAE Code 61
4-Bolt Flange Pattern
3 places.

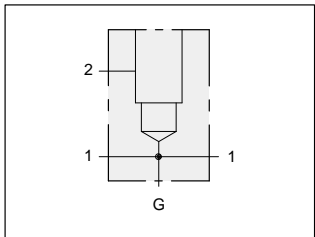


TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IEP		IEP/S	
Metric	.25 BSPP	IEP/M		IEP/T	

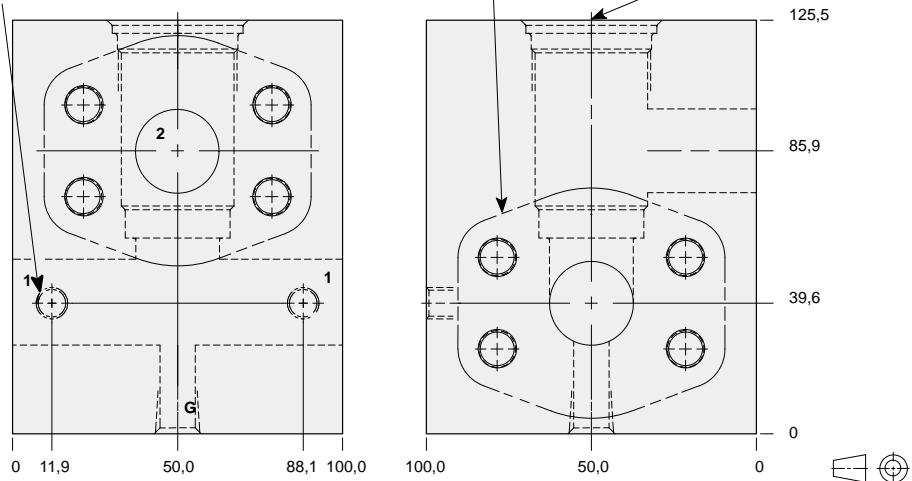


Through port 1.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

1.00" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-16A Cavity
Locating Shoulder
Depth 4,1 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

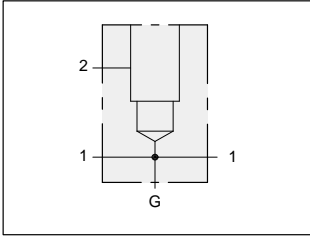
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IE4		IE4/S	
Metric	.25 BSPP	IE4/M		IE4/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

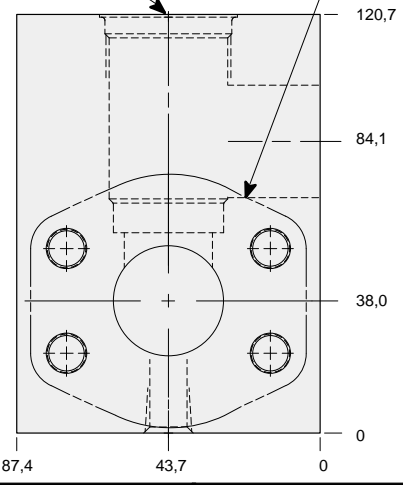
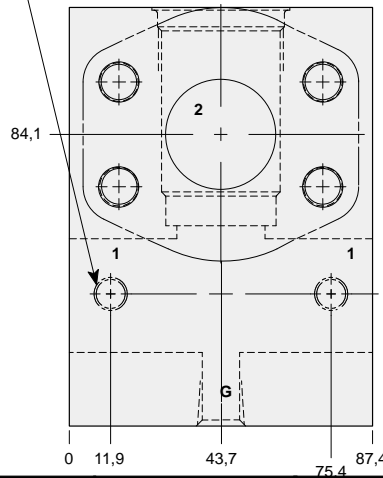


Through port 1.25" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19 mm. deep.
Metric: M10 x 1.50-6H
x 19 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 0,8 mm.

1.25" SAE Code 61
4-Bolt Flange Pattern
3 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

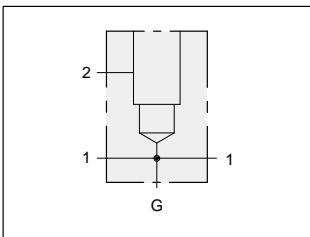
RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25

Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IEQ		IEQ/S	
Metric	.25 BSPP	IEQ/M		IEQ/T	

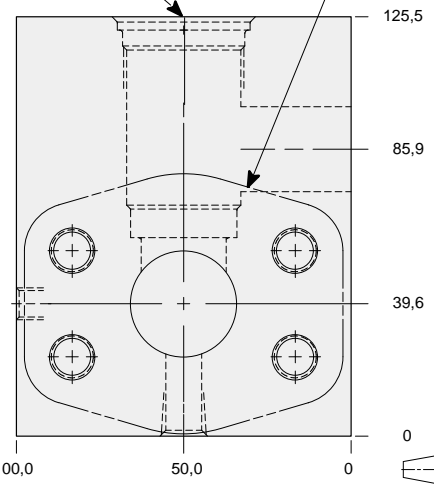
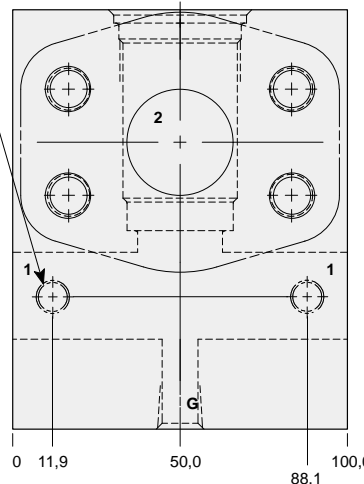


Through port 1.25" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-16A Cavity
Locating Shoulder
Depth 4,1 mm.

1.25" SAE Code 62
4-Bolt Flange Pattern
3 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
CNGC - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25

Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IE5		IE5/S	
Metric	.25 BSPP	IE5/M		IE5/T	

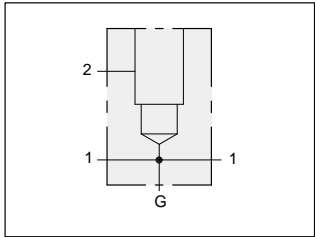


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-16A

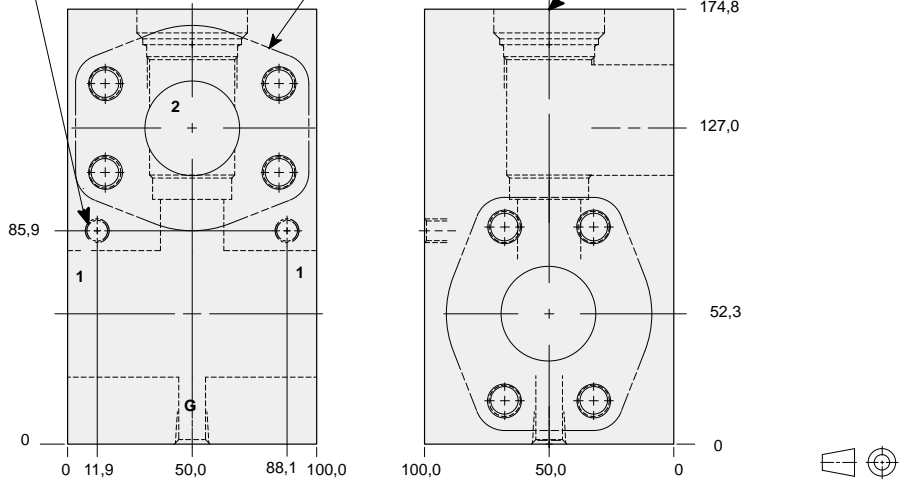


Through port 1.50" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

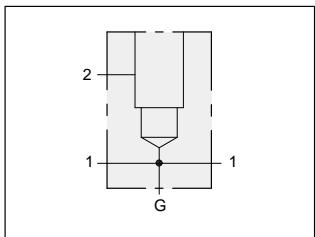
1.50" SAE Code 61
4-Bolt Flange Pattern
3 places.

T-16A Cavity
Locating Shoulder
Depth 14,2 mm.



- TYPICAL CARTRIDGES USED WITH THIS BODY**
- RPIC - *** Page 1.07
 - RPIE - *** Page 1.09
 - RDHA - *** Page 1.11
 - RQIB - *** Page 1.13
 - RPID - *** Page 1.15
 - NFEC - *** Page 5.13
 - CNCG - *** Page 5.15
 - NCFB - *** Page 5.17
 - NCFC - *** Page 5.19
 - FXEA - *** Page 5.21
 - FCEB - *** Page 5.23
 - FDEA - *** Page 5.25
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IER		IER/S	
Metric	.25 BSPP	IER/M		IER/T	

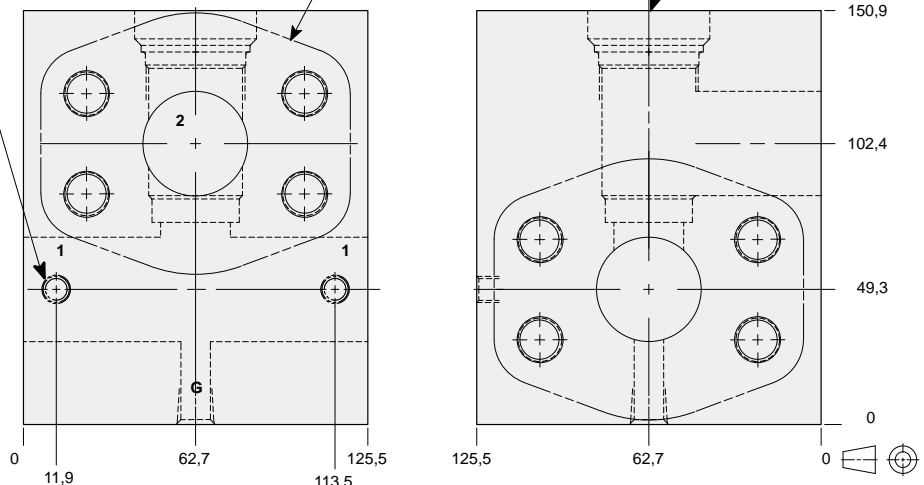


Through port 1.50" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19 mm. deep.
Metric: M10 x 1.50-6H
x 19 mm. deep.
2 places.

1.50" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-16A Cavity
Locating Shoulder
Depth 14,2 mm.



- TYPICAL CARTRIDGES USED WITH THIS BODY**
- RPIC - *** Page 1.07
 - RPIE - *** Page 1.09
 - RDHA - *** Page 1.11
 - RQIB - *** Page 1.13
 - RPID - *** Page 1.15
 - NFEC - *** Page 5.13
 - CNCG - *** Page 5.15
 - NCFB - *** Page 5.17
 - NCFC - *** Page 5.19
 - FXEA - *** Page 5.21
 - FCEB - *** Page 5.23
 - FDEA - *** Page 5.25
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

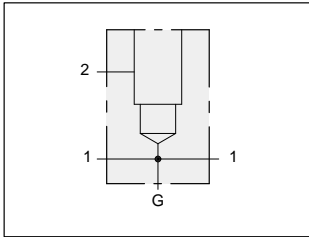
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IE6		IE6/S	
Metric	.25 BSPP	IE6/M		IE6/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

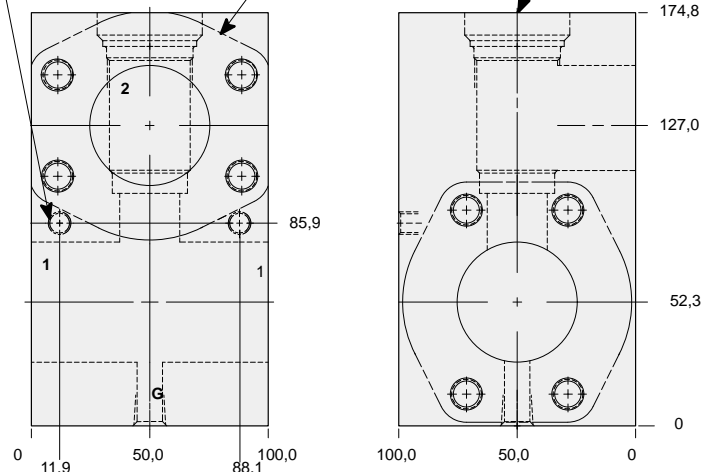


Through port 2.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

2.00" SAE Code 61
4-Bolt Flange Pattern
3 places.

T-16A Cavity
Locating Shoulder
Depth 14,2 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

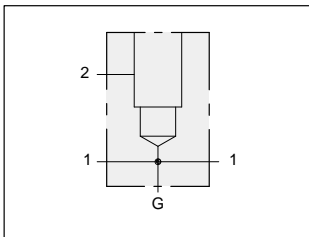
RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
CNCG - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25

Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IES		IES/S	
Metric	.25 BSPP	IES/M		IES/T	

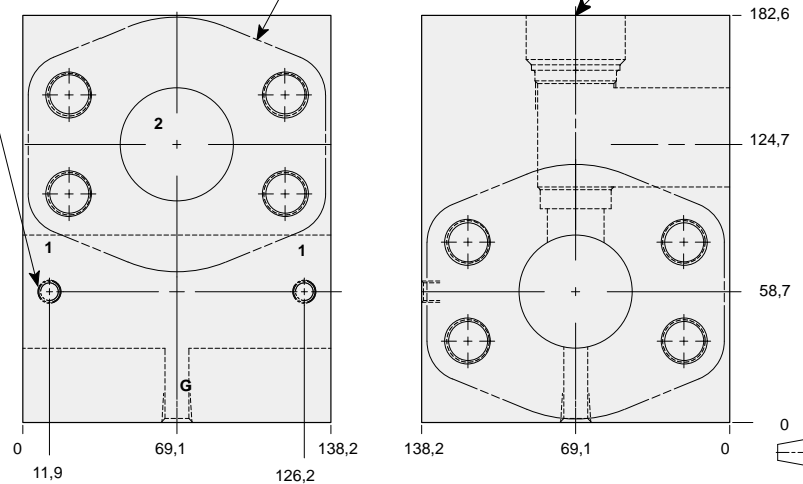


Through port 2.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

2.00" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-16A Cavity
Locating Shoulder
Depth 24,6 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
CNCG - ***	Page	5.15
NCFB - ***	Page	5.17
NCFC - ***	Page	5.19
FXEA - ***	Page	5.21
FCEB - ***	Page	5.23
FDEA - ***	Page	5.25

Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IE8		IE8/S	
Metric	.25 BSPP	IE8/M		IE8/T	

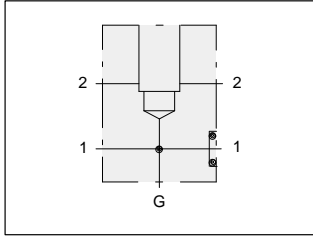


LINE MOUNT BODIES

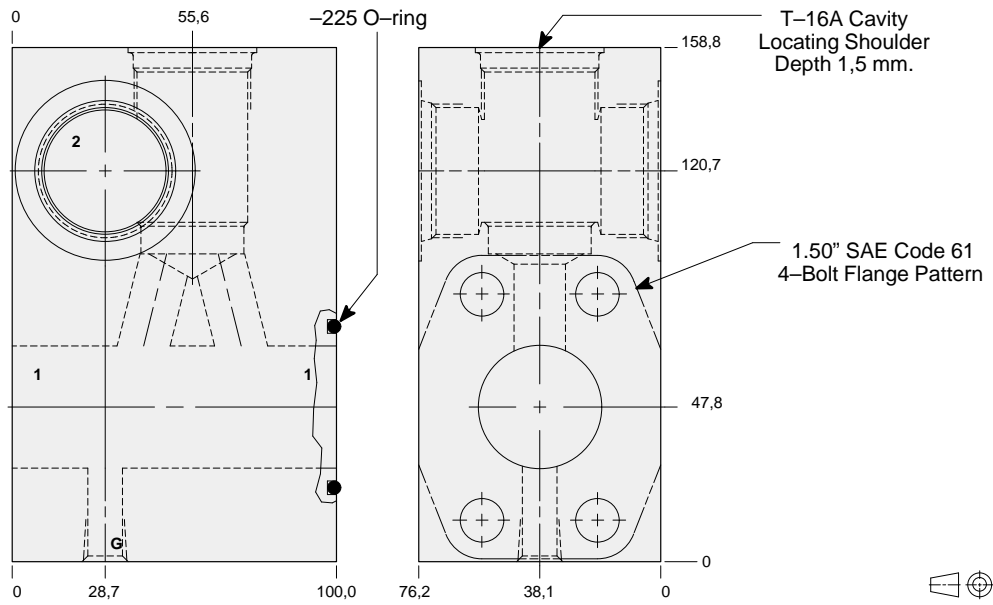


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-16A



Sandwich mount through port 1.50" SAE Code 61 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15

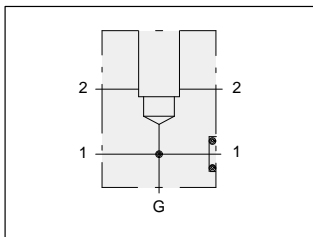
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

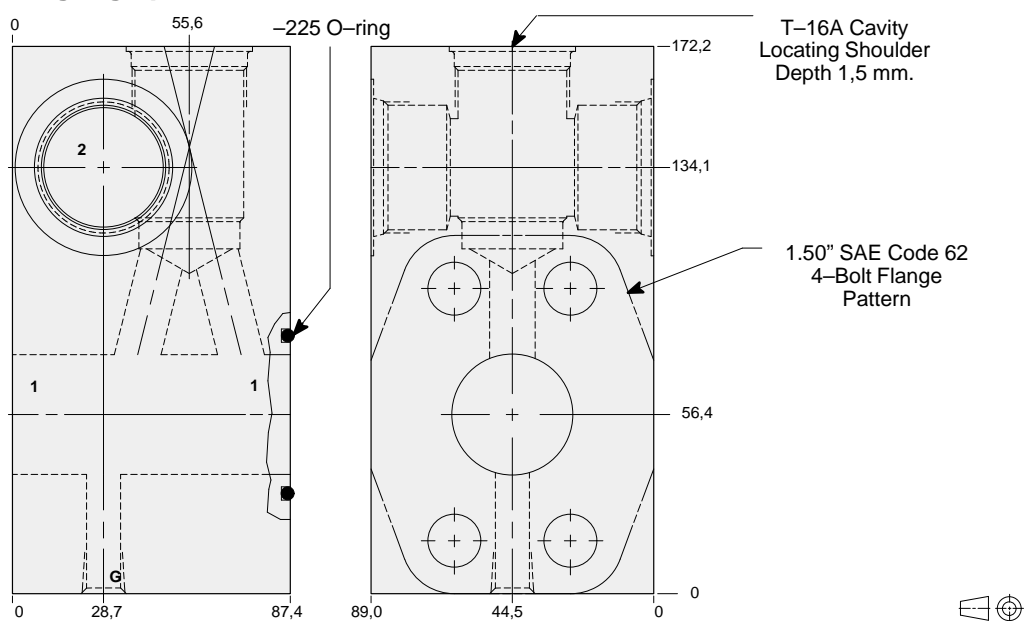
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.25 NPTF	.25 NPTF	ZQD		ZQD/S	
Inch	SAE-20	.25 NPTF	ZQC		ZQC/S	
Metric	1.25 BSPP	.25 BSPP	ZQB/M		ZQB/T	



Sandwich mount through port 1.50" SAE Code 62 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

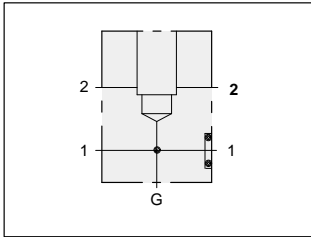
Mounting Hole Dimensions	Port 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.25 NPTF	.25 NPTF	ZFT		ZFT/S	
Inch	SAE-20	.25 NPTF	ZFV		ZFV/S	
Metric	1.25 BSPP	.25 BSPP	ZFW		ZFW/S	



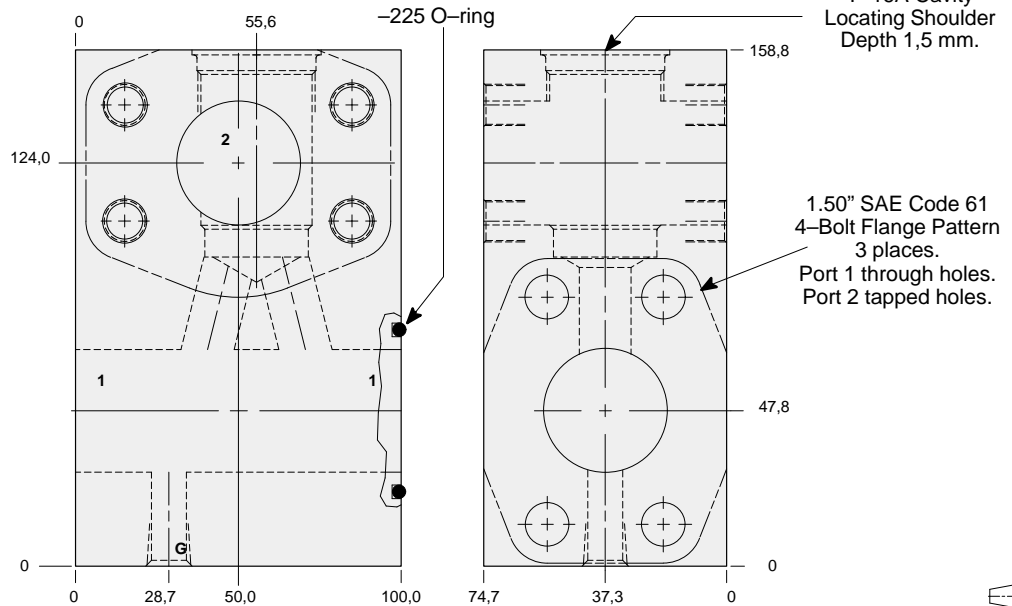
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Sandwich mount through flange port 1.50" SAE Code 61 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15

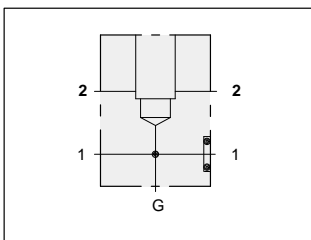
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

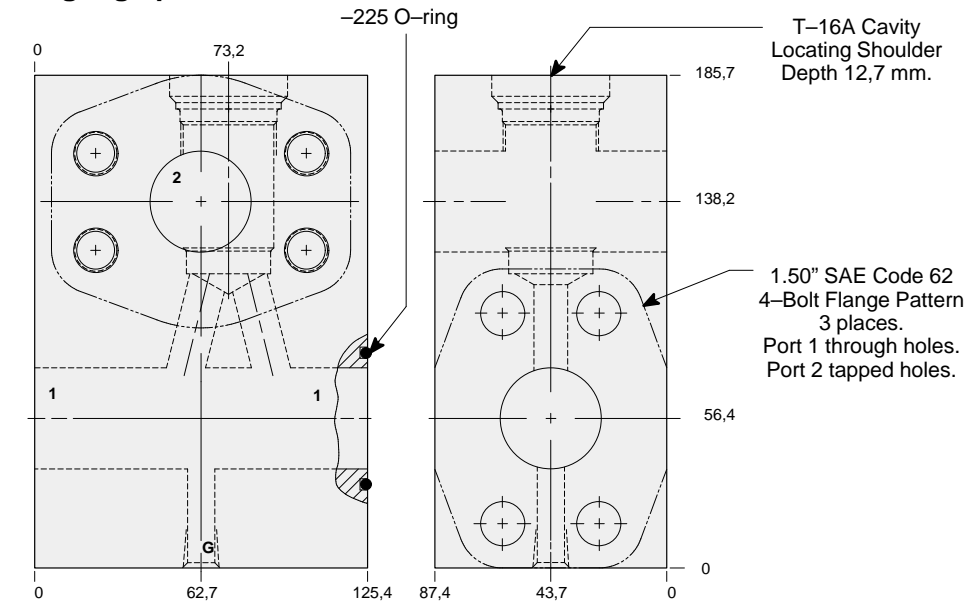
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	ZQA		ZQA/S	
Metric	.25 BSPP	ZQA/M		ZQA/T	



Sandwich mount through flange port 1.50" SAE Code 62 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	ZBJ		ZBJ/S	
Metric	.25 BSPP	ZBJ/M		ZBJ/T	

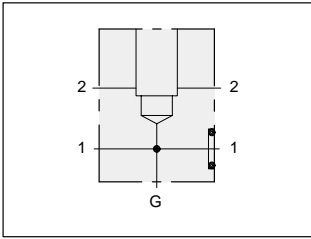


LINE MOUNT BODIES

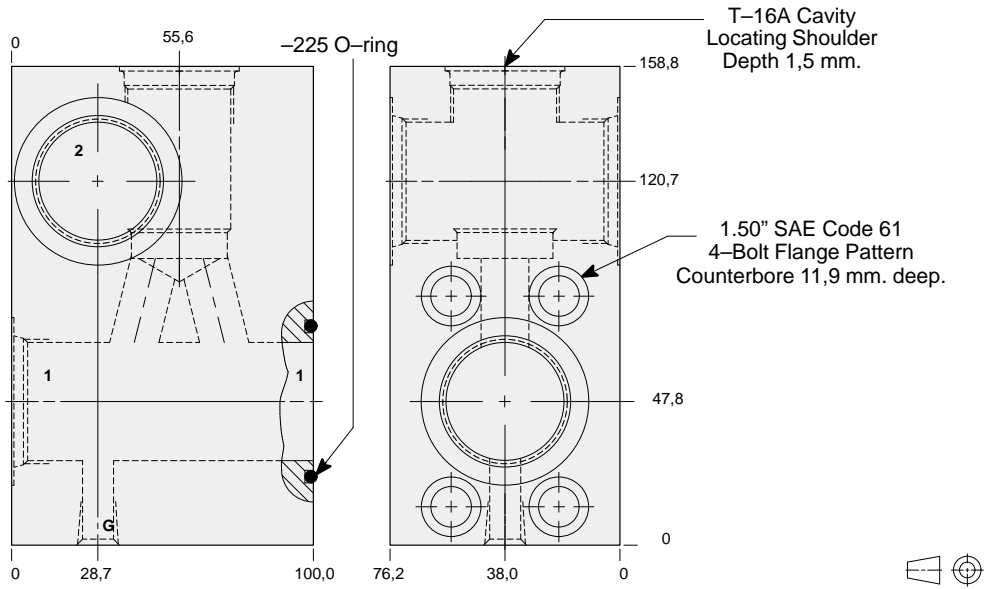


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-16A



Flange mount through port 1.50" SAE Code 61 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RPIC - *** Page 1.07
- RPIE - *** Page 1.09
- RDHA - *** Page 1.11
- RQIB - *** Page 1.13

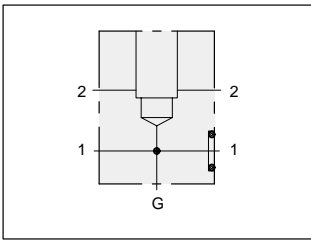
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

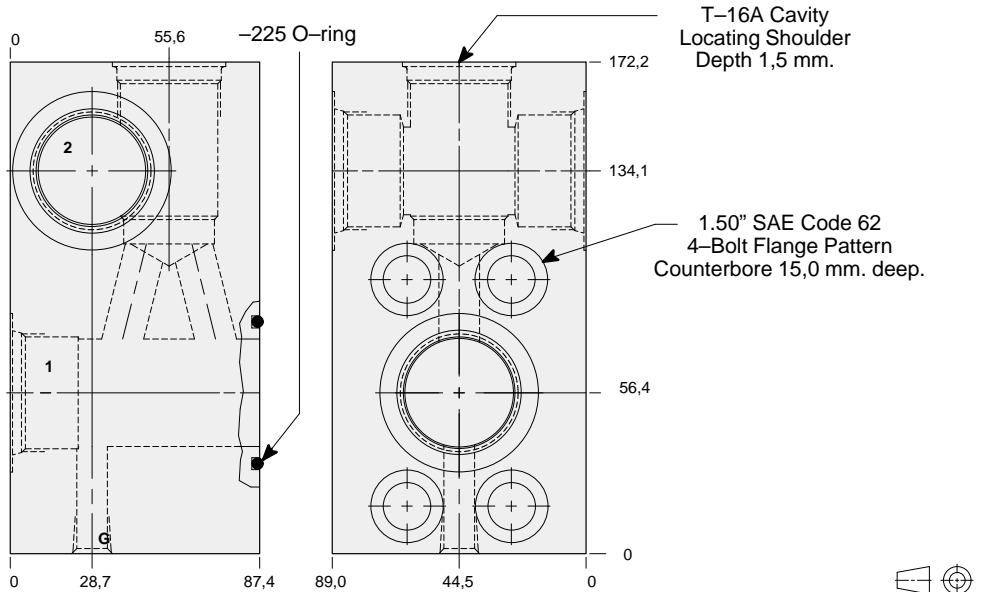
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.25 NPTF	.25 NPTF	ZBQ		ZBQ/S	
Inch	SAE-20	.25 NPTF	ZBP		ZBP/S	
Metric	1.25 BSPP	.25 BSPP	ZBN/M		ZBN/T	



Flange mount through port 1.50" SAE Code 62 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RPIC - *** Page 1.07
- RPIE - *** Page 1.09
- RDHA - *** Page 1.11
- RQIB - *** Page 1.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

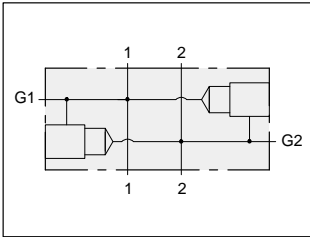
Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.25 NPTF	.25 NPTF	ZBM		ZBM/S	
Inch	SAE-20	.25 NPTF	ZBL		ZBL/S	
Metric	1.25 BSPP	.25 BSPP	ZBK/M		ZBK/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



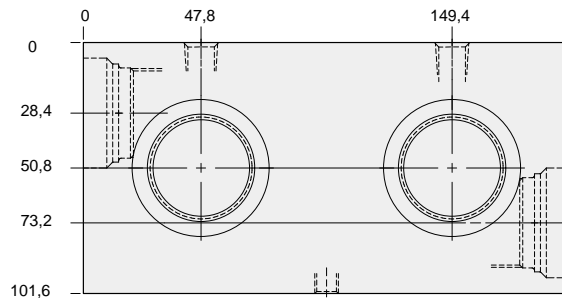
Two cavity body with gauge ports for cross-port relief applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

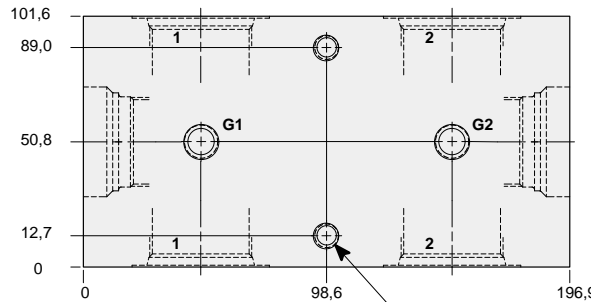
RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



T-16A Cavity Locating Shoulder
Depth 14,2 mm
2 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



Mounting Hole Dimensions	Ports 1 & 2	Ports G1 & G2	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.25 NPTF	.25 NPTF	YIF		YIF/S	
Inch	SAE-20	.25 NPTF	YIN			
Metric	1.25 BSPP	.25 BSPP	YIY/M		YIY/T	

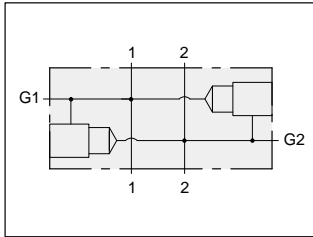


LINE MOUNT BODIES

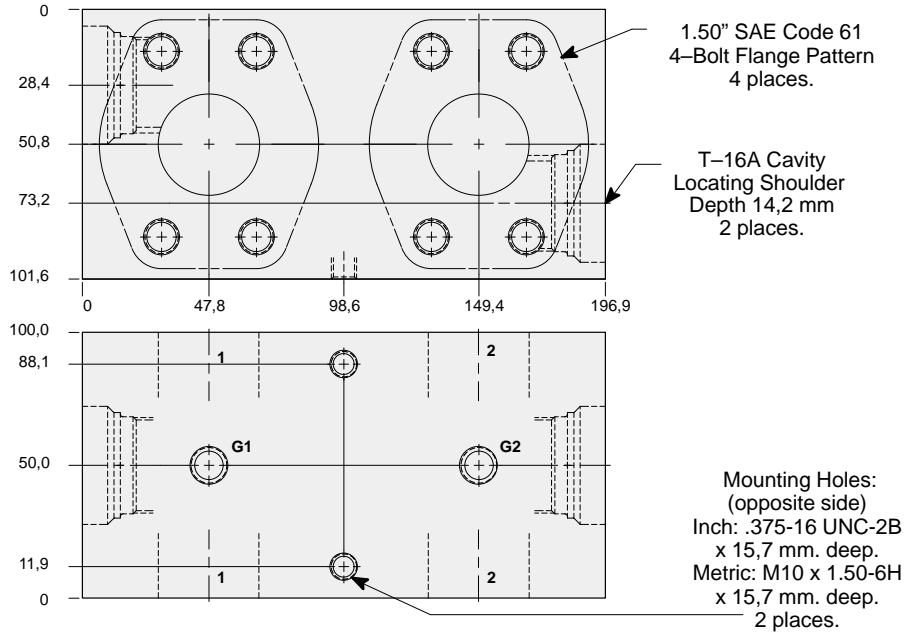


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-16A



Two cavity 1.50" SAE Code 61 flange port body with gauge ports for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

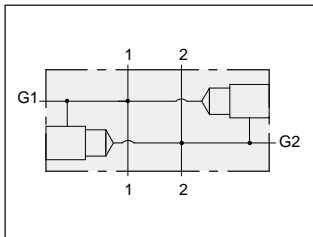
RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13

Instructions for ordering complete cartridge and body assemblies. Page viii

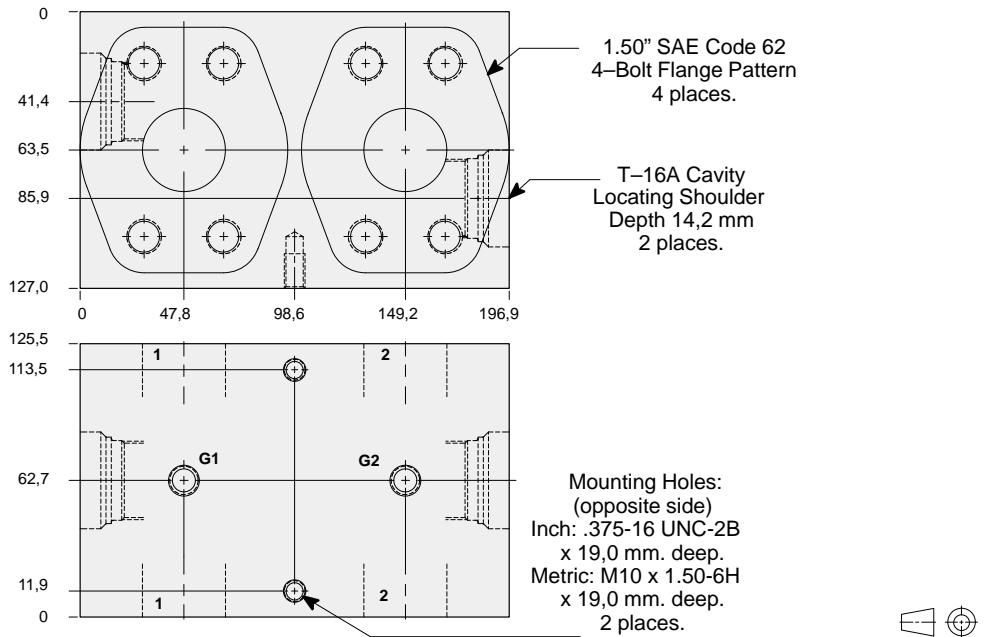
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YIR		YIR/S	
Metric	.25 BSPP	YIR/M		YIR/T	



Two cavity 1.50" SAE Code 62 flange port body with gauge ports or cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

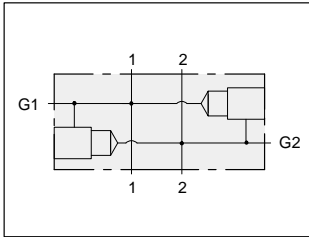
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YI6		YI6/S	
Metric	.25 BSPP	YI6/M		YI6/T	



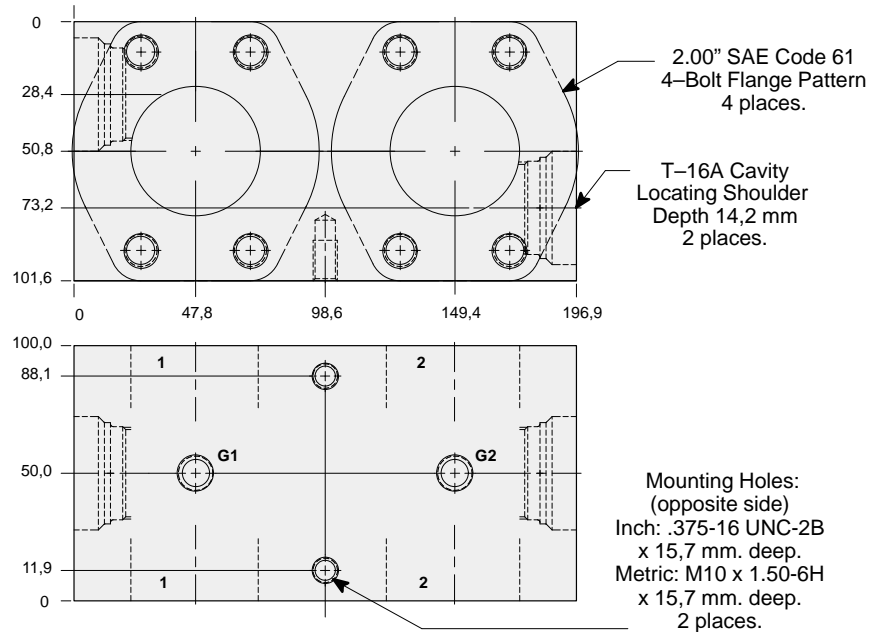
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 2.00" SAE Code 61 flange port body with gauge ports for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13

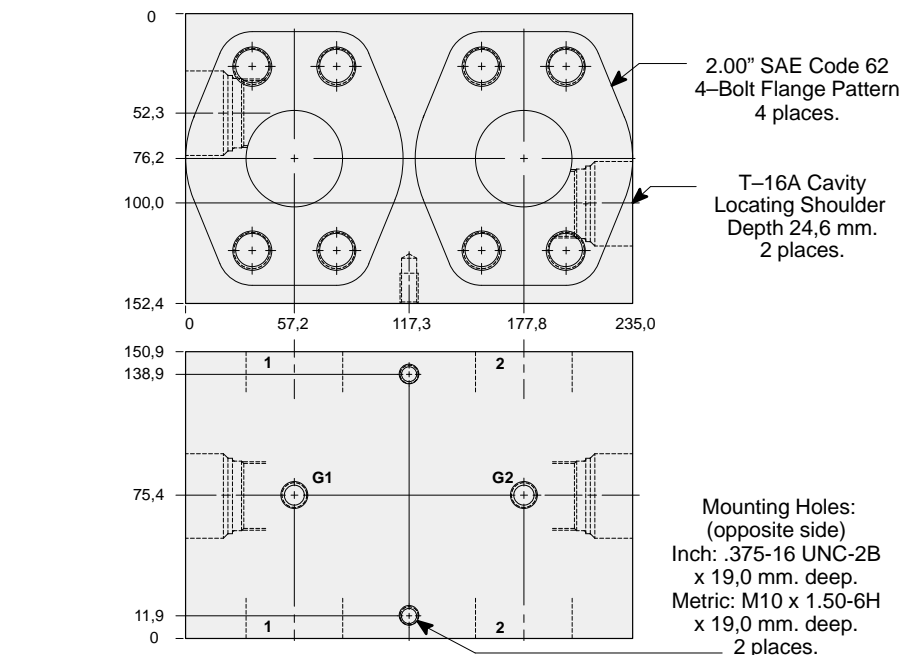
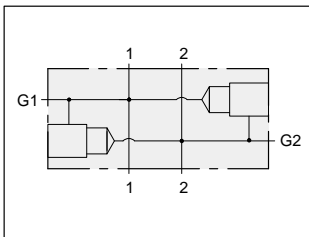
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YIS		YIS/S	
Metric	.25 BSPP	YIS/M		YIS/T	

Two cavity 2.00" SAE Code 62 flange port body with gauge ports for cross-port relief applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YI8		YI8/S	
Metric	.25 BSPP	YI8/M		YI8/T	

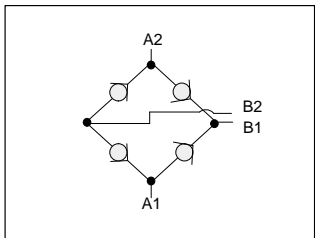
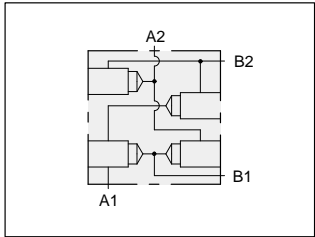


LINE MOUNT BODIES

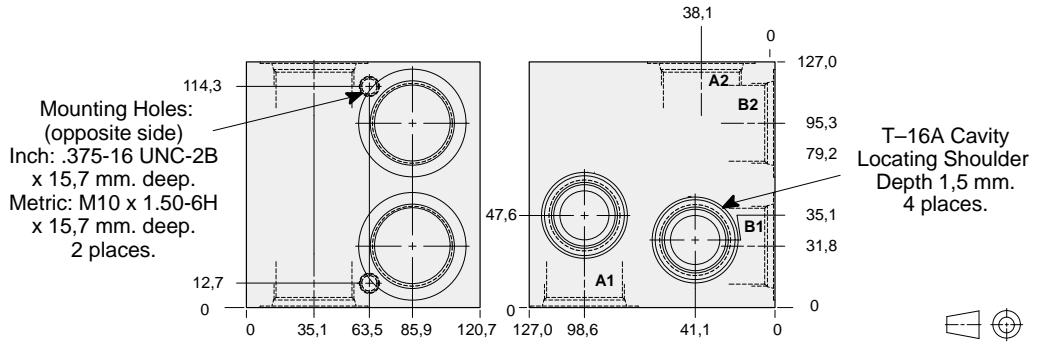


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-16A



Rectifier body.



Mounting Hole Dimensions	All Ports	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	YSC		YSC/S	
Inch	1.00 NPTF	YSD		YSD/S	
Inch	1.25 NPTF	YSE		YSE/S	
Inch	SAE-12	YSF		YSF/S	
Inch	SAE-16	YSG		YSG/S	
Inch	SAE-20	YSH		YSH/S	
Metric	.75 BSPP	YSI		YSI/S	
Metric	1.00 BSPP	YSJ		YSJ/S	
Metric	1.25 BSPP	YSK		YSK/S	

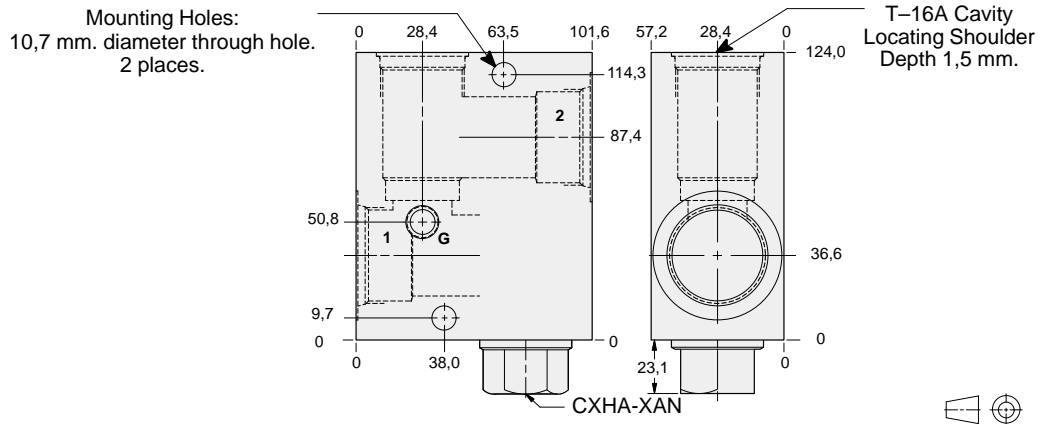
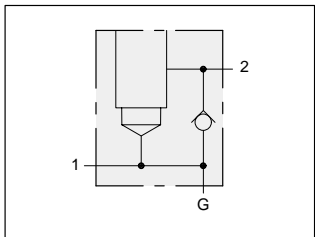
TYPICAL CARTRIDGES USED WITH THIS BODY

CXHA - *** Page 5.09

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Body with reverse free flow check and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - *** Page 1.07

RPIE - *** Page 1.09

RDHA - *** Page 1.11

RQIB - *** Page 1.13

RPID - *** Page 1.15

NFEC - *** Page 5.13

FXEA - *** Page 5.21

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

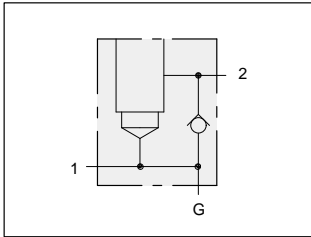
All Ports	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	IND		IND/S	
1.00 NPTF	.25 NPTF	INE		INE/S	
1.25 NPTF	.25 NPTF	INF		INF/S	
SAE-12	.25 NPTF	INL		INL/S	
SAE-16	.25 NPTF	INM		INM/S	
SAE-20	.25 NPTF	INN		INN/S	
.75 BSPP	.25 BSPP	INW		INW/S	
1.00 BSPP	.25 BSPP	INX		INX/S	
1.25 BSPP	.25 BSPP	INY		INY/S	



LINE MOUNT BODIES



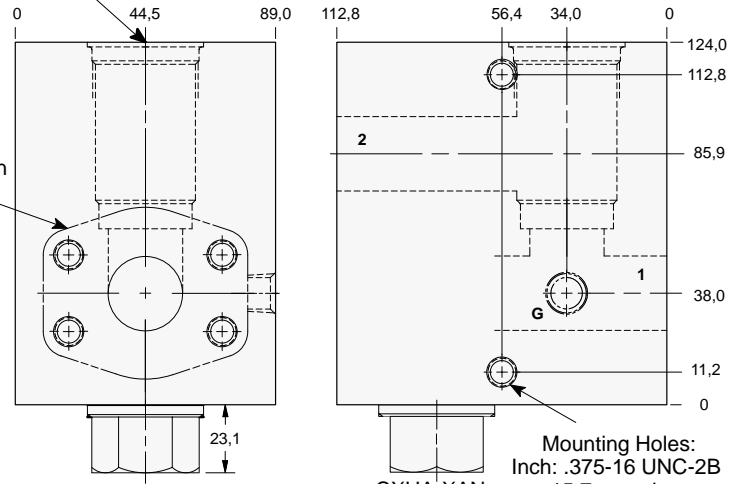
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



1.00" SAE Code 61 flange port body with reverse free flow check and gauge port.

T-16A Cavity
Locating Shoulder
Depth 1,5

1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.



Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
FXEA - ***	Page	5.21

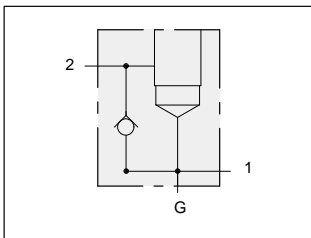
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

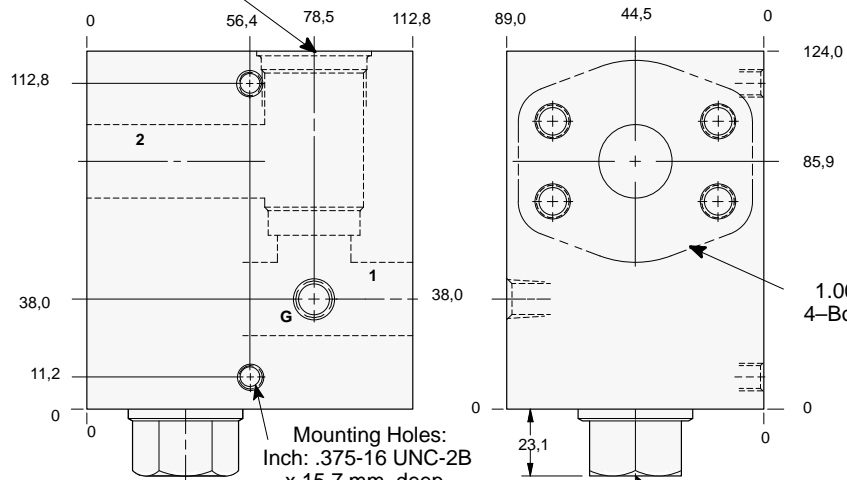
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	INP		INP/S	
Metric	.25 BSPP	INP/M		INP/T	



1.00" SAE Code 62 flange port body with reverse free flow check and gauge port.

T-16A Cavity
Locating Shoulder
Depth 1,5 mm.



Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
FXEA - ***	Page	5.21

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IN4		IN4/S	
Metric	.25 BSPP	IN4/M		IN4/T	

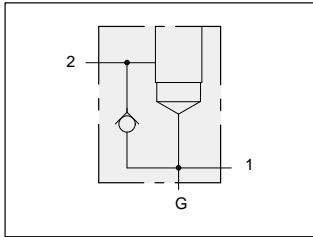


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

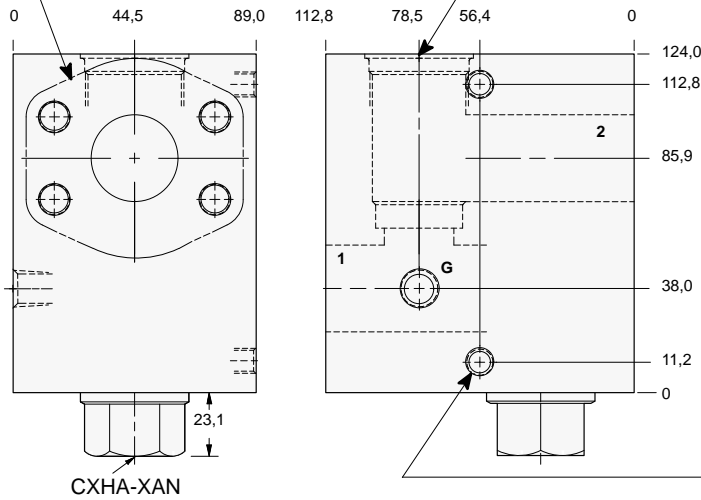
Series 3 T-16A



1.25" SAE Code 61 flange port body with reverse free flow check and gauge port.

1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-16A Cavity
Locating Shoulder
Depth 1,5 mm.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
FXEA - ***	Page	5.21

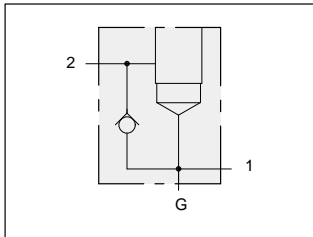
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

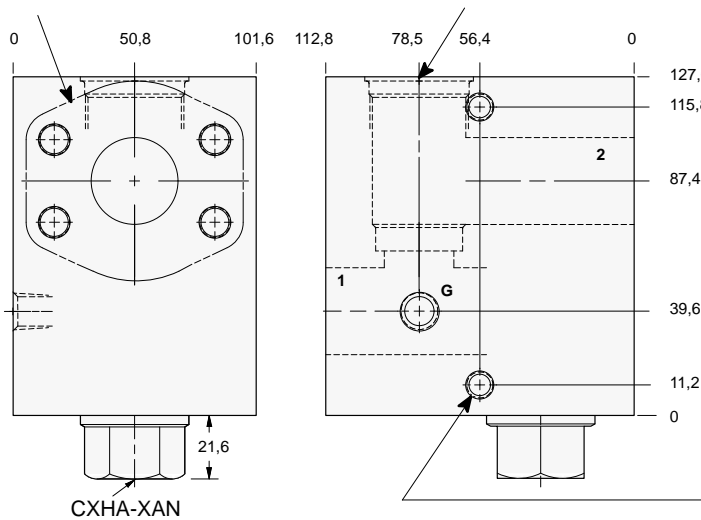
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	INQ		INQ/S	
Metric	.25 BSPP	INQ/M		INQ/T	



1.25" SAE Code 62 flange port body with reverse free flow check and gauge port.

1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-16A Cavity
Locating Shoulder
Depth 3,0 mm.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPIC - ***	Page	1.07
RPIE - ***	Page	1.09
RDHA - ***	Page	1.11
RQIB - ***	Page	1.13
RPID - ***	Page	1.15
NFEC - ***	Page	5.13
FXEA - ***	Page	5.21

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

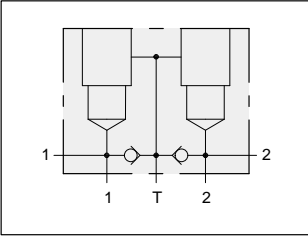
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	IN5		IN5/S	
Metric	.25 BSPP	IN5/M		IN5/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity body with make-up checks for cross-port relief applications.

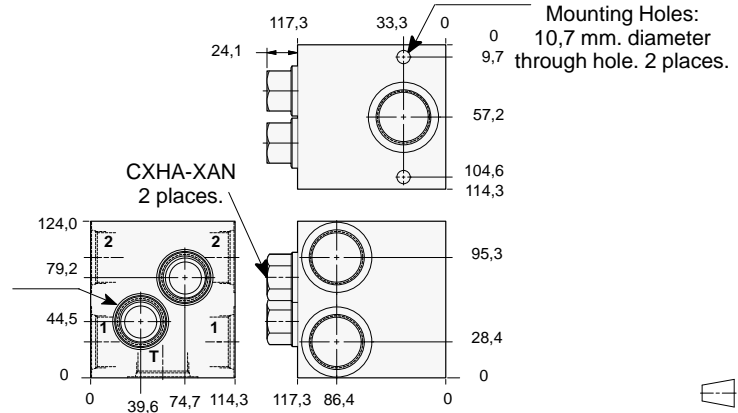
TYPICAL CARTRIDGES USED WITH THIS BODY

- RPIC - *** Page 1.07
- RPIE - *** Page 1.09
- RDHA - *** Page 1.11
- RQIB - *** Page 1.13
- RPID - *** Page 1.15

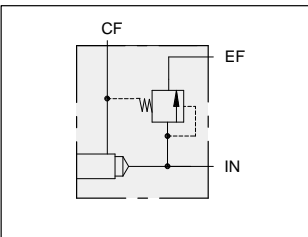
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



All Ports	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.75 NPTF	IMD		IMD/S	
1.00 NPTF	IME		IME/S	
1.25 NPTF	IMF		IMF/S	
SAE-12	IML		IML/S	
SAE-16	IMM		IMM/S	
SAE-20	IMN		IMN/S	
.75 BSPP	IMW		IMW/S	
1.00 BSPP	IMX		IMX/S	
1.25 BSPP	IMY		IMY/S	



Body with moldulating element for pressure compensated flow control applications.

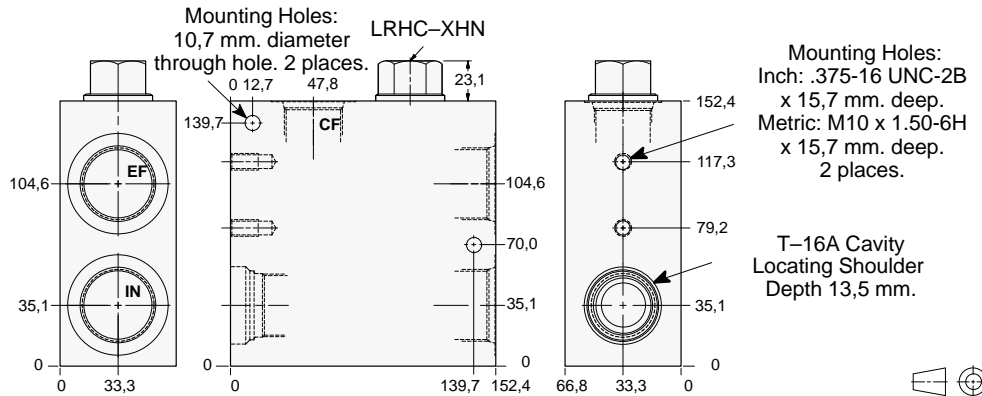
TYPICAL CARTRIDGES USED WITH THIS BODY

- NFEC - *** Page 5.13
- NCFB - *** Page 5.17
- NCFC - *** Page 5.19
- FXEA - *** Page 5.21
- FCEB - *** Page 5.23
- FDEA - *** Page 5.25

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02



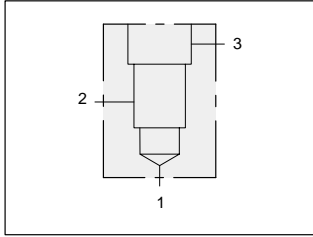
Mounting Hole Dimensions	Port CF	Ports IN, & EF	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	.75 NPTF	WNI		WNI/S	
Inch	.75 NPTF	1.00 NPTF	WNJ		WNJ/S	
Inch	1.00 NPTF	1.25 NPTF	WNK		WNK/S	
Inch	SAE-10	SAE-12	WNL		WNL/S	
Inch	SAE-12	SAE-16	WNM		WNM/S	
Inch	SAE-16	SAE-20	WNN		WNN/S	
Metric	.50 BSPP	.75 BSPP	WNO		WNO/S	
Metric	.75 BSPP	1.00 BSPP	WNP		WNP/S	
Metric	1.00 BSPP	1.25 BSPP	WNQ		WNQ/S	



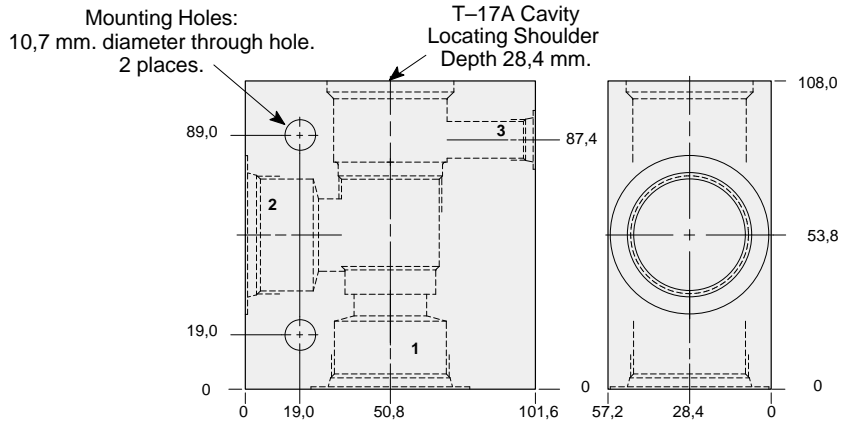
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.



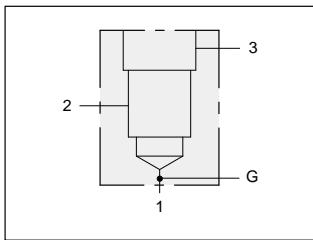
TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

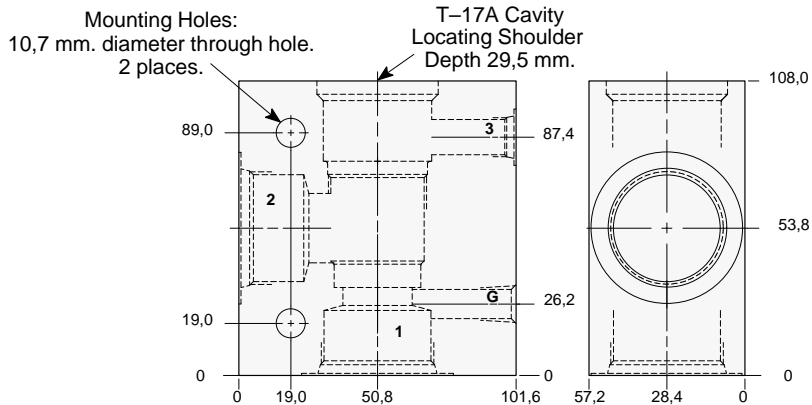
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	HCD		HCD/S	
1.00 NPTF	.25 NPTF	HCE		HCE/S	
1.25 NPTF	.25 NPTF	HCF		HCF/S	
SAE-12	SAE-6	HCL		HCL/S	
SAE-16	SAE-6	HCM		HCM/S	
SAE-20	SAE-6	HCN		HCN/S	
.75 BSPP	.25 BSPP	HCW		HCW/S	
1.00 BSPP	.25 BSPP	HCX		HCX/S	
1.25 BSPP	.25 BSPP	HCY		HCY/S	



90 degree body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

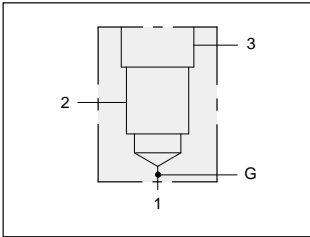
Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	.25 NPTF	HFD		HFD/S	
1.00 NPTF	.25 NPTF	.25 NPTF	HFE		HFE/S	
1.25 NPTF	.25 NPTF	.25 NPTF	HFF		HFF/S	
SAE-12	SAE-6	.25 NPTF	HFL		HFL/S	
SAE-16	SAE-6	.25 NPTF	HFM		HFM/S	
SAE-20	SAE-6	.25 NPTF	HFN		HFN/S	
.75 BSPP	.25 BSPP	.25 BSPP	HFV		HFV/S	
1.00 BSPP	.25 BSPP	.25 BSPP	HFX		HFX/S	
1.25 BSPP	.25 BSPP	.25 BSPP	HFY		HFY/S	



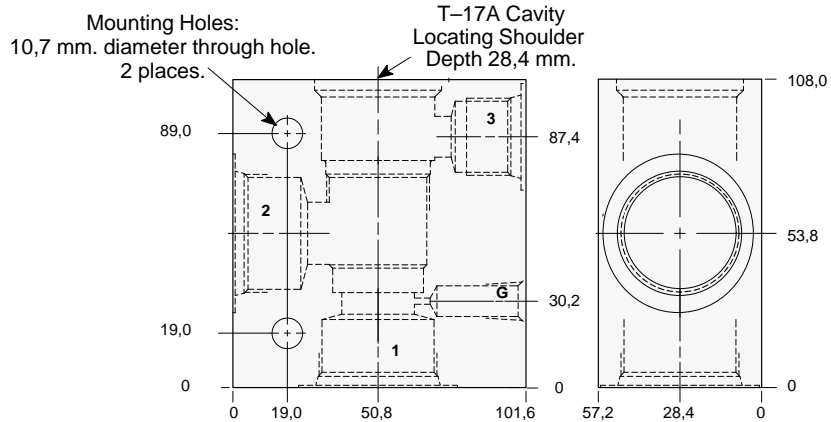
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body with high capacity port 3 and gauge port.



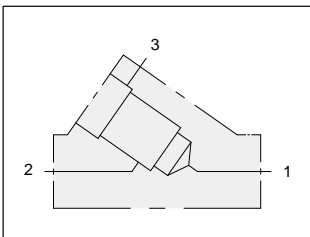
TYPICAL CARTRIDGES USED WITH THIS BODY

PPHB - ***	Page	3.11
PPHC - ***	Page	3.13
FREA - ***	Page	6.03

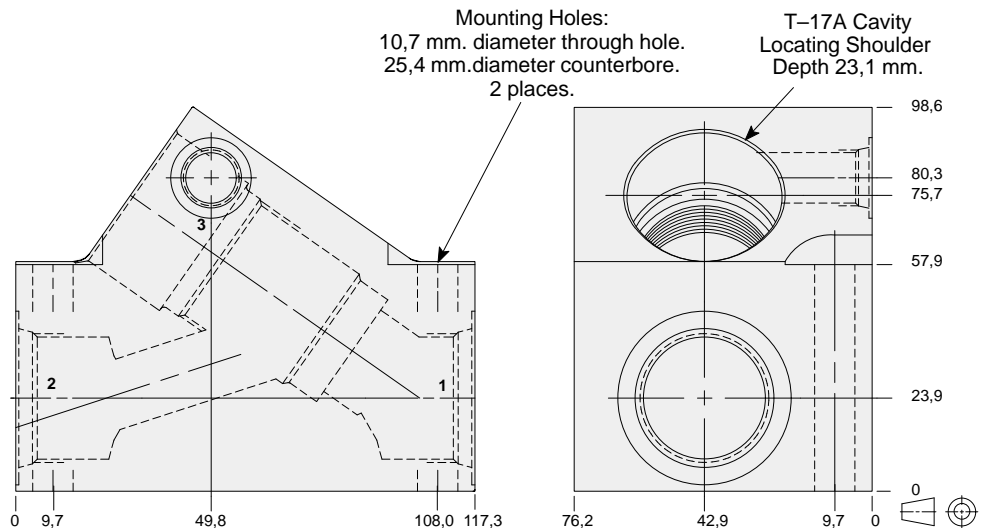
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	.75 NPTF	.25 NPTF	HED		HED/S	
1.00 NPTF	.75 NPTF	.25 NPTF	HEE		HEE/S	
1.25 NPTF	.75 NPTF	.25 NPTF	HEF		HEF/S	
SAE-12	SAE-6	.25 NPTF	HEL		HEL/S	
SAE-16	SAE-6	.25 NPTF	HEM		HEM/S	
SAE-20	SAE-6	.25 NPTF	HEN		HEN/S	
.75 BSPP	.75 BSPP	.25 BSPP	HEW		HEW/S	
1.00 BSPP	.75 BSPP	.25 BSPP	HEX		HEX/S	
1.25 BSPP	.75 BSPP	.25 BSPP	HEY		HEY/S	



Inline body.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

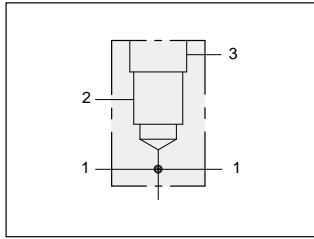
Ports 1 & 2	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	HDD		HDD/S	
1.00 NPTF	.25 NPTF	HDE		HDE/S	
SAE-12	SAE-6	HDL		HDL/S	
SAE-16	SAE-6	HDM		HDM/S	
.75 BSPP	.25 BSPP	HDW		HDW/S	
1.00 BSPP	.25 BSPP	HDX		HDX/S	



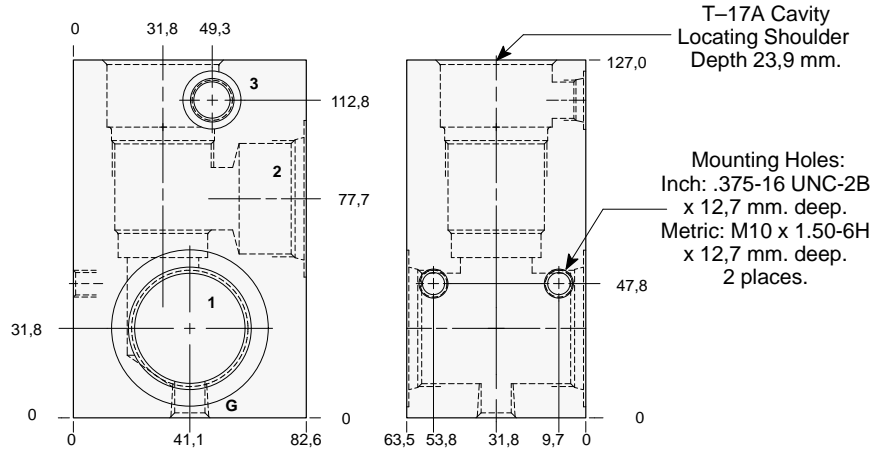
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02

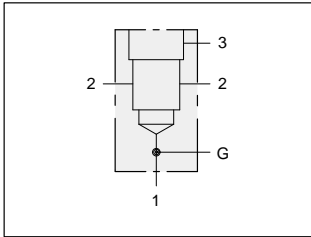
Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	.25 NPTF	HHD		HHD/S	
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	HHE		HHE/S	
Inch	1.25 NPTF	.25 NPTF	.25 NPTF	HHF		HHF/S	
Inch	SAE-12	SAE-6	.25 NPTF	HHL		HHL/S	
Inch	SAE-16	SAE-6	.25 NPTF	HHM		HHM/S	
Inch	SAE-20	SAE-6	.25 NPTF	HHN		HHN/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	HHW		HHW/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	HHX		HHX/S	
Metric	1.25 BSPP	.25 BSPP	.25 BSPP	HHY		HHY/S	



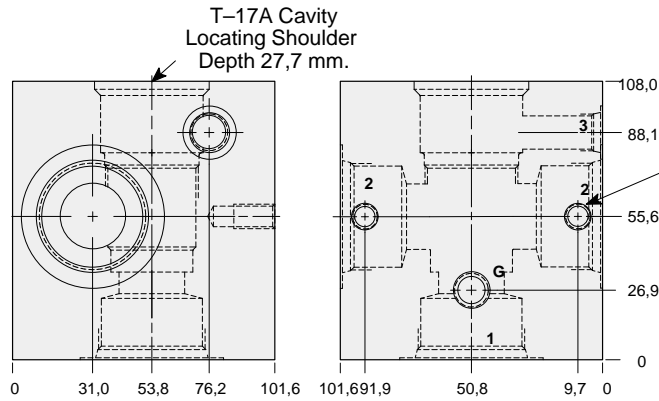
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port body with gauge port for reducing applications.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

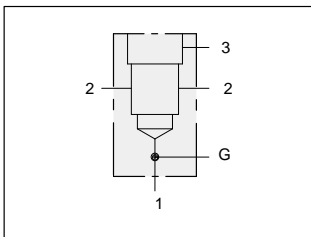
TYPICAL CARTRIDGES USED WITH THIS BODY

PBHB - *** Page 3.07
PBHC - *** Page 3.09

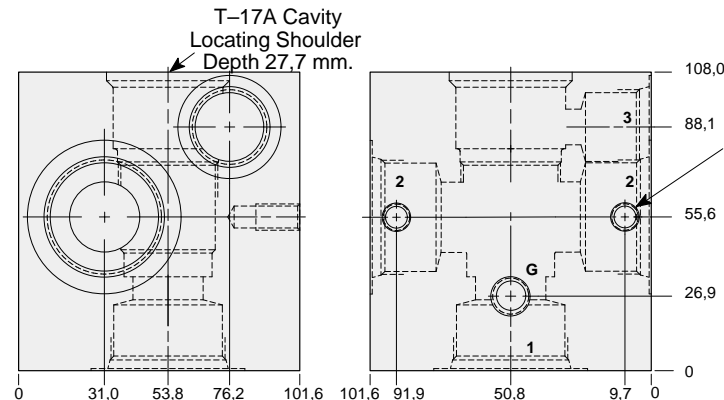
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	.25 NPTF	WSW		WSW/S	
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	WSX		WSX/S	
Inch	1.25 NPTF	.25 NPTF	.25 NPTF	WSY		WSY/S	
Inch	SAE-12	SAE-6	.25 NPTF	WSZ		WSZ/S	
Inch	SAE-16	SAE-6	.25 NPTF	WTA		WTA/S	
Inch	SAE-20	SAE-6	.25 NPTF	WTB		WTB/S	
Metric	.75 BSPP	.25 BSPP	.25 BSPP	WTC		WTC/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	WTD		WTD/S	
Metric	1.25 BSPP	.25 BSPP	.25 BSPP	WTE		WTE/S	



Through port body with high capacity port 3 and gauge port for reducing/relieving applications.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

PPHB - *** Page 3.11
PPHC - *** Page 3.13
FREA - *** Page 6.03

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.75 NPTF	.25 NPTF	WTF		WTF/S	
Inch	1.00 NPTF	.75 NPTF	.25 NPTF	WTG		WTG/S	
Inch	1.25 NPTF	.75 NPTF	.25 NPTF	WTH		WTH/S	
Inch	SAE-12	SAE-12	.25 NPTF	WTI		WTI/S	
Inch	SAE-16	SAE-12	.25 NPTF	WTJ		WTJ/S	
Inch	SAE-20	SAE-12	.25 NPTF	WTK		WTK/S	
Metric	.75 BSPP	.75 BSPP	.25 BSPP	WTL		WTL/S	
Metric	1.00 BSPP	.75 BSPP	.25 BSPP	WTM		WTM/S	
Metric	1.25 BSPP	.75 BSPP	.25 BSPP	WTN		WTN/S	

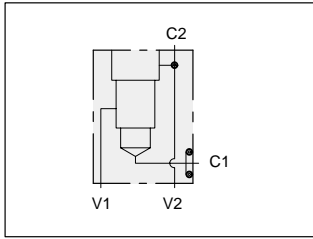


LINE MOUNT BODIES

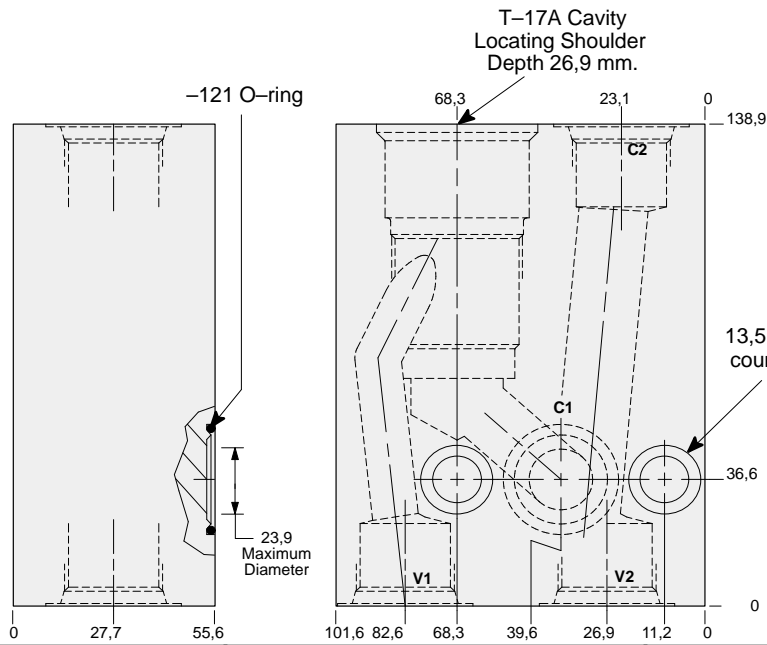


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-17A

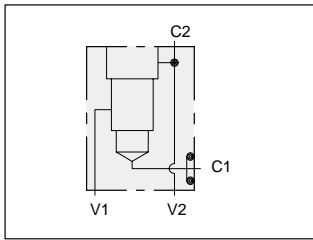


Gasket mount body for load control applications.

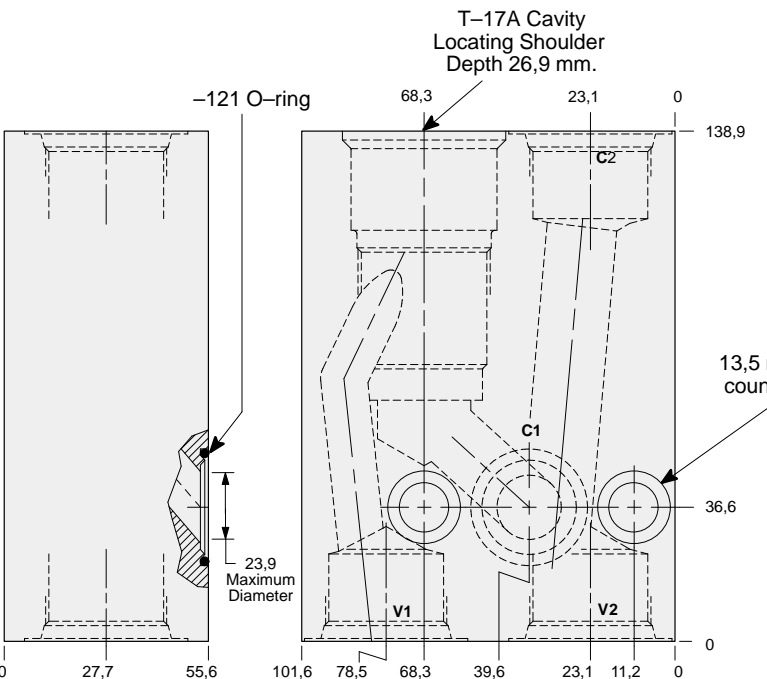


- TYPICAL CARTRIDGES USED WITH THIS BODY**
- CBGA - *** Page 4.11
 - CBGG - *** Page 4.13
 - CBGH - *** Page 4.15
 - CKGB - *** Page 4.17
- Cartridge seal type determines O-ring type.
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02

Ports V1, V2, & C2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.75 NPTF	ZTJ		ZTJ/S	
SAE-12	ZTK		ZTK/S	
.75 BSPP	ZTL		ZTL/S	



Gasket mount body for load control applications.



- TYPICAL CARTRIDGES USED WITH THIS BODY**
- CBGA - *** Page 4.11
 - CBGG - *** Page 4.13
 - CBGH - *** Page 4.15
 - CKGB - *** Page 4.17
- Cartridge seal type determines O-ring type.
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02

Ports V1, V2, & C2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
SAE-16	ZTM		ZTM/S	

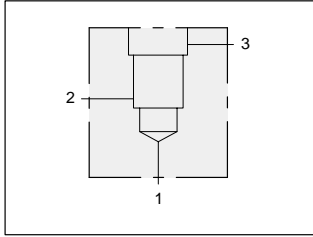


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

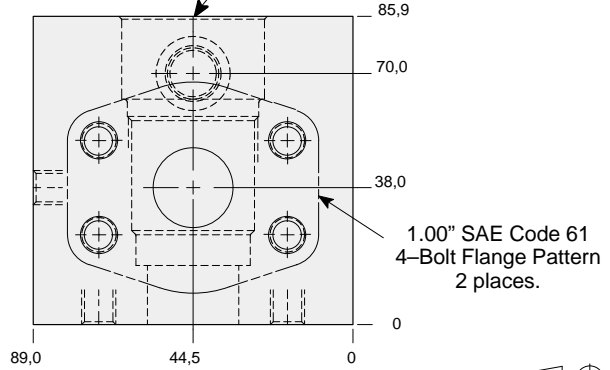
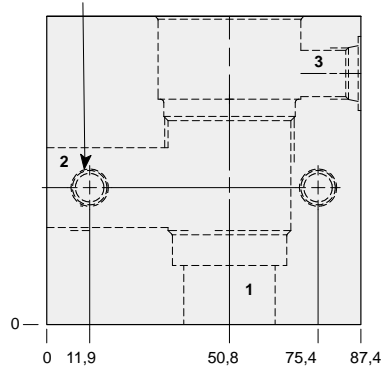
Series 3 T-17A



90 degree 1.00" SAE Code 61 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.

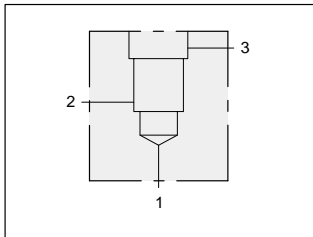


TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

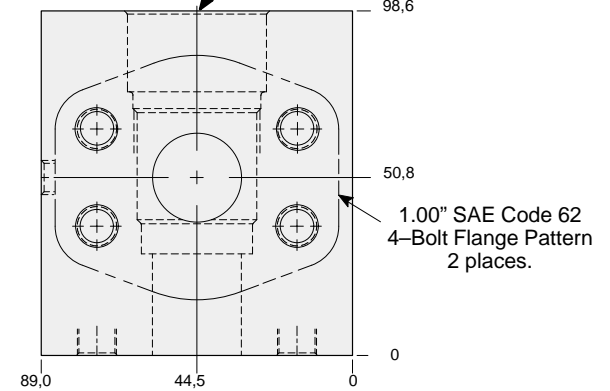
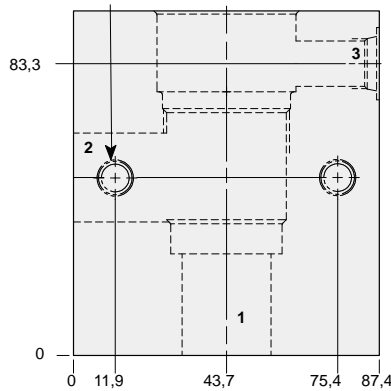
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	HCP		HCP/S	
Metric	.25 BSPP	HCP/M		HCP/T	



90 degree 1.00" SAE Code 62 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

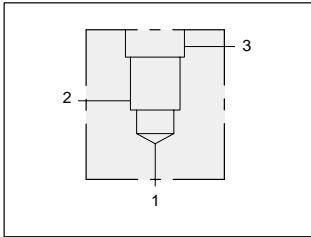
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	HC4		HC4/S	
Metric	.25 BSPP	HC4/M		HC4/T	



LINE MOUNT BODIES



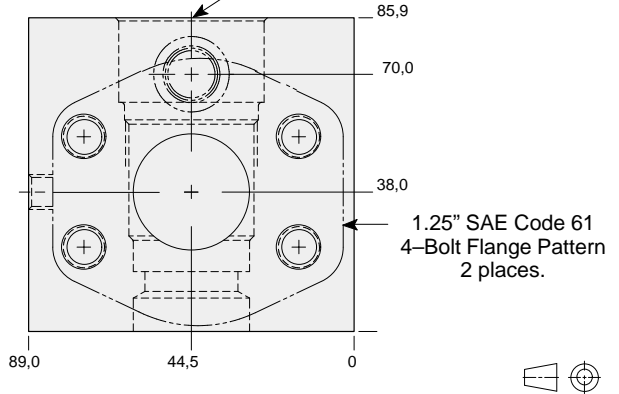
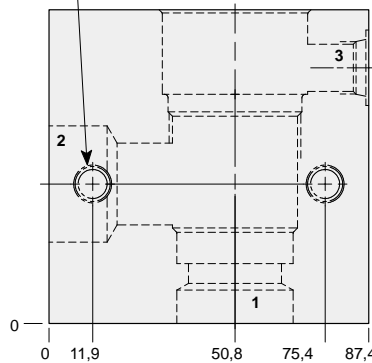
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree 1.25" SAE Code 61 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.

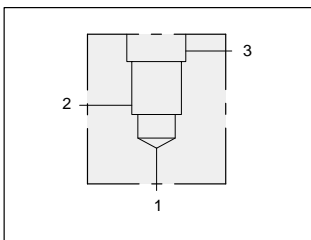


TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

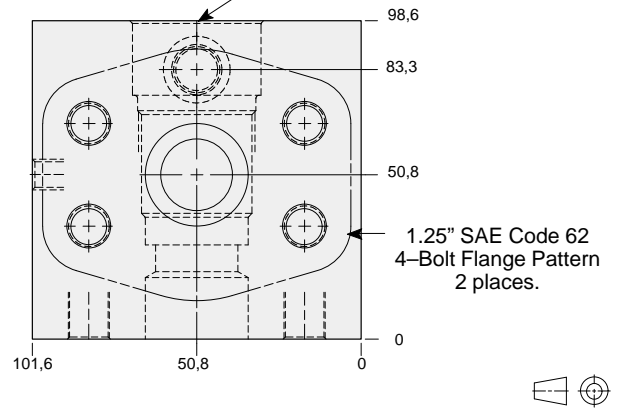
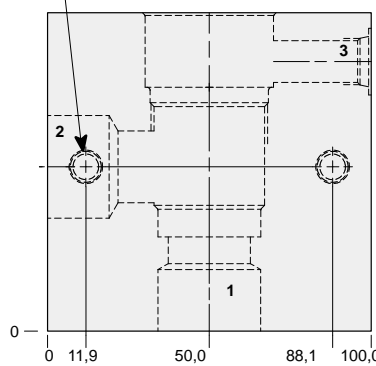
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	HCQ		HCQ/S	
Metric	.25 BSPP	HCQ/M		HCQ/T	



90 degree 1.25" SAE Code 62 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
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PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
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LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	HC5		HC5/S	
Metric	.25 BSPP	HC5/M		HC5/T	

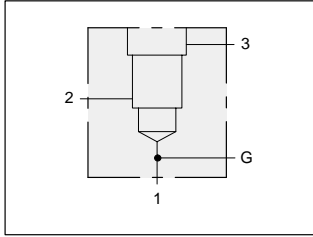


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

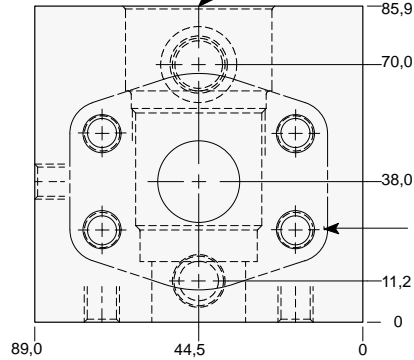
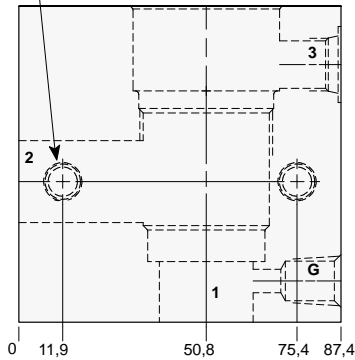
Series 3 T-17A



90 degree 1.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.



1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

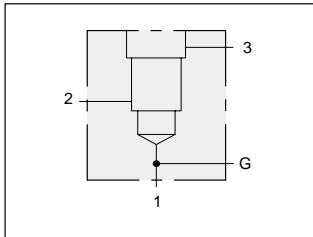


TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

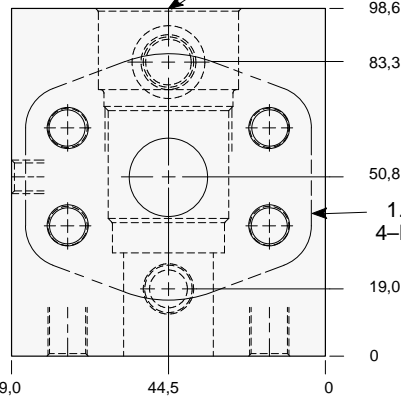
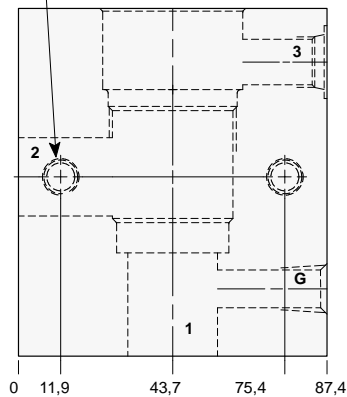
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	HFP		HFP/S	
Metric	.25 BSPP	.25 BSPP	HFP/M		HFP/T	



90 degree 1.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.



1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

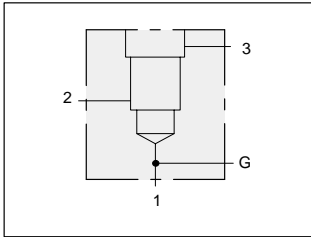
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	HF4		HF4/S	
Metric	.25 BSPP	.25 BSPP	HF4/M		HF4/T	



LINE MOUNT BODIES



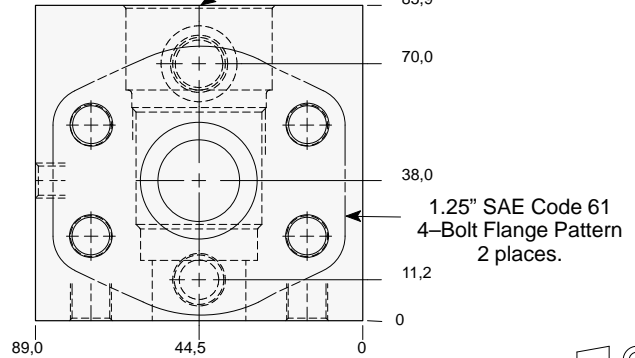
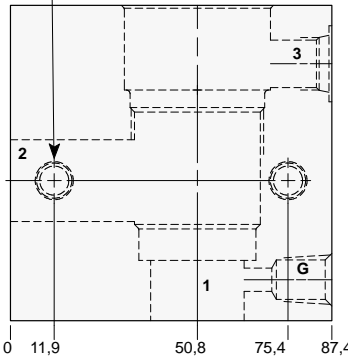
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree 1.25" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.

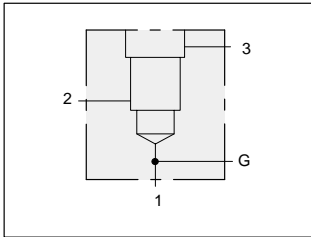


TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

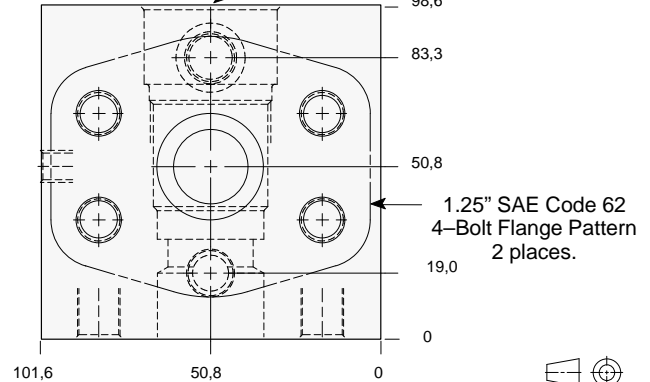
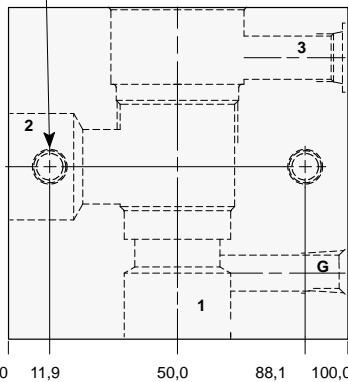
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	HFQ		HFQ/S	
Metric	.25 BSPP	.25 BSPP	HFQ/M		HFQ/T	



90 degree 1.25" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	HF5		HF5/S	
Metric	.25 BSPP	.25 BSPP	HF5/M		HF5/T	

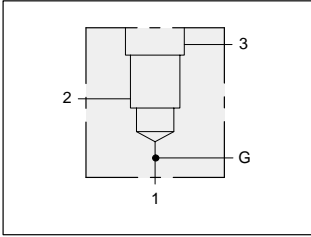


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

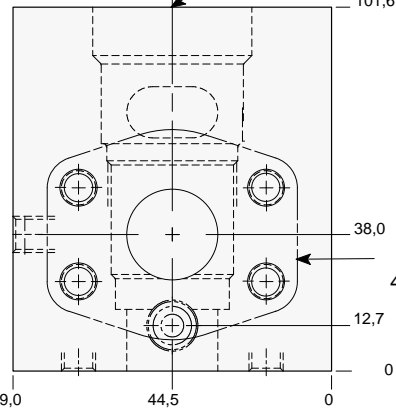
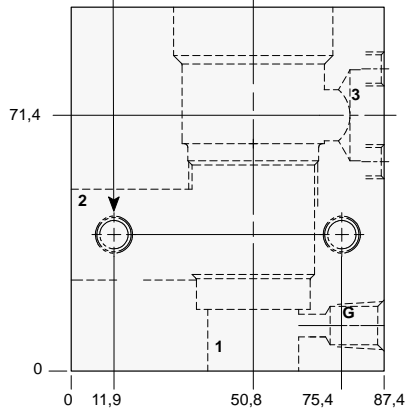
Series 3 T-17A



90 degree 1.00" SAE Code 61 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 38,0 mm.



1.00" SAE Code 61
4-Bolt Flange Pattern
3 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

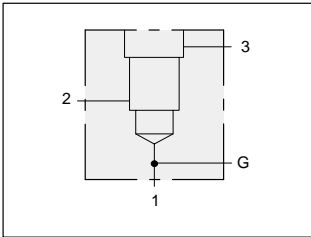
PPHB - *** Page 3.11
PPHC - *** Page 3.13
FREA - *** Page 6.03

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

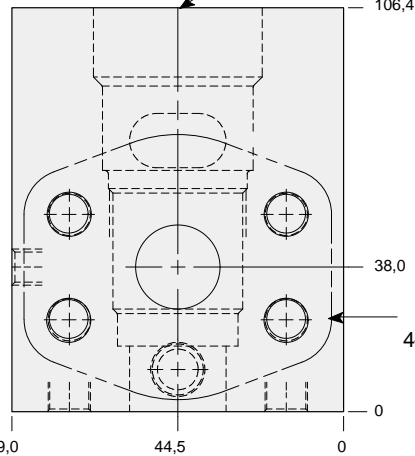
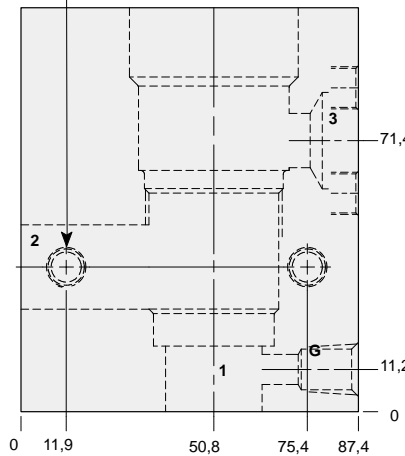
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	HEP		HEP/S	
Metric	.25 BSPP	HEP/M		HEP/T	



90 degree 1.00" SAE Code 62 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 42,9 mm.



1.00" SAE Code 62
4-Bolt Flange Pattern
3 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPHB - *** Page 3.11
PPHC - *** Page 3.13
FREA - *** Page 6.03

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

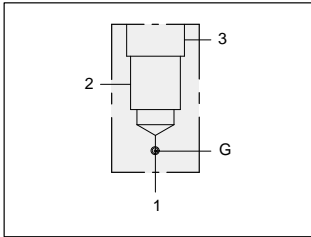
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	HE4		HE4/S	
Metric	.25 BSPP	HE4/M		HE4/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



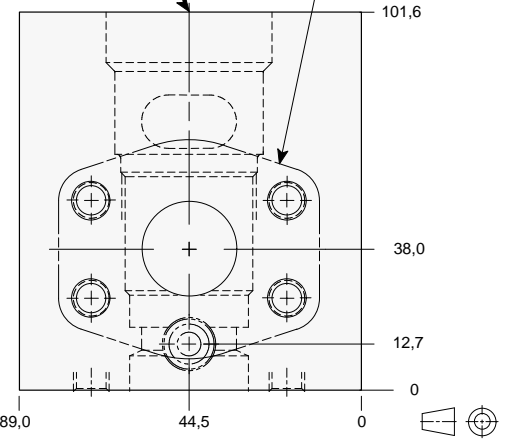
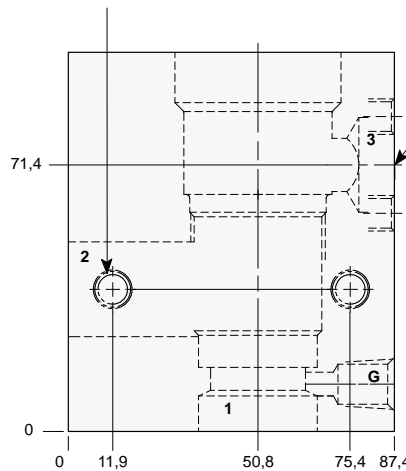
90 degree 1.25" SAE Code 61 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.00" SAE Code 61
4-Bolt Flange Pattern

T-17A Cavity
Locating Shoulder
Depth 38,0 mm.

1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

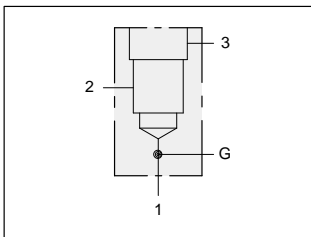
PPHB - *** Page 3.11
PPHC - *** Page 3.13
FREA - *** Page 6.03

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	HEQ		HEQ/S	
Metric	.25 BSPP	HEQ/M		HEQ/T	



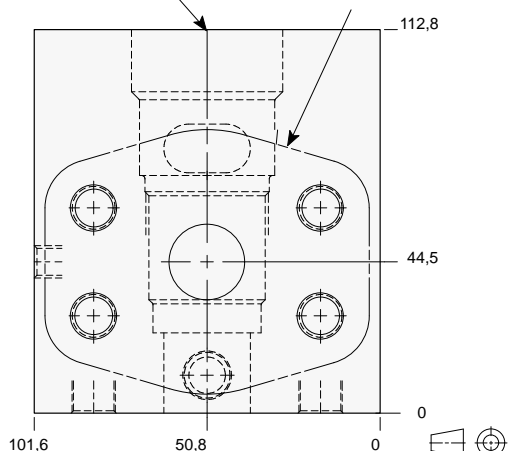
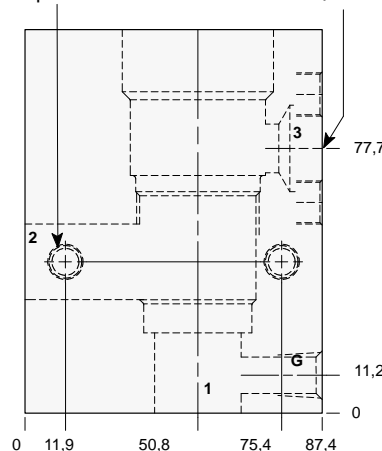
90 degree 1.25" SAE Code 62 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-17A Cavity
Locating Shoulder
Depth 42,9 mm.

1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPHB - *** Page 3.11
PPHC - *** Page 3.13
FREA - *** Page 6.03

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	HE5		HE5/S	
Metric	.25 BSPP	HE5/M		HE5/T	

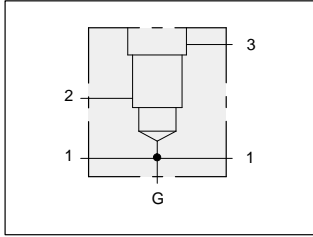


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-17A

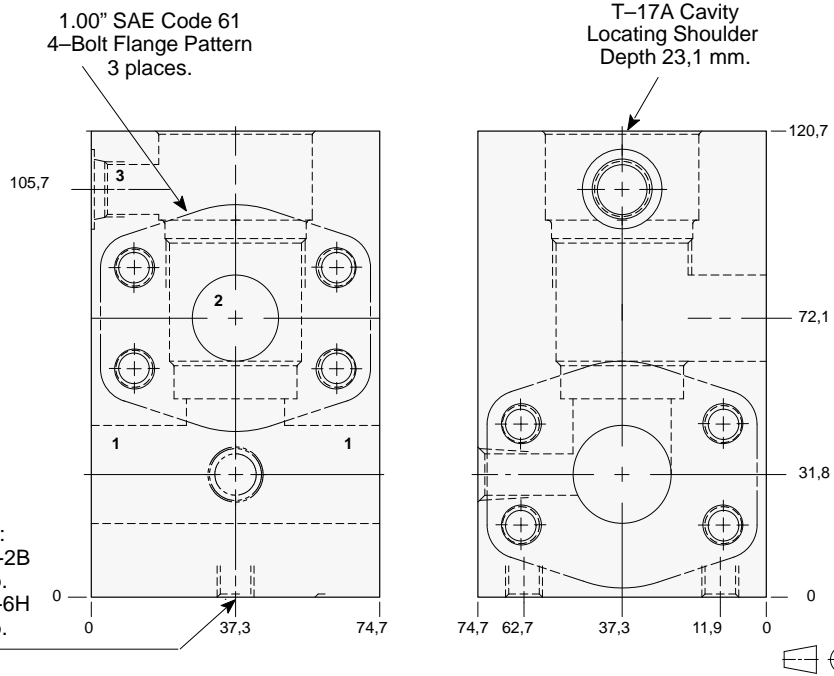


TYPICAL CARTRIDGES USED WITH THIS BODY

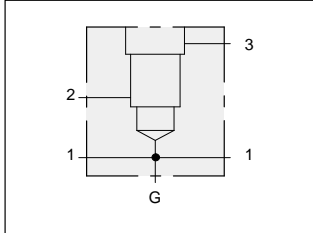
RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Through port 1.00" SAE Code 61 flange port body with gauge port.



Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	HHP		HHP/S	
Metric	.25 BSPP	.25 BSPP	HHP/M		HHP/T	

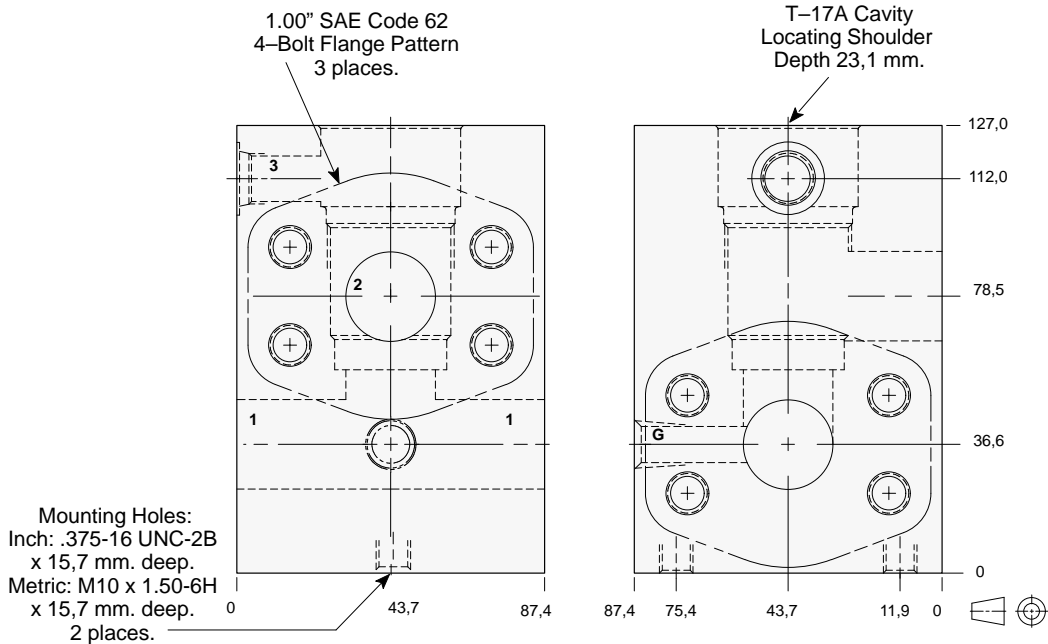


TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PBHB - ***	Page	3.07
PBHC - ***	Page	3.09

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Through port 1.00" SAE Code 62 flange port body with gauge port.



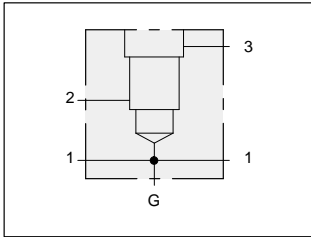
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	HH4		HH4/S	
Metric	.25 BSPP	.25 BSPP	HH4/M		HH4/T	



LINE MOUNT BODIES



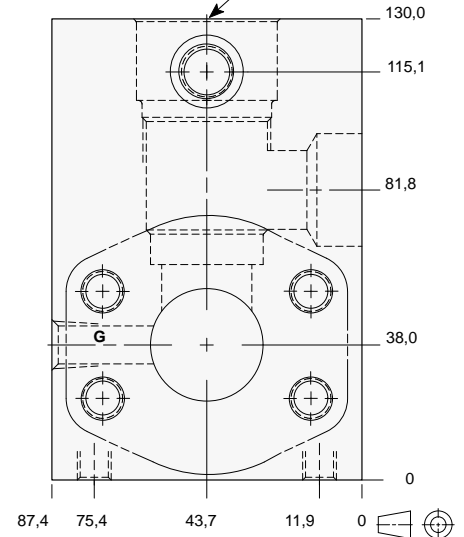
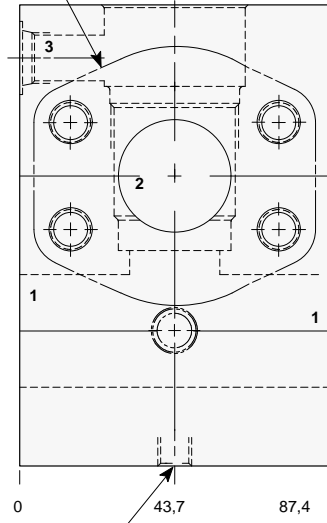
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port 1.25" SAE Code 61 flange port body with gauge port.

1.25" SAE Code 61
4-Bolt Flange Pattern
3 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.



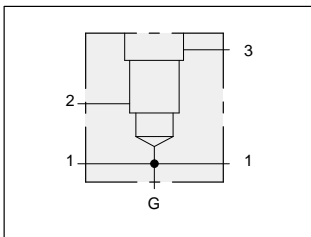
Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PPHB - ***	Page	3.11
PPHC - ***	Page	3.13

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

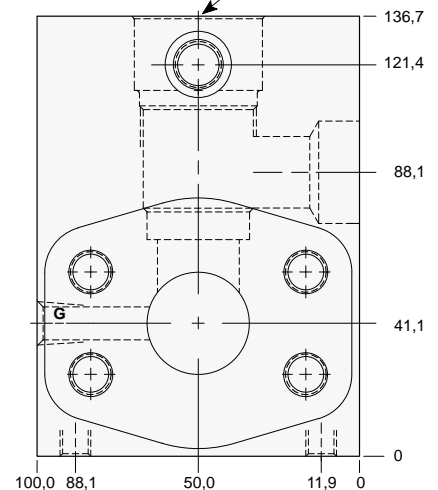
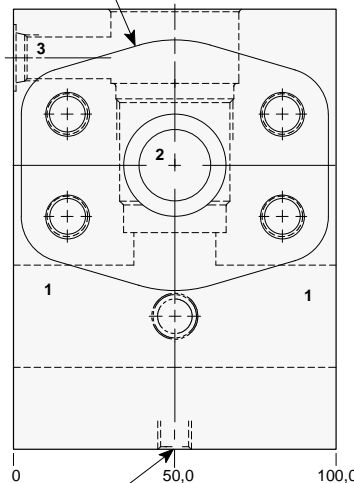
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	HHQ		HHQ/S	
Metric	.25 BSPP	.25 BSPP	HHQ/M		HHQ/T	



Through port 1.25" SAE Code 62 flange port body with gauge port.

1.25" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.



Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
PPHB - ***	Page	3.11
PPHC - ***	Page	3.13

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

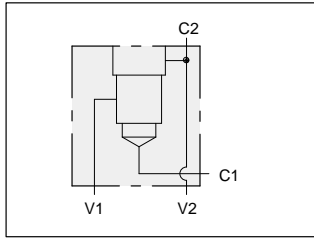
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	HH5		HH5/S	
Metric	.25 BSPP	.25 BSPP	HH5/M		HH5/T	



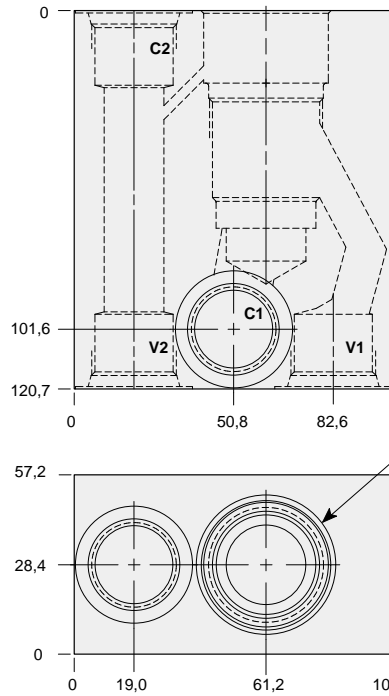
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Nipple mount body for load control applications.



T-17A Cavity
Locating Shoulder
Depth 23,1 mm.



**TYPICAL CARTRIDGES
USED WITH THIS BODY**

CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports V1, V2, C1, & C2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
SAE-12	ZRN		ZRN/S	
.25 BSPP	ZTW		ZTW/S	

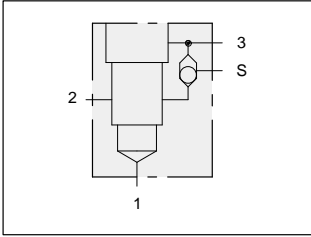


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

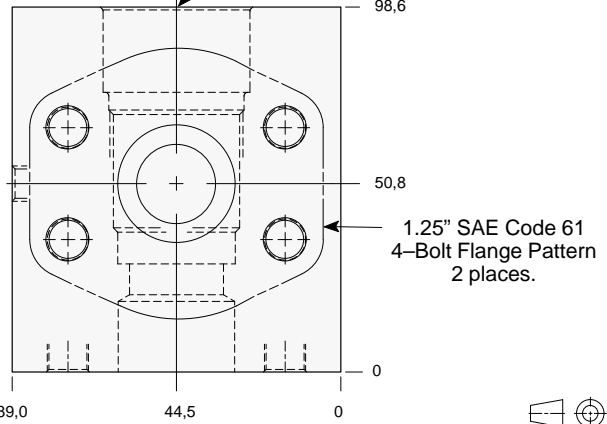
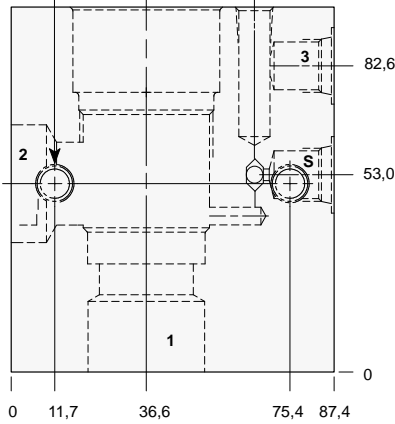
Series 3 T-17A



90 degree 1.25" SAE Code 61 flange port body with shuttle for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.

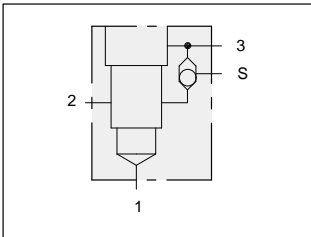


TYPICAL CARTRIDGES USED WITH THIS BODY

- CBGA - *** Page 4.11
- CBGG - *** Page 4.13
- CBCH - *** Page 4.41
- CKGB - *** Page 4.17

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports S & 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	HGQ		HGQ/S	
Metric	.25 BSPP	HGQ/M		HGQ/T	

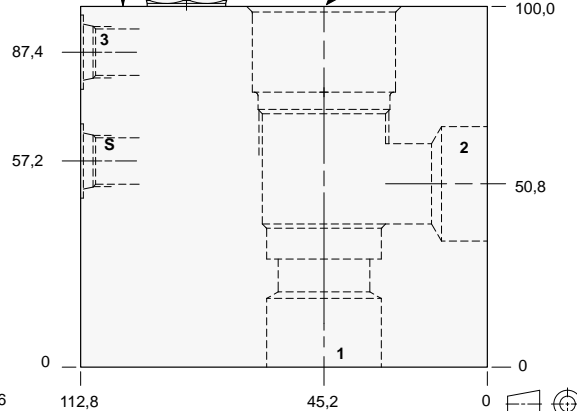
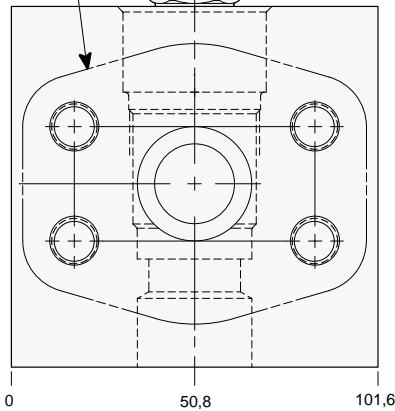


90 degree 1.25" SAE Code 62 flange port body with shuttle for load control applications.

1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.

CSAD-XXN

T-17A Cavity
Locating Shoulder
Depth 23,1 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBGA - *** Page 4.11
- CBGG - *** Page 4.13
- CBCH - *** Page 4.41
- CKGB - *** Page 4.17

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

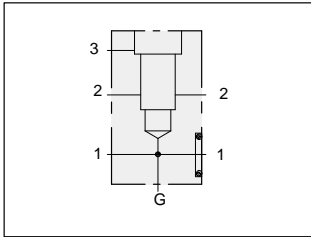
Mounting Hole Dimensions	Ports S & 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	HG5		HG5/S	
Metric	.25 BSPP	HG5/M		HG5/T	



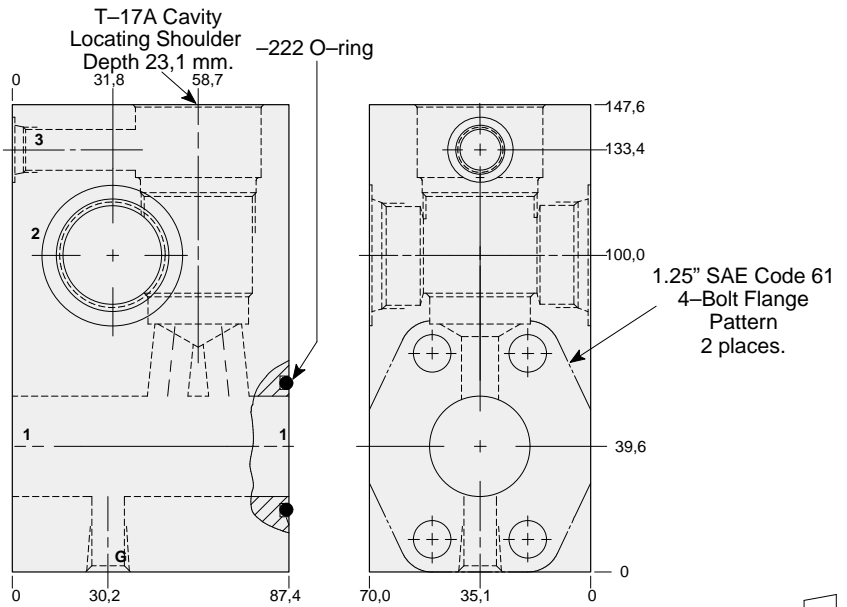
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

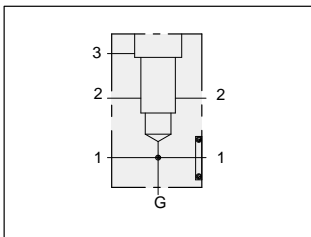


Sandwich mount through flange port 1.25" SAE Code 61 body with gauge port.

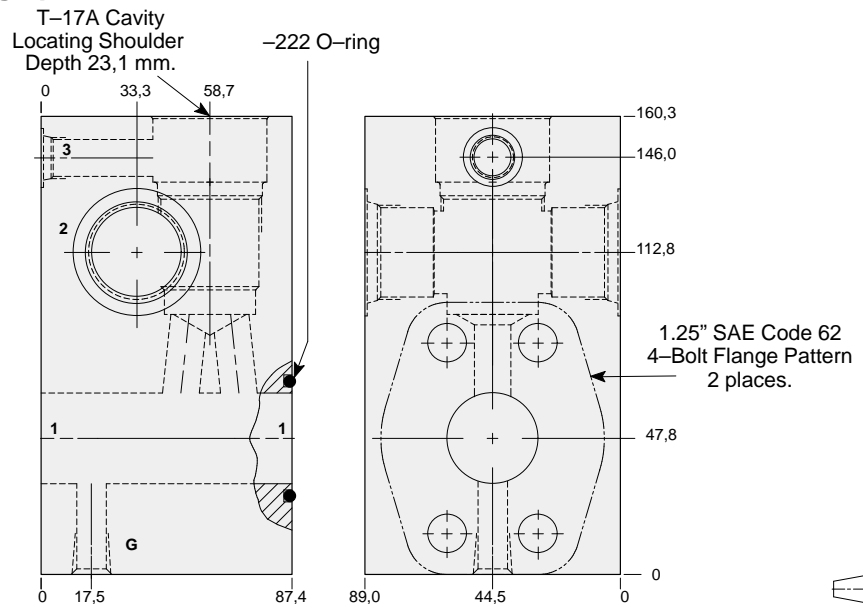


Note: ZMQ body has a 1.00 NPTF port in port 1 opposite O-ring.

Mounting Hole Dimensions	Port 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	ZMQ		ZMQ/S	
Inch	SAE-16	SAE-6	.25 NPTF	ZMS		ZMS/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	ZMT/M		ZMT/T	



Sandwich mount through flange port 1.25" SAE Code 62 body with gauge port.



Mounting Hole Dimensions	Port 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	WXZ		WXZ/S	
Inch	SAE-16	SAE-6	.25 NPTF	WXY		WXY/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	WXX/M		WXX/T	

TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

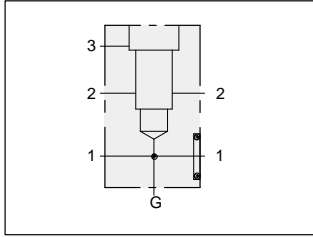


LINE MOUNT BODIES

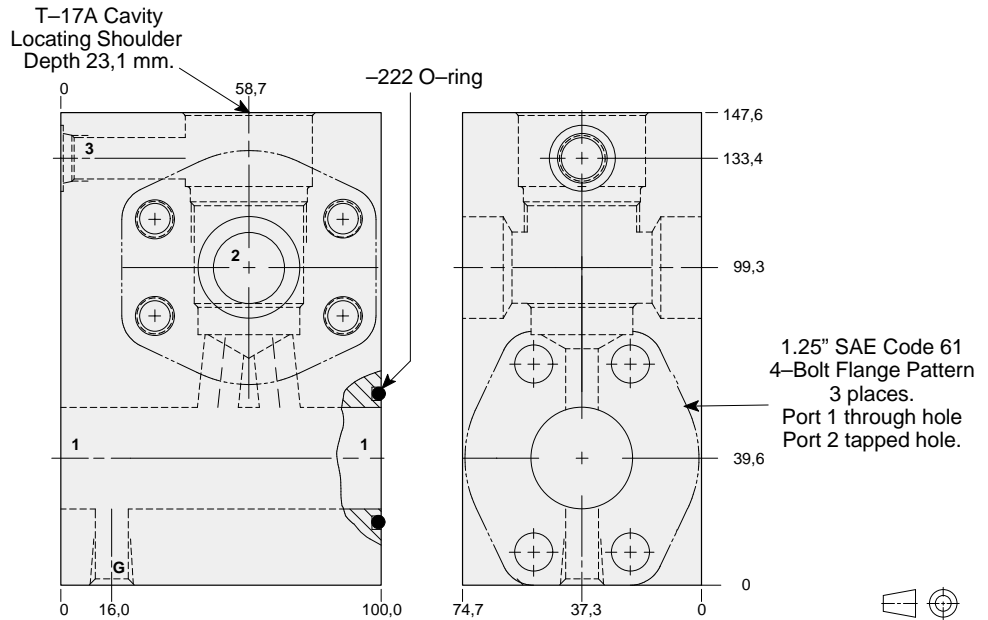


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-17A

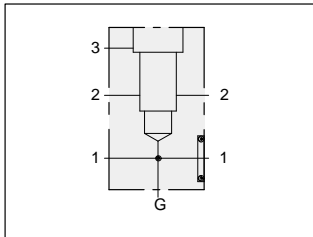


Sandwich mount through flange port 1.25" SAE Code 61 body with gauge port.

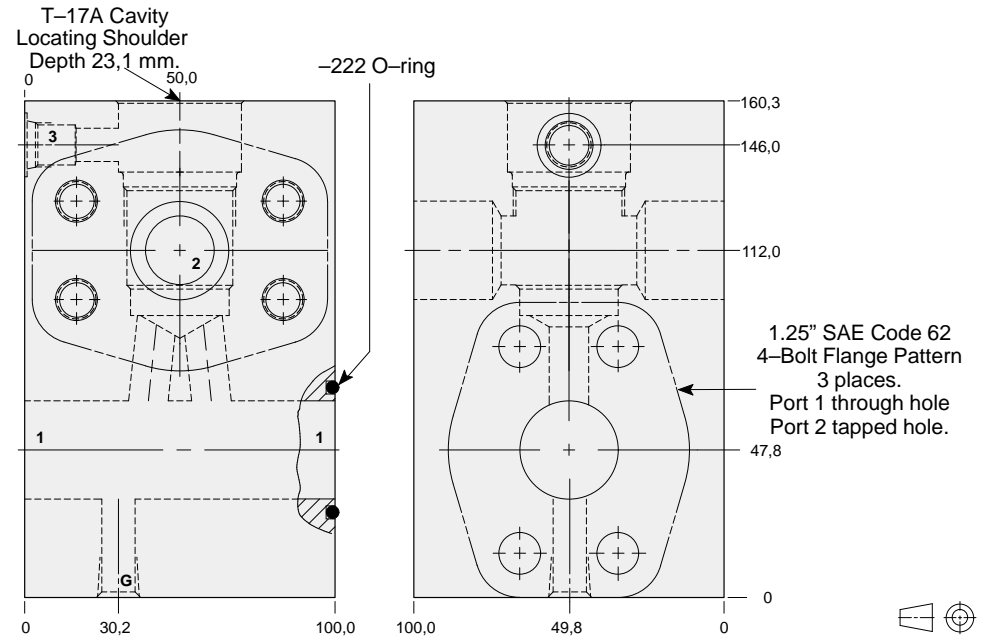


- TYPICAL CARTRIDGES USED WITH THIS BODY**
- RVGA - *** Page 1.19
 - RSHC - *** Page 2.07
 - SQHB - *** Page 2.09
 - RSHE - *** Page 2.11
 - SCGA - *** Page 2.13
- Cartridge seal type determines O-ring type.
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	ZMV		ZMV/S	
Metric	.25 BSPP	.25 BSPP	ZMV/M		ZMV/T	



Sandwich mount through flange port 1.25" SAE Code 62 body with gauge port.



- TYPICAL CARTRIDGES USED WITH THIS BODY**
- RVGA - *** Page 1.19
 - RSHC - *** Page 2.07
 - SQHB - *** Page 2.09
 - RSHE - *** Page 2.11
 - SCGA - *** Page 2.13
- Cartridge seal type determines O-ring type.
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

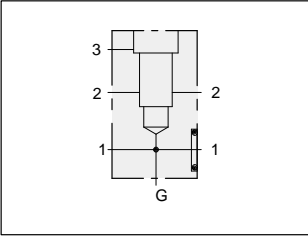
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	WYB		WYB/S	
Metric	.25 BSPP	.25 BSPP	WYB/M		WYB/T	



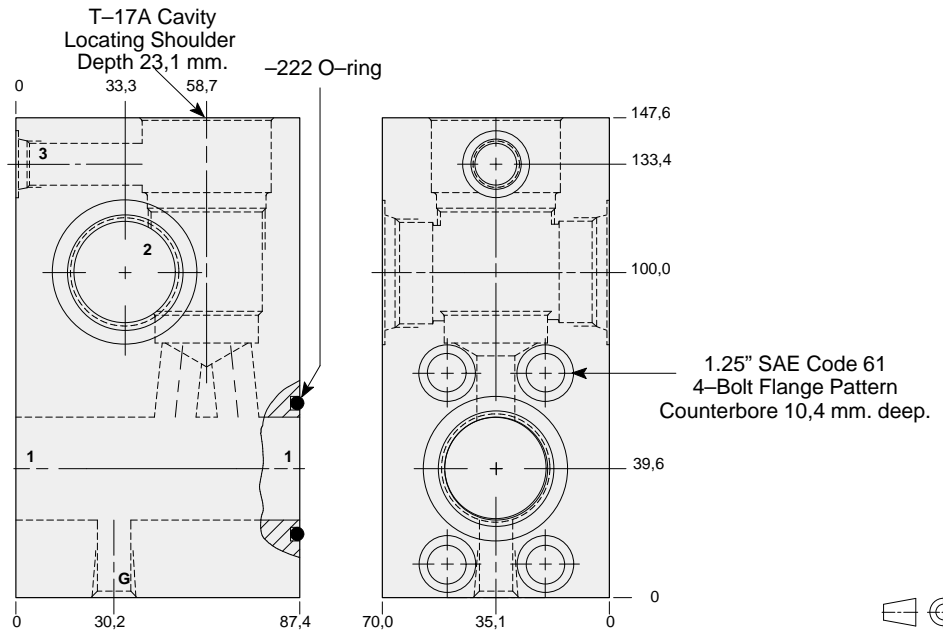
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Flange mount through port 1.25" SAE Code 61 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RVGA - *** Page 1.19
- RSHC - *** Page 2.07
- SQHB - *** Page 2.09
- RSHE - *** Page 2.11
- SCGA - *** Page 2.13

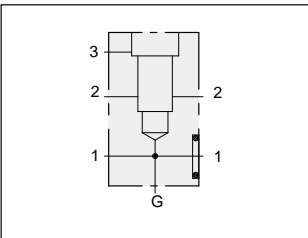
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

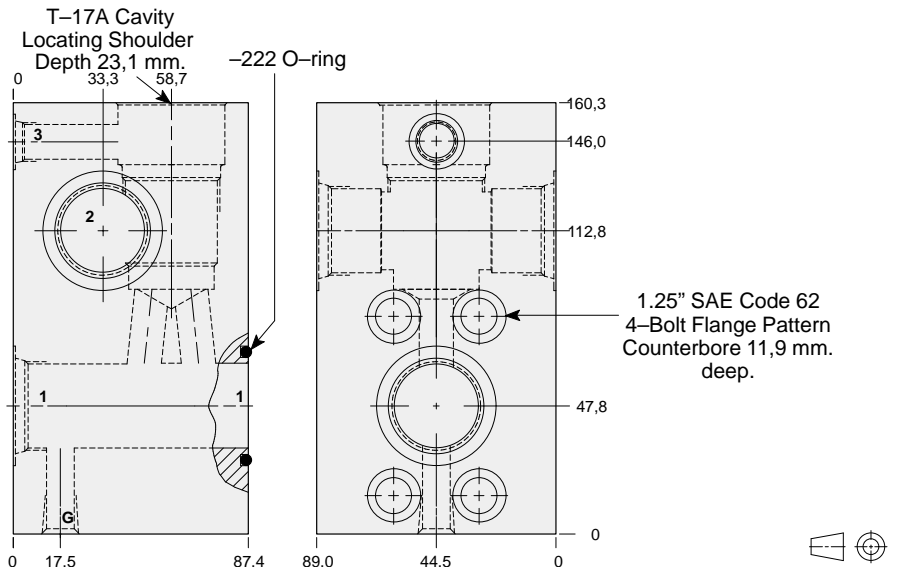
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	WYT		WYT/S	
Inch	SAE-16	SAE-6	.25 NPTF	WYS		WYS/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	WYR/M		WYR/T	



Flange mount through port 1.25" SAE Code 62 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RVGA - *** Page 1.19
- RSHC - *** Page 2.07
- SQHB - *** Page 2.09
- RSHE - *** Page 2.11
- SCGA - *** Page 2.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	WXW		WXW/S	
Inch	SAE-16	SAE-6	.25 NPTF	WXV		WXV/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	WXU/M		WXU/T	

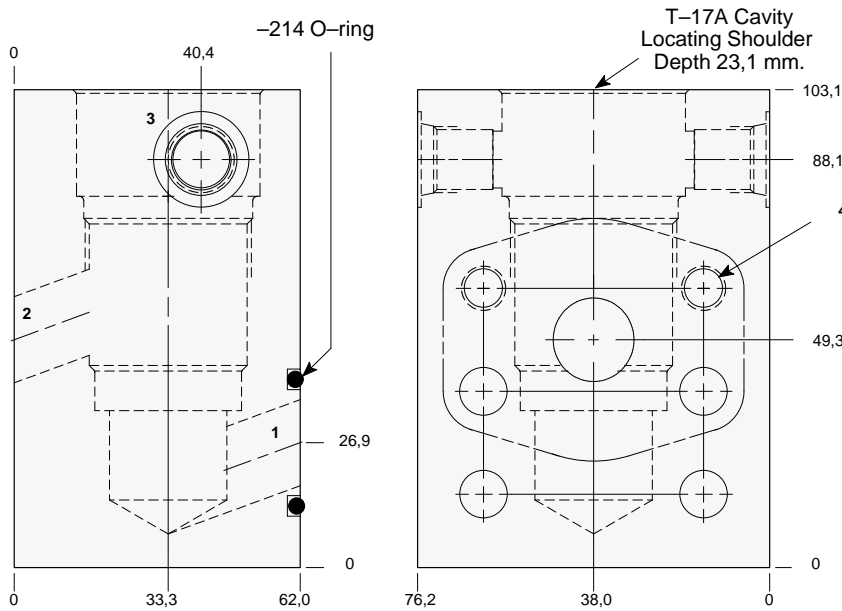
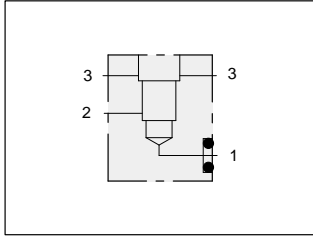


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Direct mount .75" SAE Code 61 body with through pilot/drain port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Cartridge seal type determines O-ring type.

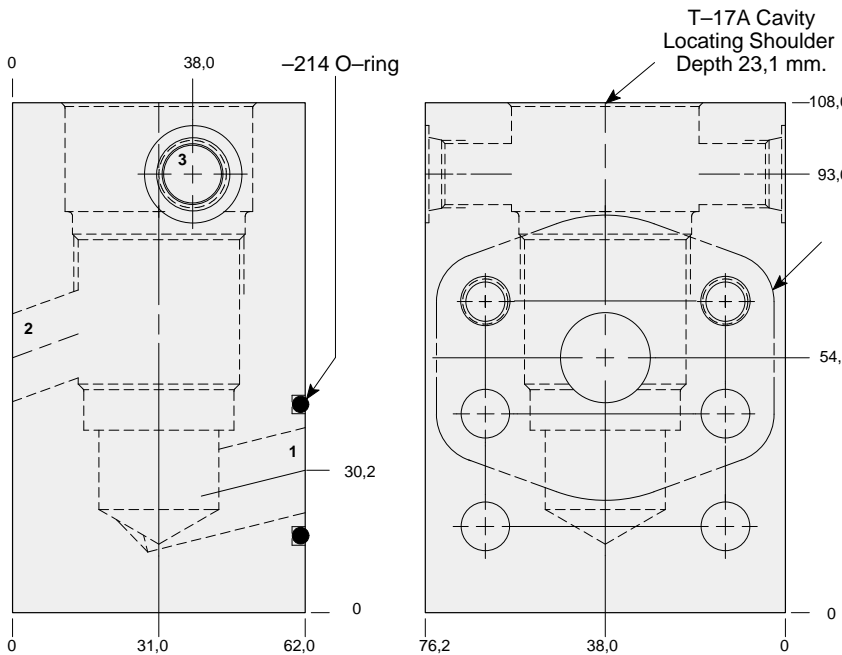
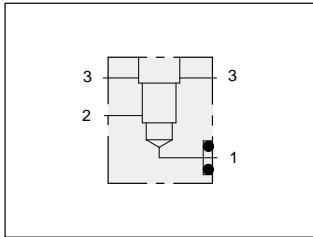
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	WGL		WGL/S	
Metric	.25 BSPP	WGL/M		WGL/T	

Direct mount .75" SAE Code 62 body with through pilot/drain port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

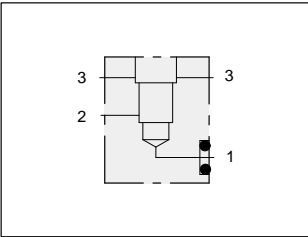
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	WNG		WNG/S	
Metric	.25 BSPP	WNG/M		WNG/T	



LINE MOUNT BODIES



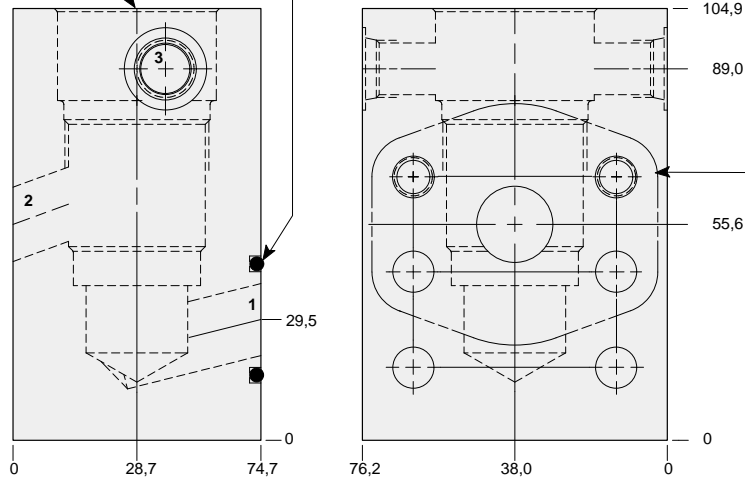
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Direct mount 1.00" SAE Code 61 body with through pilot/drain port.

T-17A Cavity Locating Shoulder
Depth 23,9 mm.

-219 O-ring



1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.
2 holes tapped
4 holes through

TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

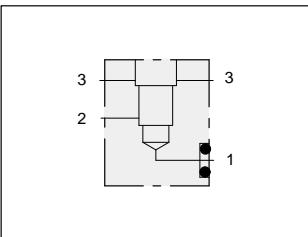
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

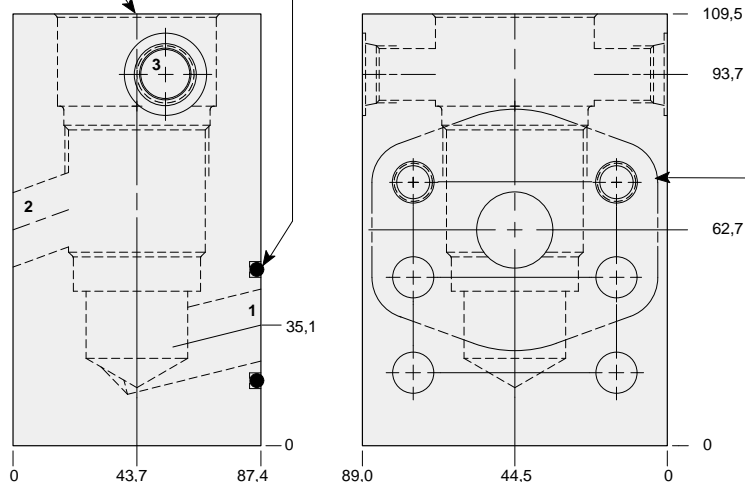
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZNW		ZNW/S	
Metric	.25 BSPP	ZNW/M		ZNW/T	



Direct mount 1.00" SAE Code 62 body with through pilot/drain port.

T-17A Cavity Locating Shoulder
Depth 23,9 mm.

-219 O-ring



1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.
2 holes tapped
4 holes through

TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZDR		ZDR/S	
Metric	.25 BSPP	ZDR/M		ZDR/T	

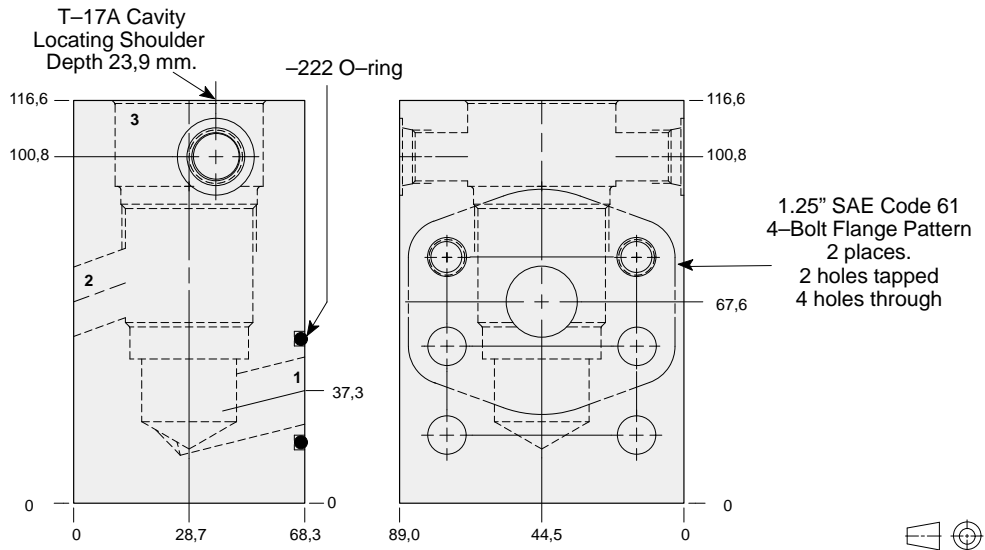
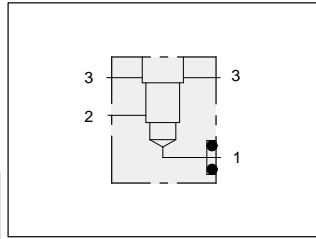


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Direct mount 1.25" SAE Code 61 body with through pilot/drain port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
RSHC - ***	Page	2.07
SQHB - ***	Page	2.09
RSHE - ***	Page	2.11
SCGA - ***	Page	2.13
CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17
LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15
COHA - ***	Page	10.13

Cartridge seal type determines O-ring type.

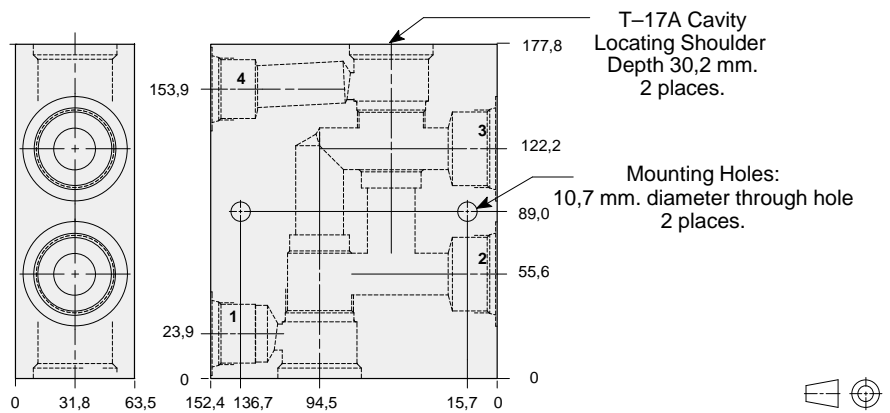
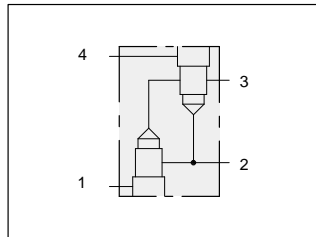
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZJY		ZJY/S	
Metric	.25 BSPP	ZJY/M		ZJY/T	

Two cavity body for flow control applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

FREA - ***	Page	6.03
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Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

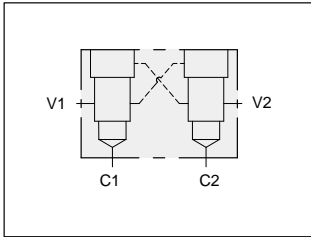
Ports 1 & 2	Port 2 & 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.75 NPTF	.75 NPTF	VXB		VXB/S	
1.00 NPTF	1.00 NPTF	VXC		VXC/S	
1.00 NPTF	1.25 NPTF	VXD		VXD/S	
SAE-12	SAE-12	VXF		VXF/S	
SAE-16	SAE-16	VXG		VXG/S	
SAE-16	SAE-20	VXH		VXH/S	
.75 BSPP	.75 BSPP	VXJ		VXJ/S	
1.00 BSPP	1.00 BSPP	VXK		VXK/S	
1.00 BSPP	1.25 BSPP	VXL		VXL/S	



LINE MOUNT BODIES

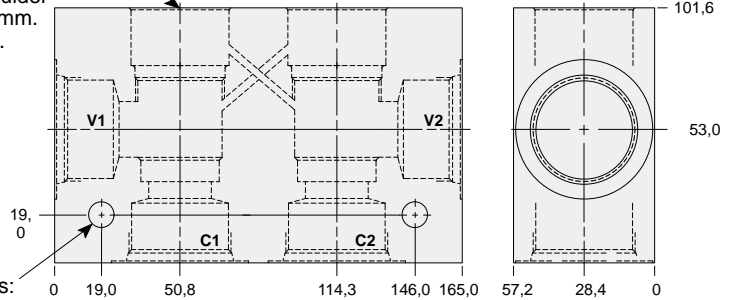


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 90 degree cross-piloted body for load control applications.

T-17A Cavity Locating Shoulder
Depth 23,1 mm.
2 places.



Mounting Holes:
10,7 mm. diameter through hole.
2 places.

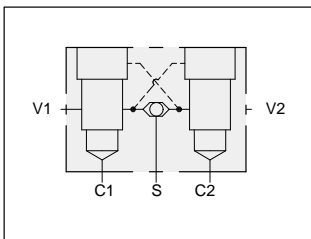
TYPICAL CARTRIDGES USED WITH THIS BODY

CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17

Instructions for ordering complete cartridge and body assemblies. Page viii

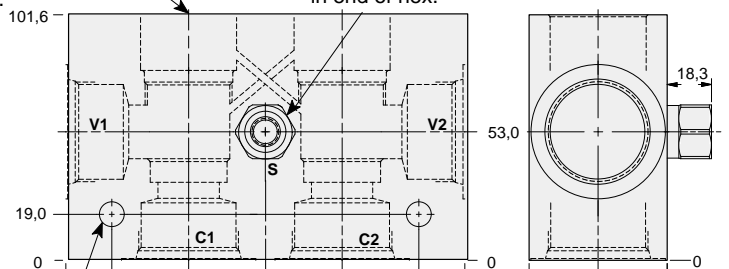
Pressure ratings, material specifications. Page 11.02

Ports C1, C2, & V1, V2	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.75 NPTF	YJD		YJD/S	
1.00 NPTF	YJE		YJE/S	
1.25 NPTF	YJF		YJF/S	
SAE-12	YJL		YJL/S	
SAE-16	YJM		YJM/S	
SAE-20	YJN		YJN/S	
.75 BSPP	YJW		YJW/S	
1.00 BSPP	YJX		YJX/S	
1.25 BSPP	YJY		YJY/S	



Two cavity 90 degree cross-piloted body with shuttle for load control applications.

T-17A Cavity Locating Shoulder
Depth 23,1 mm.
2 places.



Mounting Holes:
10,7 mm. diameter through hole.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15
CKGB - ***	Page	4.17

Cartridge seal type determines shuttle valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

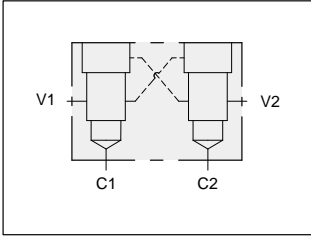
Ports C1, C2, & V1, V2	Shuttle Cartridge	Port S	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	CSAA - EXN	SAE-4	YKD		YKD/S	
1.00 NPTF	CSAA - EXN	SAE-4	YKE		YKE/S	
1.25 NPTF	CSAA - EXN	SAE-4	YKF		YKF/S	
SAE-12	CSAA - EXN	SAE-4	YKL		YKL/S	
SAE-16	CSAA - EXN	SAE-4	YKM		YKM/S	
SAE-20	CSAA - EXN	SAE-4	YKN		YKN/S	
.75 BSPP	CSAA - BXN	.25 BSPP	YKW		YKW/S	
1.00 BSPP	CSAA - BXN	.25 BSPP	YKX		YKX/S	
1.25 BSPP	CSAA - BXN	.25 BSPP	YKY		YKY/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

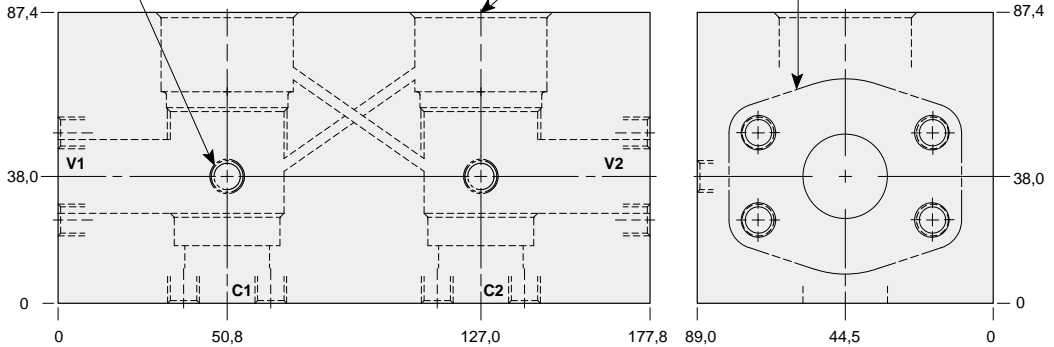


Two cavity cross-piloted 1.00" SAE Code 61 body for load control applications.

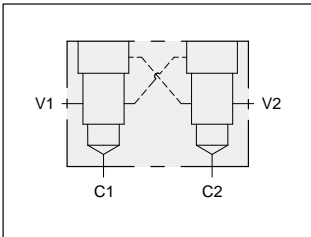
Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,9 mm.
2 places.

1.00" SAE Code 61
4-Bolt Flange Pattern
4 places.



Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	YJP		YJP/S	
Metric	YJP/M		YJP/T	

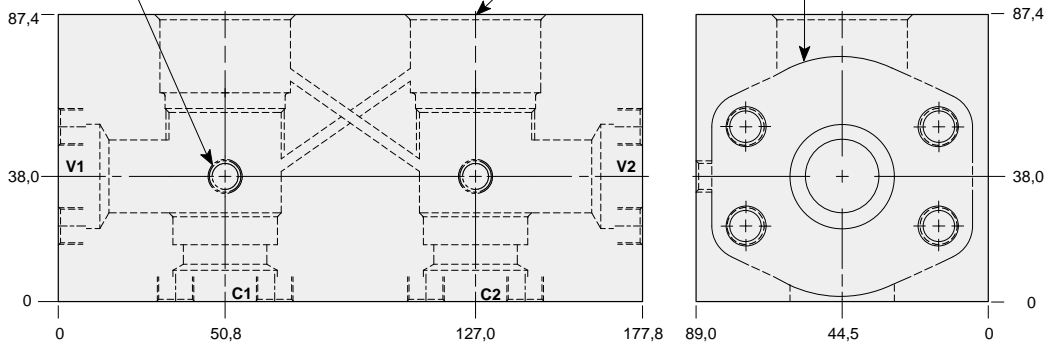


Two cavity cross-piloted 1.25" SAE Code 61 body for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-17A Cavity
Locating Shoulder
Depth 23,9 mm.
2 places.

1.25" SAE Code 61
4-Bolt Flange Pattern
4 places



Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	YJQ		YJQS	
Metric	YJQ/M		YJQ/T	

TYPICAL CARTRIDGES USED WITH THIS BODY

- CBGA - *** Page 4.11
- CBGG - *** Page 4.13
- CBGH - *** Page 4.15
- CKGB - *** Page 4.17

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

TYPICAL CARTRIDGES USED WITH THIS BODY

- CBGA - *** Page 4.11
- CBGG - *** Page 4.13
- CBGH - *** Page 4.15
- CKGB - *** Page 4.17

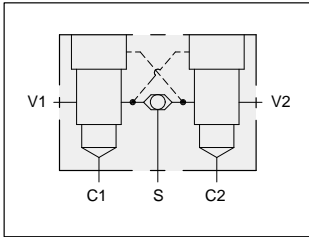
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03



LINE MOUNT BODIES



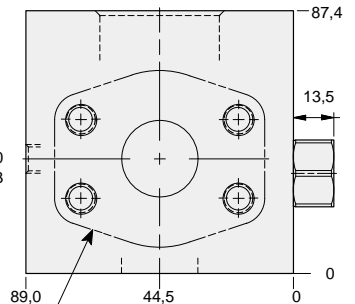
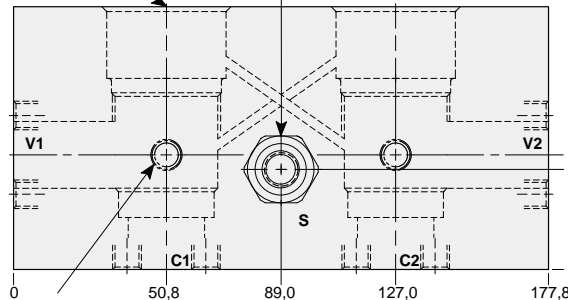
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity cross-piloted 1.00" SAE Code 61 body with shuttle for load control applications.

T-17A Cavity Locating Shoulder Depth 23,9 mm. 2 places.

Shuttle port in end of hex.



1.00" SAE Code 61 4-Bolt Flange Pattern 4 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

- CBGA - *** Page 4.11
- CBGG - *** Page 4.13
- CBGH - *** Page 4.15
- CKGB - *** Page 4.17

Cartridge seal type determines check valve seal type.

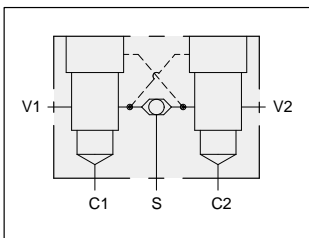
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Holes: (opposite side)
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep. 2 places.

Mounting Hole Dimensions	Shuttle Cartridge	Port 3	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	CSAA - EXN	SAE-6	YKP		YKP/S	
Metric	CSAA - BXN	.25 BSPP	YKP/M		YKP/T	



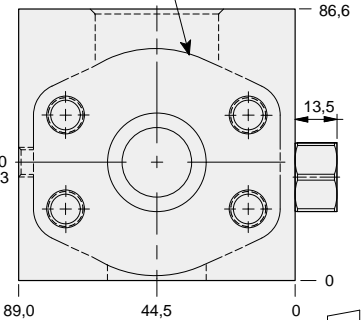
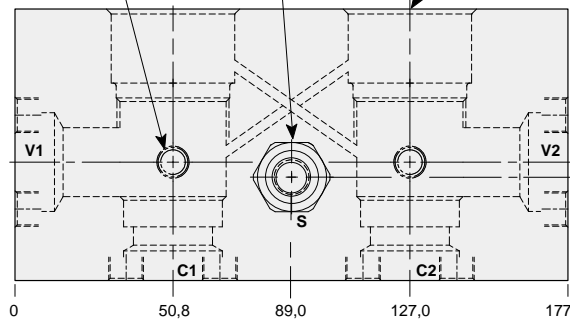
Two cavity cross-piloted 1.25" SAE Code 61 body with shuttle for load control applications.

Mounting Holes: (opposite side)
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep. 2 places.

Shuttle port in end of hex.

T-17A Cavity Locating Shoulder Depth 23,9 mm.

1.25" SAE Code 61 4-Bolt Flange Pattern 4 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBGA - *** Page 4.11
- CBGG - *** Page 4.13
- CBGH - *** Page 4.15
- CKGB - *** Page 4.17

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Shuttle Cartridge	Port 3	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	CSAA - EXN	SAE-6	YKQ		YKQ/S	
Metric	CSAA - BXN	.25 BSPP	YKQ/M		YKQ/T	

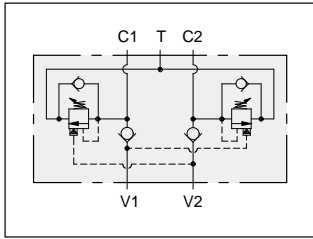
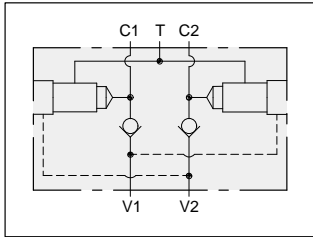


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-17A



TYPICAL CARTRIDGES USED WITH THIS BODY

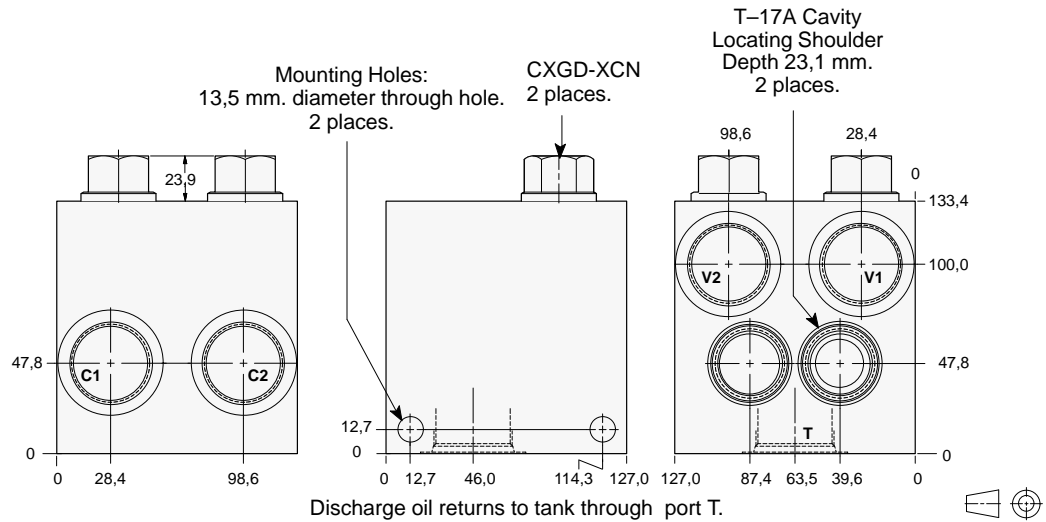
- CBGA - *** Page 4.11
- CBGG - *** Page 4.13
- CBGH - *** Page 4.15

Cartridge seal type determines check valve seal type.

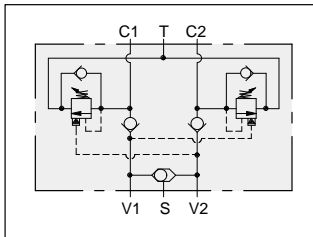
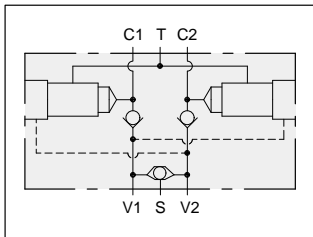
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Two cavity dual load control body with checks.



Ports C1, C2, & V1, V2	Port T	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
1.00 NPTF	1.25 NPTF	HME		HME/S	
1.25 NPTF	1.25 NPTF	HMF		HMF/S	
SAE-16	SAE-20	HMM		HMM/S	
SAE-20	SAE-20	HMN		HMN/S	
1.00 BSPP	1.25 BSPP	HMX		HMX/S	
1.25 BSPP	1.25 BSPP	HMY		HMY/S	



TYPICAL CARTRIDGES USED WITH THIS BODY

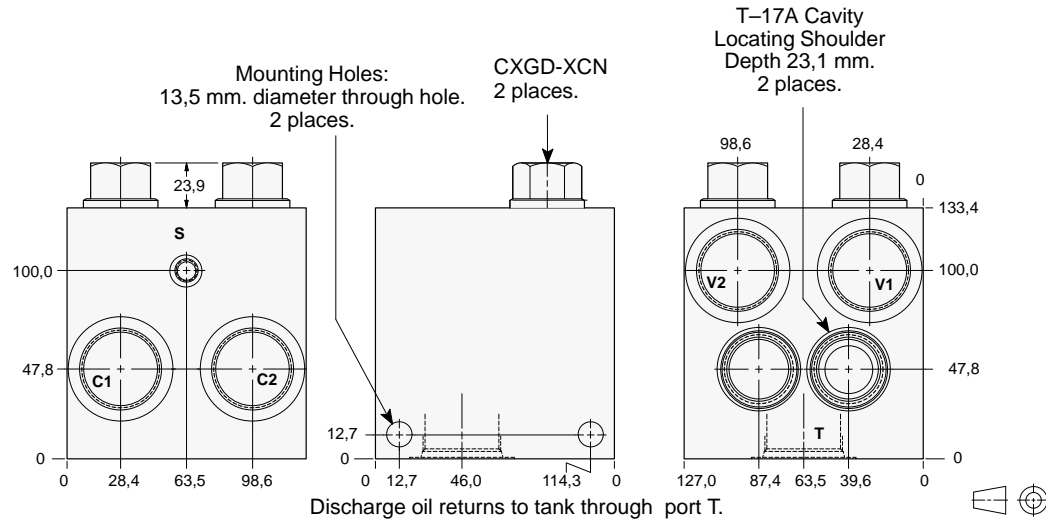
- CBGA - *** Page 4.11
- CBGG - *** Page 4.13
- CBGH - *** Page 4.15

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Two cavity dual load control body with checks and shuttle.



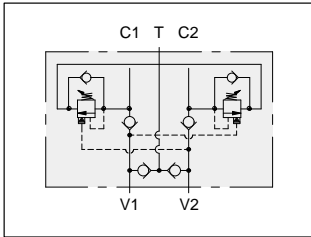
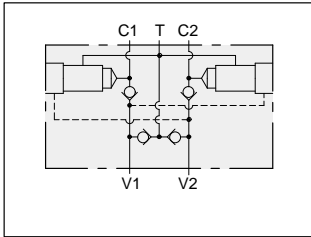
Ports C1, C2, & V1, V2	Port S	Port T	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
1.00 NPTF	.25 NPTF	1.25 NPTF	HNE		HNE/S	
1.25 NPTF	.25 NPTF	1.25 NPTF	HNF		HNF/S	
SAE-16	SAE-4	SAE-20	HNM		HNM/S	
SAE-20	SAE-4	SAE-20	HNN		HNN/S	
1.00 BSPP	.25 BSPP	1.25 BSPP	HNX		HNX/S	
1.25 BSPP	.25 BSPP	1.25 BSPP	HNY		HNY/S	



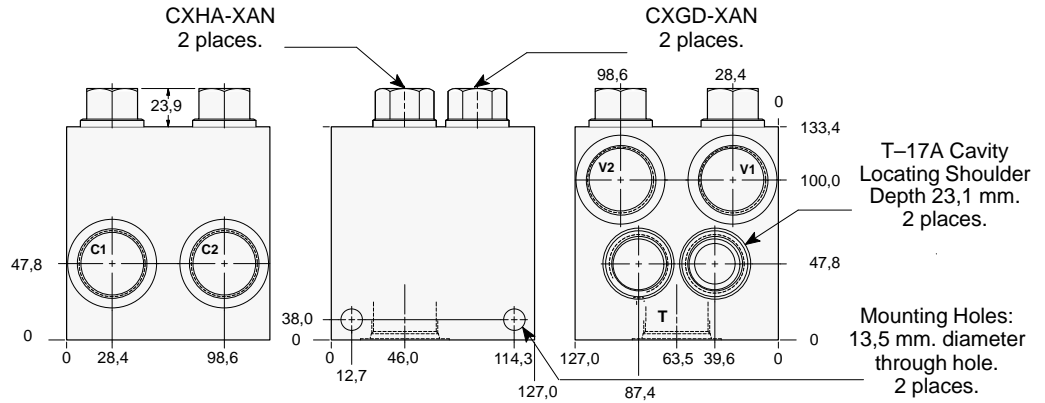
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity dual load control body with make-up checks.



T-17A Cavity Locating Shoulder Depth 23,1 mm. 2 places.

Mounting Holes: 13,5 mm. diameter through hole. 2 places.

Discharge oil returns to tank through directional valve or port T.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15

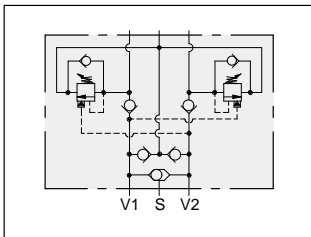
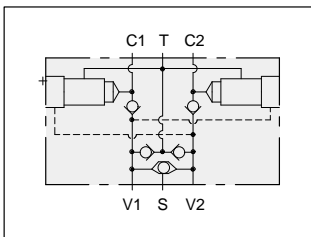
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

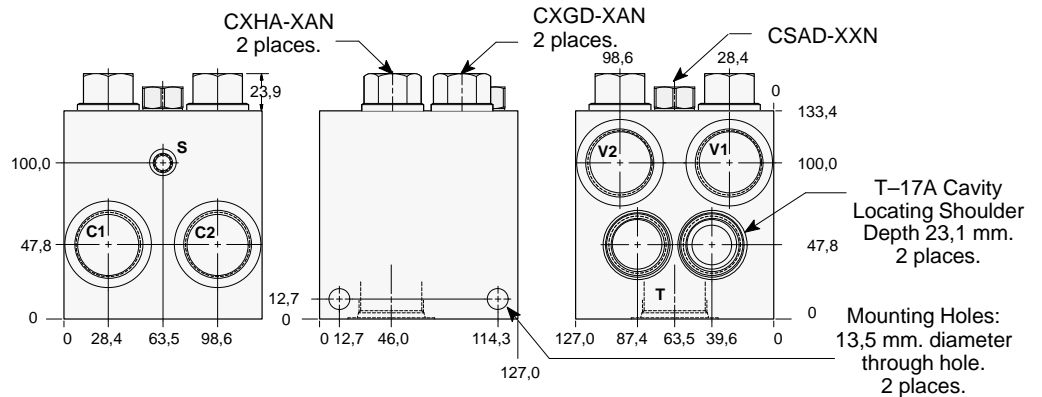
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Ports C1, C2, & V1, V2	Port T	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
1.00 NPTF	1.25 NPTF	HPE		HPE/S	
1.25 NPTF	1.25 NPTF	HPF		HPF/S	
SAE-16	SAE-20	HPM		HPM/S	
SAE-20	SAE-20	HPN		HPN/S	
1.00 BSPP	1.25 BSPP	HPX		HPX/S	
1.25 BSPP	1.25 BSPP	HPY		HPY/S	



Two cavity dual load control body with make-up checks and shuttle.



T-17A Cavity Locating Shoulder Depth 23,1 mm. 2 places.

Mounting Holes: 13,5 mm. diameter through hole. 2 places.

Discharge oil returns to tank through directional valve or port T.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBGA - ***	Page	4.11
CBGG - ***	Page	4.13
CBGH - ***	Page	4.15

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Ports C1, C2, & V1, V2	Port S	Port T	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
1.00 NPTF	.25 NPTF	1.25 NPTF	HQE		HQE/S	
1.25 NPTF	.25 NPTF	1.25 NPTF	HQF		HQF/S	
SAE-16	SAE-4	SAE-20	HQM		HQM/S	
SAE-20	SAE-4	SAE-20	HQN		HQN/S	
1.00 BSPP	.25 BSPP	1.25 BSPP	HQX		HQX/S	
1.25 BSPP	.25 BSPP	1.25 BSPP	HQY		HQY/S	

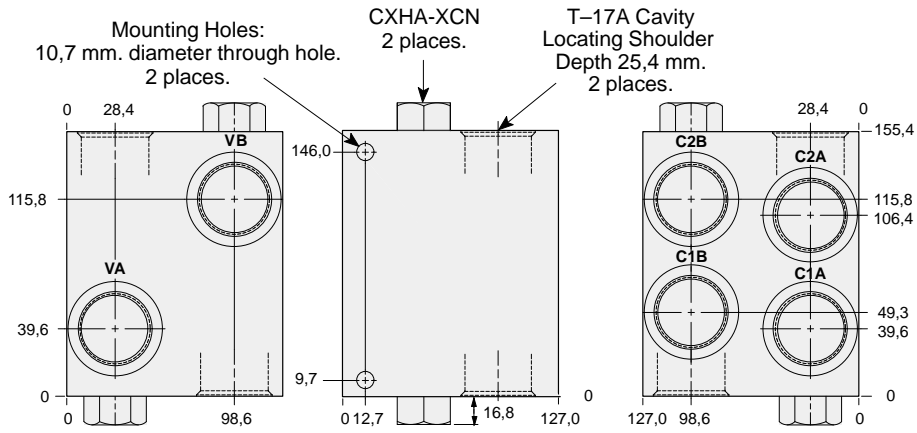
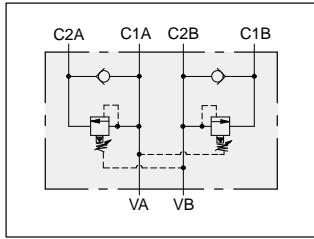
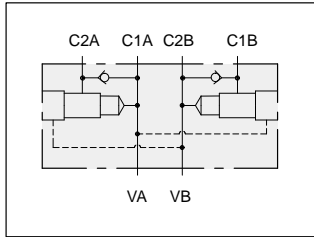


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Two cavity dual sequence body with reverse free flow checks.



TYPICAL CARTRIDGES USED WITH THIS BODY

RSHC - *** Page 2.07
SQHB - *** Page 2.09

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

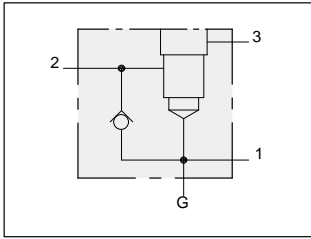
All Ports	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.75 NPTF	H8D		H8D/S	
1.00 NPTF	H8E		H8E/S	
1.25 NPTF	H8F		H8F/S	
SAE-12	H8L		H8L/S	
SAE-16	H8M		H8M/S	
SAE-20	H8N		H8N/S	
.75 BSPP	H8W		H8W/S	
1.00 BSPP	H8X		H8X/S	
1.25 BSPP	H8Y		H8Y/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

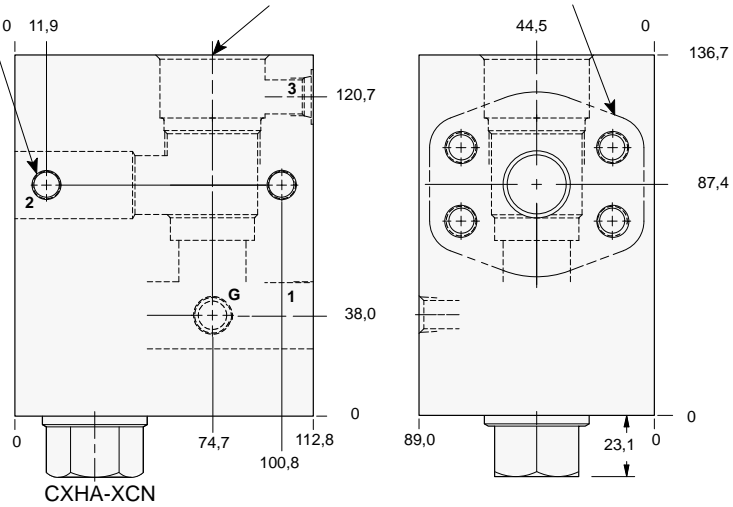


1.00" SAE Code 62 flange port body with reverse free flow check and gauge port for sequence applications.

Mounting Holes
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.

T-17A Cavity
 Locating Shoulder
 Depth 23,9 mm.

1.00" SAE Code 62
 4-Bolt Flange Pattern
 2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

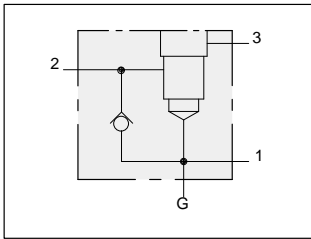
- RSHC - *** Page 2.07
- SQHB - *** Page 2.09
- RSHE - *** Page 2.11

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	H64		H64/S	
Metric	.25 BSPP	.25 BSPP	H64/M		H64/T	

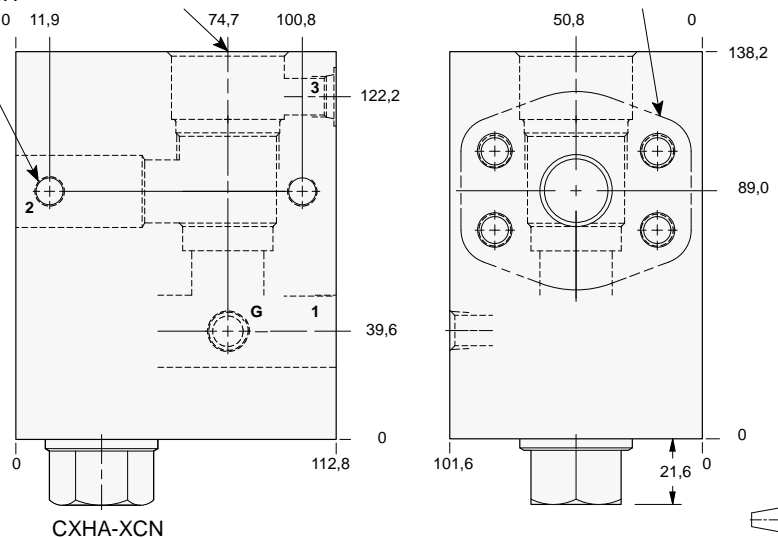


1.25" SAE Code 62 flange port body with reverse free flow check and gauge port for sequence applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.

T-17A Cavity
 Locating Shoulder
 Depth 23,9 mm.

1.25" SAE Code 62
 4-Bolt Flange Pattern
 2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RSHC - *** Page 2.07
- SQHB - *** Page 2.09
- RSHE - *** Page 2.11

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	H65		H65/S	
Metric	.25 BSPP	.25 BSPP	H65/M		H65/T	

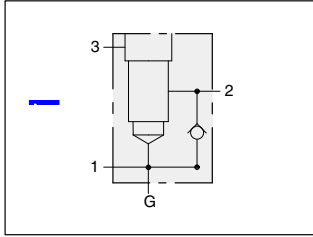


LINE MOUNT BODIES

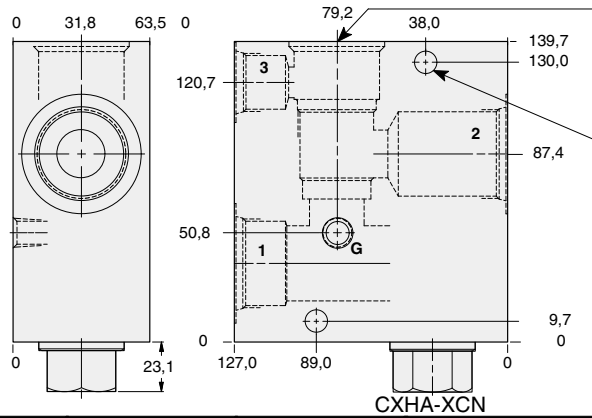


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-17A



Body with reverse free flow check and gauge port for sequence applications.



T-17A Cavity
Locating Shoulder
Depth 23,1 mm.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.

CXHA-XCN



TYPICAL CARTRIDGES USED WITH THIS BODY

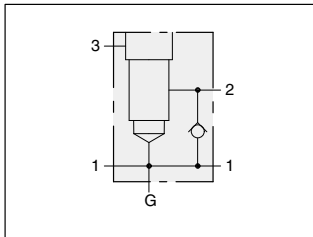
- RSHC - *** Page 2.07
- SQHB - *** Page 2.09
- RSHE - *** Page 2.11

Cartridge seal type determines check valve seal type.

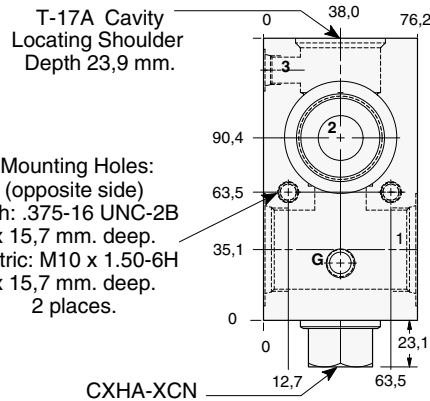
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	.25 NPTF	H6D		H6D/S	
1.00 NPTF	.25 NPTF	.25 NPTF	H6E		H6E/S	
1.25 NPTF	.25 NPTF	.25 NPTF	H6F		H6F/S	
SAE-12	SAE-6	.25 NPTF	H6L		H6L/S	
SAE-16	SAE-6	.25 NPTF	H6M		H6M/S	
SAE-20	SAE-6	.25 NPTF	H6N		H6N/S	
.75 BSPP	.25 BSPP	.25 BSPP	H6W		H6W/S	
1.00 BSPP	.25 BSPP	.25 BSPP	H6X		H6X/S	
1.25 BSPP	.25 BSPP	.25 BSPP	H6Y		H6Y/S	



Through port body with reverse free flow check and gauge port for sequence applications.



T-17A Cavity
Locating Shoulder
Depth 23,9 mm.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

CXHA-XCN



TYPICAL CARTRIDGES USED WITH THIS BODY

- RSHC - *** Page 2.07
- SQHB - *** Page 2.09
- RSHE - *** Page 2.11

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

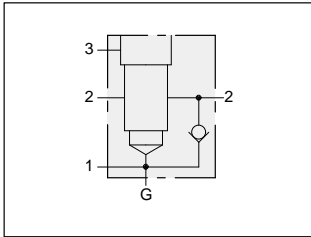
Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	.25 NPTF	H7D		H7D/S	
1.00 NPTF	.25 NPTF	.25 NPTF	H7E		H7E/S	
1.25 NPTF	.25 NPTF	.25 NPTF	H7F		H7F/S	
SAE-12	SAE-6	.25 NPTF	H7L		H7L/S	
SAE-16	SAE-6	.25 NPTF	H7M		H7M/S	
SAE-20	SAE-6	.25 NPTF	H7N		H7N/S	
.75 BSPP	.25 BSPP	.25 BSPP	H7W		H7W/S	
1.00 BSPP	.25 BSPP	.25 BSPP	H7X		H7X/S	
1.25 BSPP	.25 BSPP	.25 BSPP	H7Y		H7Y/S	



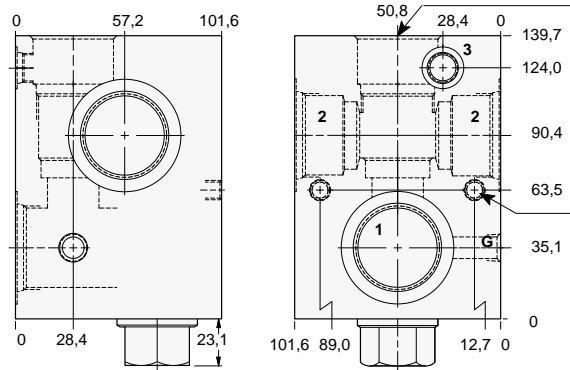
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port body with reverse free flow check and gauge port for reducing applications.



T-17A Cavity
Locating Shoulder
Depth 23,9 mm.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



**TYPICAL CARTRIDGES
USED WITH THIS BODY**

- PBHB - *** Page 3.07
- PBHC - *** Page 3.09

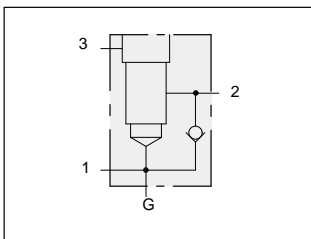
Cartridge seal type determines
check valve seal type.

Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

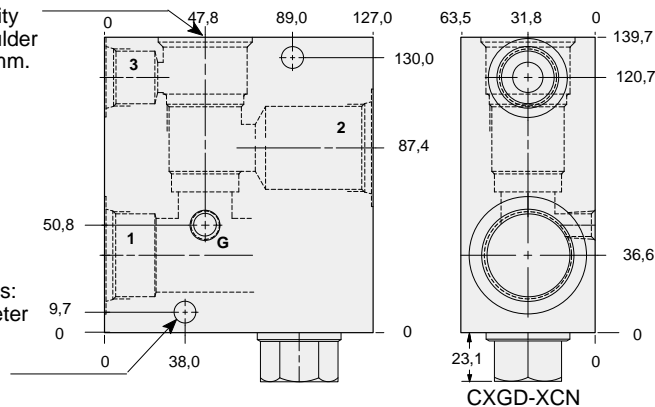
CXGD-XCN

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	.25 NPTF	H3D		H3D/S	
1.00 NPTF	.25 NPTF	.25 NPTF	H3E		H3E/S	
1.25 NPTF	.25 NPTF	.25 NPTF	H3F		H3F/S	
SAE-12	SAE-6	.25 NPTF	H3L		H3L/S	
SAE-16	SAE-6	.25 NPTF	H3M		H3M/S	
SAE-20	SAE-6	.25 NPTF	H3N		H3N/S	
.75 BSPP	.25 BSPP	.25 BSPP	H3W		H3W/S	
1.00 BSPP	.25 BSPP	.25 BSPP	H3X		H3X/S	
1.25 BSPP	.25 BSPP	.25 BSPP	H3Y		H3Y/S	



Body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.

T-17A Cavity
Locating Shoulder
Depth 26,9 mm.



Mounting Holes:
10,7 mm. diameter
through hole.
2 places.

CXGD-XCN



**TYPICAL CARTRIDGES
USED WITH THIS BODY**

- PBHB - *** Page 3.07
- PPHC - *** Page 3.13

Cartridge seal type determines
check valve seal type.

Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	.75 NPTF	.25 NPTF	H4D		H4D/S	
1.00 NPTF	.75 NPTF	.25 NPTF	H4E		H4E/S	
1.25 NPTF	.75 NPTF	.25 NPTF	H4F		H4F/S	
SAE-12	SAE-12	.25 NPTF	H4L		H4L/S	
SAE-16	SAE-12	.25 NPTF	H4M		H4M/S	
SAE-20	SAE-12	.25 NPTF	H4N		H4N/S	
.75 BSPP	.75 BSPP	.25 BSPP	H4W		H4W/S	
1.00 BSPP	.75 BSPP	.25 BSPP	H4X		H4X/S	
1.25 BSPP	.75 BSPP	.25 BSPP	H4Y		H4Y/S	

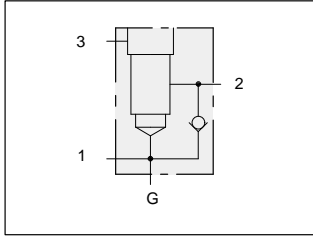


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

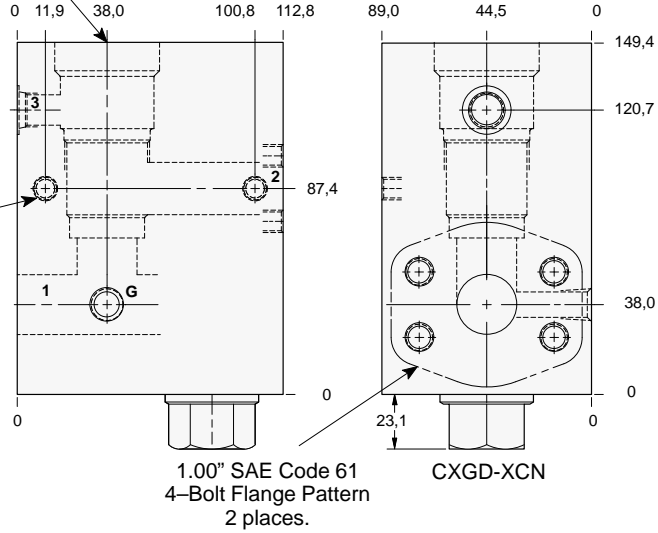
Series 3 T-17A



1.00" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications.

T-17A Cavity
Locating Shoulder
Depth 36,6 mm.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PBHB - *** Page 3.07
PBHC - *** Page 3.09

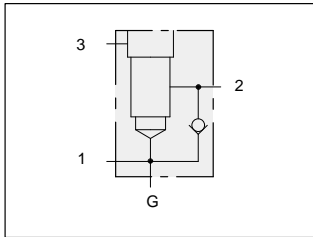
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

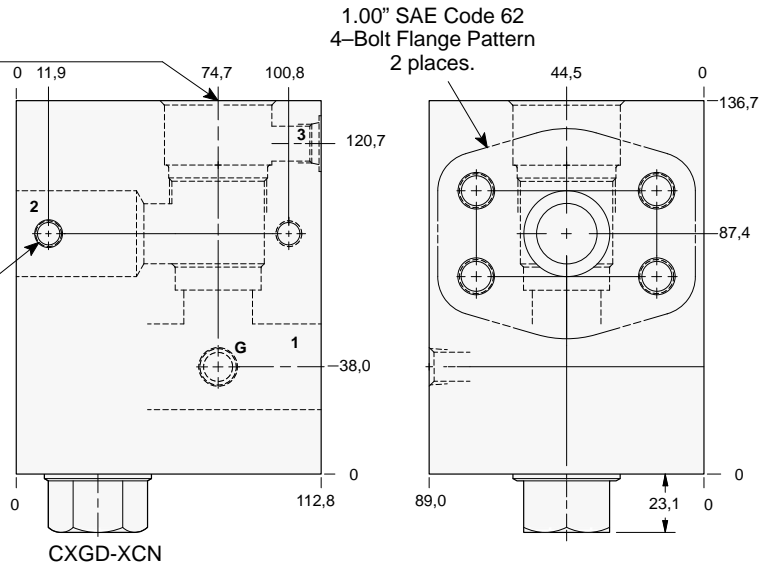
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	H2P		H2P/S	
Metric	.25 BSPP	.25 BSPP	H2P/M		H2P/T	



1.00" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications.

T-17A Cavity
Locating Shoulder
Depth 23,9 mm.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PBHB - *** Page 3.07
PBHC - *** Page 3.09

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

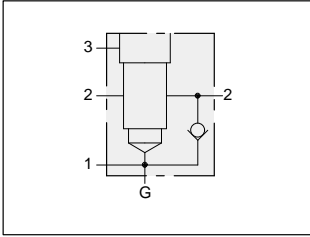
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	H24		H24/S	
Metric	.25 BSPP	.25 BSPP	H24/M		H24/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port 1.00" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

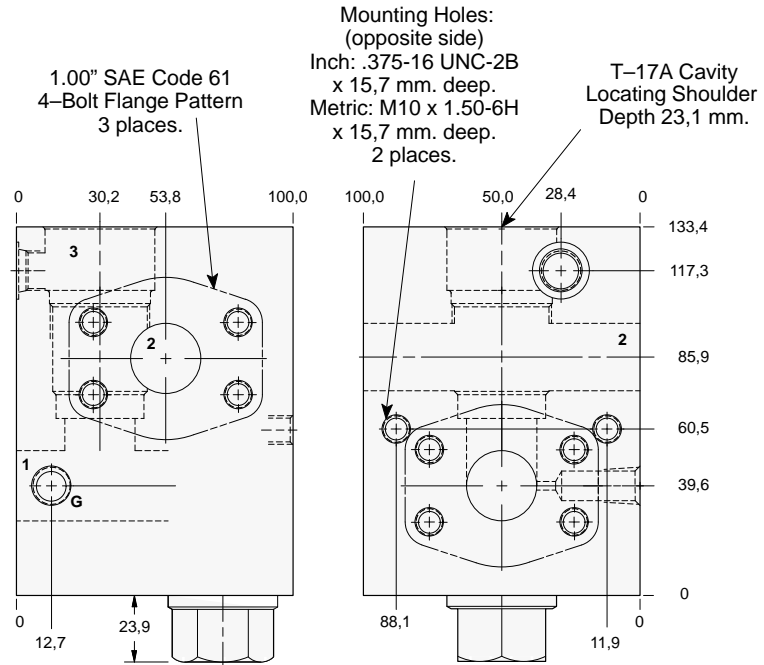
PBHB - *** Page 3.07
PBHC - *** Page 3.09

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



CXGD-XCN

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	H3P		H3P/S	
Metric	.25 BSPP	.25 BSPP	H3P/M		H3P/T	

Series 3 T-17A

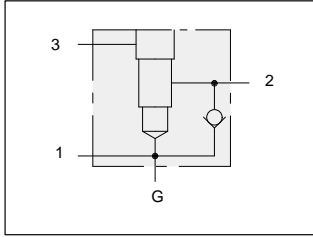


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-17A

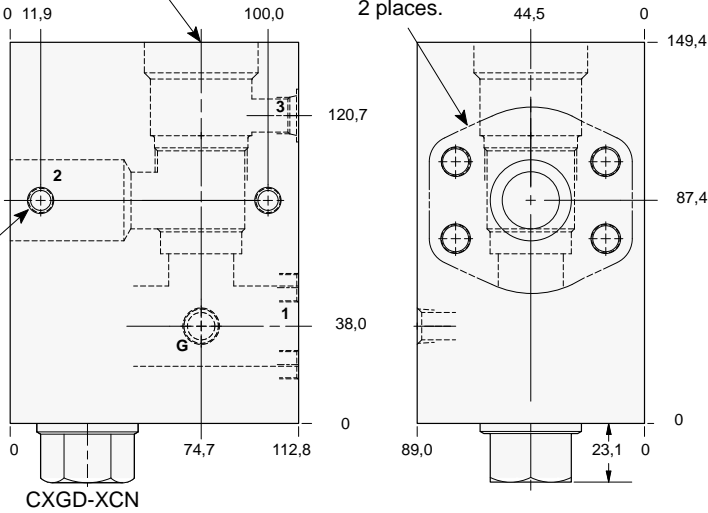


1.25" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications.

T-17A Cavity Locating Shoulder Depth 36,6 mm.

1.25" SAE Code 61 4-Bolt Flange Pattern 2 places.

Mounting Holes:
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep.
2 places.

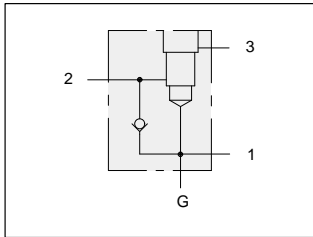


CXGD-XCN



- TYPICAL CARTRIDGES USED WITH THIS BODY**
- PBHB - *** Page 3.07
 - PBHC - *** Page 3.09
- Cartridge seal type determines check valve seal type.
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	H2Q		H2Q/S	
Metric	.25 BSPP	.25 BSPP	H2Q/M		H2Q/T	

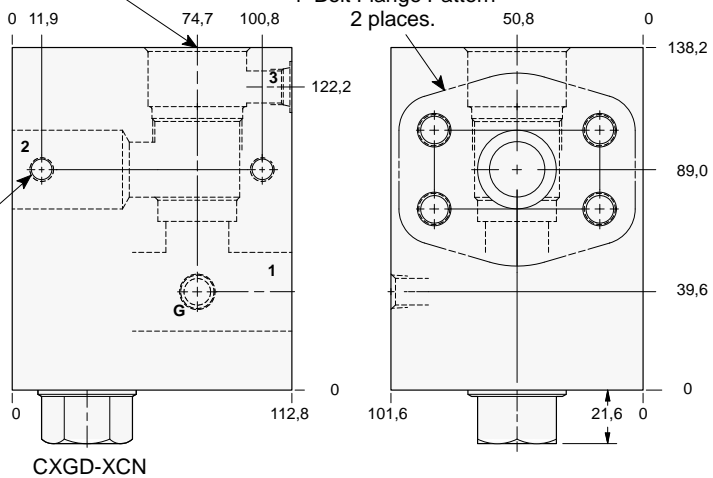


1.25" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications.

T-17A Cavity Locating Shoulder Depth 23,9 mm.

1.25" SAE Code 62 4-Bolt Flange Pattern 2 places.

Mounting Holes:
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep.
2 places.



CXGD-XCN



- TYPICAL CARTRIDGES USED WITH THIS BODY**
- PBHB - *** Page 3.07
 - PBHC - *** Page 3.09
- Cartridge seal type determines check valve seal type.
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

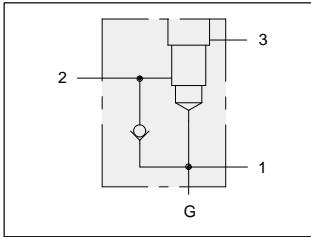
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	H25		H25/S	
Metric	.25 BSPP	.25 BSPP	H25/M		H25/T	



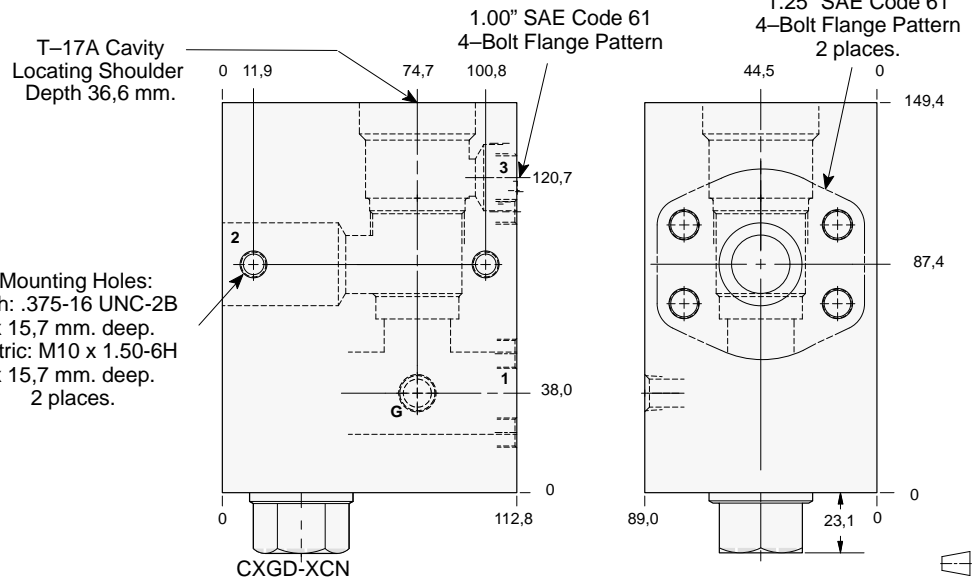
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



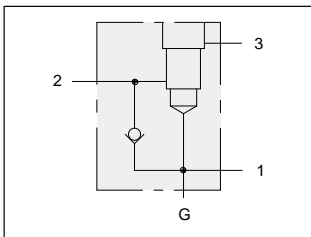
1.25" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.



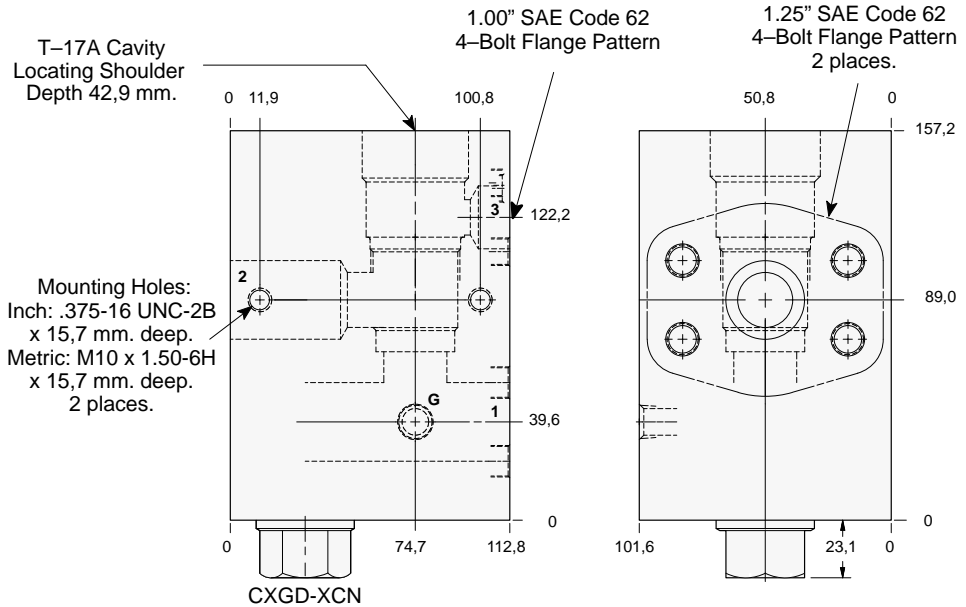
TYPICAL CARTRIDGES USED WITH THIS BODY

- PPHB - *** Page 3.11
- PPHC - *** Page 3.13
- Cartridge seal type determines check valve seal type.
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3 SAE Code 61	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.00"	.25 NPTF	H4Q		H4Q/S	
Metric	1.00"	.25 BSPP	H4Q/M		H4Q/T	



1.25" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

- PPHB - *** Page 3.11
- PPHC - *** Page 3.13
- Cartridge seal type determines check valve seal type.
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3 SAE Code 62	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.00"	.25 NPTF	H45		H45/S	
Metric	1.00"	.25 BSPP	H45/M		H45/T	

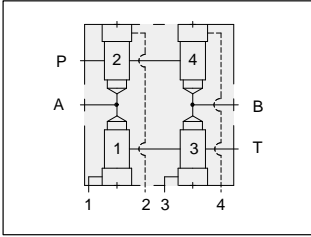


LINE MOUNT BODIES



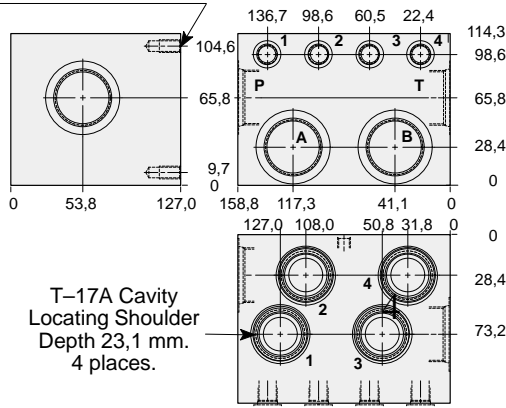
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-17A



Four cavity four-way logic body for directional applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.



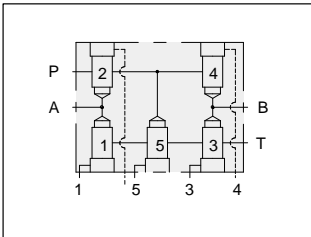
TYPICAL CARTRIDGES USED WITH THIS BODY

LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15

Instructions for ordering complete cartridge and body assemblies. Page viii

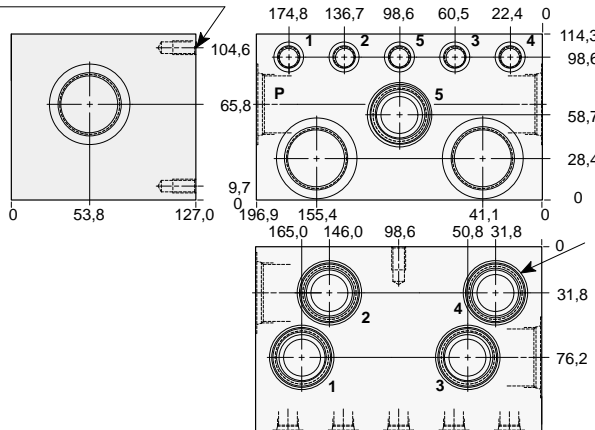
Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Ports A & B P & T	Ports 1 & 2, 3 & 4	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	YRS		YRS/S	
Inch	1.00 NPTF	.25 NPTF	YRB		YRB/S	
Inch	1.25 NPTF	.25 NPTF	YRO		YRO/S	
Inch	SAE-12	SAE-6	YRN		YRN/S	
Inch	SAE-16	SAE-6	YRR		YRR/S	
Inch	SAE-20	SAE-6	YRL		YRL/S	
Metric	.75 BSPP	.25 BSPP	YRK		YRK/S	
Metric	1.00 BSPP	.25 BSPP	YRJ		YRJ/S	
Metric	1.25 BSPP	.25 BSPP	YRG		YRG/S	



Five cavity four-way logic body for directional applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

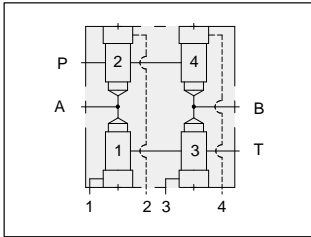
Mounting Hole Dimensions	Ports A & B P & T	Ports 1, 2, 3, 4 & 5	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	YQS		YQS/S	
Inch	1.00 NPTF	.25 NPTF	YQB		YQB/S	
Inch	1.25 NPTF	.25 NPTF	YQO		YQO/S	
Inch	SAE-12	SAE-6	YQN		YQN/S	
Inch	SAE-16	SAE-6	YQR		YQR/S	
Inch	SAE-20	SAE-6	YQL		YQL/S	
Metric	.75 BSPP	.25 BSPP	YQK		YQK/S	
Metric	1.00 BSPP	.25 BSPP	YQJ		YQJ/S	
Metric	1.25 BSPP	.25 BSPP	YQG		YQG/S	



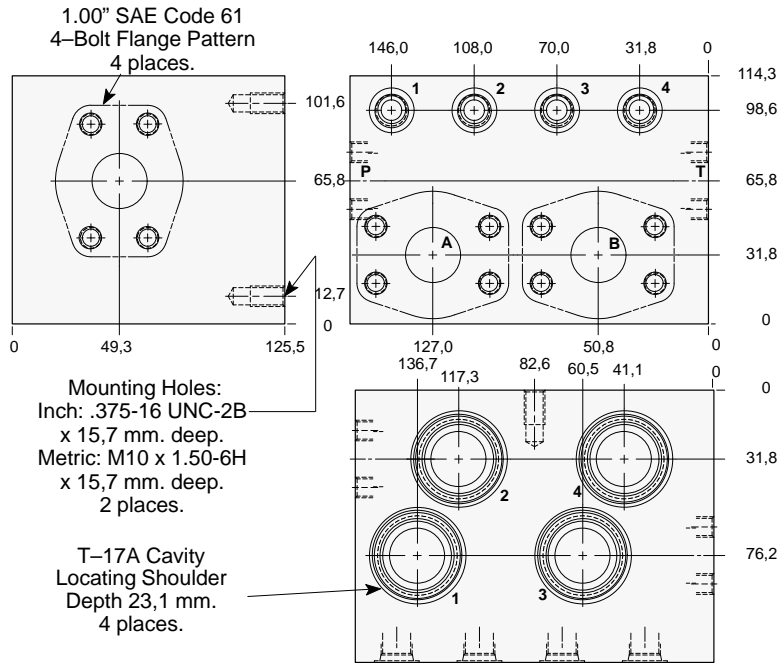
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Four cavity four-way 1.00" SAE Code 61 flange port logic body for directional applications.

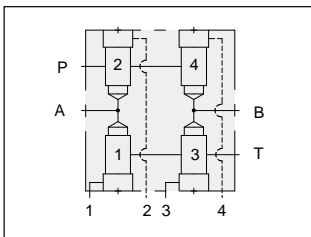


TYPICAL CARTRIDGES USED WITH THIS BODY

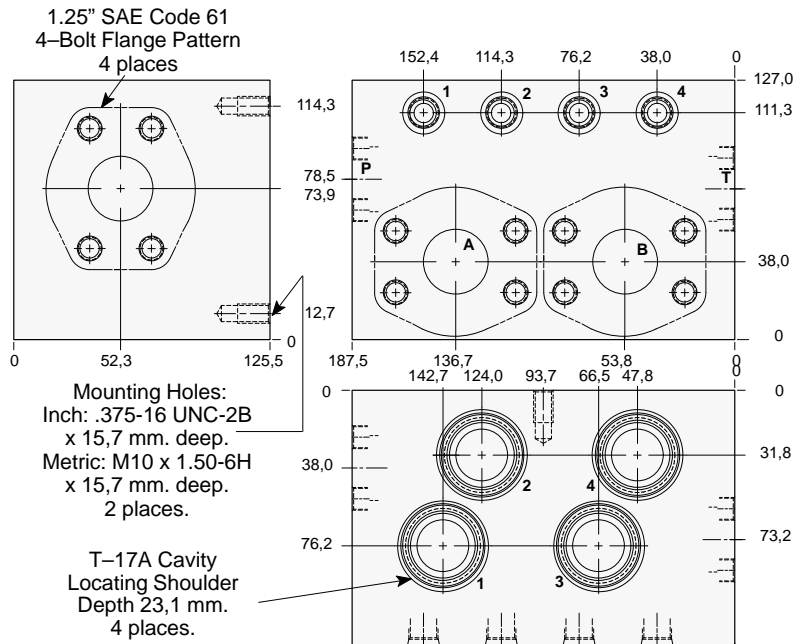
- LOHC - *** Page 9.09
- LKHC - *** Page 9.11
- LPHC - *** Page 9.13
- LRHC - *** Page 9.15

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2, 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	YRH		YRH/S	
Metric	.25 BSPP	YRH/M		YRH/T	



Four cavity four-way 1.25" SAE Code 61 flange port logic body for directional applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

- LOHC - *** Page 9.09
- LKHC - *** Page 9.11
- LPHC - *** Page 9.13
- LRHC - *** Page 9.15

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2, 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	YRF		YRF/S	
Metric	.25 BSPP	YRF/M		YRF/T	

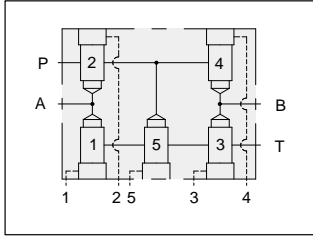


LINE MOUNT BODIES



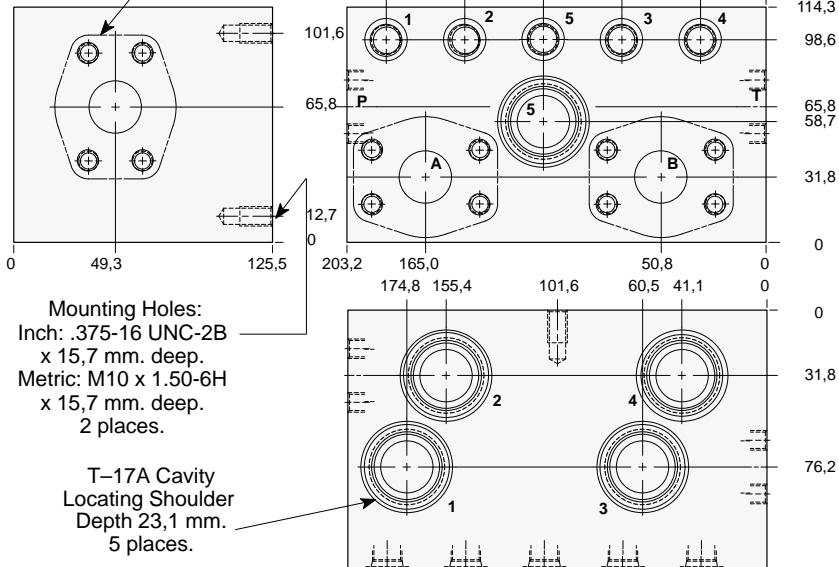
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Series 3 T-17A



Five cavity four-way 1.00" SAE Code 61 flange port logic body for directional applications.

1.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

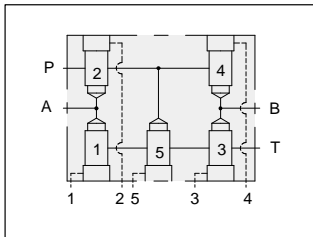


TYPICAL CARTRIDGES USED WITH THIS BODY

LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15

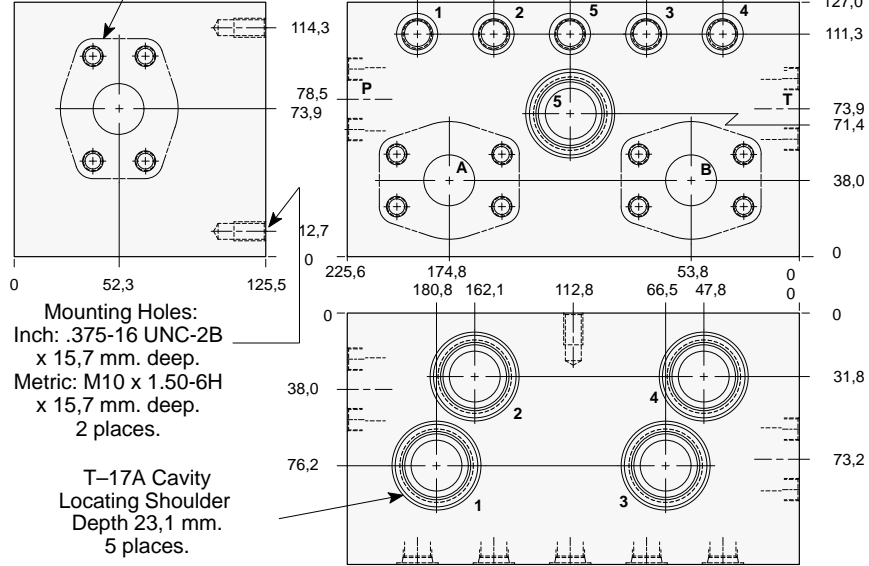
Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Ports 1, 2 3, 4 & 5	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	YQH		YQH/S	
Metric	.25 BSSP	YQH/M		YQH/T	



Five cavity four-way 1.25" SAE Code 61 flange port logic body for directional applications.

1.25" SAE Code 61
4-Bolt Flange Pattern
4 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

LOHC - ***	Page	9.09
LKHC - ***	Page	9.11
LPHC - ***	Page	9.13
LRHC - ***	Page	9.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Ports 1, 2 3, 4 & 5	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	YQF		YQF/S	
Metric	.25 BSSP	YQF/M		YQF/T	

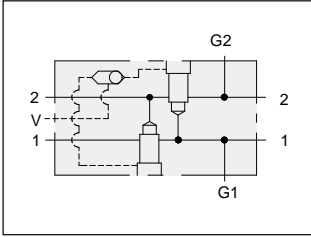


LINE MOUNT BODIES

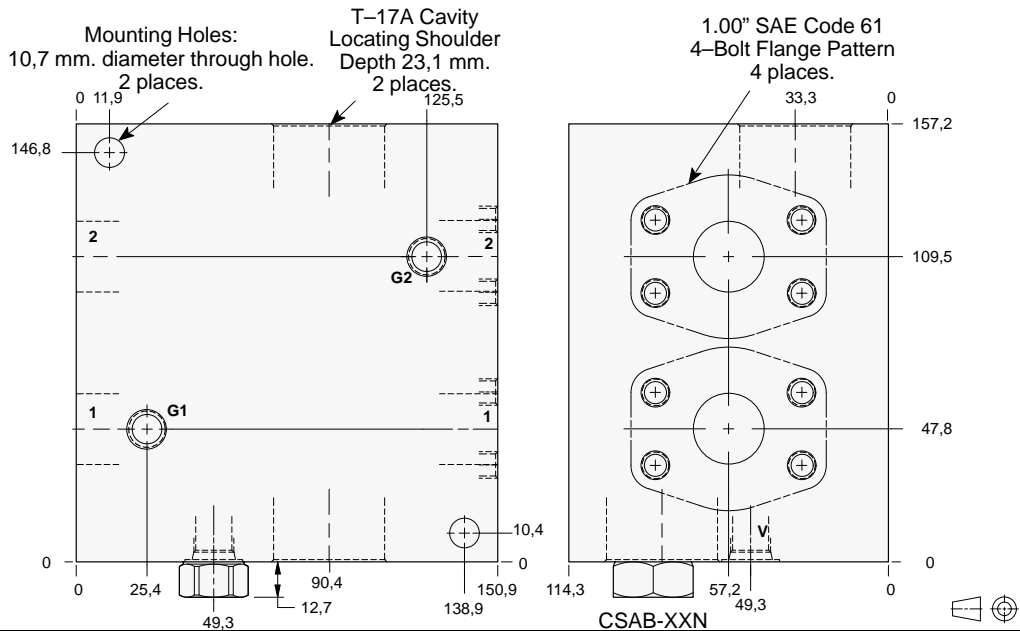


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

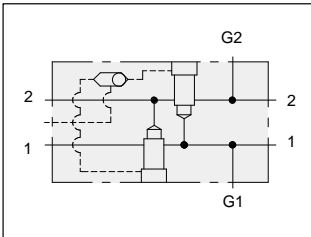
Series 3 T-17A



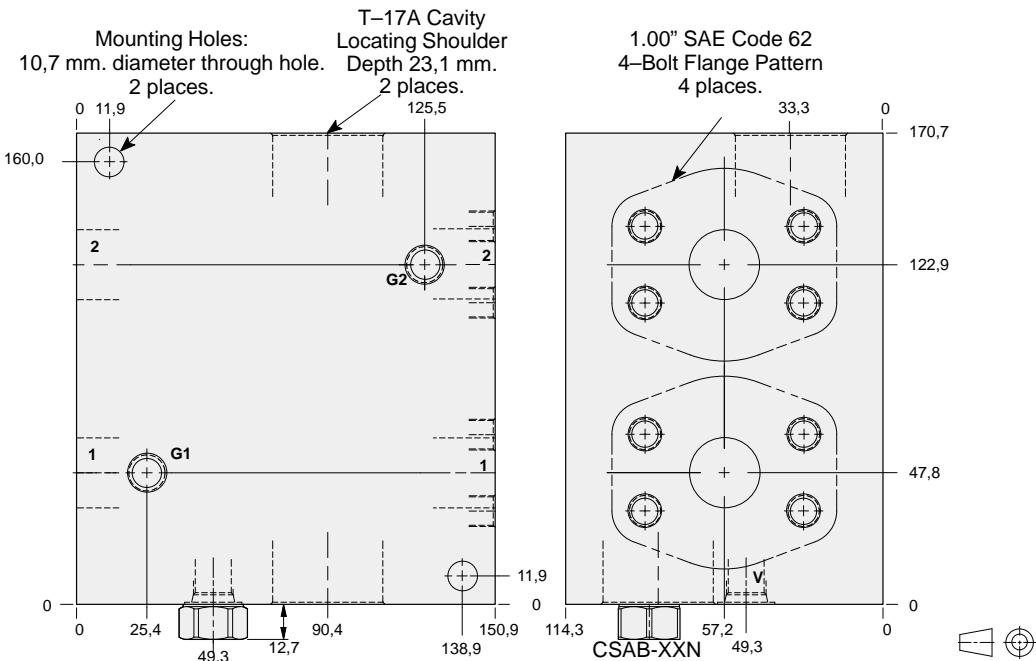
Two cavity through flange port 1.00" SAE Code 61 body with shuttle and gauge ports.



Mounting Hole Dimensions	Port V	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	XCP		XCP/S	
Metric	.25 BSPP	.25 BSPP	XCP/M		XCP/T	



Two cavity through flange port 1.00" SAE Code 62 body with shuttle and gauge ports.



Mounting Hole Dimensions	Port V	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	XC4		XC4/S	
Metric	.25 BSPP	.25 BSPP	XC4/M		XC4/T	

TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - *** Page 1.19

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - *** Page 1.19

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

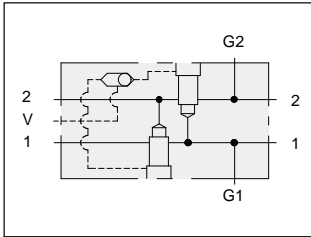
SAE Specifications. Page 11.03



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - *** Page 1.19

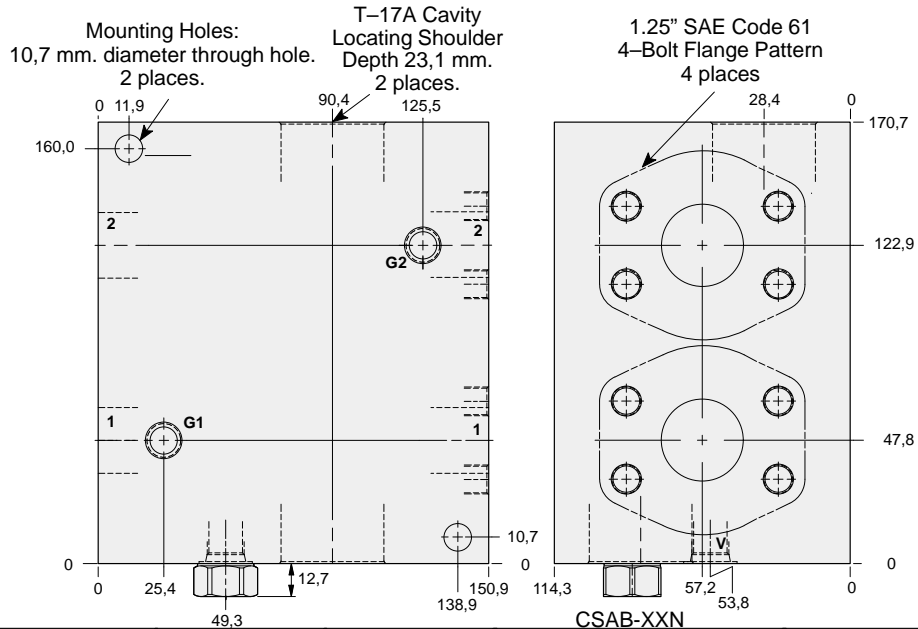
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

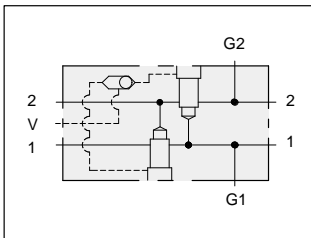
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Two cavity through flange port 1.25" SAE Code 61 body with shuttle and gauge ports.



Mounting Hole Dimensions	Port V	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	XCQ		XCQ/S	
Metric	.25 BSPP	.25 BSPP	XCQ/M		XCQ/T	



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - *** Page 1.19

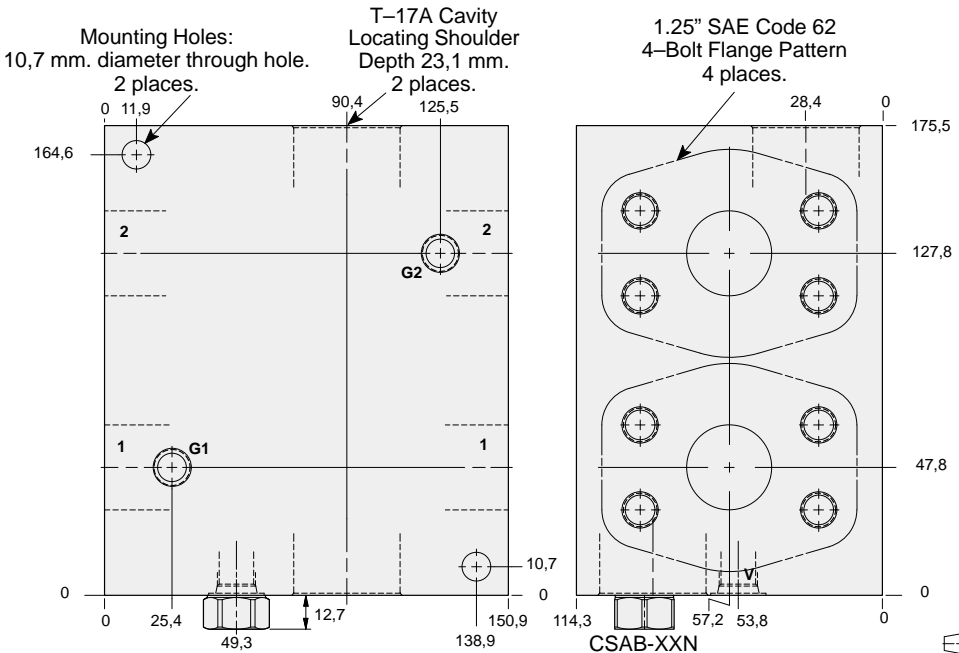
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Two cavity through flange port 1.25" SAE Code 62 body with shuttle and gauge ports.



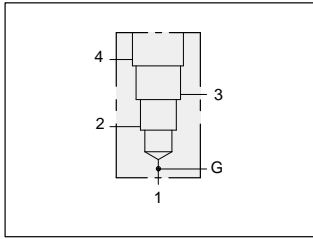
Mounting Hole Dimensions	Port V	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	XC5		XC5/S	
Metric	.25 BSPP	.25 BSPP	XC5/M		XC5/T	



LINE MOUNT BODIES

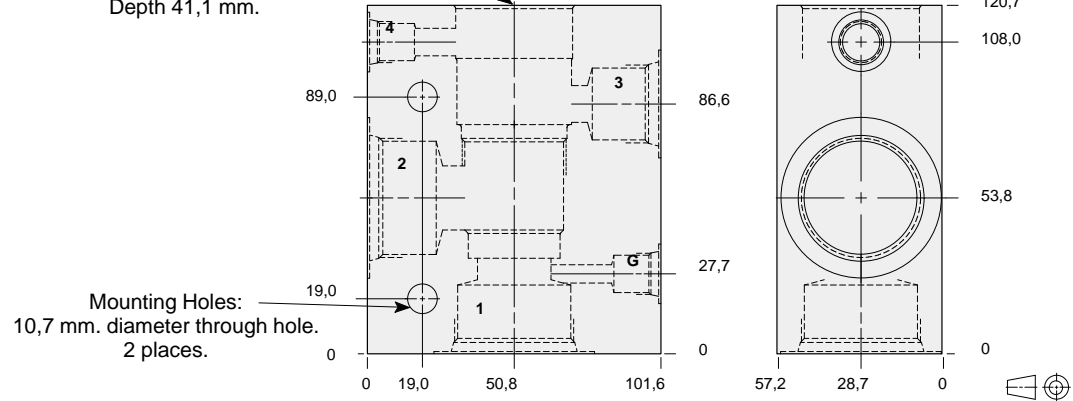


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body with gauge port.

T-23A Cavity
Locating Shoulder
Depth 41,1 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGD - ***	Page	1.21
PVHA - ***	Page	3.15
PVHB - ***	Page	3.17
CWGA - ***	Page	4.19
CWGG - ***	Page	4.21
CVGV - ***	Page	4.23
FVEA - ***	Page	6.05

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02

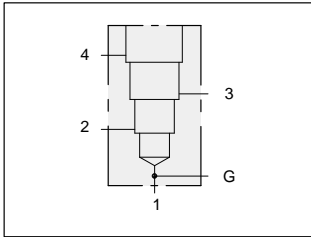
Parts 1 & 2	Port 3	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
.75 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	PAD		PAD/S	
1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	PAE		PAE/S	
1.25 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	PAF		PAF/S	
SAE-12	SAE-12	SAE-6	.25 NPTF	PAL		PAL/S	
SAE-16	SAE-12	SAE-6	.25 NPTF	PAM		PAM/S	
SAE-20	SAE-12	SAE-6	.25 NPTF	PAN		PAN/S	
.75 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	PAW		PAW/S	
1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	PAX		PAX/S	
1.25 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	PAY		PAY/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

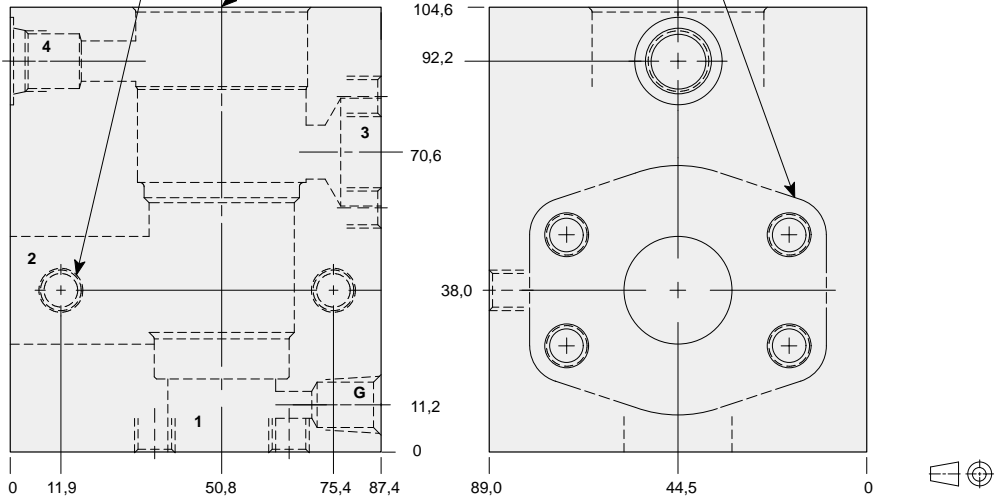


90 degree 1.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 41,4 mm.

1.00" SAE Code 61
4-Bolt Flange Pattern
3 places.

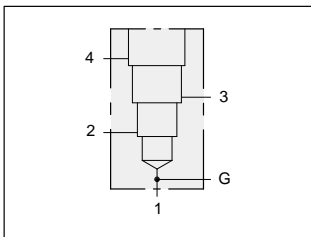


TYPICAL CARTRIDGES USED WITH THIS BODY

RVGD - ***	Page	1.21
PVHA - ***	Page	3.15
PVHB - ***	Page	3.17
CWGA - ***	Page	4.19
CWGG - ***	Page	4.21
CVGV - ***	Page	4.23
FVEA - ***	Page	6.05

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	PAP		PAP/S	
Metric	.25 BSPP	.25 BSPP	PAP/M		PAP/T	

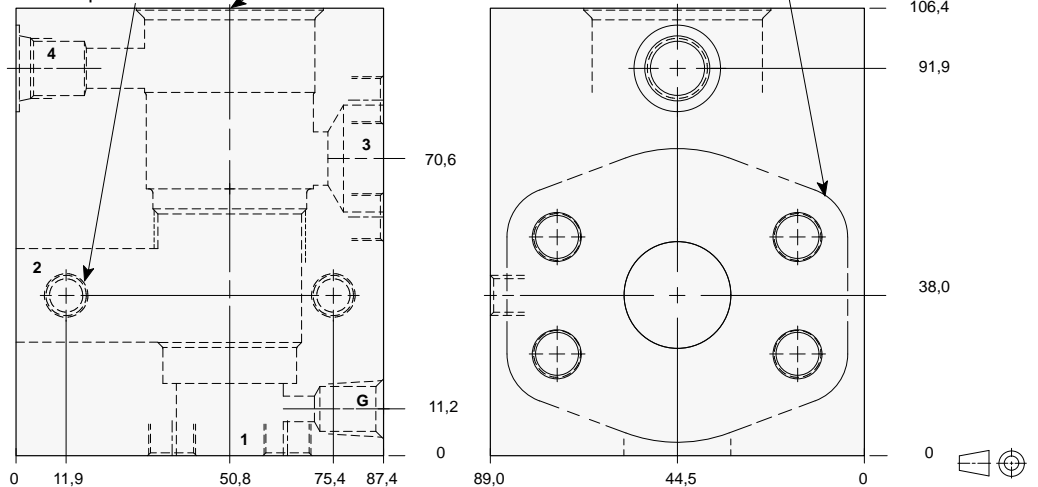


90 degree 1.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 42,9 mm.

1.00" SAE Code 62
4-Bolt Flange Pattern
3 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGD - ***	Page	1.21
PVHA - ***	Page	3.15
PVHB - ***	Page	3.17
CWGA - ***	Page	4.19
CWGG - ***	Page	4.21
CVGV - ***	Page	4.23
FVEA - ***	Page	6.05

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

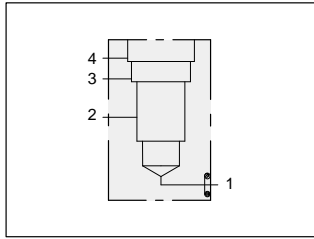
Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	PA4		PA4/S	
Metric	.25 BSPP	.25 BSPP	PA4/M		PA4/T	



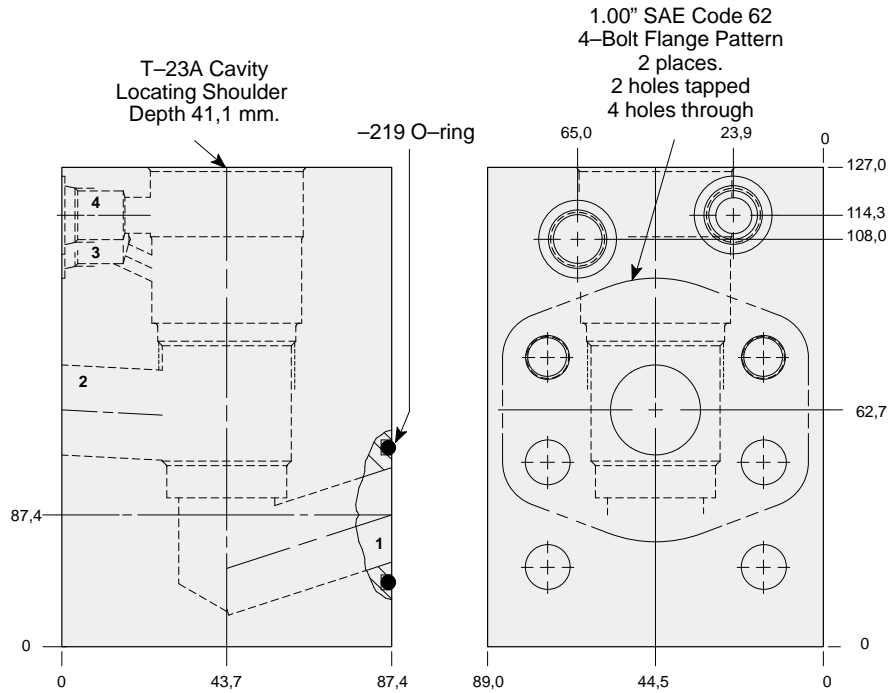
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Direct mount 1.00" SAE Code 62 body.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGA - ***	Page	1.19
CWGA - ***	Page	4.19
CWGG - ***	Page	4.21
CVGV - ***	Page	4.23

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

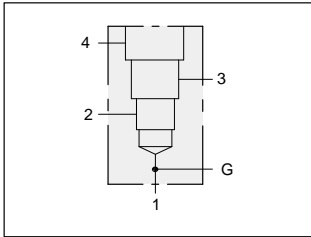
Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	WHA		WHA/S	
Metric	.25 BSPP	WHA/M		WHA/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



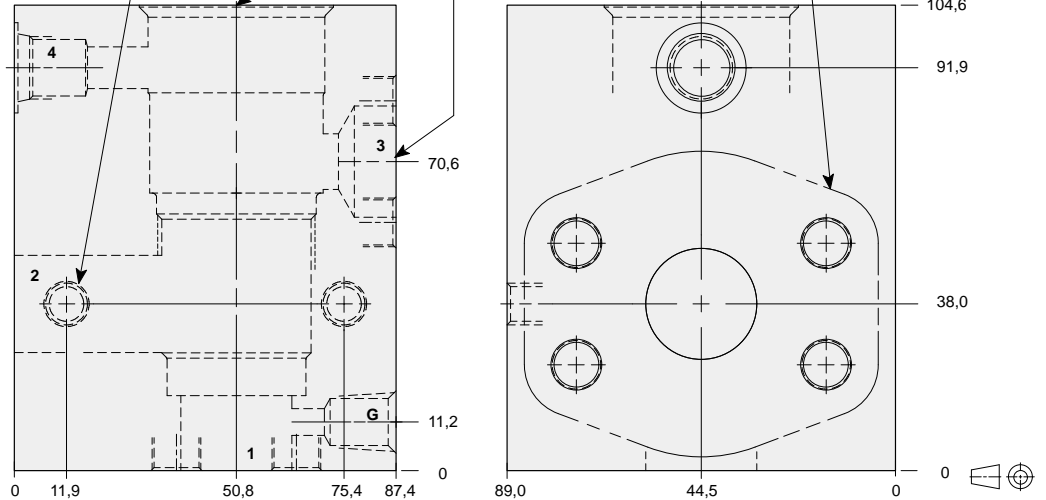
90 degree 1.25" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 41,1 mm.

1.00" SAE Code 61
4-Bolt Flange Pattern

1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.

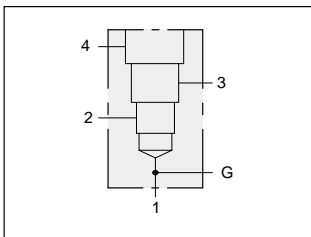


TYPICAL CARTRIDGES USED WITH THIS BODY

RVGD - ***	Page	1.21
PVHA - ***	Page	3.15
PVHB - ***	Page	3.17
CWGA - ***	Page	4.19
CWGG - ***	Page	4.21
CVGV - ***	Page	4.23
FVEA - ***	Page	6.05

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	PAQ		PAQ/S	
Metric	.25 BSPP	.25 BSPP	PAQ/M		PAQ/T	

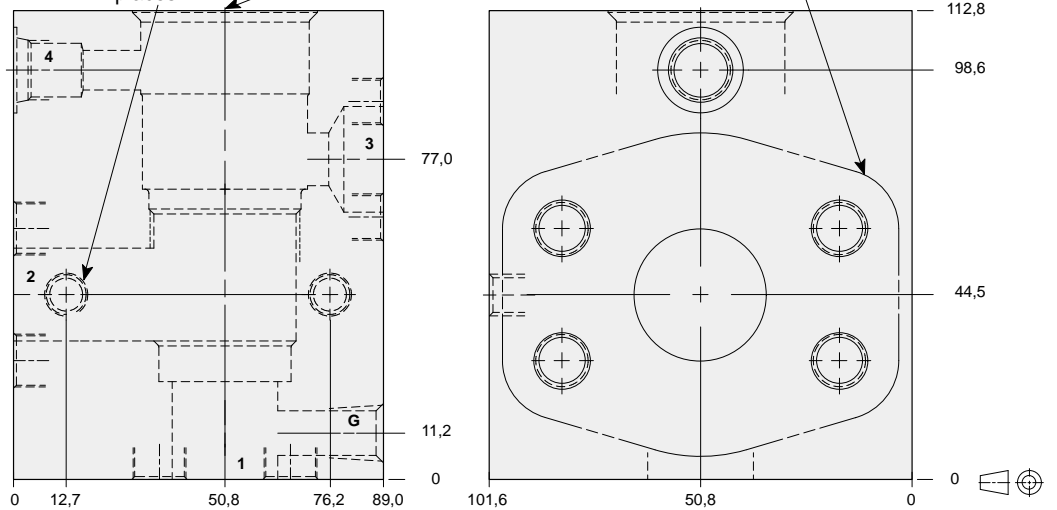


90 degree 1.25" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 42,9 mm.

1.25" SAE Code 62
4-Bolt Flange Pattern
3 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVGD - ***	Page	1.21
PVHA - ***	Page	3.15
PVHB - ***	Page	3.17
CWGA - ***	Page	4.19
CWGG - ***	Page	4.21
CVGV - ***	Page	4.23
FVEA - ***	Page	6.05

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	PA5		PA5/S	
Metric	.25 BSPP	.25 BSPP	PA5/M		PA5/T	

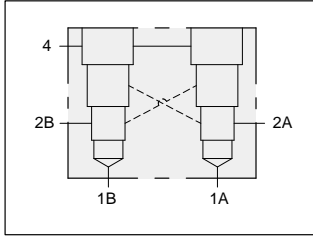
Series 3 T-23A



LINE MOUNT BODIES



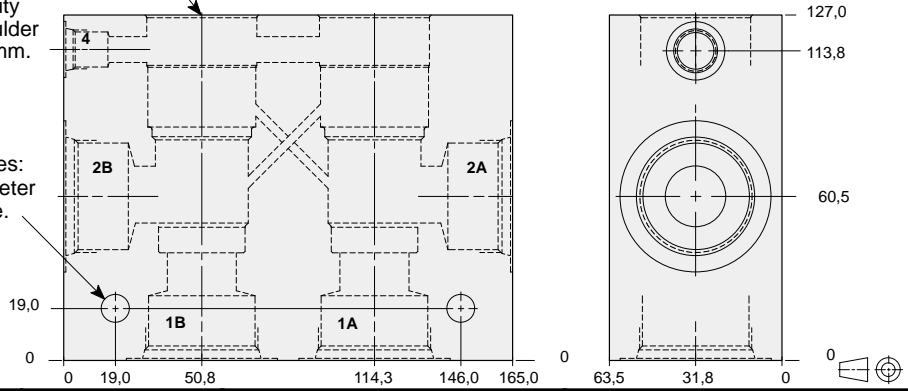
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 90 degree cross-piloted body with common port 4 for load control applications.

T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



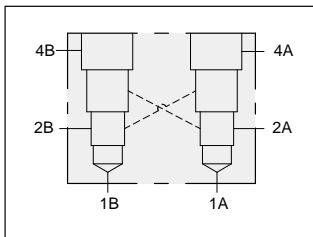
TYPICAL CARTRIDGES USED WITH THIS BODY

CWGA - ***	Page	4.19
CWGG - ***	Page	4.21
CVGV - ***	Page	4.23

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

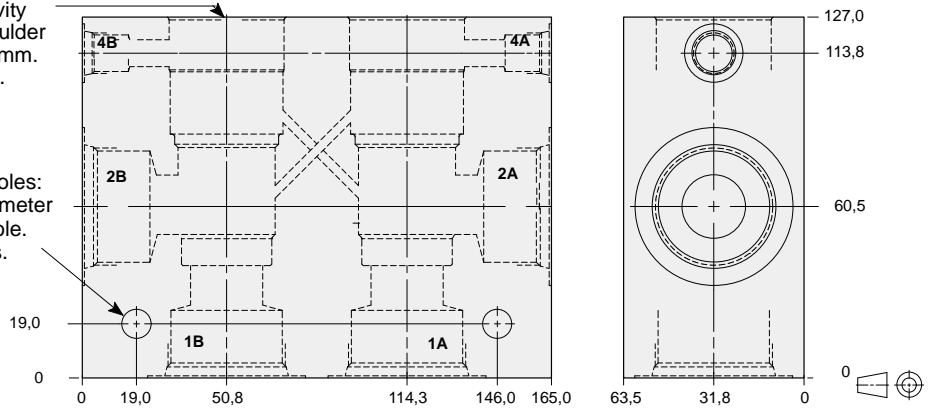
Ports 1A, 1B, 2A, & 2B	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	XMD		XMD/S	
1.00 NPTF	.25 NPTF	XME		XME/S	
1.25 NPTF	.25 NPTF	XMF		XMF/S	
SAE-12	SAE-6	XML		XML/S	
SAE-16	SAE-6	XMM		XMM/S	
SAE-20	SAE-6	XMN		XMN/S	
.75 BSPP	.25 BSPP	XMW		XMW/S	
1.00 BSPP	.25 BSPP	XXM		XXM/S	
1.25 BSPP	.25 BSPP	XMY		XMY/S	



Two cavity 90 degree cross-piloted body with independent port 4 for load control applications.

T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

CWGA - ***	Page	4.19
CWGG - ***	Page	4.21
CVGV - ***	Page	4.23

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

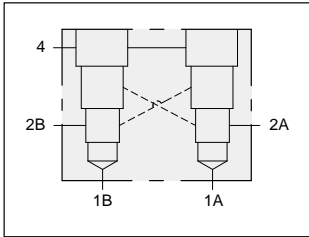
Ports 1A, 1B, 2A, & 2B	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	VAD		VAD/S	
1.00 NPTF	.25 NPTF	VAE		VAE/S	
1.25 NPTF	.25 NPTF	VAF		VAF/S	
SAE-12	SAE-6	VAL		VAL/S	
SAE-16	SAE-6	VAM		VAM/S	
SAE-20	SAE-6	VAN		VAN/S	
.75 BSPP	.25 BSPP	VAW		VAW/S	
1.00 BSPP	.25 BSPP	VAX		VAX/S	
1.25 BSPP	.25 BSPP	VAY		VAY/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

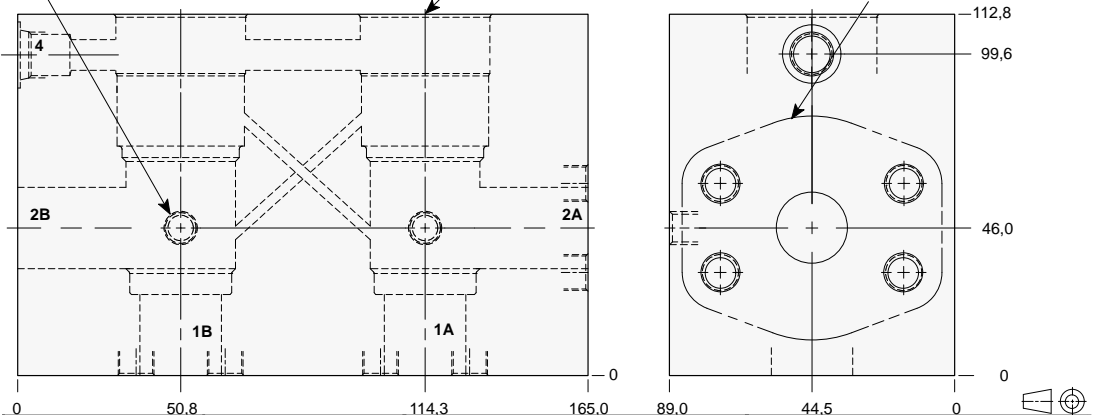


Two cavity cross-piloted 1.00" SAE Code 61 flange port body with common port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

1.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

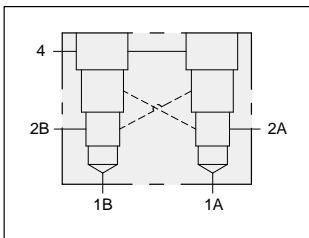


TYPICAL CARTRIDGES USED WITH THIS BODY

- CWGA - *** Page 4.19
- CWGG - *** Page 4.21
- CVGV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page iii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XMP		XMP/S	
Metric	.25 BSPP	XMP/M		XMP/T	

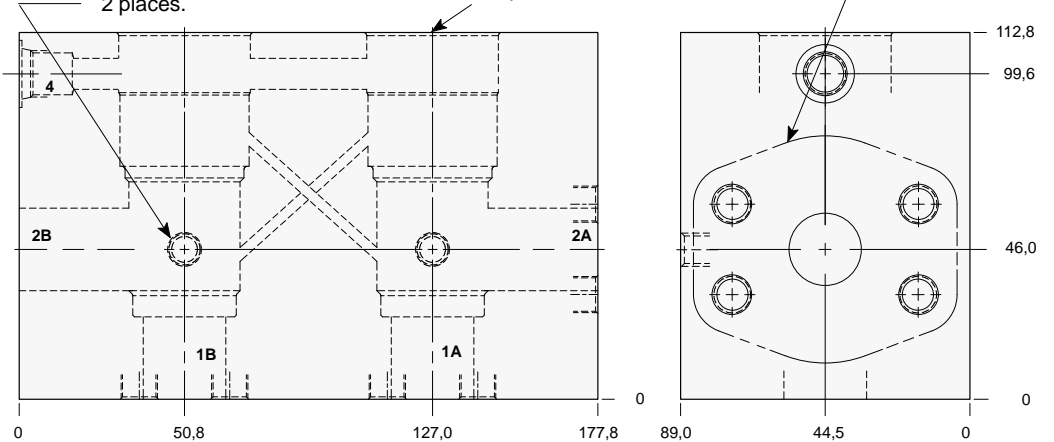


Two cavity cross-piloted 1.00" SAE Code 62 flange port body with common port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

1.00" SAE Code 62
4-Bolt Flange Pattern
3 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CWGA - *** Page 4.19
- CWGG - *** Page 4.21
- CVGV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page iii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

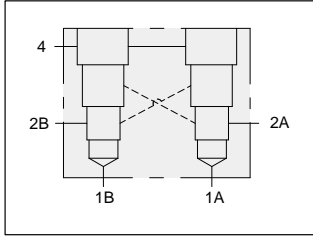
Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XM4		XM4/S	
Metric	.25 BSPP	XM4/M		XM4/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity cross-piloted 1.25" SAE Code 61 flange port body with common port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

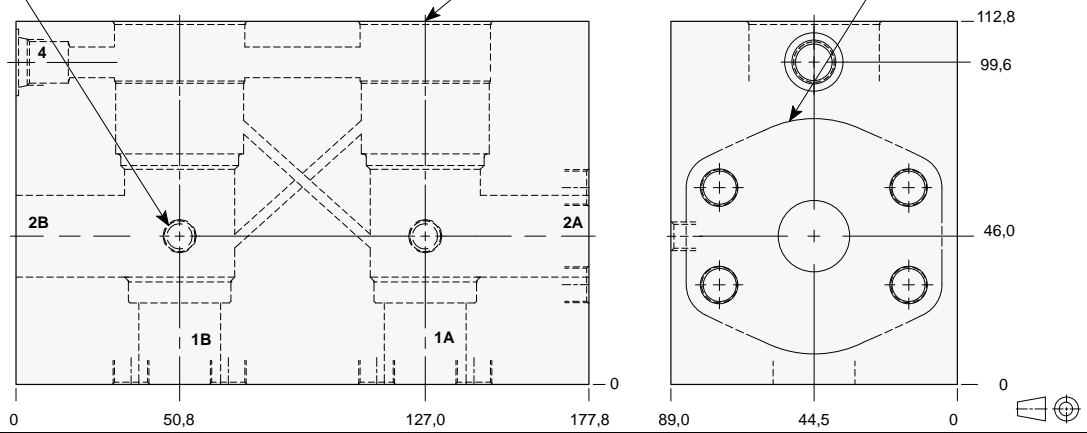
T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

1.25" SAE Code 61
4-Bolt Flange Pattern
4 places

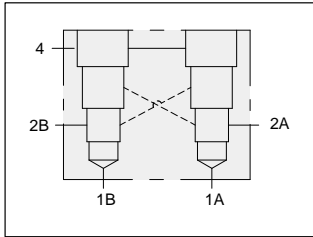
TYPICAL CARTRIDGES USED WITH THIS BODY

CWGA - *** Page 4.19
CWGG - *** Page 4.21
CVGV - *** Page 4.23

Instructions for ordering complete cartridge and body assemblies. Page iii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03



Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XMQ		XMQ/S	
Metric	.25 BSPP	XMQ/M		XMQ/T	



Two cavity cross-piloted 1.25" SAE Code 62 flange port body with common port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

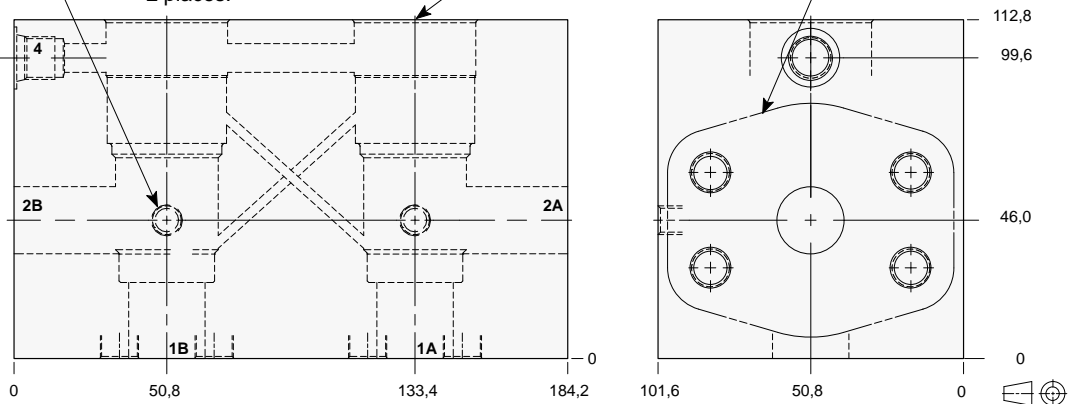
T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

1.25" SAE Code 62
4-Bolt Flange Pattern
4 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

CWGA - *** Page 4.19
CWGG - *** Page 4.21
CVGV - *** Page 4.23

Instructions for ordering complete cartridge and body assemblies. Page iii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03



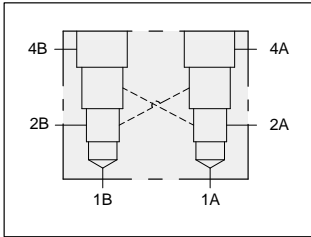
Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XM5		XM5/S	
Metric	.25 BSPP	XM5/M		XM5/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

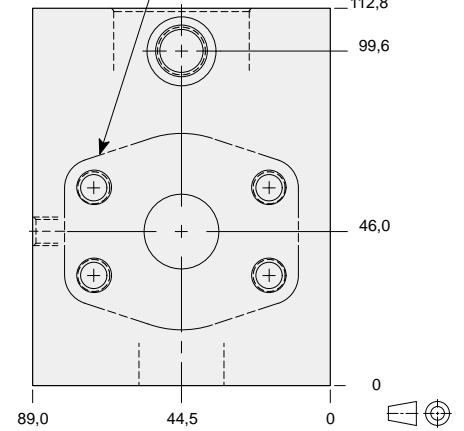
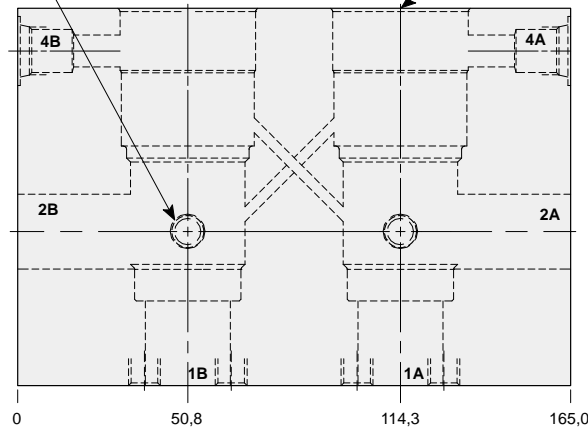


Two cavity cross-piloted 1.00" SAE Code 61 flange port body with independent port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

1.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

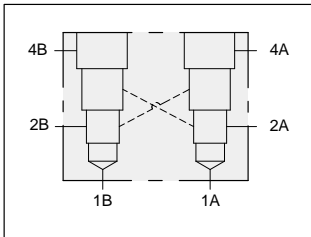


TYPICAL CARTRIDGES USED WITH THIS BODY

- CWGA - *** Page 4.19
- CWGG - *** Page 4.21
- CVGV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page iii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	VAP		VAP/S	
Metric	.25 BSPP	VAP/M		VAP/T	

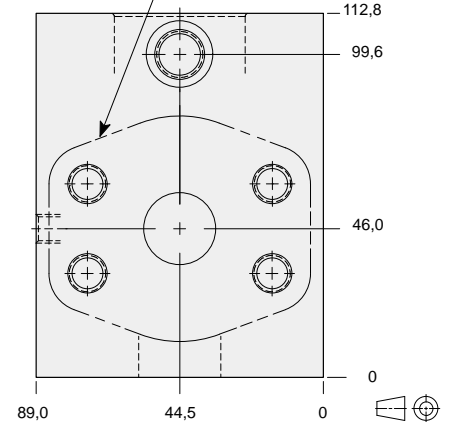
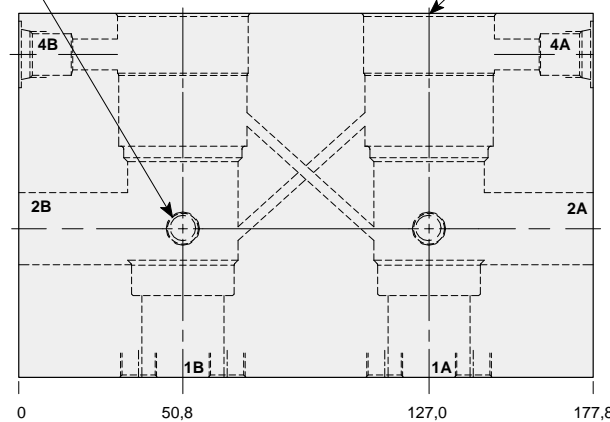


Two cavity cross-piloted 1.00" SAE Code 62 flange port body with independent port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

1.00" SAE Code 62
4-Bolt Flange Pattern
4 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CWGA - *** Page 4.19
- CWGG - *** Page 4.21
- CVGV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page iii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

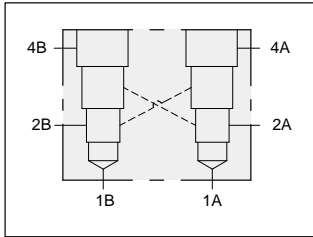
Mounting Hole Dimensions	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	VA4		VA4/S	
Metric	.25 BSPP	VA4/M		VA4/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

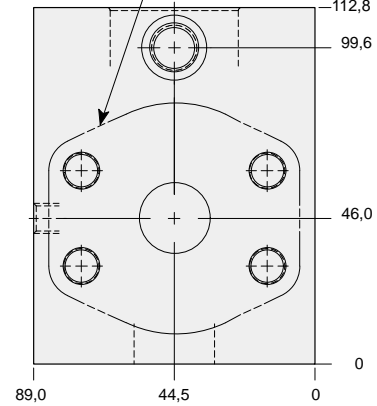
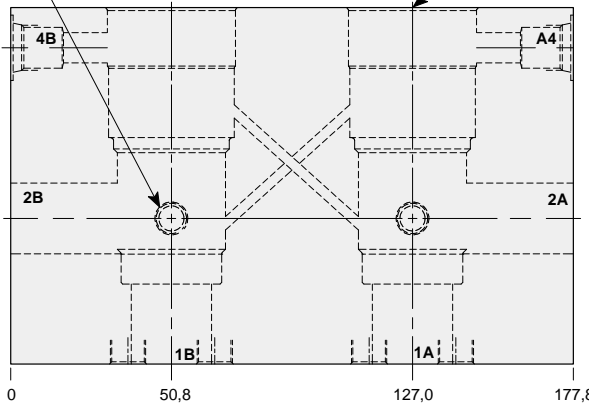


Two cavity cross-piloted 1.25" SAE Code 61 flange port body with independent port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

1.25" SAE Code 61
4-Bolt Flange Pattern
4 places

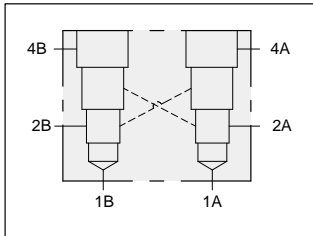


TYPICAL CARTRIDGES USED WITH THIS BODY

- CWGA - *** Page 4.19
- CWGG - *** Page 4.21
- CVGV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page iii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	VAQ		VAQ/S	
Metric	.25 BSPP	VAQ/M		VAQ/T	

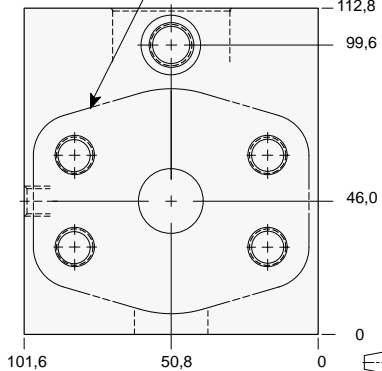
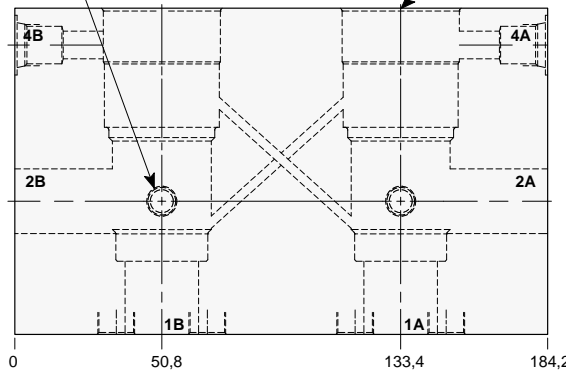


Two cavity cross-piloted 1.25" SAE Code 62 flange port body with independent port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-23A Cavity
Locating Shoulder
Depth 41,7 mm.
2 places.

1.25" SAE Code 62
4-Bolt Flange Pattern
4 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CWGA - *** Page 4.19
- CWGG - *** Page 4.21
- CVGV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page iii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

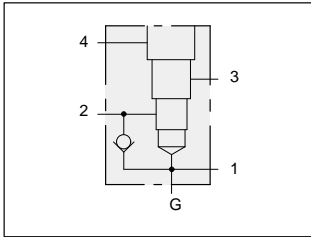
Mounting Hole Dimensions	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	VA5		VA5/S	
Metric	.25 BSPP	VA5/M		VA5/T	



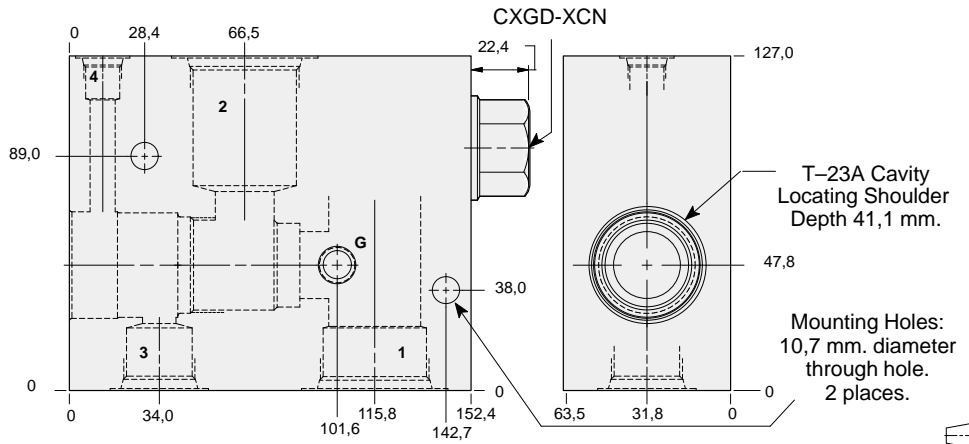
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with reverse free flow check and gauge port for reducing/relieving applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

- PVHA - *** Page 3.15
 PVHB - *** Page 3.17

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
.75 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	P4D		P4D/S	
1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	P4E		P4E/S	
1.25 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	P4F		P4F/S	
SAE-12	SAE-12	SAE-6	.25 NPTF	P4L		P4L/S	
SAE-16	SAE-12	SAE-6	.25 NPTF	P4M		P4M/S	
SAE-20	SAE-12	SAE-6	.25 NPTF	P4N		P4N/S	
.75 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	P4W		P4W/S	
1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	P4X		P4X/S	
1.25 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	P4Y		P4Y/S	

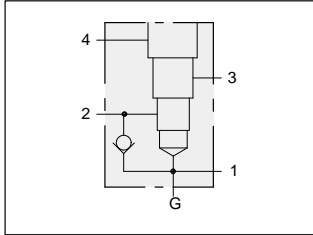
Series 3 T-23A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

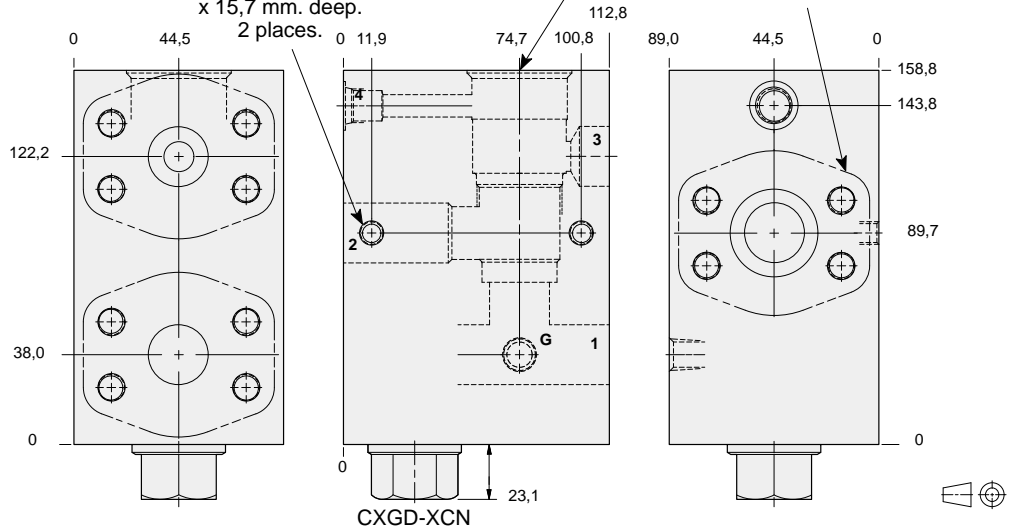


1.00" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing/relieving applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.

T-23A Cavity
 Locating Shoulder
 Depth 43,7 mm.

1.00" SAE Code 61
 4-Bolt Flange Pattern
 3 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PVHA - *** Page 3.15
 PVHB - *** Page 3.17

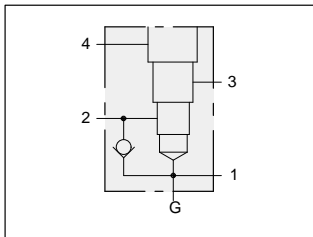
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	P4P		P4P/S	
Metric	.25 BSPP	.25 BSPP	P4P/M		P4P/T	

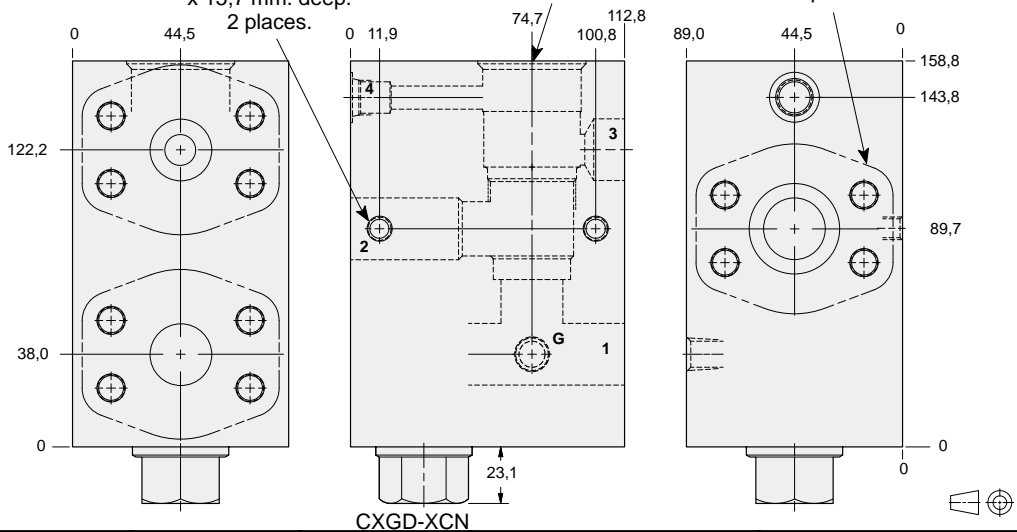


1.00" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing/relieving applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.

T-23A Cavity
 Locating Shoulder
 Depth 43,7 mm.

1.00" SAE Code 62
 4-Bolt Flange Pattern
 3 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PVHA - *** Page 3.15
 PVHB - *** Page 3.17

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

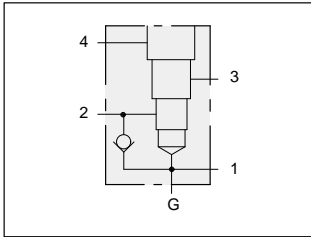
Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	P44		P44/S	
Metric	.25 BSPP	.25 BSPP	P44/M		P44/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



1.25" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing/relieving applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

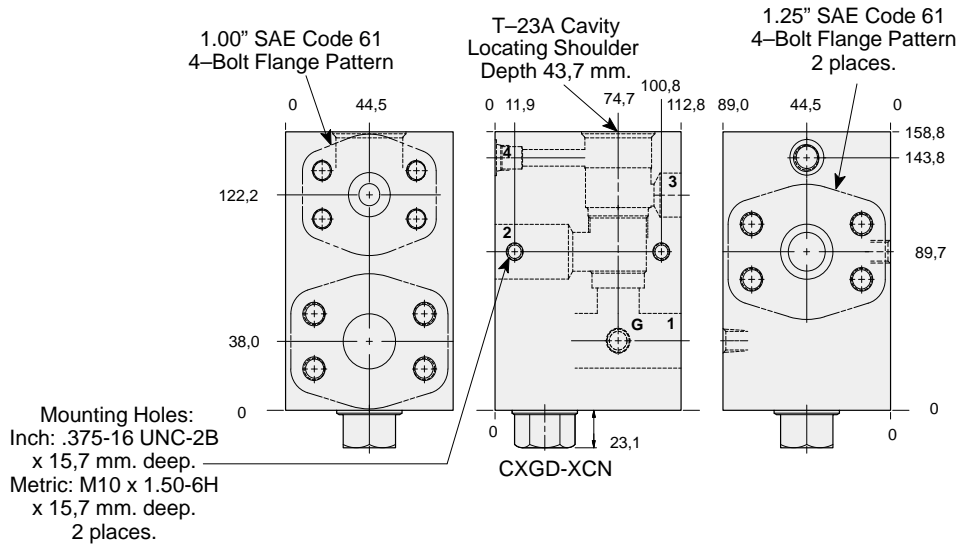
PVHA - *** Page 3.15
 PVHB - *** Page 3.17

Cartridge seal type determines check valve seal type.

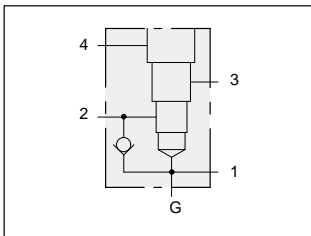
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Port 3 SAE Code 61	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00"	SAE-6	.25 NPTF	P4Q		P4Q/S	
Metric	1.00"	.25 BSPP	.25 BSPP	P4Q/M		P4Q/T	



1.25" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing/relieving applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

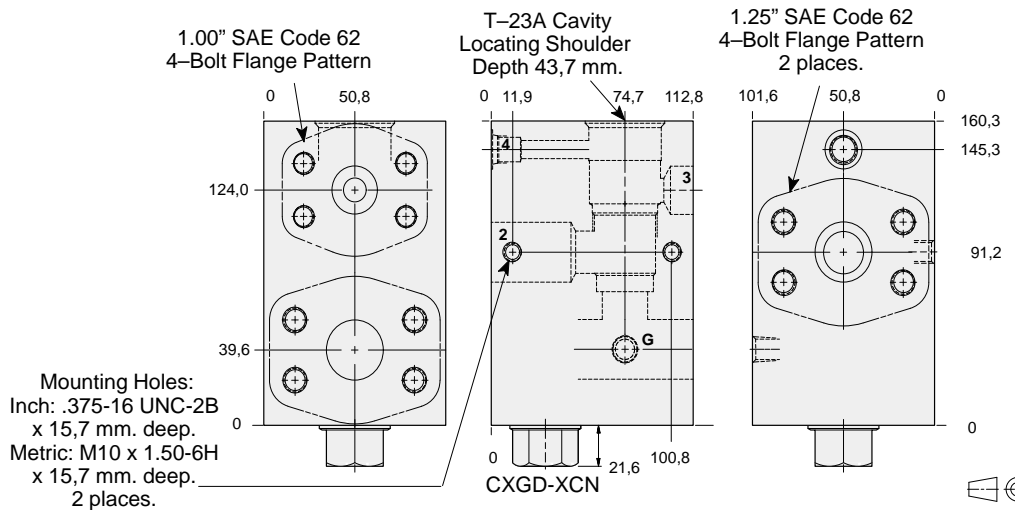
PVHA - *** Page 3.15
 PVHB - *** Page 3.17

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



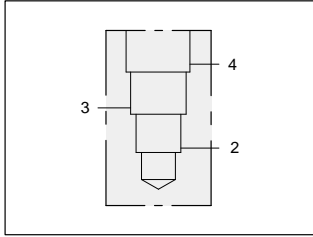
Mounting Hole Dimensions	Port 3 SAE Code 62	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00"	SAE-6	.25 NPTF	P45		P45/S	
Metric	1.00"	.25 BSPP	.25 BSPP	P45/M		P45/T	



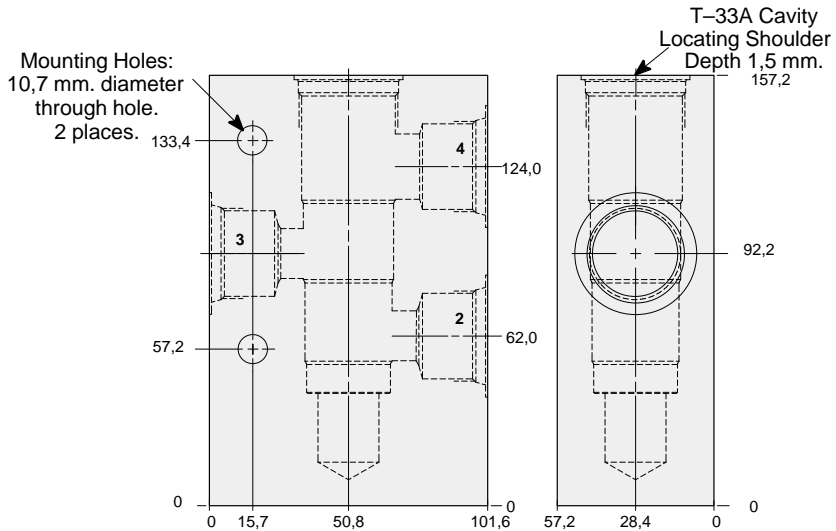
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body for flow divider/combiner applications.



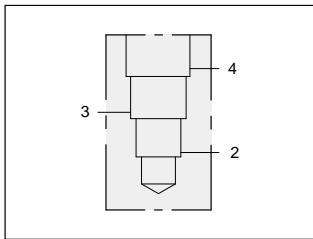
TYPICAL CARTRIDGES USED WITH THIS BODY

FSED - ***	Page	7.09
FSEA - ***	Page	7.11
FSES - ***	Page	7.13
FSEH - ***	Page	7.15
DSGH - ***	Page	10.07

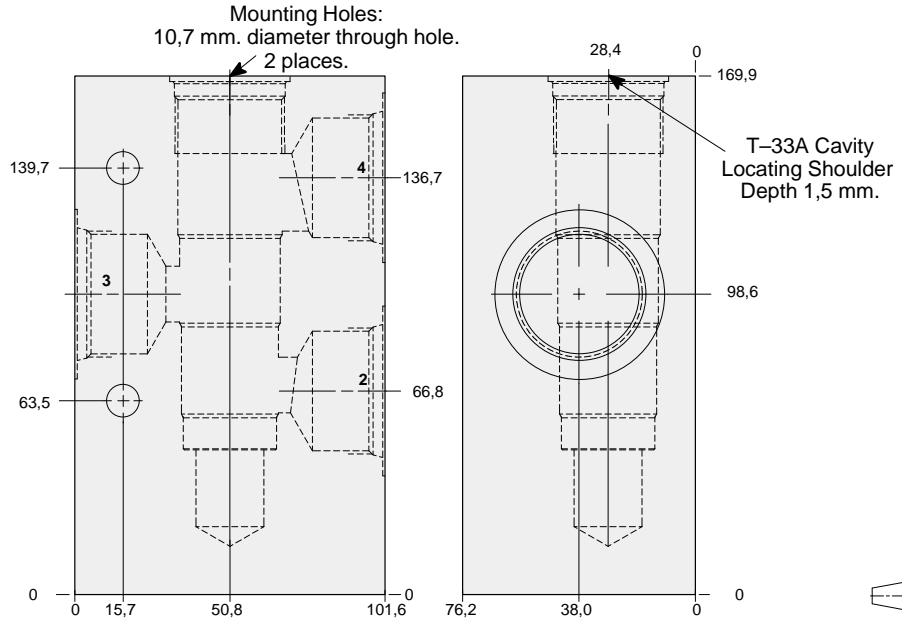
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Parts 2, 3 & 4	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.75 NPTF	PMD		PMD/S	
1.00 NPTF	PME		PME/S	
SAE-12	PML		PML/S	
SAE-16	PMM		PMM/S	
.75 BSPP	PMW		PMW/S	
1.00 BSPP	PMX		PMX/S	



Body for flow divider/combiner applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

FSED - ***	Page	7.09
FSEA - ***	Page	7.11
FSES - ***	Page	7.13
FSEH - ***	Page	7.15
DSGH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

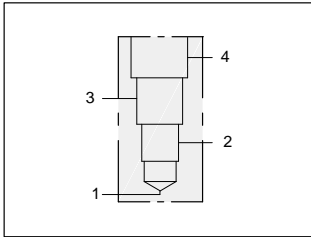
Parts 2, 3 & 4	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
1.25 NPTF	PMF		PMF/S	
SAE-20	PMN		PMN/S	
1.25 BSPP	PMY		PMY/S	



LINE MOUNT BODIES

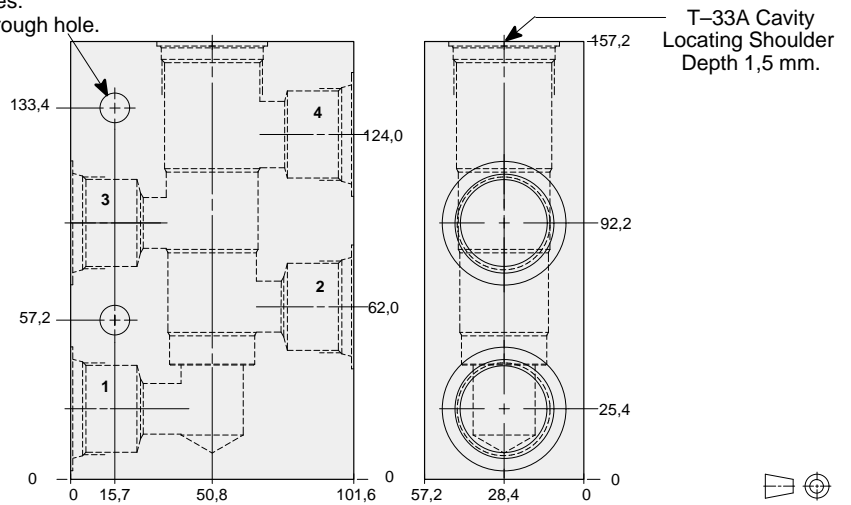


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Four port body.

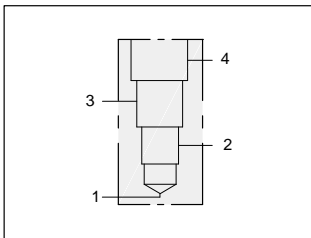
Mounting Holes:
10,7 mm. diameter through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

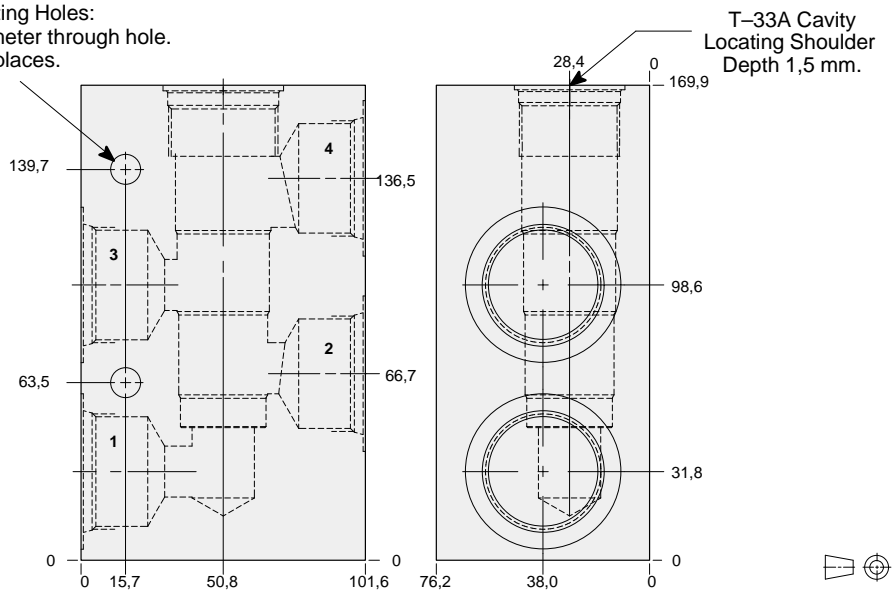
Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

Ports 1 & 2, 3 & 4	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
.75 NPTF	PND		PND/S	
1.00 NPTF	PNE		PNE/S	
SAE-12	PNL		PNL/S	
SAE-16	PNM		PNM/S	
.75 BSPP	PNW		PNW/S	
1.00 BSPP	PNX		PNX/S	



Four port body.

Mounting Holes:
10,7 mm. diameter through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

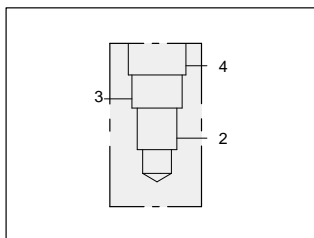
Ports 1 & 2, 3 & 4	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
1.25 NPTF	PNF		PNF/S	
SAE-20	PNN		PNN/S	
1.25 BSPP	PNY		PNY/S	



LINE MOUNT BODIES



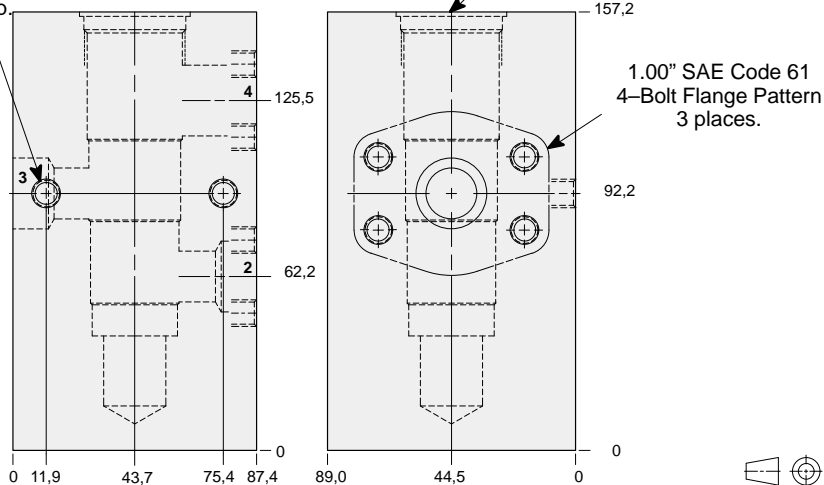
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



1.00" SAE Code 61 flange port body for flow divider/combiner applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.

T-33A Cavity
 Locating Shoulder
 Depth 1,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

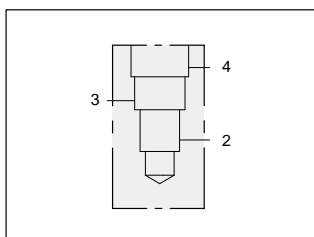
FSED - ***	Page	7.09
FSEA - ***	Page	7.11
FSES - ***	Page	7.13
FSEH - ***	Page	7.15
DSGH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

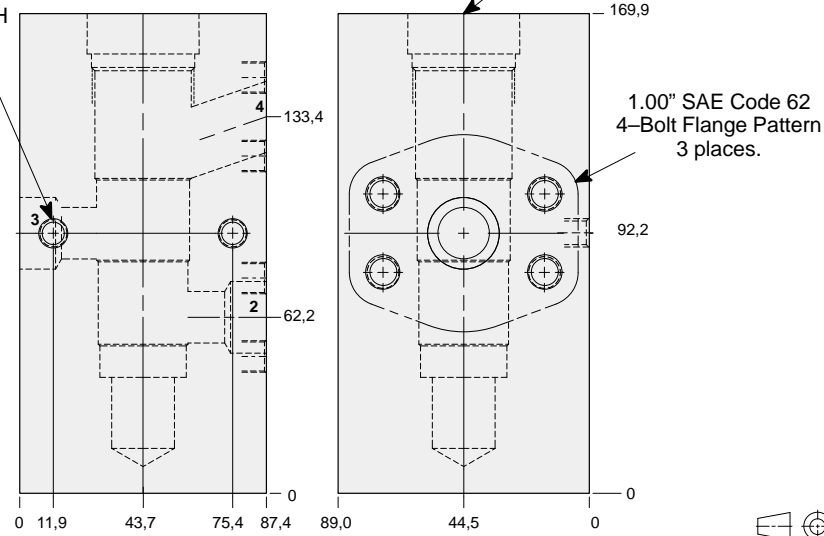
Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	PMP		PMP/S	
Metric	PMP/M		PMP/T	



1.00" SAE Code 62 flange port body for flow divider/combiner applications.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.

T-33A Cavity
 Locating Shoulder
 Depth 14,2 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

FSED - ***	Page	7.09
FSEA - ***	Page	7.11
FSES - ***	Page	7.13
FSEH - ***	Page	7.15
DSGH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

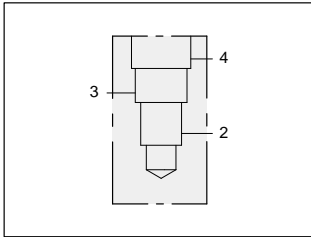
Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	PM4		PM4/S	
Metric	PM4/M		PM4/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

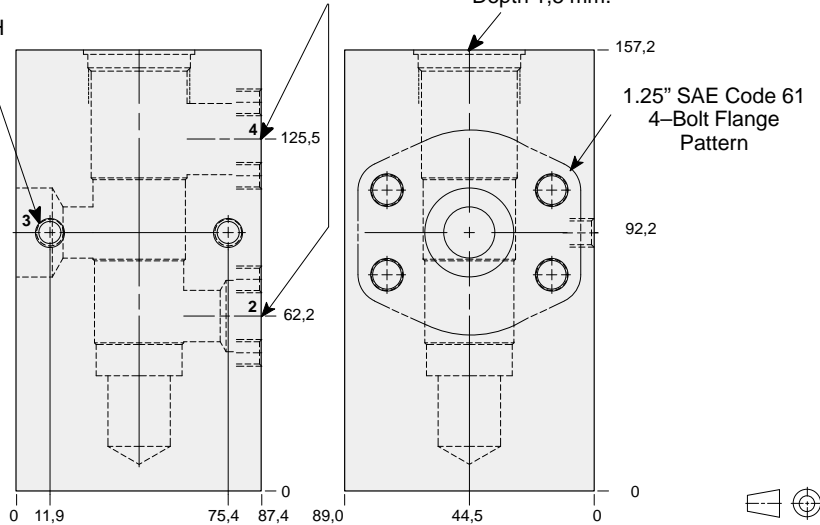


1.25" SAE Code 61 flange port body for flow divider/combiner applications.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-33A Cavity
Locating Shoulder
Depth 1,5 mm.

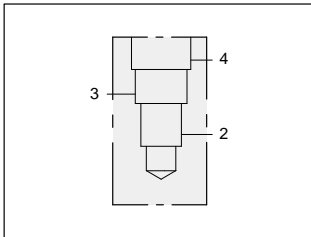


TYPICAL CARTRIDGES USED WITH THIS BODY

FSED - ***	Page	7.09
FSEA - ***	Page	7.11
FSES - ***	Page	7.13
FSEH - ***	Page	7.15
DSGH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Ports 2 & 4 SAE Code 61	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	1.00"	PMQ		PMQ/S	
Metric	1.00"	PMQM		PMQ/T	

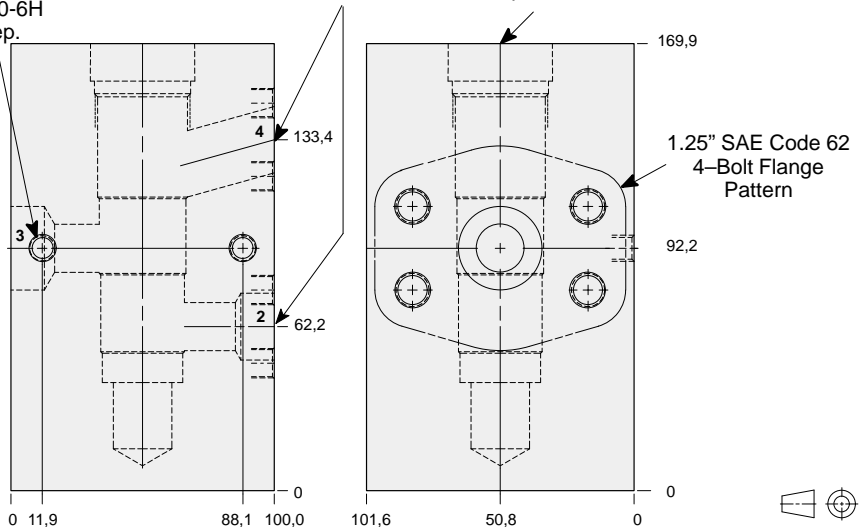


1.25" SAE Code 62 flange port body for flow divider/combiner applications.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-33A Cavity
Locating Shoulder
Depth 14,2 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

FSED - ***	Page	7.09
FSEA - ***	Page	7.11
FSES - ***	Page	7.13
FSEH - ***	Page	7.15
DSGH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

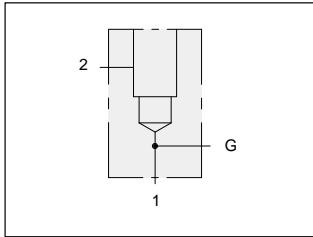
Mounting Hole Dimensions	Ports 2 & 4 SAE Code 62	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	1.00"	PM5		PM5/S	
Metric	1.00"	PM5/M		PM5/T	



LINE MOUNT BODIES

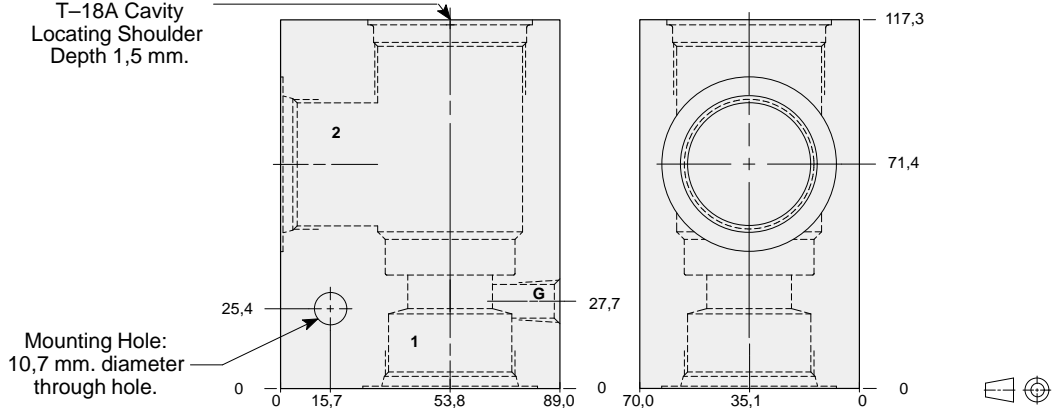


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body with gauge port.

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.

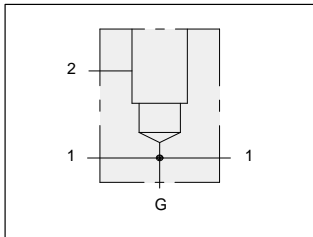


TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

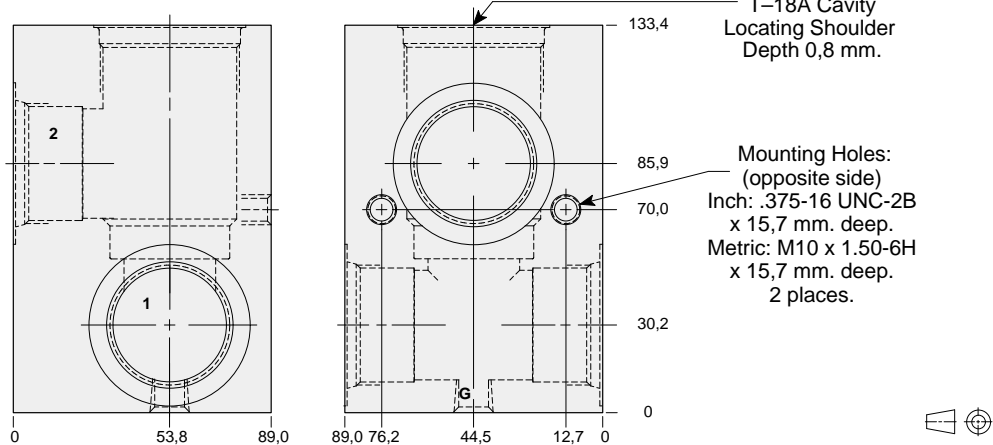
Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	LAD		LAD/S	
1.00 NPTF	.25 NPTF	LAE		LAE/S	
1.25 NPTF	.25 NPTF	LAF		LAF/S	
SAE-12	.25 NPTF	LAL		LAL/S	
SAE-16	.25 NPTF	LAM		LAM/S	
SAE-20	.25 NPTF	LAN		LAN/S	
.75 BSPP	.25 BSPP	LAW		LAW/S	
1.00 BSPP	.25 BSPP	LAX		LAX/S	
1.25 BSPP	.25 BSPP	LAY		LAY/S	



Through port body with gauge port.

T-18A Cavity
Locating Shoulder
Depth 0,8 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02

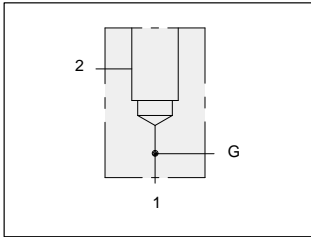
Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	LED		LED/S	
Inch	1.00 NPTF	.25 NPTF	LEE		LEE/S	
Inch	1.25 NPTF	.25 NPTF	LEF		LEF/S	
Inch	SAE-12	.25 NPTF	LEL		LEL/S	
Inch	SAE-16	.25 NPTF	LEM		LEM/S	
Inch	SAE-20	.25 NPTF	LEN		LEN/S	
Metric	.75 BSPP	.25 BSPP	LEW		LEW/S	
Metric	1.00 BSPP	.25 BSPP	LEX		LEX/S	
Metric	1.25 BSPP	.25 BSPP	LEY		LEY/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

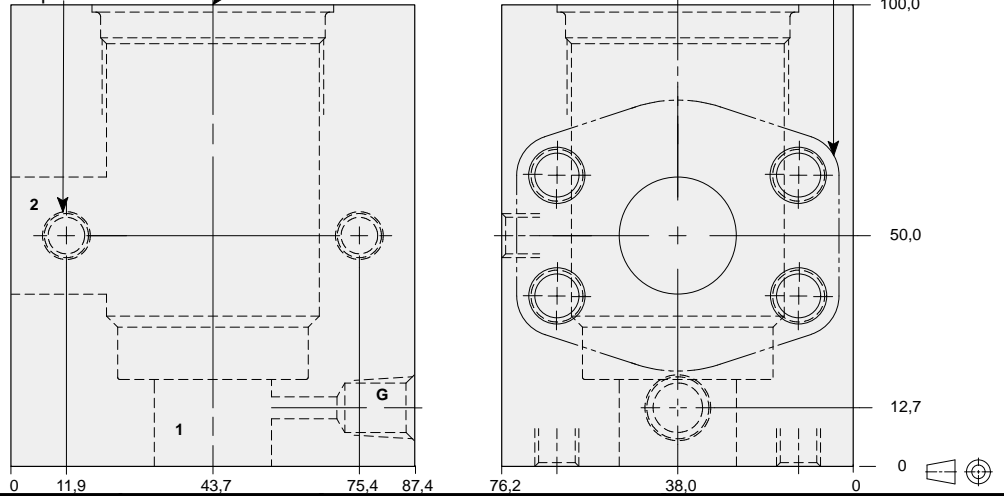


90 degree 1.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.

1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

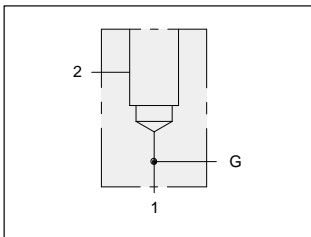
RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LAP		LAP/S	
Metric	.25 BSPP	LAP/M		LAP/T	

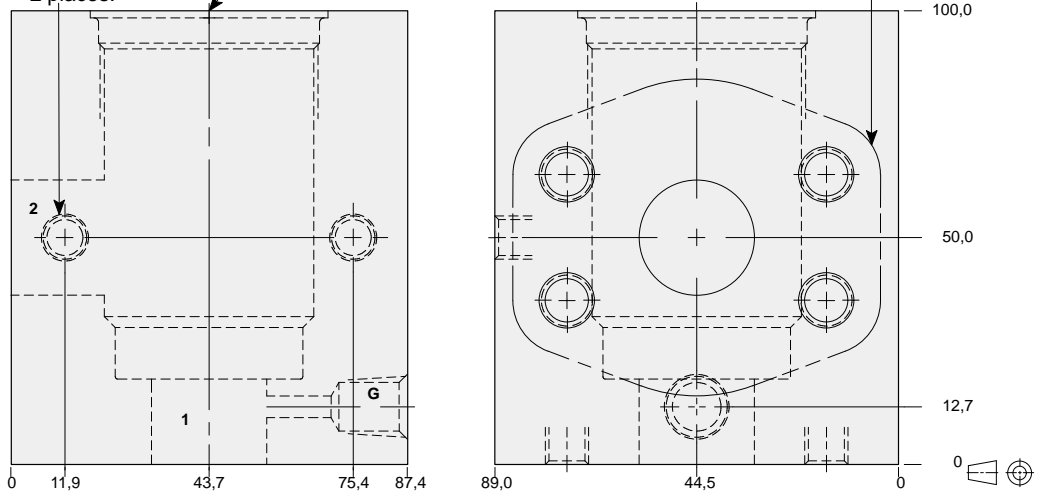


90 degree 1.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.

1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LA4		LA4/S	
Metric	.25 BSPP	LA4/M		LA4/T	

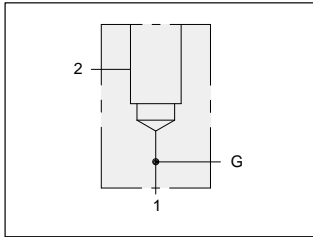
Series 4 T-18A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

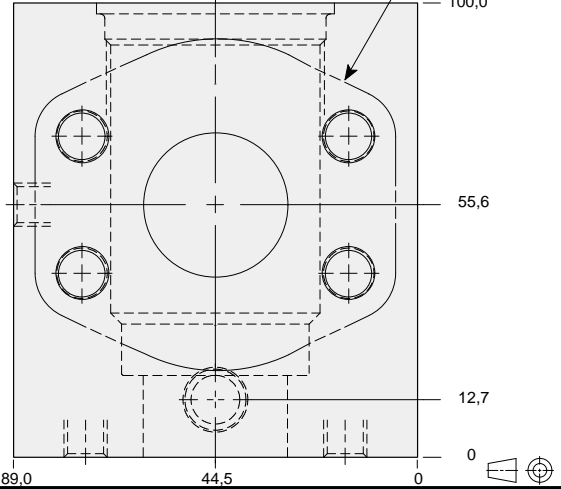
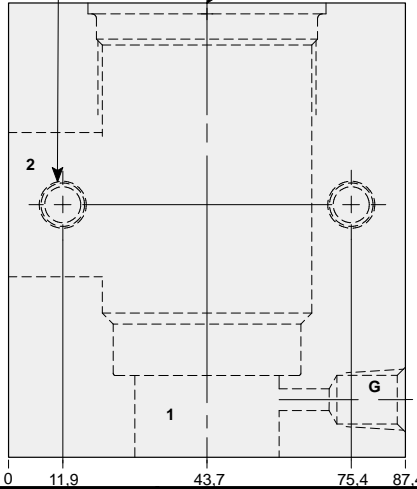


90 degree 1.25" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-18A Cavity
Locating Shoulder
Depth 2,3 mm.

1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.

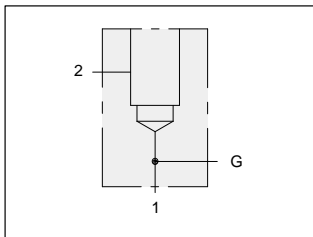


TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LAQ		LAQ/S	
Metric	.25 BSPP	LAQ/M		LAQ/T	

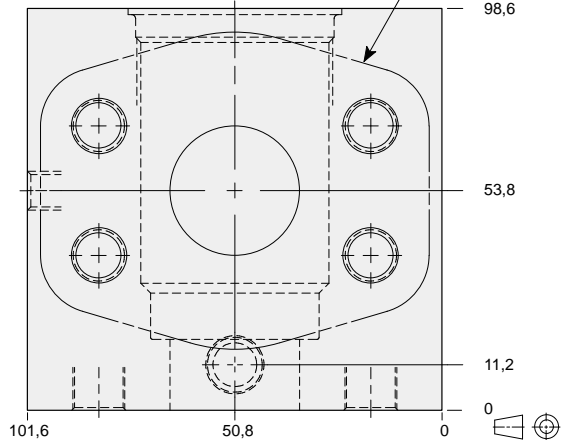
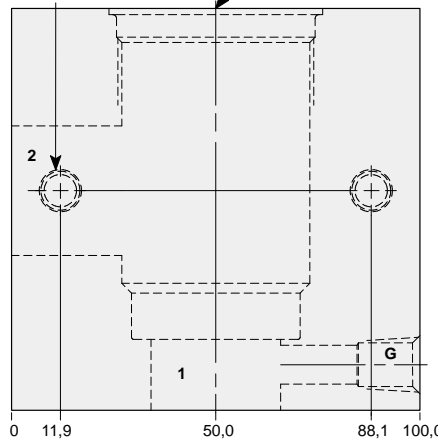


90 degree 1.25" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.

1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

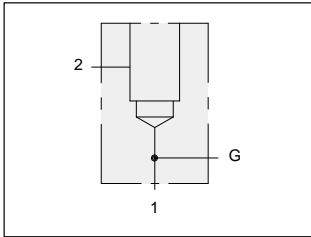
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LA5		LA5/S	
Metric	.25 BSPP	LA5/M		LA5/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

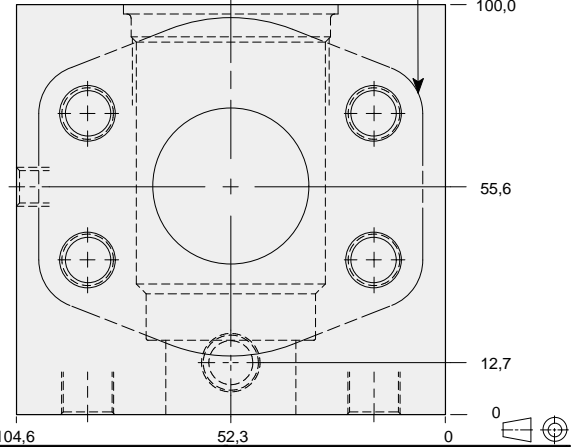
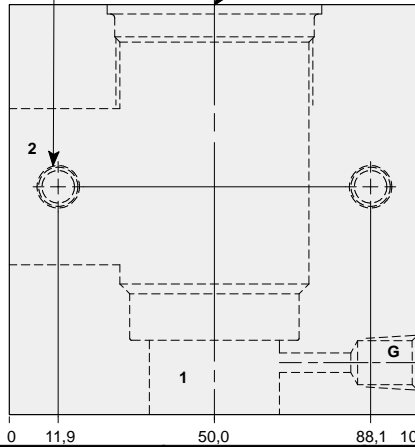


90 degree 1.50" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-18A Cavity
Locating Shoulder
Depth 2,3 mm.

1.50" SAE Code 61
4-Bolt Flange Pattern
2 places.

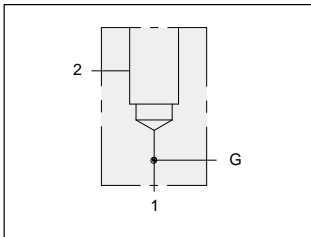


TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LAR		LAR/S	
Metric	.25 BSPP	LAR/M		LAR/T	

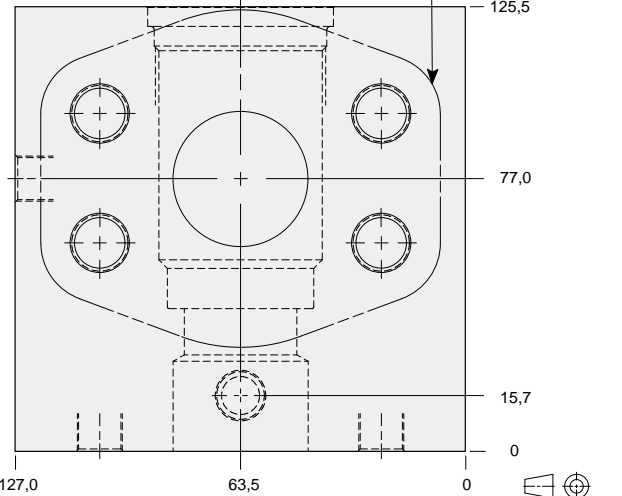
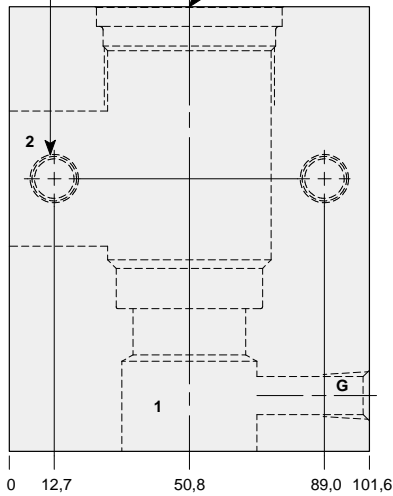


90 degree 1.50" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .500-13 UNC
x 19,0 mm. deep.
Metric: M12 x 1.25-6H
x 19,0 mm. deep.
2 places.

T-18A Cavity
Locating Shoulder
Depth 5,6 mm.

1.50" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LA6		LA6/S	
Metric	.25 BSPP	LA6/M		LA6/T	

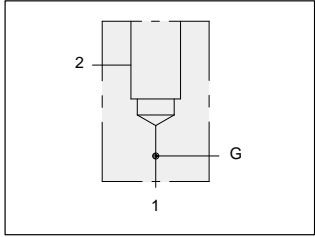
Series 4 T-18A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

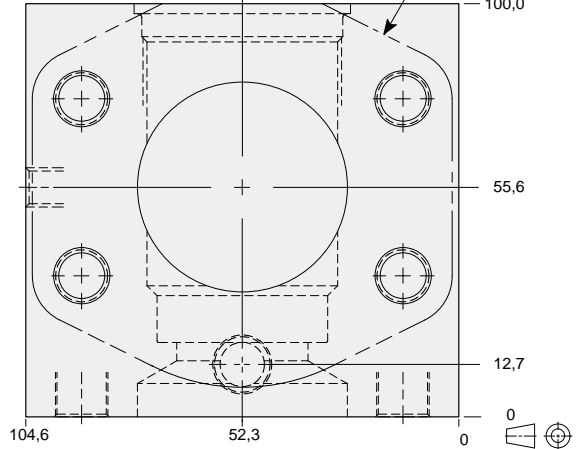
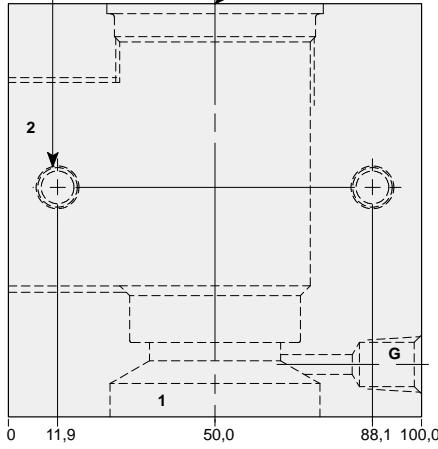


90 degree 2.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-18A Cavity
Locating Shoulder
Depth 2,3 mm.

2.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

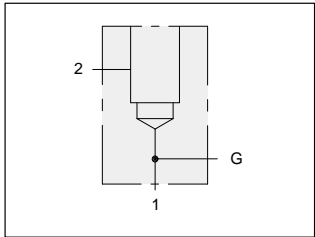


TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LAS		LAS/S	
Metric	.25 BSPP	LAS/M		LAS/T	

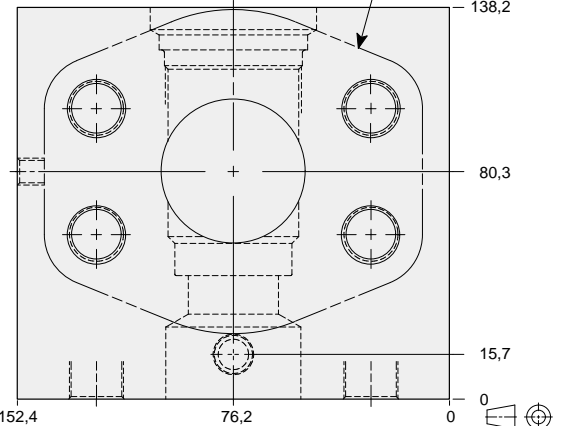
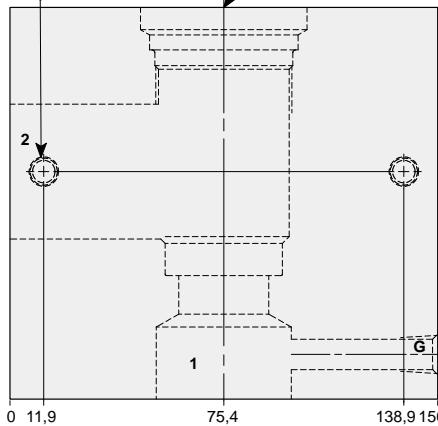


90 degree 2.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-18A Cavity
Locating Shoulder
Depth 15,0 mm.

2.00" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

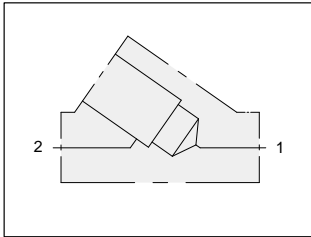
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LA8		LA8/S	
Metric	.25 BSPP	LA8/M		LA8/T	



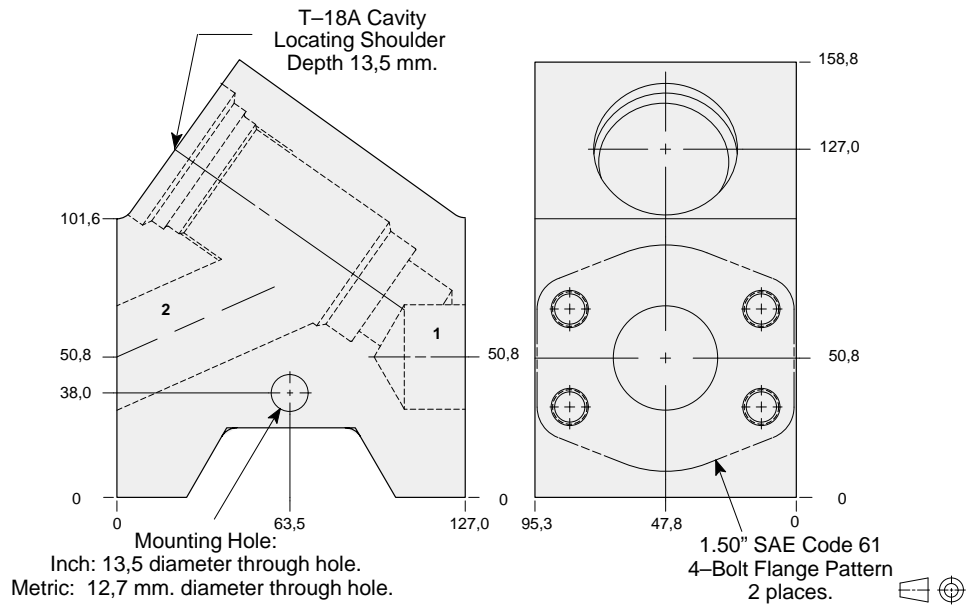
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline 1.50" SAE Code 61 flange port body.



TYPICAL CARTRIDGES USED WITH THIS BODY

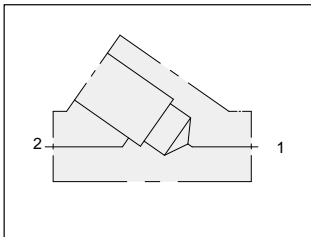
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RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
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CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
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FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii

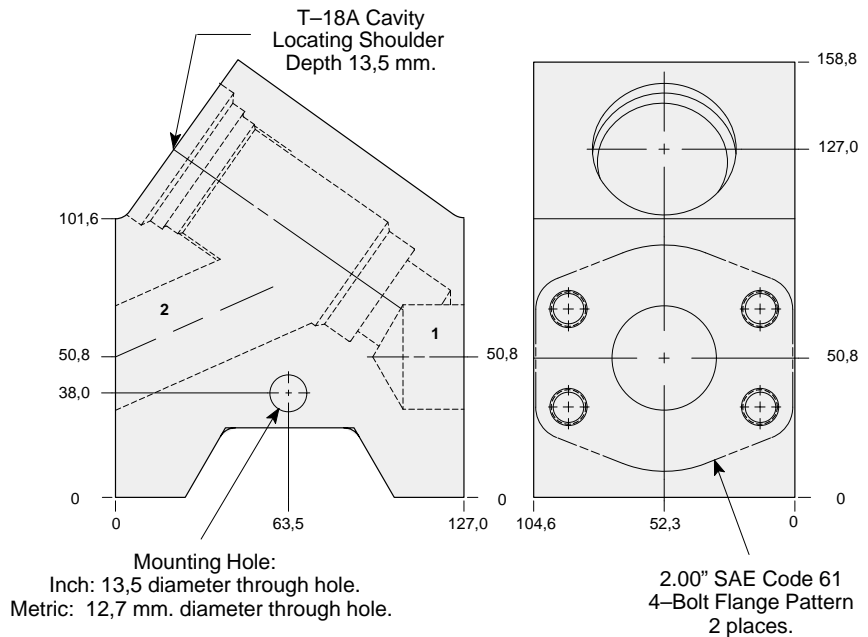
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	ZLS		ZLS/S	
Metric	ZLS/M		ZLS/T	



Inline 2.00" SAE Code 61 flange port body.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
CXJA - ***	Page	5.09
CXID - ***	Page	5.11
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25
FQIA - ***	Page	10.15

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

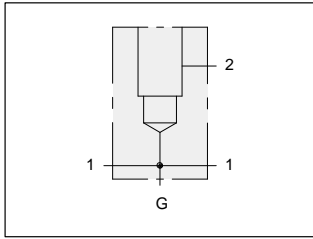
Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	ZLR		ZLR/S	
Metric	ZLR/M		ZLR/T	



LINE MOUNT BODIES



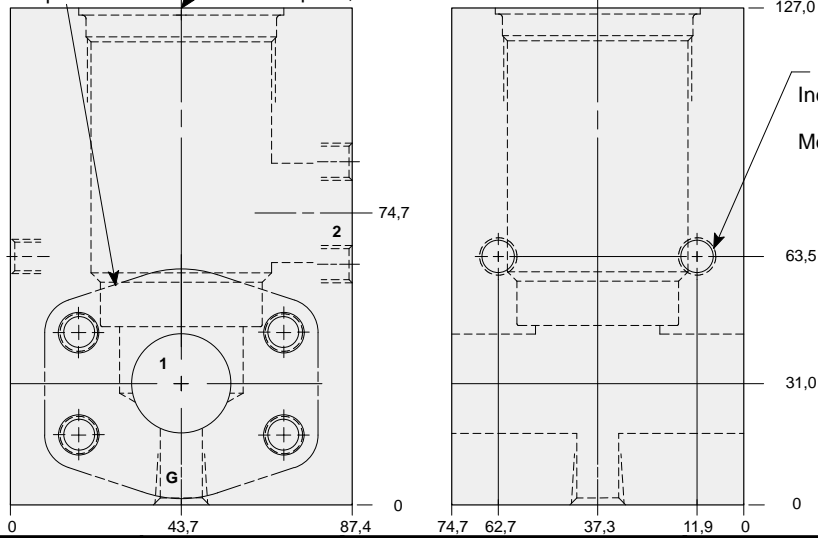
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port 1.00" SAE Code 61 flange port body with gauge port.

1.00" SAE Code 61
4-Bolt Flange Pattern
3 places.

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.



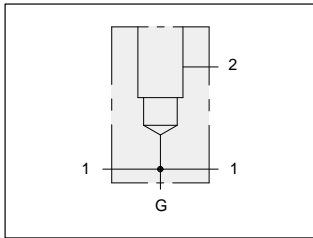
Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

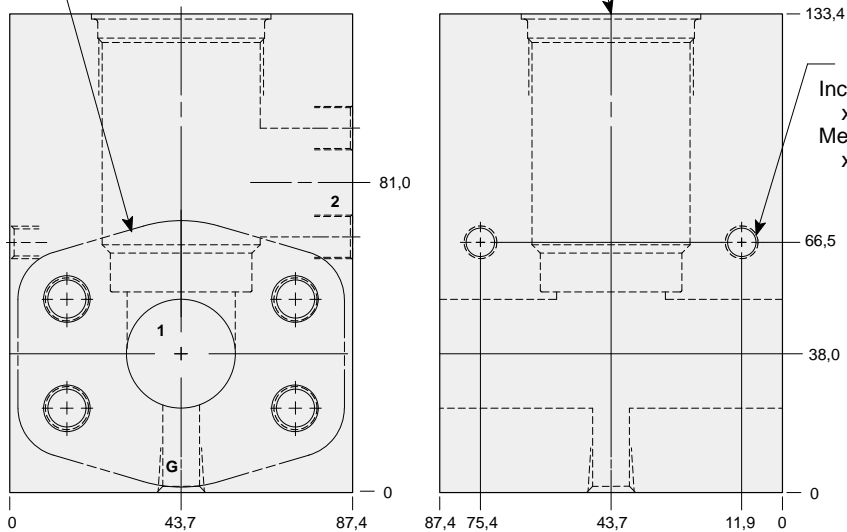
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LEP		LEP/S	
Metric	.25 BSPP	LEP/M		LEP/T	



Through port 1.00" SAE Code 62 flange port body with gauge port.

1.00" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.



Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

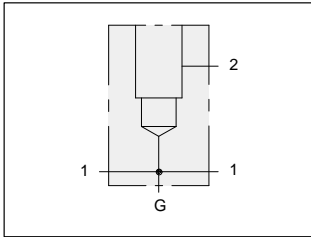
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LE4		LE4/S	
Metric	.25 BSPP	LE4/M		LE4/T	



LINE MOUNT BODIES



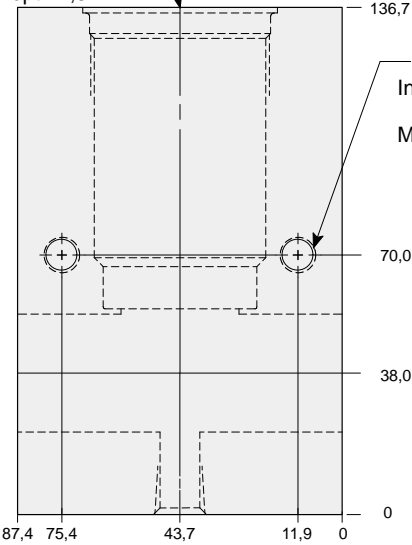
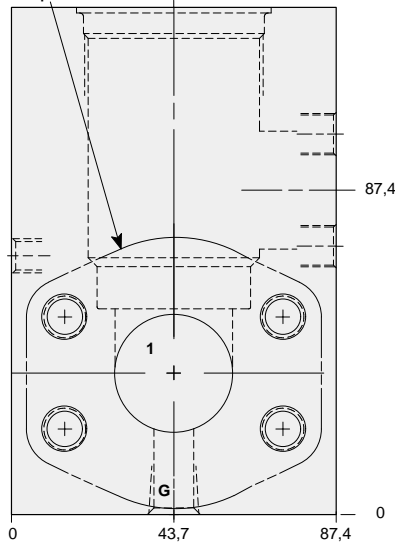
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port 1.25" SAE Code 61 flange port body with gauge port.

1.25" SAE Code 61
4-Bolt Flange Pattern
3 places.

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.



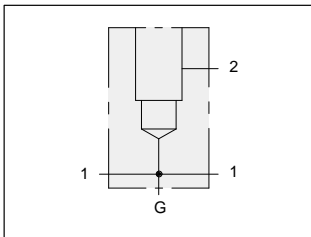
Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

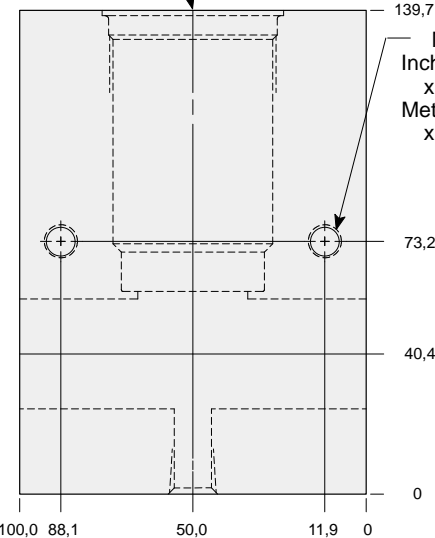
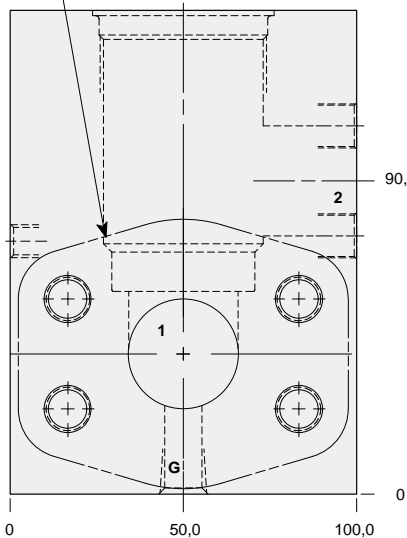
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LEQ		LEQ/S	
Metric	.25 BSPP	LEQ/M		LEQ/T	



Through port 1.25" SAE Code 62 flange port body with gauge port.

1.25" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.



Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

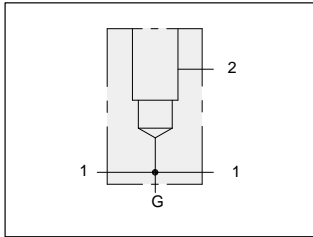
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LE5		LE5/S	
Metric	.25 BSPP	LE5/M		LE5/T	



LINE MOUNT BODIES



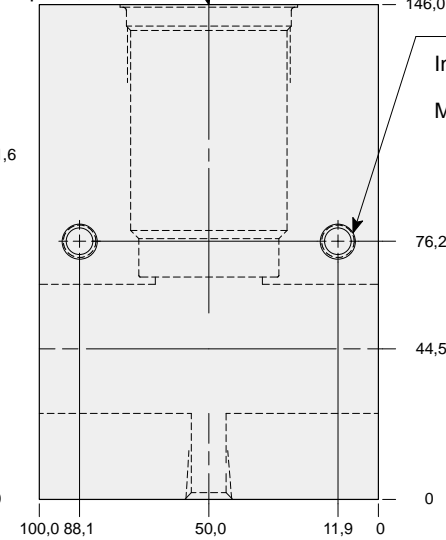
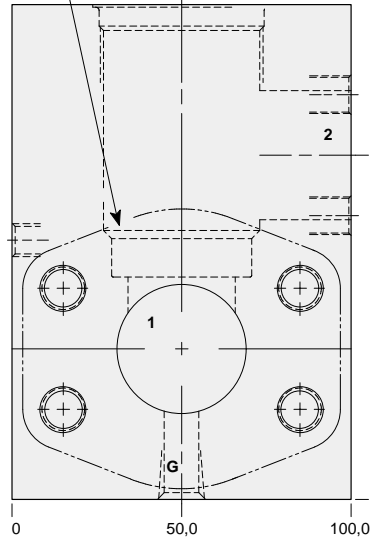
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port 1.50" SAE Code 61 flange port body with gauge port.

1.50" SAE Code 61
4-Bolt Flange Pattern
3 places.

T-18A Cavity
Locating Shoulder
Depth 0,8 mm.



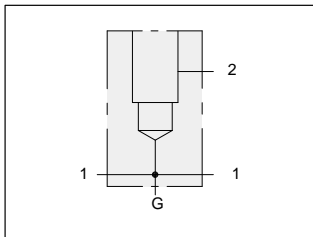
Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

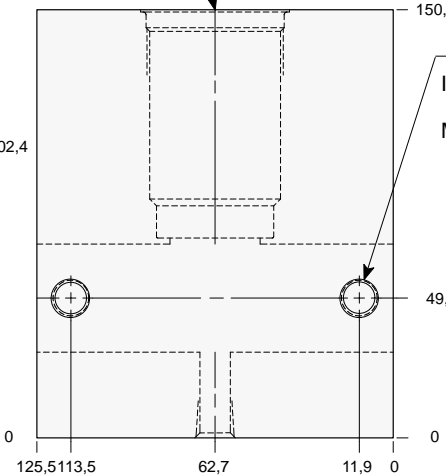
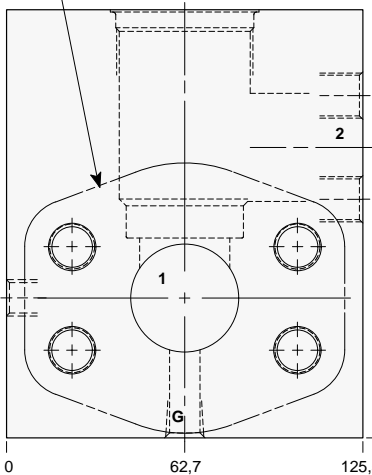
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LER		LER/S	
Metric	.25 BSPP	LER/M		LER/T	



Through port 1.50" SAE Code 62 flange port body with gauge port.

1.50" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-18A Cavity
Locating Shoulder
Depth 0,8 mm.



Mounting Holes:
Inch: .500-13 UNC-2B
x 19,0 mm. deep.
Metric: M12 x 1.75-6H
x 19,0 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

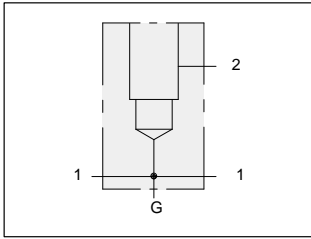
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LE6		LE6/S	
Metric	.25 BSPP	LE6/M		LE6/T	



LINE MOUNT BODIES



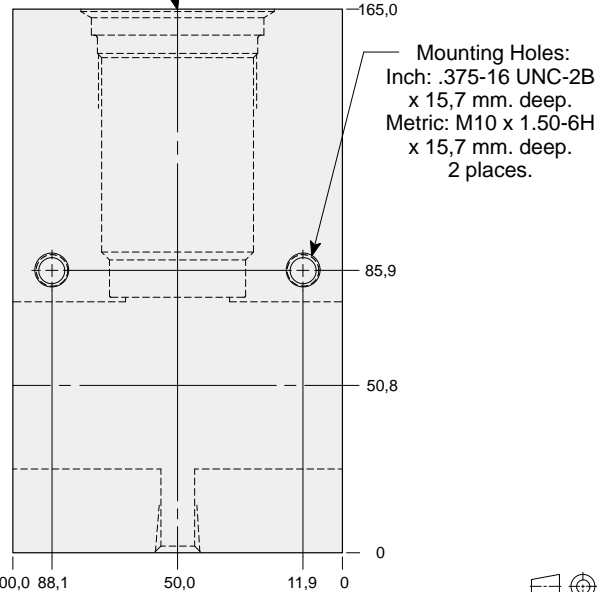
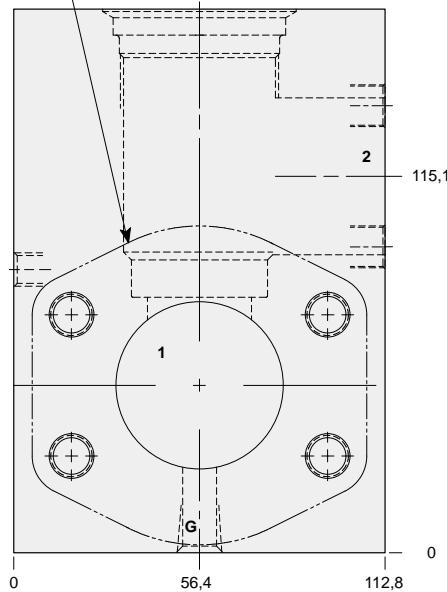
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port 2.00" SAE Code 61 flange port body with gauge port.

2.00" SAE Code 61
4-Bolt Flange Pattern
3 places.

T-18A Cavity
Locating Shoulder
Depth 7,9 mm.



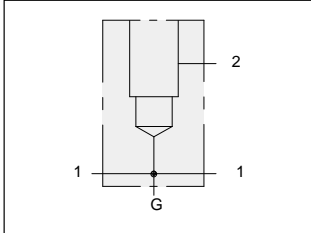
Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

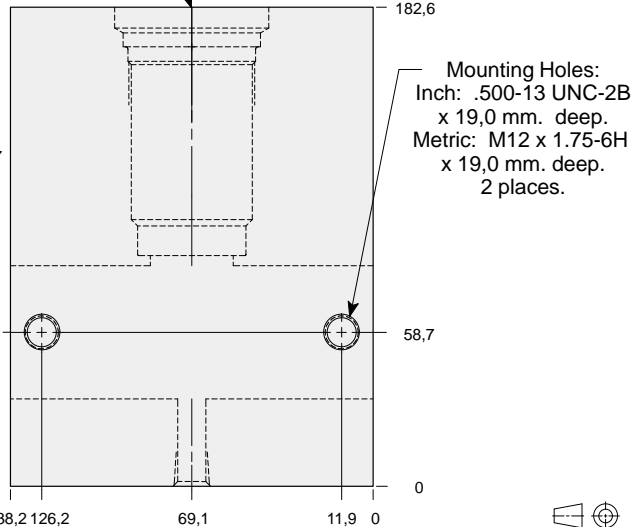
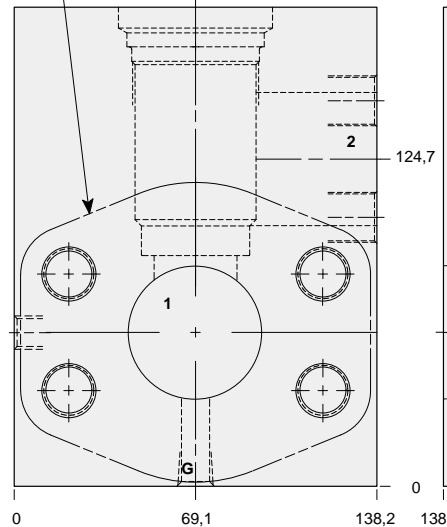
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LES		LES/S	
Metric	.25 BSPP	LES/M		LES/T	



Through port 2.00" SAE Code 62 flange port body with gauge port.

2.00" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-18A Cavity
Locating Shoulder
Depth 15 mm.



Mounting Holes:
Inch: .500-13 UNC-2B
x 19,0 mm. deep.
Metric: M12 x 1.75-6H
x 19,0 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15
NFFC - ***	Page	5.13
CNIC - ***	Page	5.15
NCGB - ***	Page	5.17
NCGC - ***	Page	5.19
FXFA - ***	Page	5.21
FCFB - ***	Page	5.23
FDFA - ***	Page	5.25

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LE8		LE8/S	
Metric	.25 BSPP	LE8/M		LE8/T	

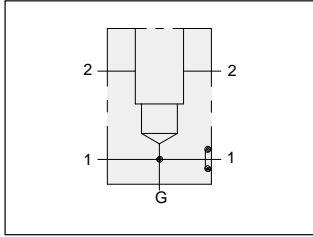
Series 4 T-18A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

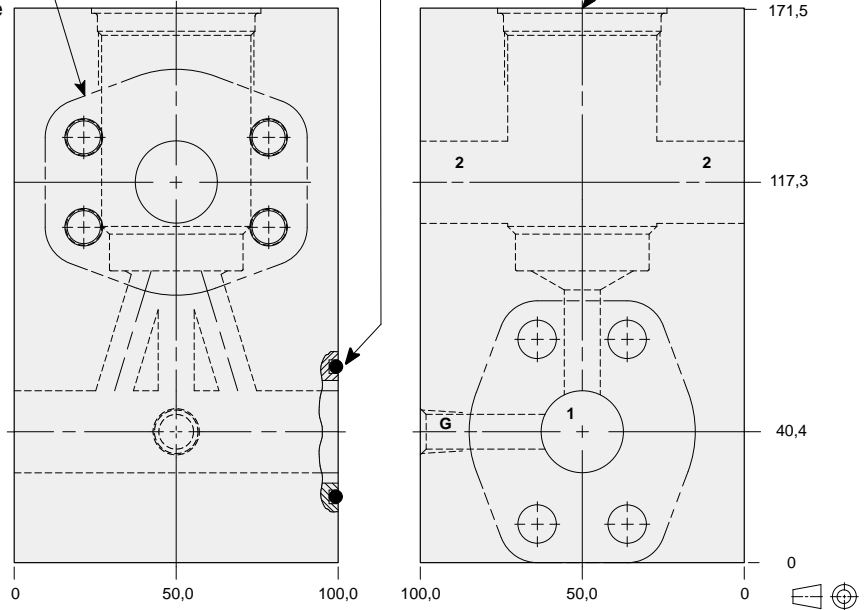


Sandwich mount through flange port 1.00" SAE Code 62 body with gauge port.

1.00" SAE Code 62
4-Bolt Flange Pattern
3 places.
Port 1 through hole
Port 2 tapped hole

-219 O-ring

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	WJM		WJM/S	
Metric	.25 BSPP	WJM/M		WJM/T	

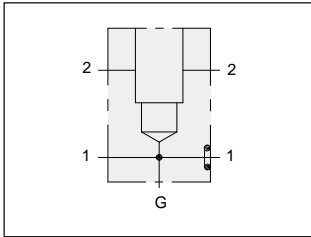
Series 4 T-18A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

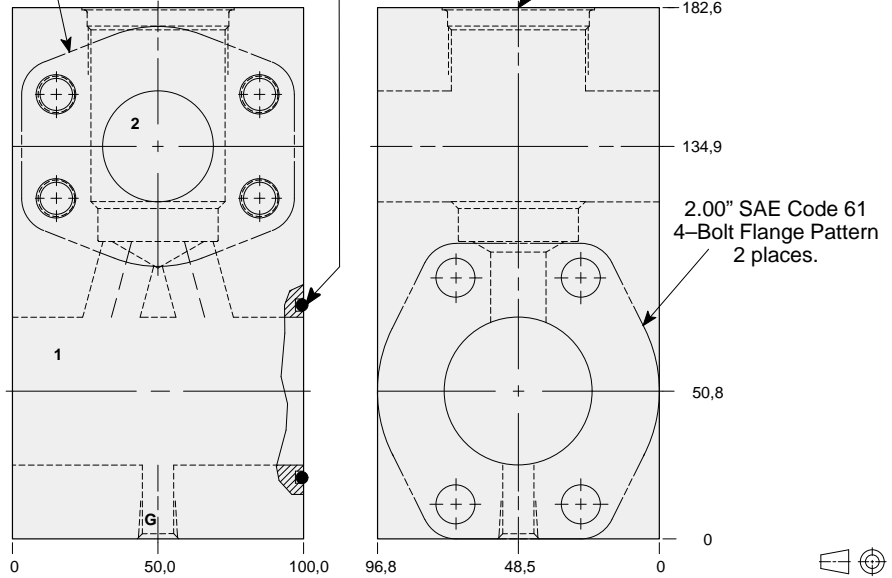


Sandwich mount through flange port 2.00" SAE Code 61 body with gauge port.

1.50" SAE Code 61
4-Bolt Flange Pattern
2 places.

-228 O-ring

T-18A Cavity
Locating Shoulder
Depth 0,8 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15

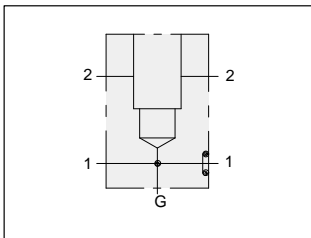
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 2 SAE Code 61	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.50"	.25 NPTF	ZBF		ZBF/S	
Metric	1.50"	.25 BSPP	ZBF/M		ZBF/T	

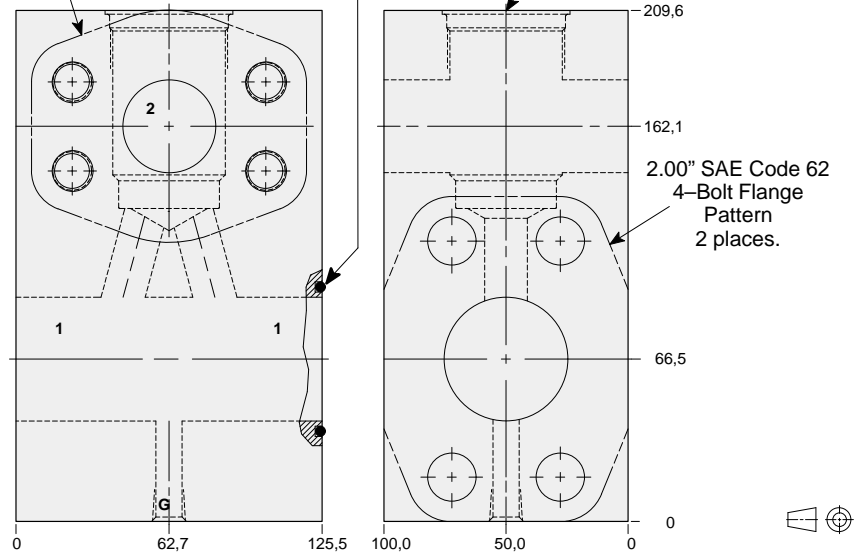


Sandwich mount through flange port 2.00" SAE Code 62 body with gauge port.

1.50" SAE Code 62
4-Bolt Flange Pattern
2 places.

-228 O-ring

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

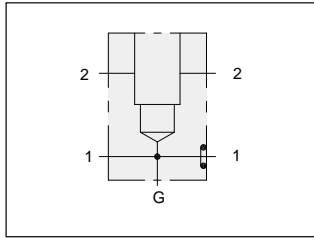
Mounting Hole Dimensions	Port 2 SAE Code 62	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.50"	.25 NPTF	ZBH		ZBH/S	
Metric	1.50"	.25 BSPP	ZBH/M		ZBH/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

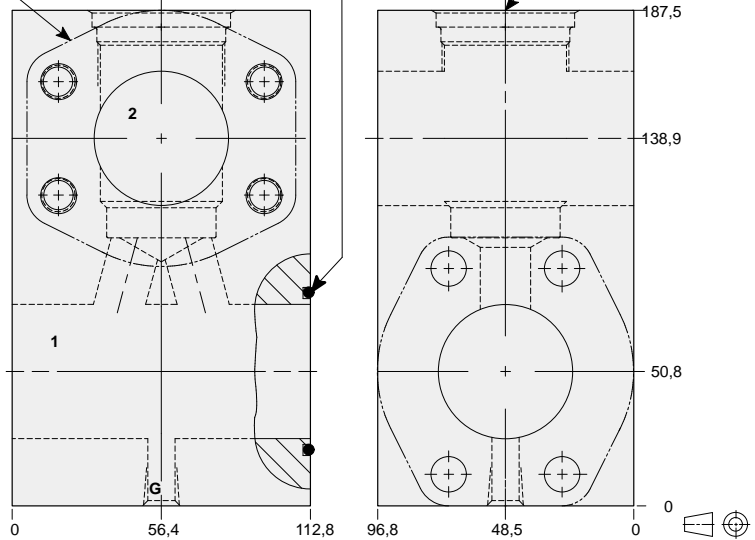


Sandwich mount through flange port 2.00" SAE Code 61 body with gauge port.

2.00" SAE Code 61
4-Bolt Flange Pattern
4 places.
Port 1 through hole
Port 2 tapped hole

-228 O-ring

T-18A Cavity
Locating Shoulder
Depth 6,4 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15

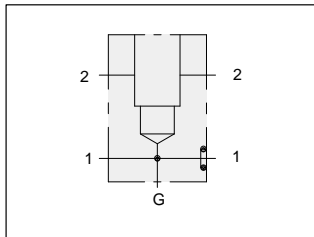
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	ZBE		ZBE/S	
Metric	.25 BSPP	ZBE/M		ZBE/T	

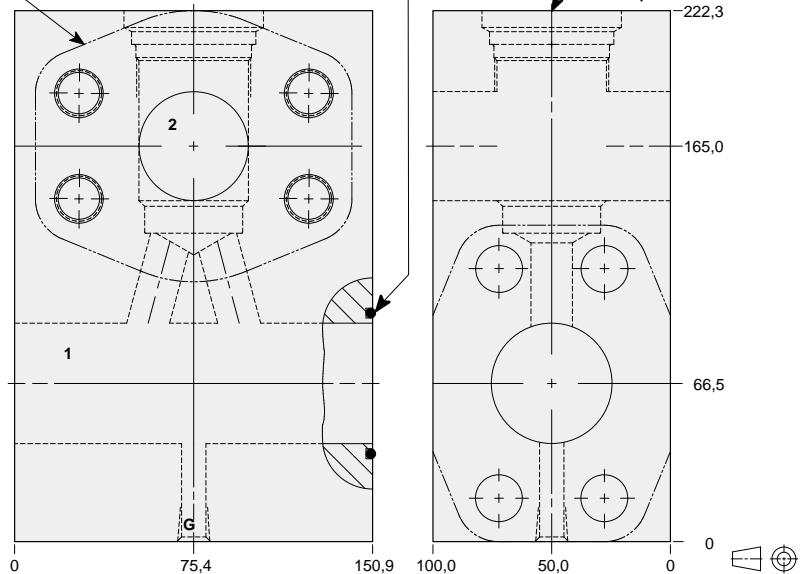


Sandwich mount through flange port 2.00" SAE Code 62 body with gauge port.

2.00" SAE Code 62
4-Bolt Flange Pattern
4 places.
Port 1 through hole
Port 2 tapped hole

-228 O-ring

T-18A Cavity
Locating Shoulder
Depth 14,2 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

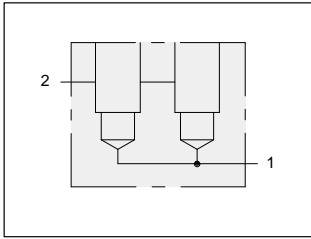
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	ZBG		ZBG/S	
Metric	.25 BSPP	ZBG/M		ZBG/T	



LINE MOUNT BODIES



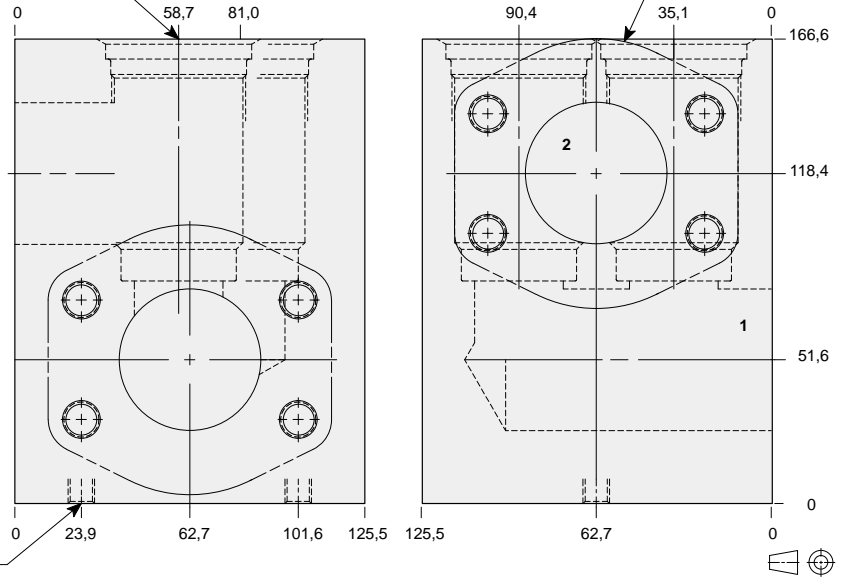
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 2.00" SAE Code 61 flange port high capacity body.

T-18A Cavities
Locating Shoulder
Depth 7,1 mm.
2 places

2.00" SAE Code 61
4-Bolt Flange Pattern
2 places.



Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	XZY		XZY/S	
Metric	XZY/M		XZY/T	

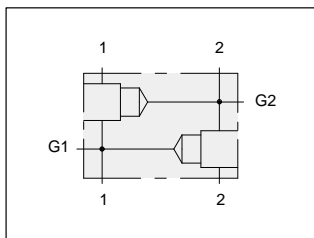
Series 4 T-18A



LINE MOUNT BODIES



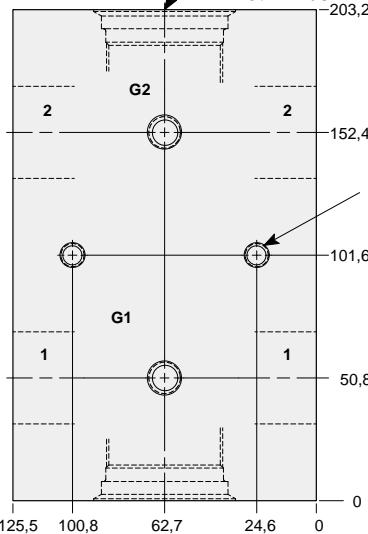
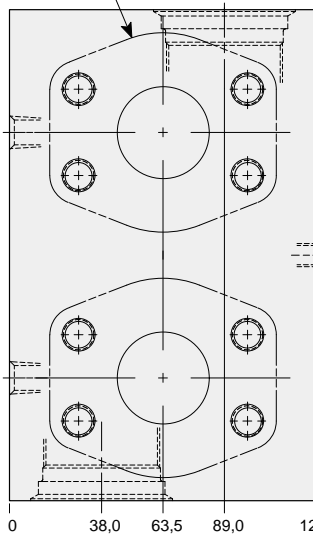
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 1.50" SAE Code 61 flange port body with gauge ports for cross-port relief applications.

1.50" SAE Code 61
4-Bolt Flange Pattern
4 places.

T-18A Cavity
Locating Shoulder
Depth 7,9 mm.
Both Ends



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

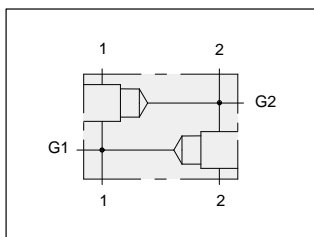
- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

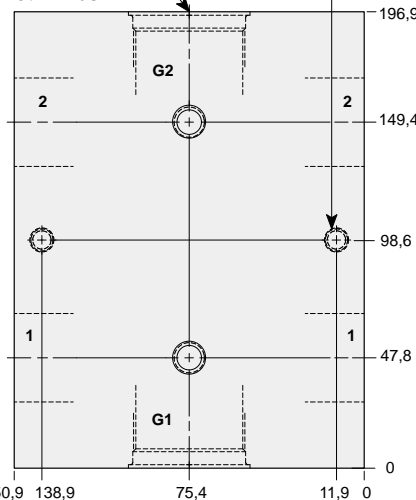
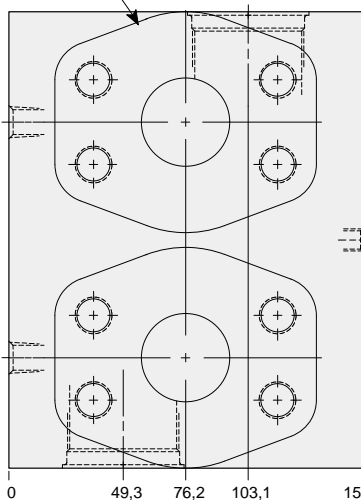
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YLR		YLR/S	
Metric	.25 BSPP	YLR/M		YLR/T	



Two cavity 1.50" SAE Code 62 flange port body with gauge ports or cross-port relief applications.

1.50" SAE Code 62
4-Bolt Flange Pattern
4 places.

T-18A Cavity
Locating Shoulder
Depth 1,5 mm.
Both Ends



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

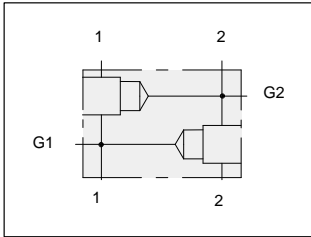
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YL6		YL6/S	
Metric	.25 BSPP	YL6/M		YL6/T	



LINE MOUNT BODIES



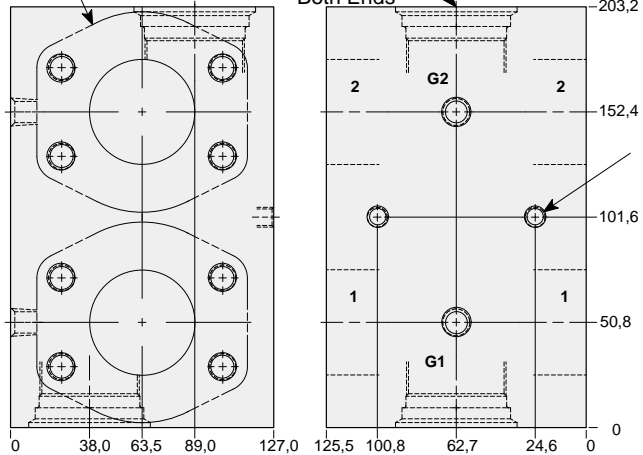
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity 2.00" SAE Code 61 flange port body with gauge ports for cross-port relief applications.

2.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

T-18A Cavity
Locating Shoulder
Depth 9,7 mm.
Both Ends



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

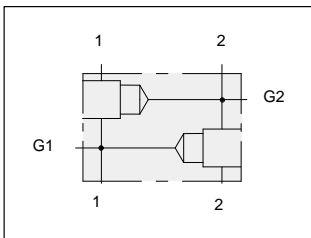
- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

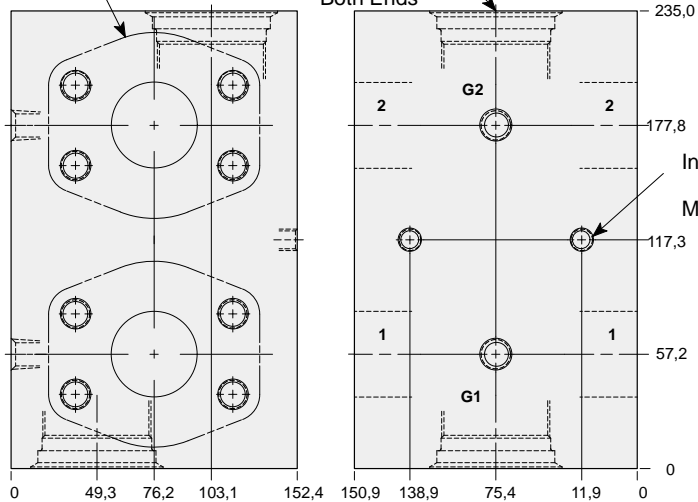
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YLS		YLS/S	
Metric	.25 BSPP	YLS/M		YLS/T	



Two cavity 2.00" SAE Code 62 flange port body with gauge ports for cross-port relief applications.

2.00" SAE Code 62
4-Bolt Flange Pattern
4 places.

T-18A Cavity
Locating Shoulder
Depth 16,8 mm.
Both Ends



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

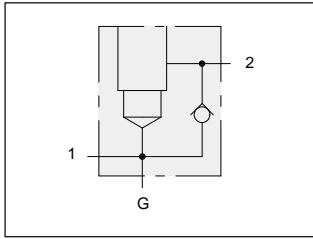
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	YL8		YL8/S	
Metric	.25 BSPP	YL8/M		YL8/T	



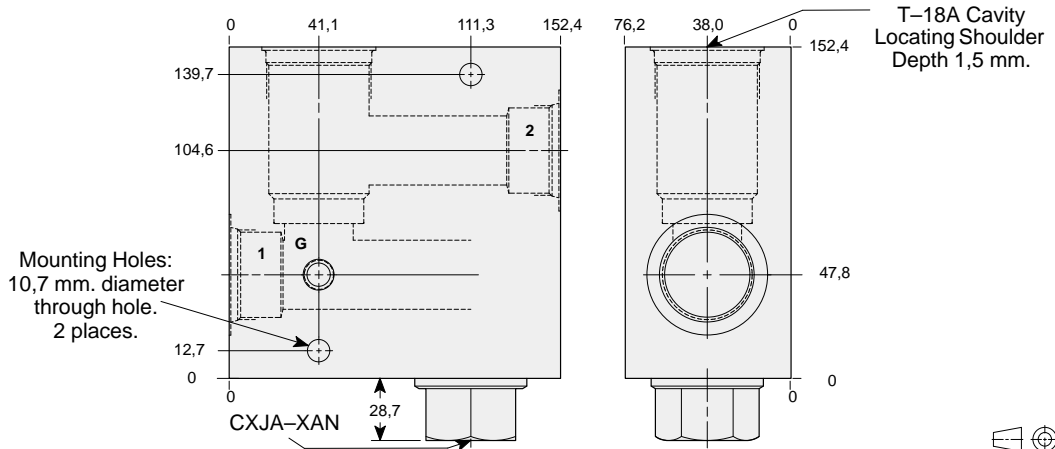
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with reverse free flow check.



TYPICAL CARTRIDGES USED WITH THIS BODY

RPKC - ***	Page	1.07
RPKE - ***	Page	1.09
RDJA - ***	Page	1.11
RQKB - ***	Page	1.13
RPKD - ***	Page	1.15

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Mounting Hole Dimensions	Ports 1 & 2	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.75 NPTF	.25 NPTF	LND		LND/S	
Inch	1.00 NPTF	.25 NPTF	LNE		LNE/S	
Inch	1.25 NPTF	.25 NPTF	LNF		LNF/S	
Inch	SAE-12	.25 NPTF	LNL		LNL/S	
Inch	SAE-16	.25 NPTF	LNM		LNM/S	
Inch	SAE-20	.25 NPTF	LNN		LNN/S	
Metric	.75 BSPP	.25 BSPP	LNW		LNW/S	
Metric	1.00 BSPP	.25 BSPP	LNX		LNX/S	
Metric	1.25 BSPP	.25 BSPP	LNy		LNy/S	

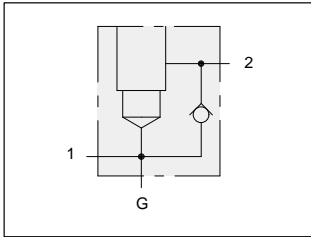
Series 4 T-18A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



1.25" SAE Code 61 flange port body with reverse free flow check for relief applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

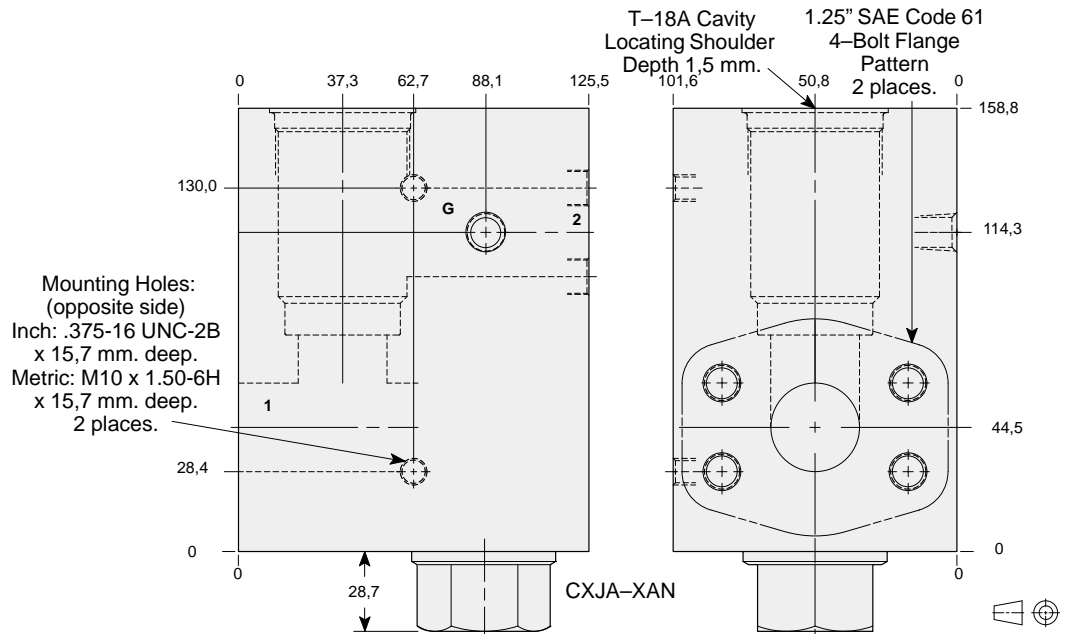
- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13
- RPKD - *** Page 1.15

Cartridge seal type determines check valve seal type.

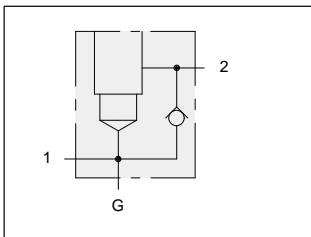
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LNQ		LNQ/S	
Metric	.25 BSPP	LNQ/M		LNQ/T	



1.25" SAE Code 62 flange port body with reverse free flow check for relief applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

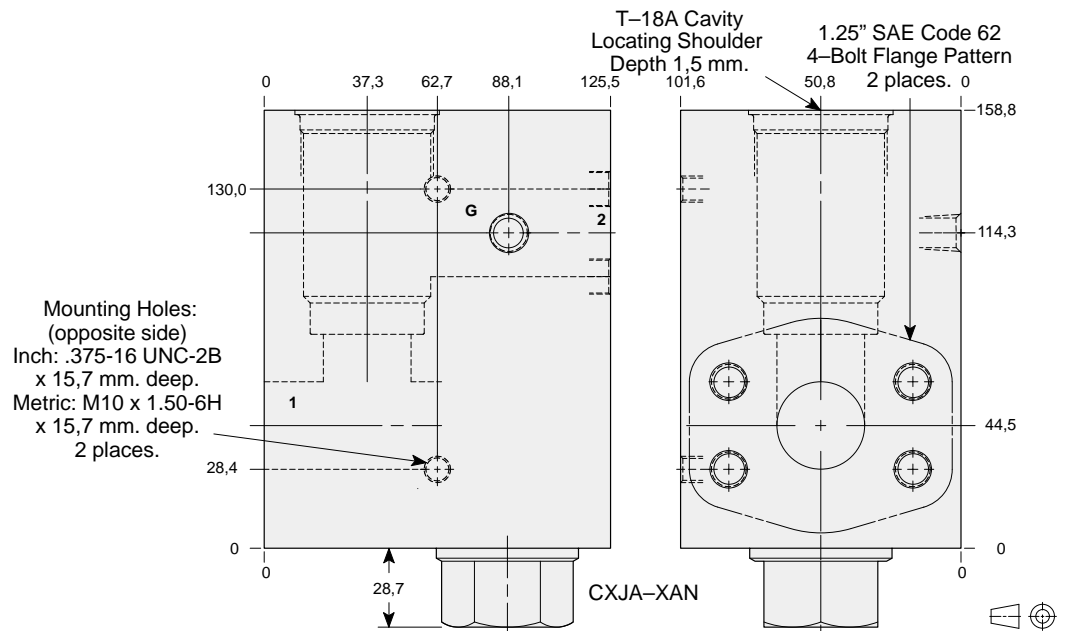
- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13
- RPKD - *** Page 1.15

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LN5		LN5/S	
Metric	.25 BSPP	LN5/M		LN5/T	

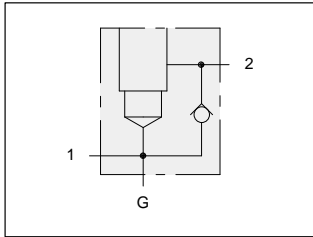
Series 4 T-18A



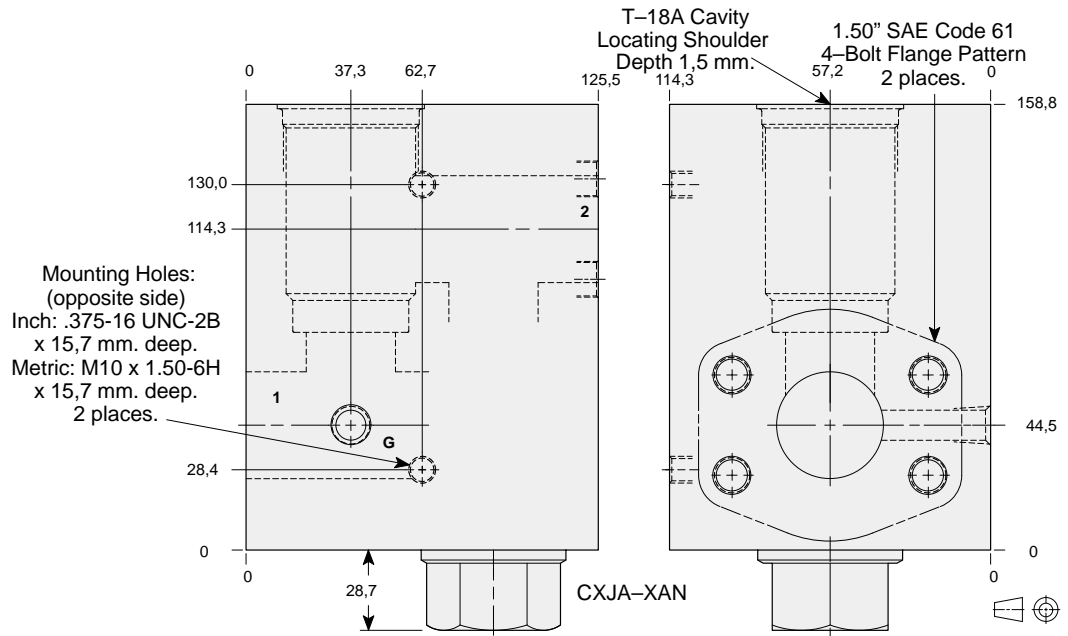
LINE MOUNT BODIES



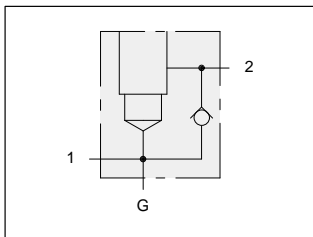
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



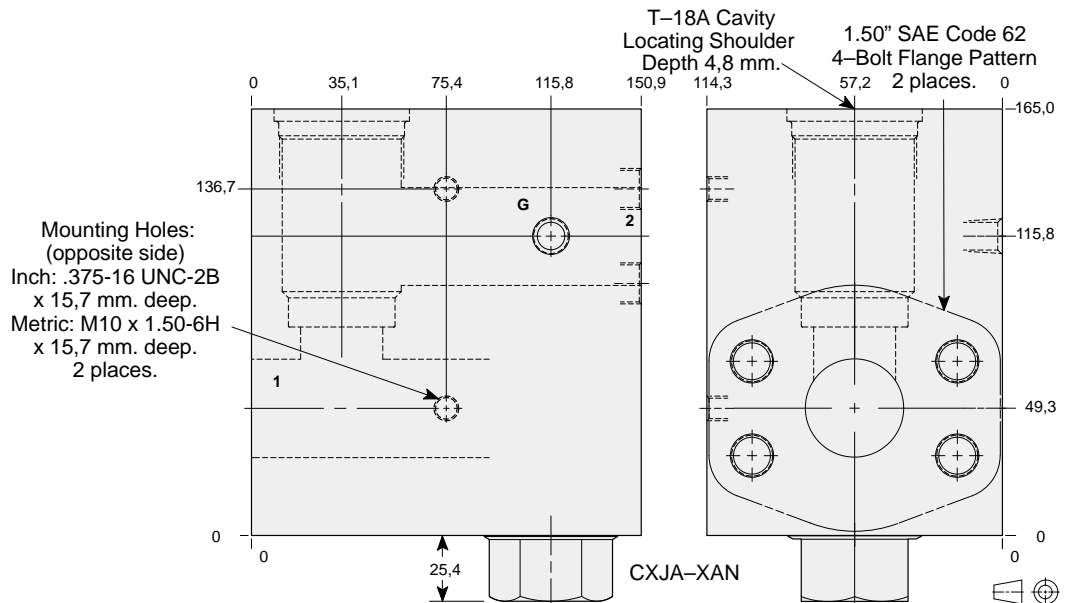
1.50" SAE Code 61 flange port body with reverse free flow check for relief applications.



Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LN6		LN6/S	
Metric	.25 BSPP	LN6/M		LN6/T	



1.50" SAE Code 62 flange port body with reverse free flow check for relief applications.



Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LN6		LN6/S	
Metric	.25 BSPP	LN6/M		LN6/T	

TYPICAL CARTRIDGES USED WITH THIS BODY

- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13
- RPKD - *** Page 1.15

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

TYPICAL CARTRIDGES USED WITH THIS BODY

- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13
- RPKD - *** Page 1.15

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

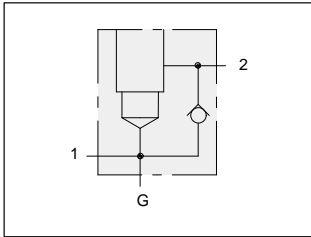
SAE Specifications. Page 11.03



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



2.00" SAE Code 61 flange port body with reverse free flow check for relief applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

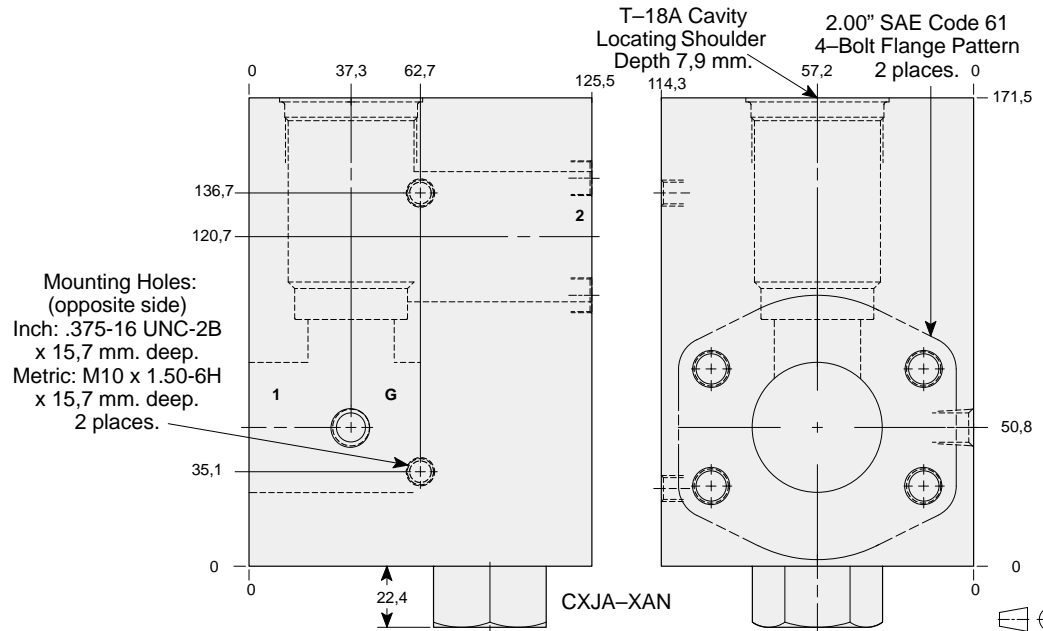
- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13
- RPKD - *** Page 1.15

Cartridge seal type determines check valve seal type.

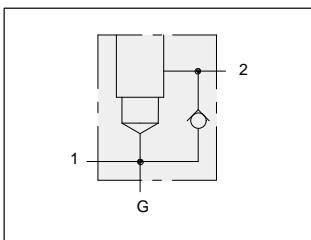
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LNS		LNS/S	
Metric	.25 BSPP	LNS/M		LNS/T	



2.00" SAE Code 62 flange port body with reverse free flow check for relief applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

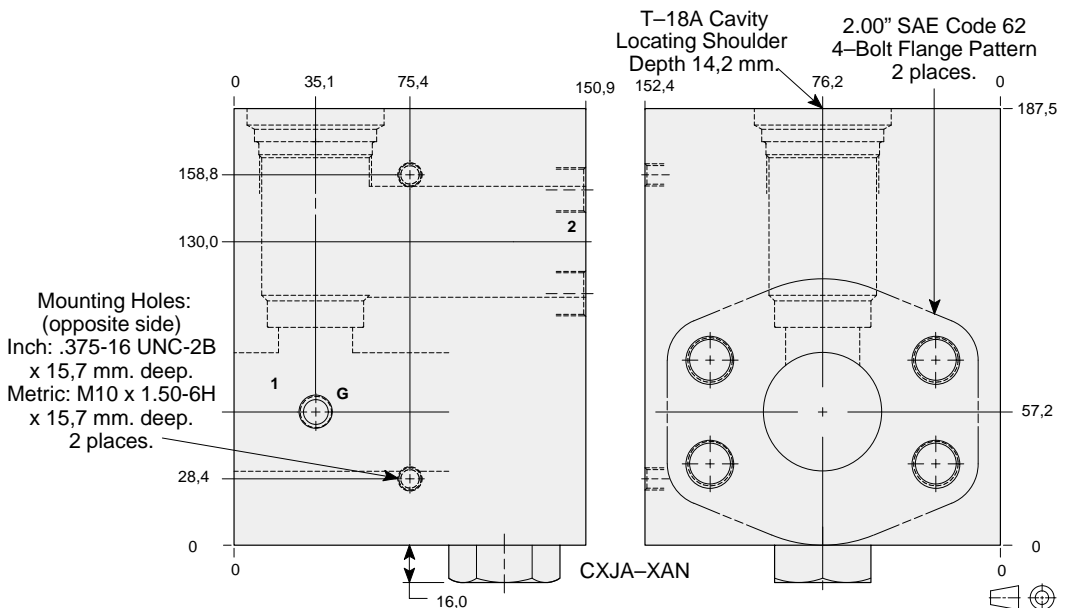
- RPKC - *** Page 1.07
- RPKE - *** Page 1.09
- RDJA - *** Page 1.11
- RQKB - *** Page 1.13
- RPKD - *** Page 1.15

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	LN8		LN8/S	
Metric	.25 BSPP	LN8/M		LN8/T	

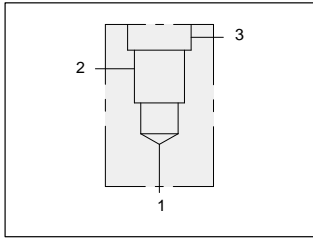
Series 4 T-18A



LINE MOUNT BODIES



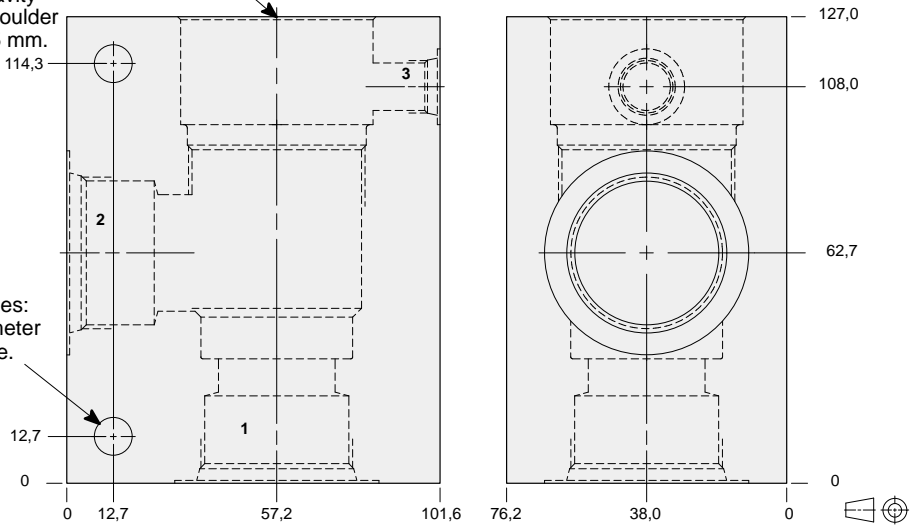
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



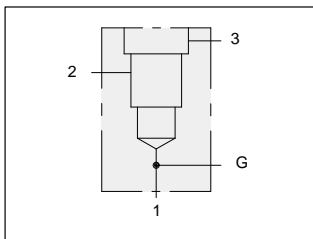
TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

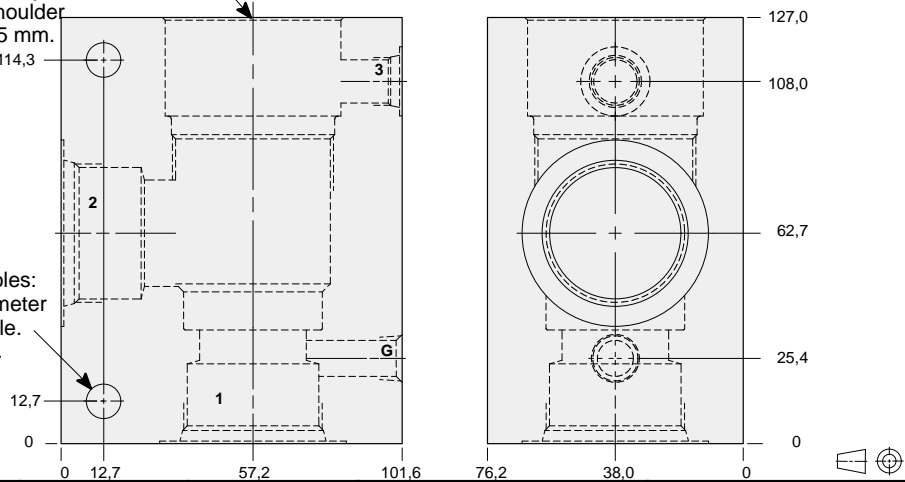
Ports 1 & 2	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
1.00 NPTF	.25 NPTF	KCE		KCE/S	
1.25 NPTF	.25 NPTF	KCF		KCF/S	
SAE-16	SAE-6	KCM		KCM/S	
SAE-20	SAE-6	KCN		KCN/S	
1.00 BSPP	.25 BSPP	KCX		KCX/S	
1.25 BSPP	.25 BSPP	KCY		KCY/S	



90 degree body with gauge port.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.

Mounting Holes:
10,7 mm. diameter
through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

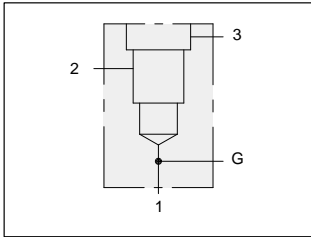
Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
1.00 NPTF	.25 NPTF	.25 NPTF	KFE		KFE/S	
1.25 NPTF	.25 NPTF	.25 NPTF	KFF		KFF/S	
SAE-16	SAE-6	.25 NPTF	KFM		KFM/S	
SAE-20	SAE-6	.25 NPTF	KFN		KFN/S	
1.00 BSPP	.25 BSPP	.25 BSPP	KFX		KFX/S	
1.25 BSPP	.25 BSPP	.25 BSPP	KFY		KFY/S	



LINE MOUNT BODIES

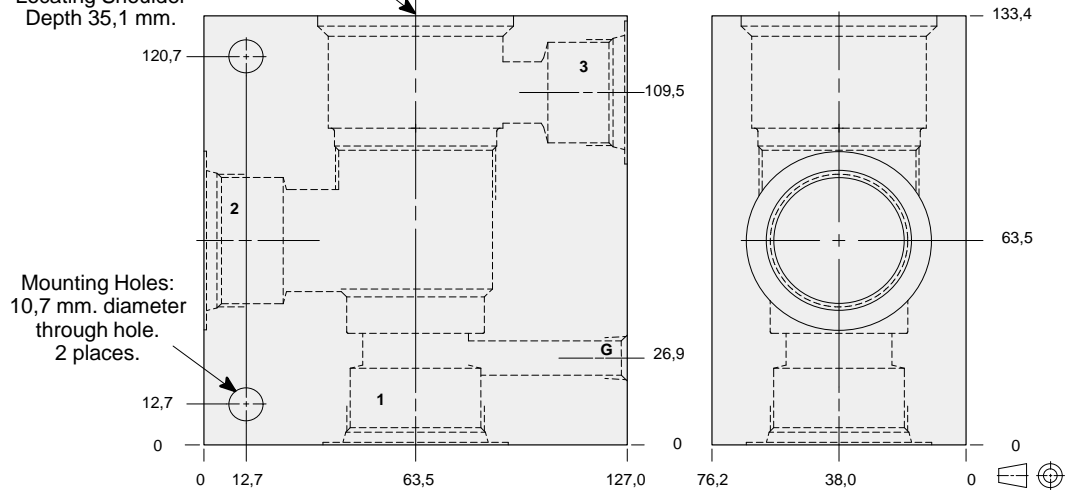


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body with high capacity port 3 and gauge port.

T-19A Cavity
Locating Shoulder
Depth 35,1 mm.



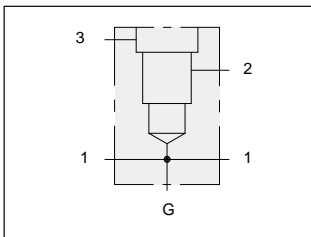
TYPICAL CARTRIDGES USED WITH THIS BODY

PPJB - ***	Page	3.11
PPJC - ***	Page	3.13
FRFA - ***	Page	6.03

Instructions for ordering complete cartridge and body assemblies. Page viii

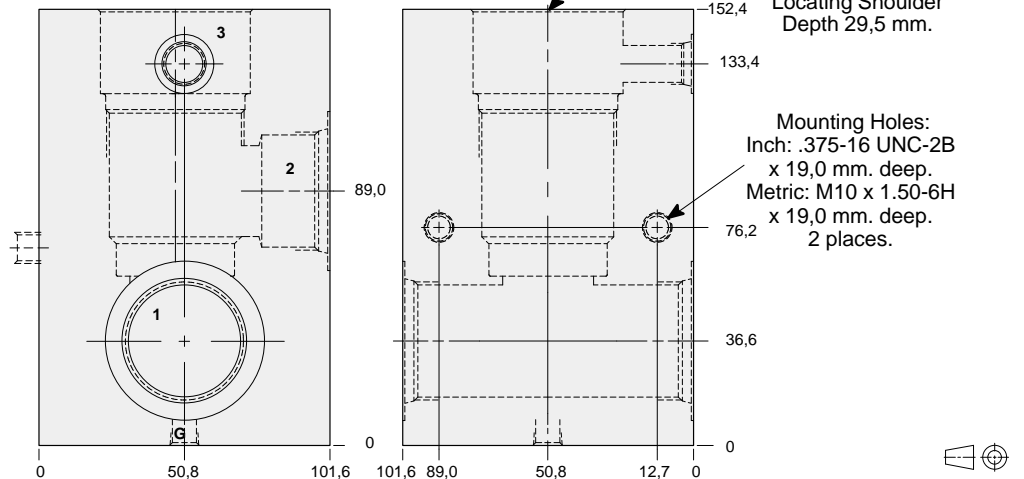
Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
1.00 NPTF	1.00 NPTF	.25 NPTF	KEE		KEE/S	
1.25 NPTF	1.00 NPTF	.25 NPTF	KEF		KEF/S	
SAE-16	SAE-16	.25 NPTF	KEM		KEM/S	
SAE-20	SAE-16	.25 NPTF	KEN		KEN/S	
1.00 BSPP	1.00 BSPP	.25 BSPP	KEX		KEX/S	
1.25 BSPP	1.00 BSPP	.25 BSPP	KEY		KEY/S	



Through port body with gauge port.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



Mounting Holes:
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
PBJB - ***	Page	3.07
PBJC - ***	Page	3.09

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

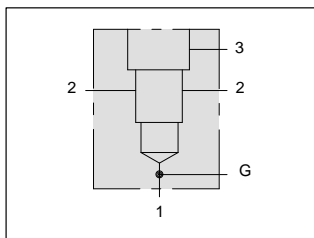
Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	KHE		KHE/S	
Inch	1.25 NPTF	.25 NPTF	.25 NPTF	KHF		KHF/S	
Inch	SAE-16	SAE-6	.25 NPTF	KHM		KHM/S	
Inch	SAE-20	SAE-6	.25 NPTF	KHN		KHN/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	KHX		KHX/S	
Metric	1.25 BSPP	.25 BSPP	.25 BSPP	KHY		KHY/S	



LINE MOUNT BODIES



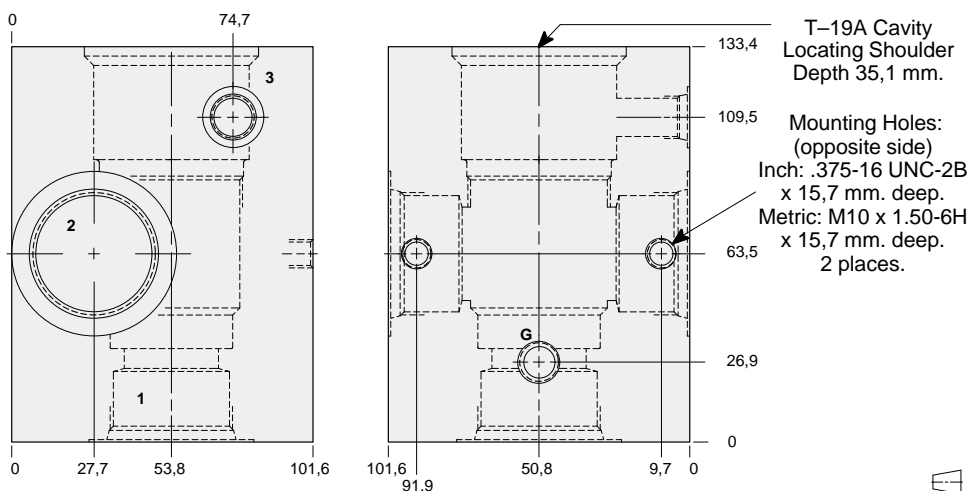
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



TYPICAL CARTRIDGES USED WITH THIS BODY

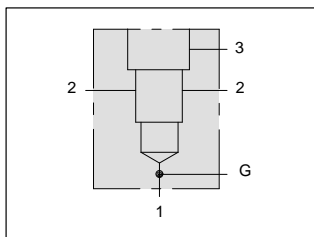
- PBJB - *** Page 3.07
- PBJC - *** Page 3.09
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02

Through port body with gauge port for reducing applications.



Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	WTO		WTO/S	
Inch	1.25 NPTF	.25 NPTF	.25 NPTF	WTP		WTP/S	
Inch	SAE-16	SAE-6	.25 NPTF	WTQ		WTQ/S	
Inch	SAE-20	SAE-6	.25 NPTF	WTR		WTR/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	WTS		WTS/S	
Metric	1.25 BSPP	.25 BSPP	.25 BSPP	WTT		WTT/S	

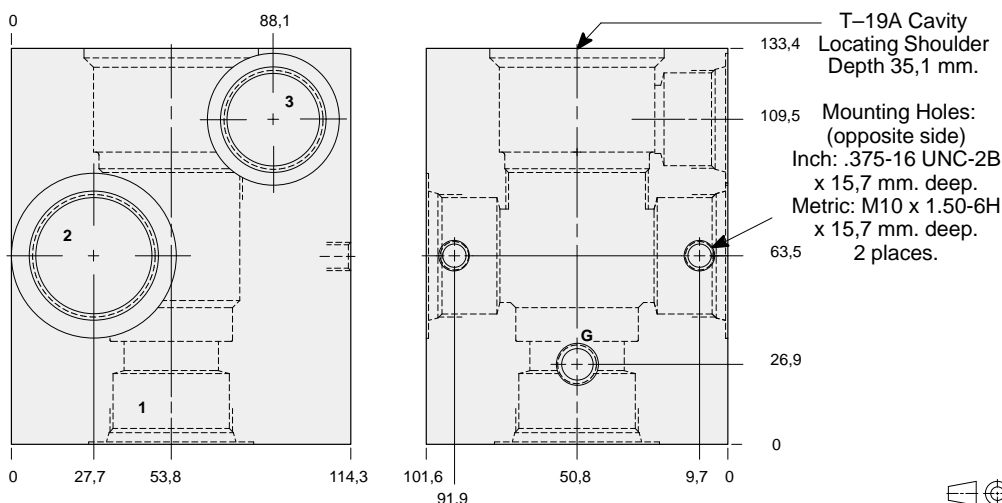
Series 4 T-19A



TYPICAL CARTRIDGES USED WITH THIS BODY

- PPJB - *** Page 3.11
- PPJC - *** Page 3.13
- FRFA - *** Page 6.03
- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02

Through port body with high capacity port 3 and gauge port for reducing/relieving applications.



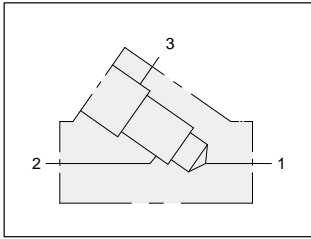
Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	1.00 NPTF	.25 NPTF	WTU		WTU/S	
Inch	1.25 NPTF	1.00 NPTF	.25 NPTF	WTV		WTV/S	
Inch	SAE-16	SAE-16	.25 NPTF	WTW		WTW/S	
Inch	SAE-20	SAE-16	.25 NPTF	WTX		WTX/S	
Metric	1.00 BSPP	1.00 BSPP	.25 BSPP	WTY		WTY/S	
Metric	1.25 BSPP	1.00 BSPP	.25 BSPP	WTZ		WTZ/S	



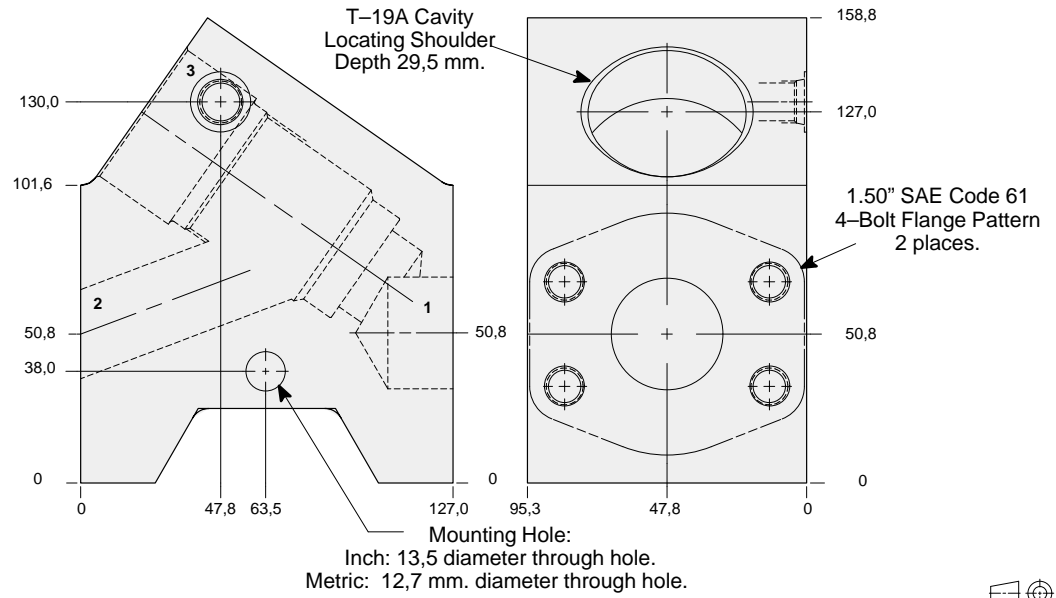
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Inline 1.50" SAE Code 61 flange port body.



TYPICAL CARTRIDGES USED WITH THIS BODY

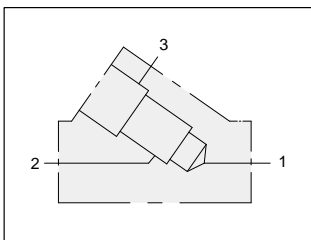
RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

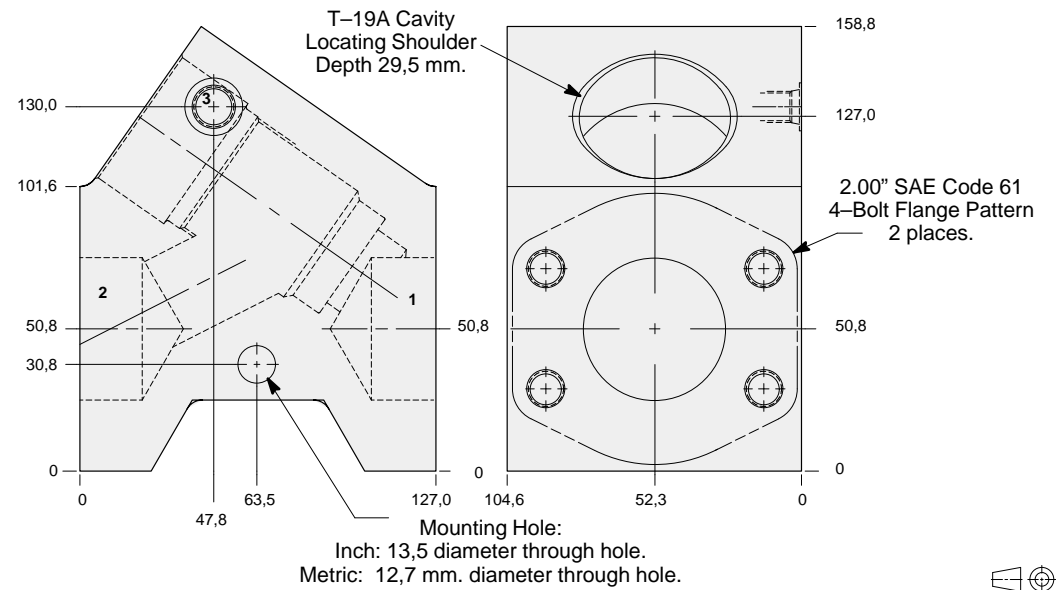
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZLQ		ZLQ/S	
Metric	.25 BSPP	ZLQ/M		ZLQ/T	



Inline 2.00" SAE Code 61 flange port body.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

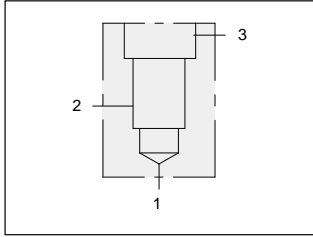
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZLP		ZLP/S	
Metric	.25 BSPP	ZLP/M		ZLP/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

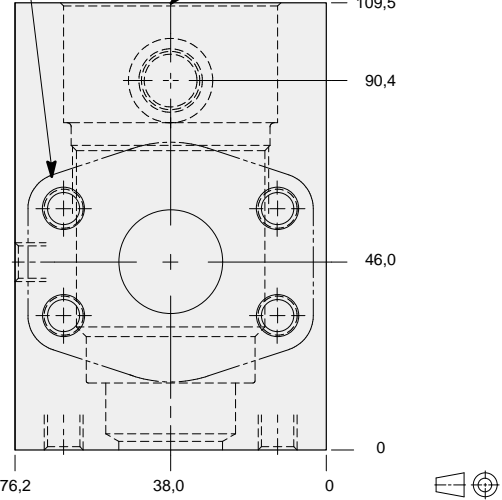
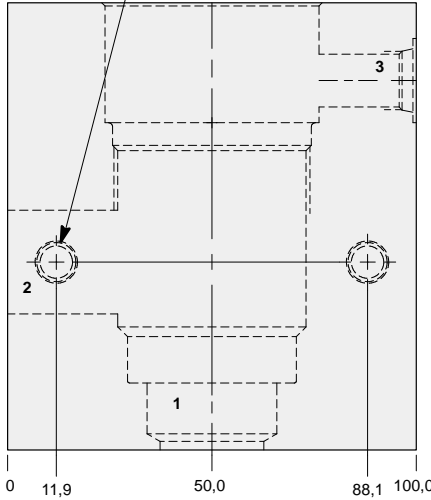


90 degree 1.00" SAE Code 61 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.

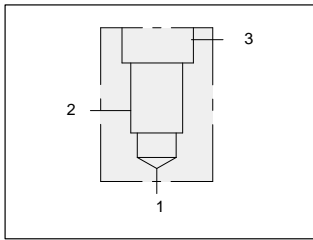


TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	KCP		KCP/S	
Metric	.25 BSPP	KCP/M		KCP/T	

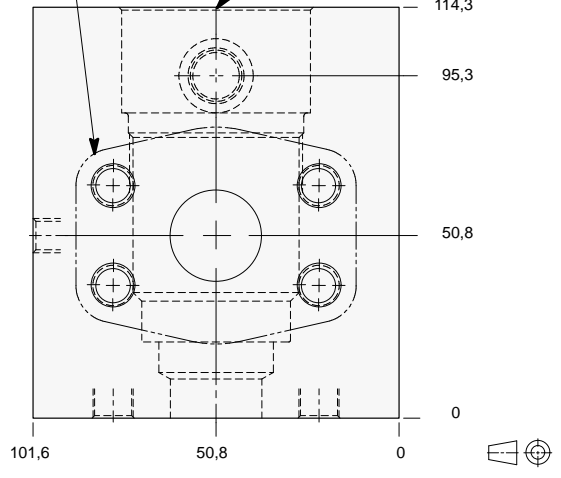
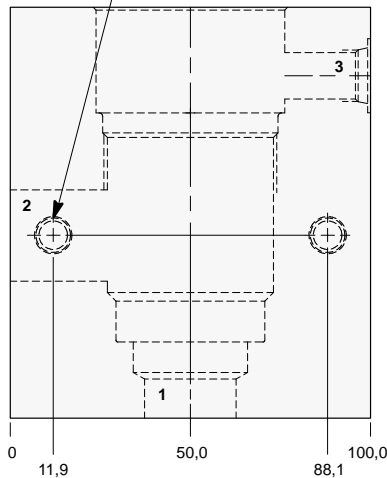


90 degree 1.00" SAE Code 62 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

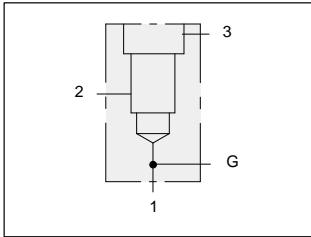
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	KC4		KC4/S	
Metric	.25 BSPP	KC4/M		KC4/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

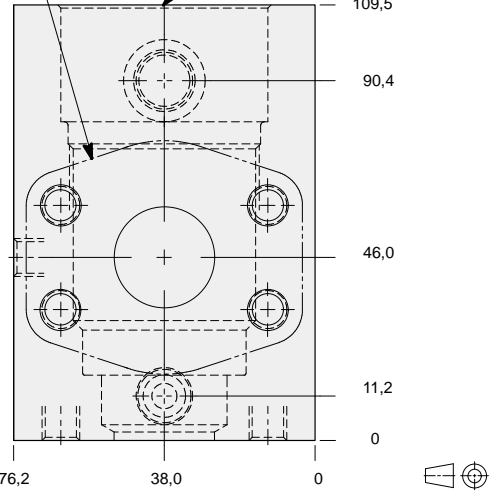
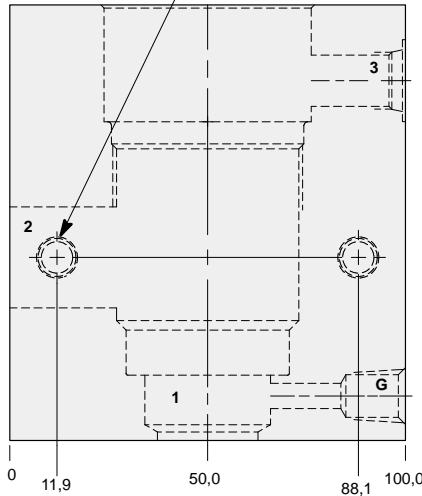


90 degree 1.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

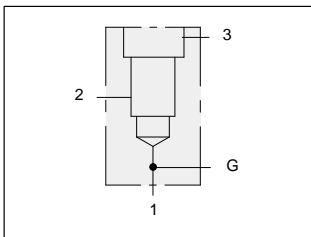
RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
PBJB - ***	Page	3.07
PBJC - ***	Page	3.09
CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17
LOJC - ***	Page	9.09
LKJC - ***	Page	9.11
LPJC - ***	Page	9.13
LRJC - ***	Page	9.15
COJA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KFP		KFP/S	
Metric	.25 BSPP	.25 BSPP	KFP/M		KFP/T	

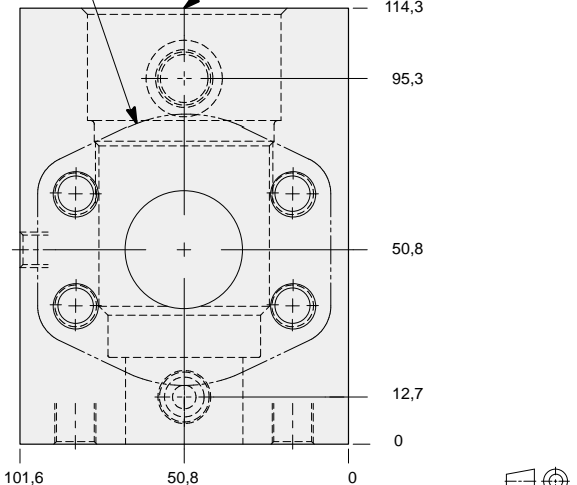
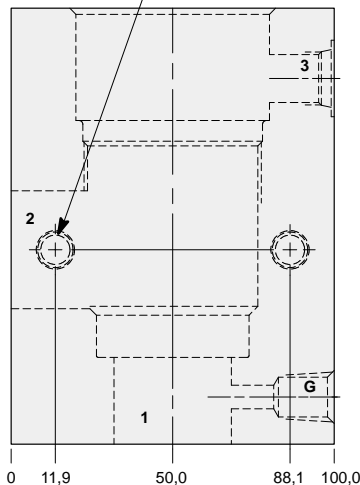


90 degree 1.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
PBJB - ***	Page	3.07
PBJC - ***	Page	3.09
CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17
LOJC - ***	Page	9.09
LKJC - ***	Page	9.11
LPJC - ***	Page	9.13
LRJC - ***	Page	9.15
COJA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KF4		KF4/S	
Metric	.25 BSPP	.25 BSPP	KF4/M		KF4/T	

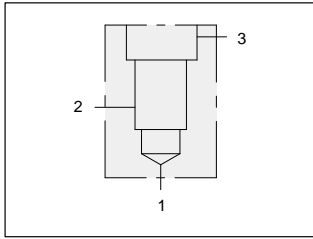
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

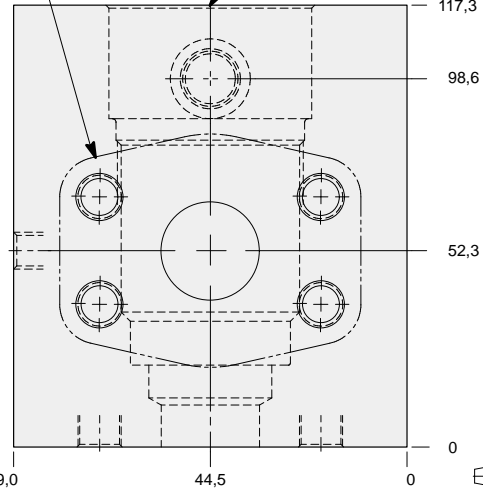
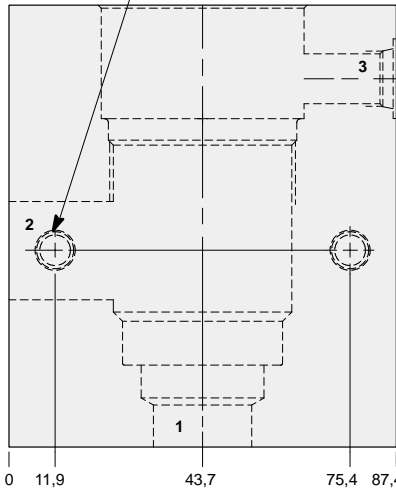


90 degree 1.25" SAE Code 61 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 30,2 mm.

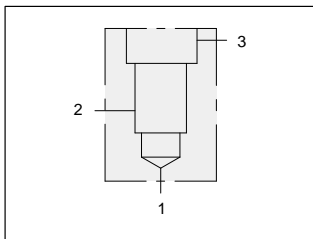


TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBBB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	KCQ		KCQ/S	
Metric	.25 BSPP	KCQ/M		KCQ/T	

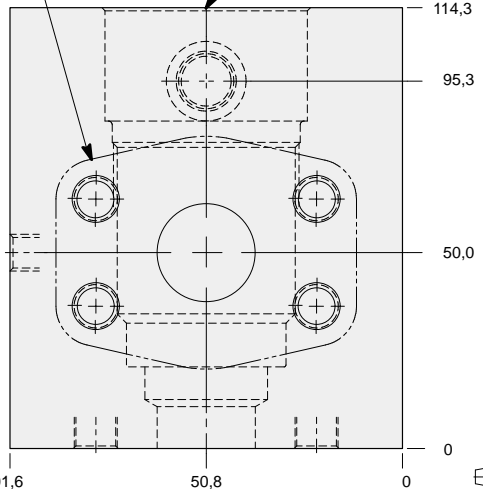
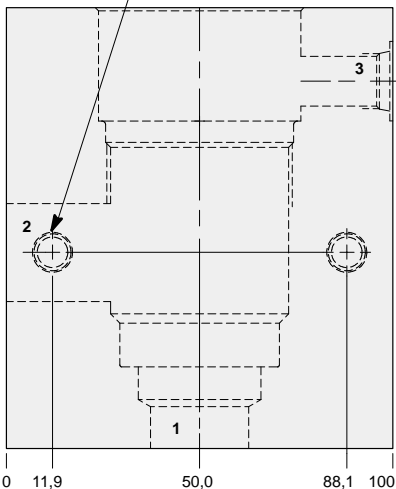


90 degree 1.25" SAE Code 62 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBBB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

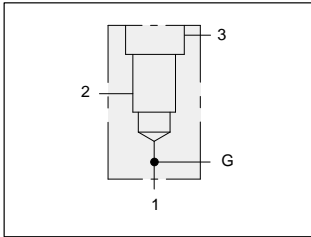
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	KC5		KC5/S	
Metric	.25 BSPP	KC5/M		KC5/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

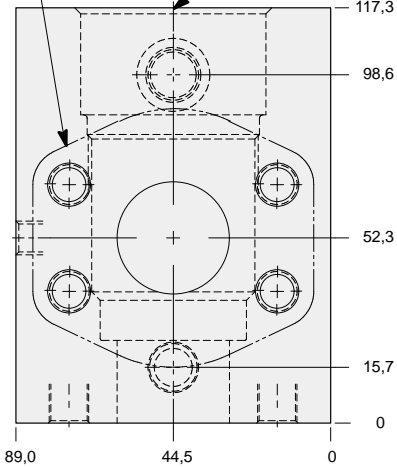
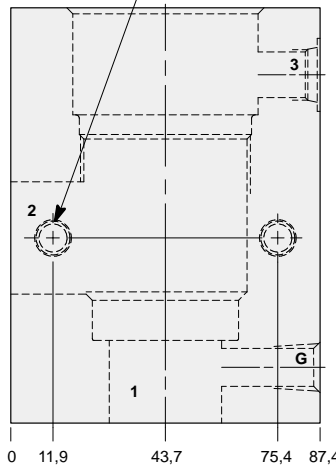


90 degree 1.25" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 30,2 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

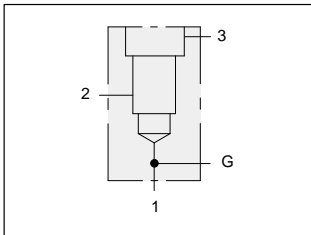
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RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KFQ		KFQ/S	
Metric	.25 BSPP	.25 BSPP	KFQ/M		KFQ/T	

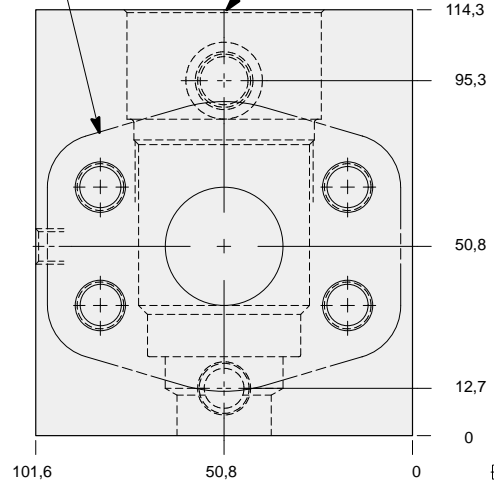
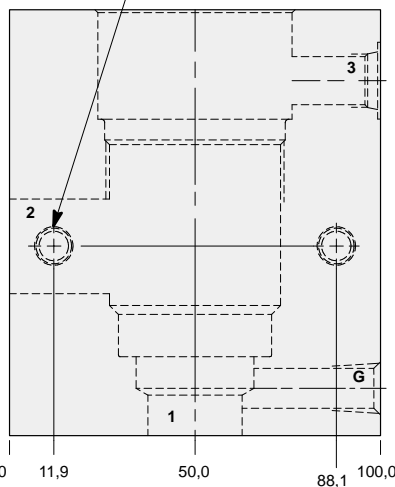


90 degree 1.25" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KF5		KF5/S	
Metric	.25 BSPP	.25 BSPP	KF5/M		KF5/T	

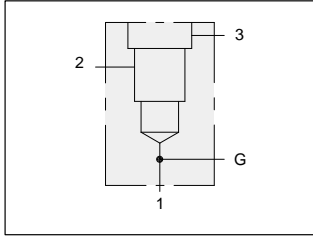
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

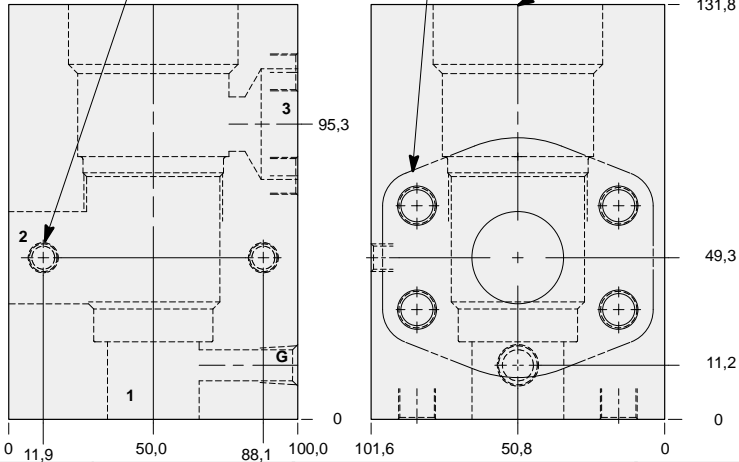


90 degree 1.25" SAE Code 61 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.25" SAE Code 61
4-Bolt Flange Pattern
3 places.

T-19A Cavity
Locating Shoulder
Depth 47,8 mm.

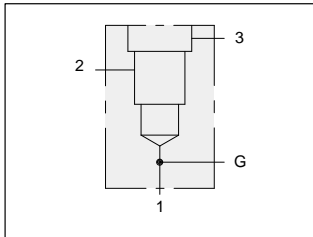


TYPICAL CARTRIDGES USED WITH THIS BODY

- PPJB - *** Page 3.11
- PPJC - *** Page 3.13
- FRFA - *** Page 6.03

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	KEQ		KEQ/S	
Metric	.25 BSPP	KEQ/M		KEQ/T	

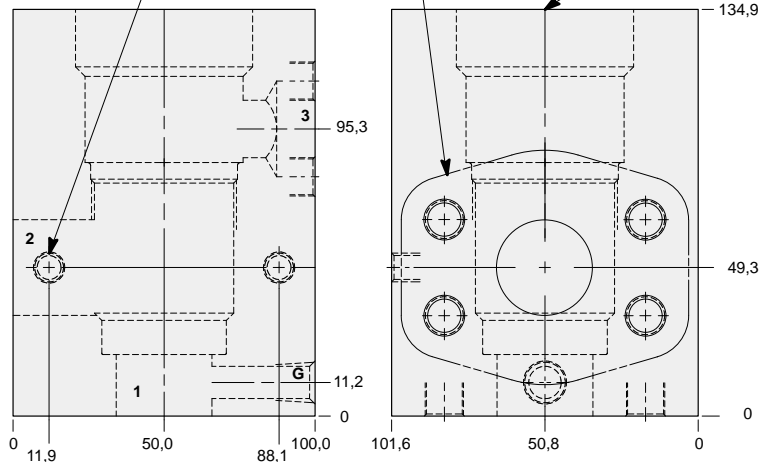


90 degree 1.25" SAE Code 62 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.25" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-19A Cavity
Locating Shoulder
Depth 50,8 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

- PPJB - *** Page 3.11
- PPJC - *** Page 3.13
- FRFA - *** Page 6.03

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	KE5		KE5/S	
Metric	.25 BSPP	KE5/M		KE5/T	

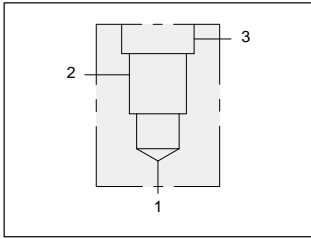
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

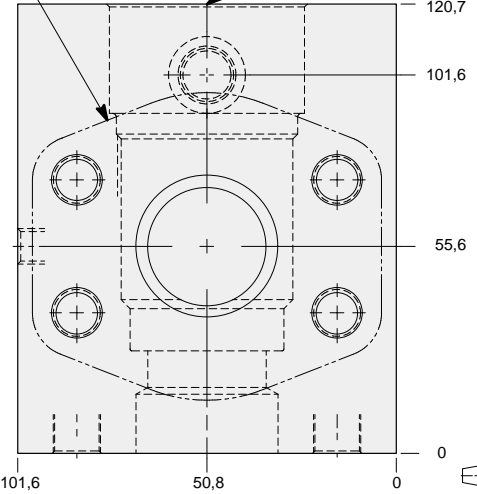
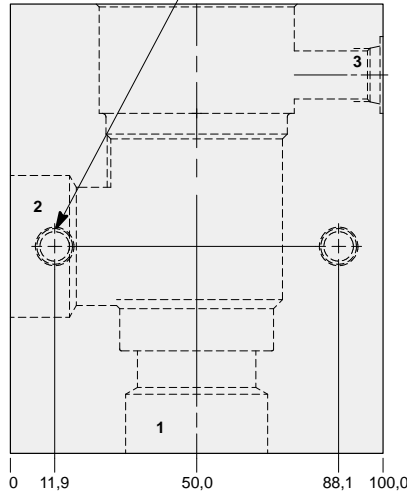


90 degree 1.50" SAE Code 61 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.50" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

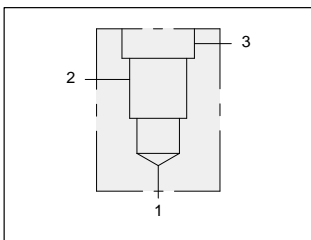
RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	KCR		KCR/S	
Metric	.25 BSPP	KCR/M		KCR/T	

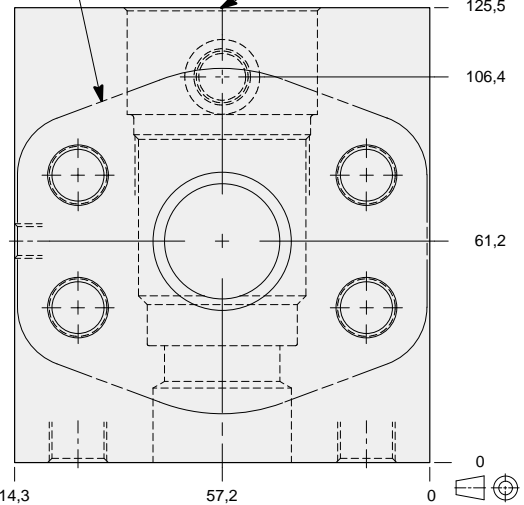
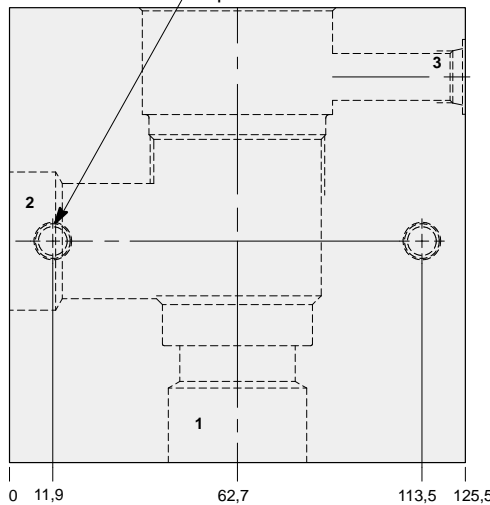


90 degree 1.50" SAE Code 62 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.50" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	KC6		KC6/S	
Metric	.25 BSPP	KC6/M		KC6/T	

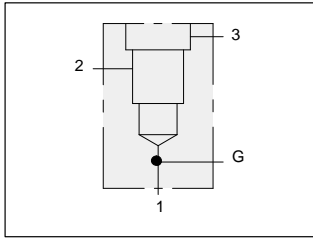
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

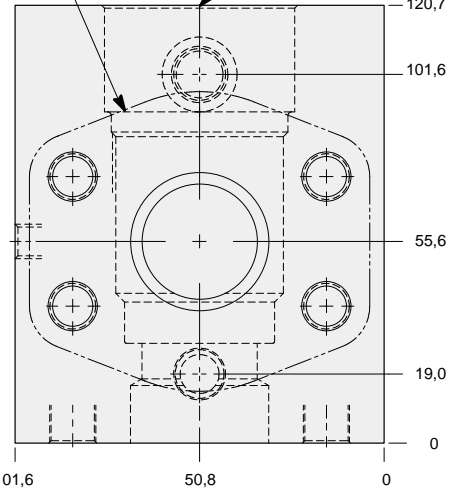
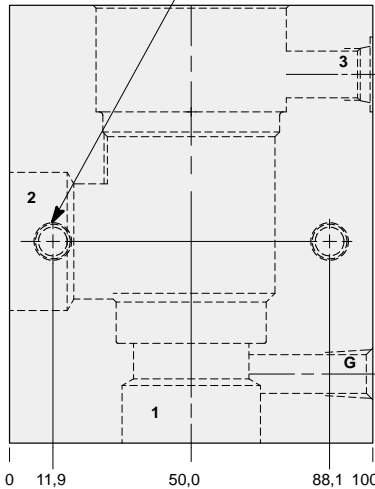


90 degree 1.50" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.50" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

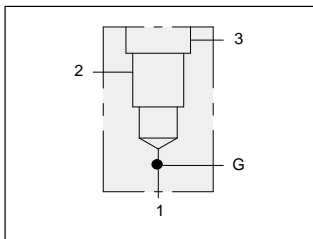
RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBBJ	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KFR		KFR/S	
Metric	.25 BSPP	.25 BSPP	KFR/M		KFR/T	

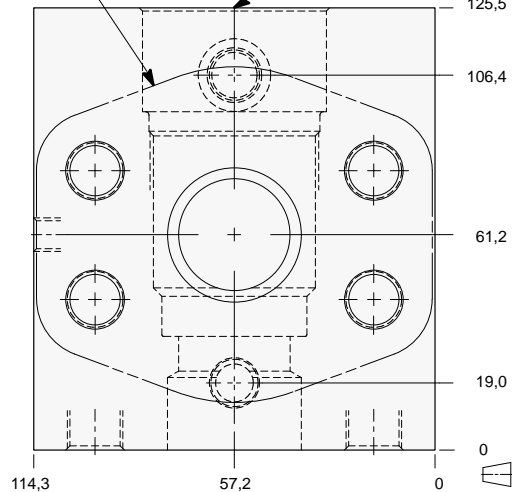
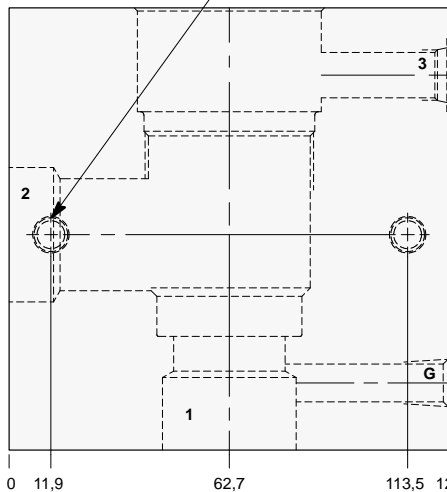


90 degree 1.50" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.50" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBBJ	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

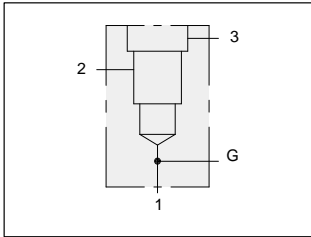
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KF6		KF6/S	
Metric	.25 BSPP	.25 BSPP	KF6/M		KF6/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

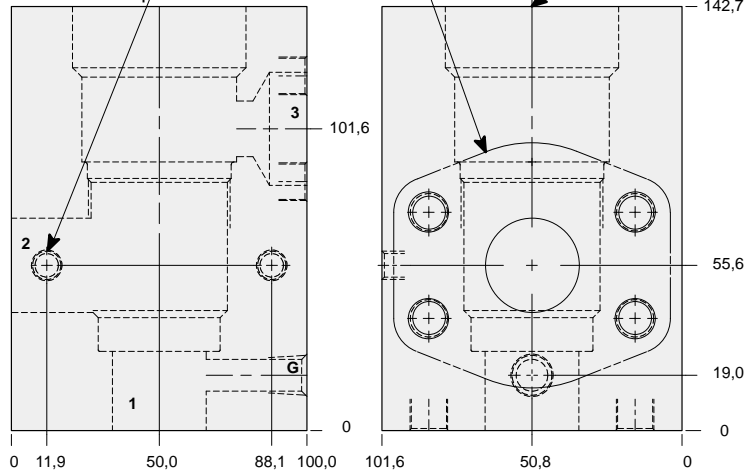


90 degree 1.50" SAE Code 61 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.50" SAE Code 61
4-Bolt Flange Pattern
3 places.

T-19A Cavity
Locating Shoulder
Depth 52,3 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

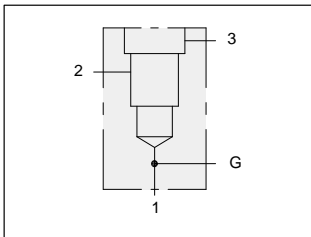
PPJB - ***	Page	3.11
PPJC - ***	Page	3.13
FRFA - ***	Page	6.03

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	KER		KER/S	
Metric	.25 BSPP	KER/M		KER/T	

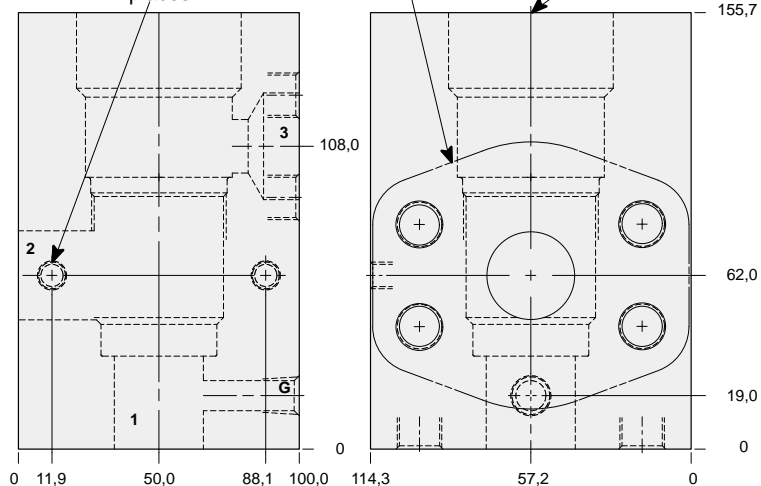


90 degree 1.50" SAE Code 62 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.50" SAE Code 62
4-Bolt Flange Pattern
3 places.

T-19A Cavity
Locating Shoulder
Depth 58,7 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPJB - ***	Page	3.11
PPJC - ***	Page	3.13
FRFA - ***	Page	6.03

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

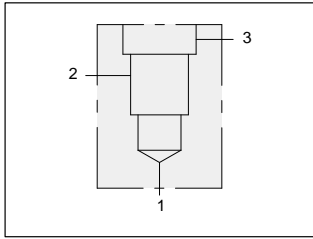
Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	KE6		KE6/S	
Metric	.25 BSPP	KE6/M		KE6/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

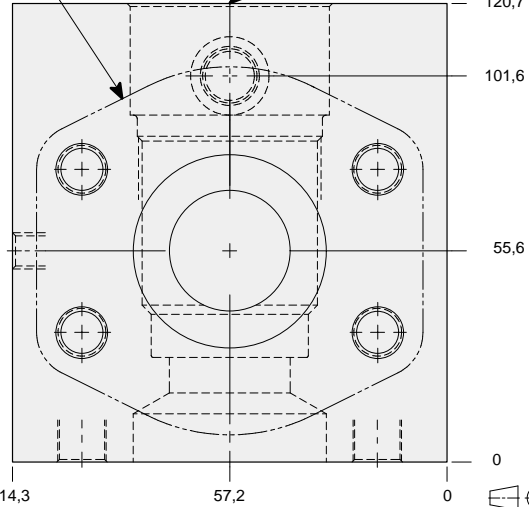
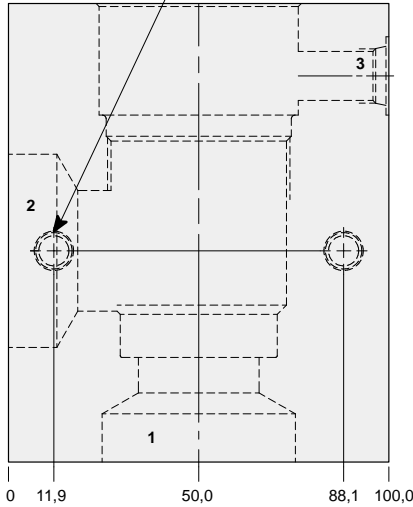


90 degree 2.00" SAE Code 61 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

2.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.

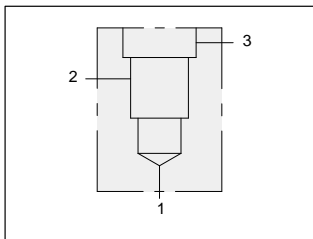


TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	KCS		KCS/S	
Metric	.25 BSPP	KCS/M		KCS/T	

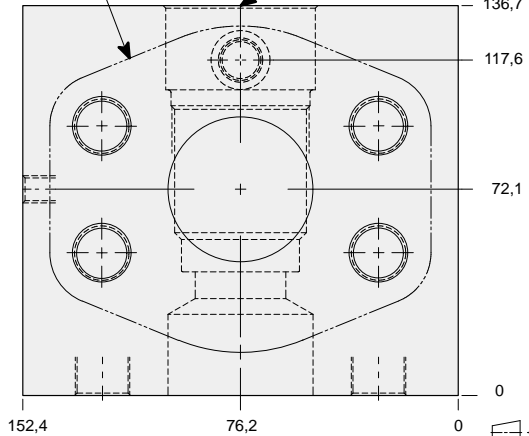
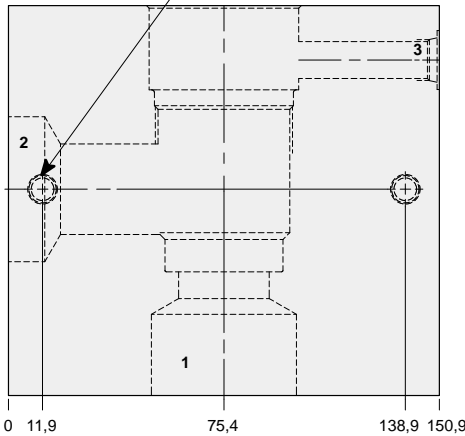


90 degree 2.00" SAE Code 62 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

2.00" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
PBJB	- ***	Page	3.07
PBJC	- ***	Page	3.09
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies. Page viii
Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03

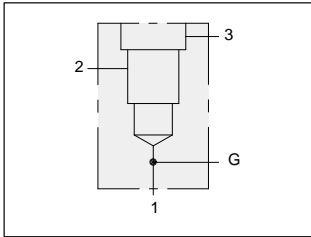
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	KC8		KC8/S	
Metric	.25 BSPP	KC8/M		KC8/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

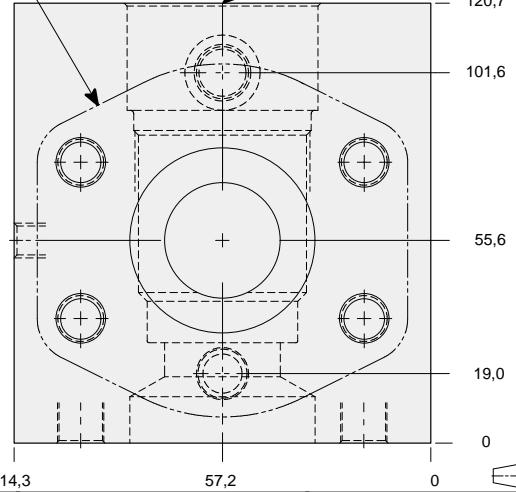
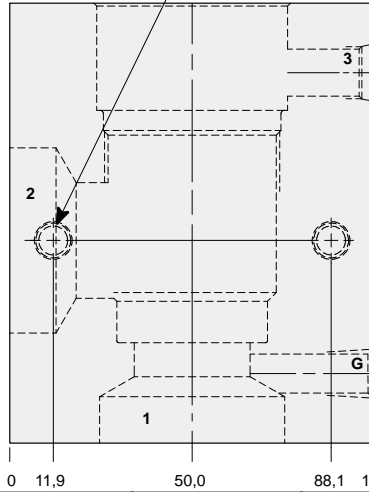


90 degree 2.00" SAE Code 61 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

2.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.

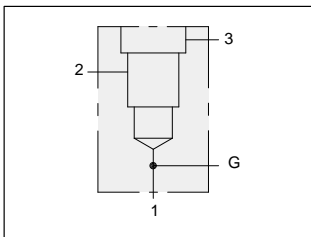


TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
PBJB - ***	Page	3.07
PBJC - ***	Page	3.09
CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17
LOJC - ***	Page	9.09
LKJC - ***	Page	9.11
LPJC - ***	Page	9.13
LRJC - ***	Page	9.15
COJA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KFS		KFS/S	
Metric	.25 BSPP	.25 BSPP	KFS/M		KFS/T	

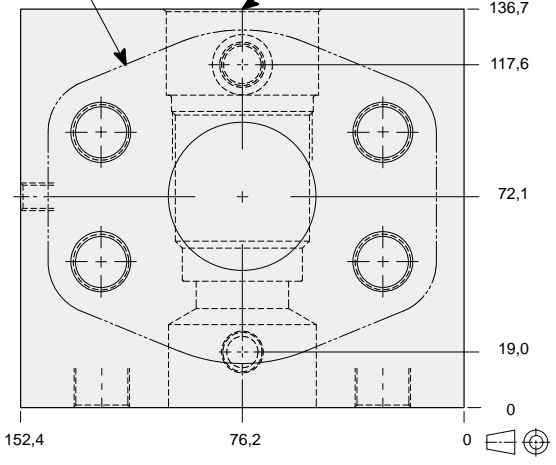
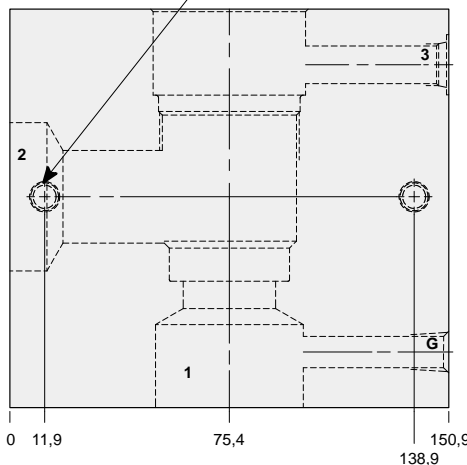


90 degree 2.00" SAE Code 62 flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

2.00" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
PBJB - ***	Page	3.07
PBJC - ***	Page	3.09
CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17
LOJC - ***	Page	9.09
LKJC - ***	Page	9.11
LPJC - ***	Page	9.13
LRJC - ***	Page	9.15
COJA - ***	Page	10.13

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KF8		KF8/S	
Metric	.25 BSPP	.25 BSPP	KF8/M		KF8/T	

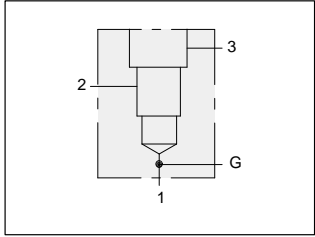
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

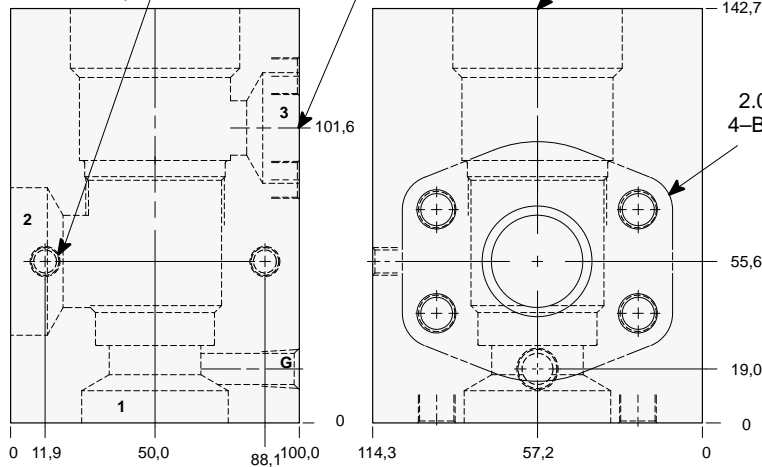


90 degree 2.00" SAE Code 61 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

1.50" SAE Code 61
4-Bolt Flange Pattern

T-19A Cavity
Locating Shoulder
Depth 52,3 mm.

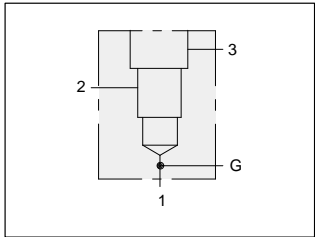


TYPICAL CARTRIDGES USED WITH THIS BODY

PPJB - ***	Page	3.11
PPJC - ***	Page	3.13
FRFA - ***	Page	6.03

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 3 SAE Code 61	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.50"	.25 NPTF	KES		KES/S	
Metric	1.50"	.25 BSPP	KES/M		KES/T	

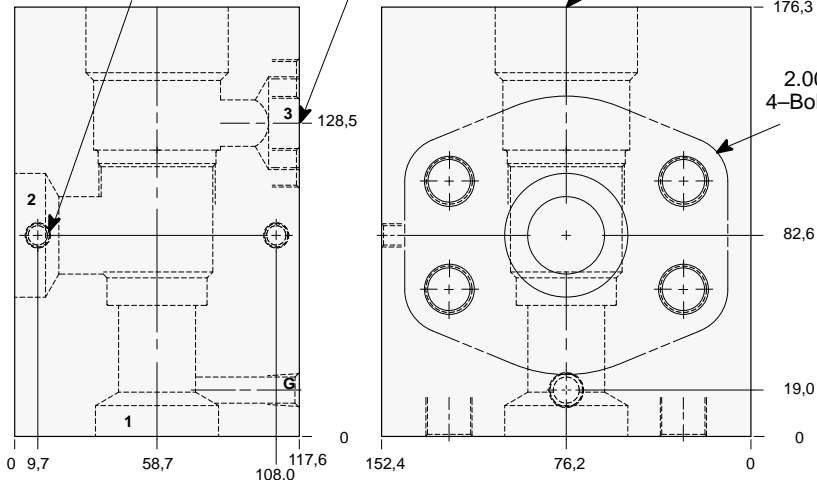


90 degree 2.00" SAE Code 62 flange port body with high capacity port 3 and gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

1.50" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 58,7 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPJB - ***	Page	3.11
PPJC - ***	Page	3.13
FRFA - ***	Page	6.03

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 3 SAE Code 62	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.50"	.25 NPTF	KE8		KE8/S	
Metric	1.50"	.25 BSPP	KE8/M		KE8/T	

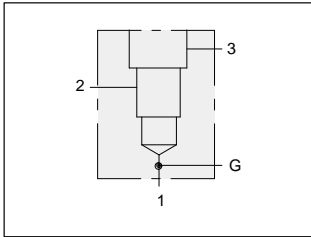
Series 4 T-19A



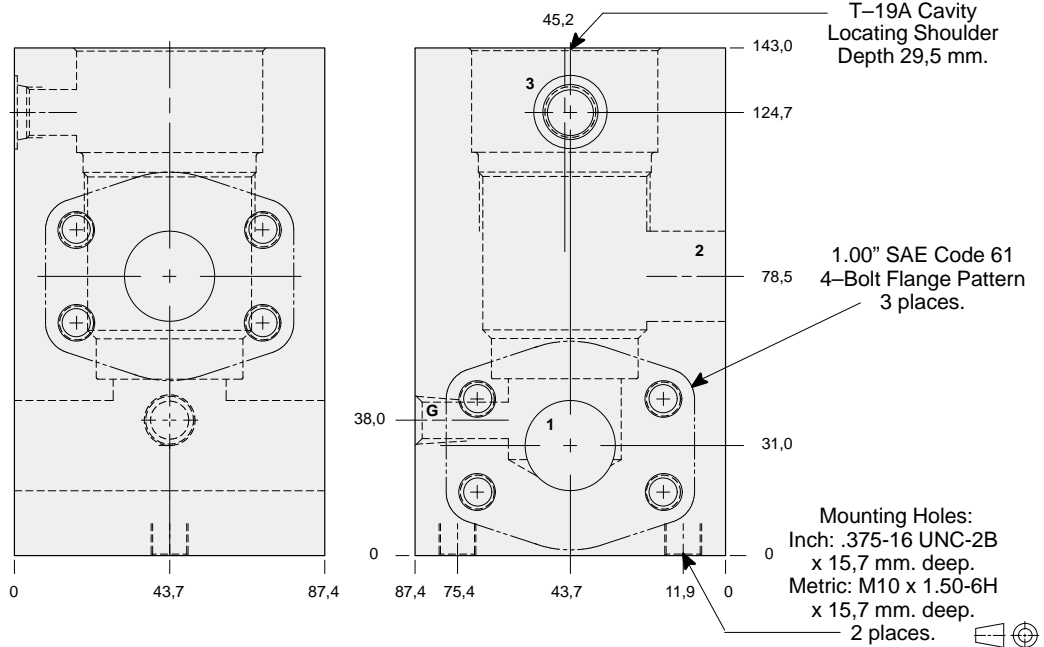
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port 1.00" SAE Code 61 flange port body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

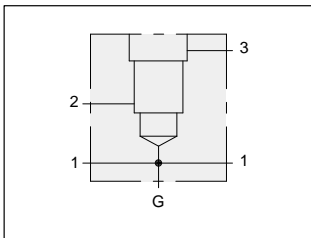
RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
PBJB - ***	Page	3.07
PBJC - ***	Page	3.09

Instructions for ordering complete cartridge and body assemblies. Page viii

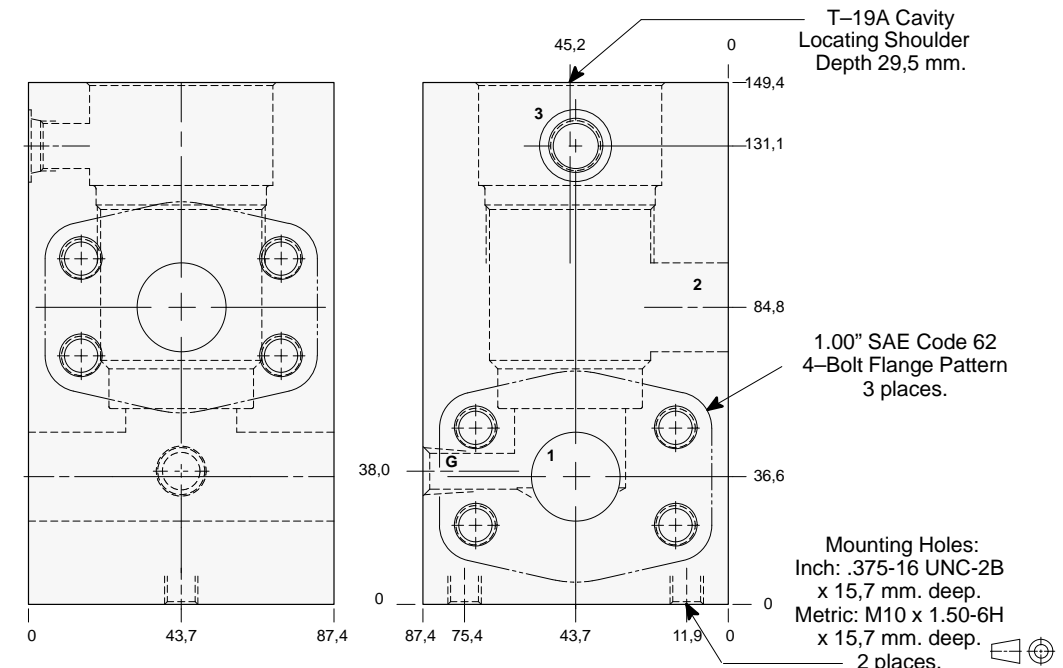
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KHP		KHP/S	
Metric	.25 BSPP	.25 BSPP	KHP/M		KHP/T	



Through port 1.00" SAE Code 62 flange port body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
PBJB - ***	Page	3.07
PBJC - ***	Page	3.09

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KH4		KH4/S	
Metric	.25 BSPP	.25 BSPP	KH4/M		KH4/T	

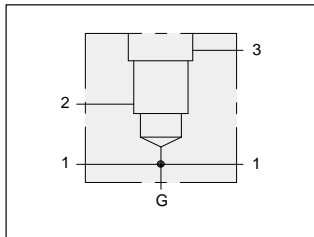
Series 4 T-19A



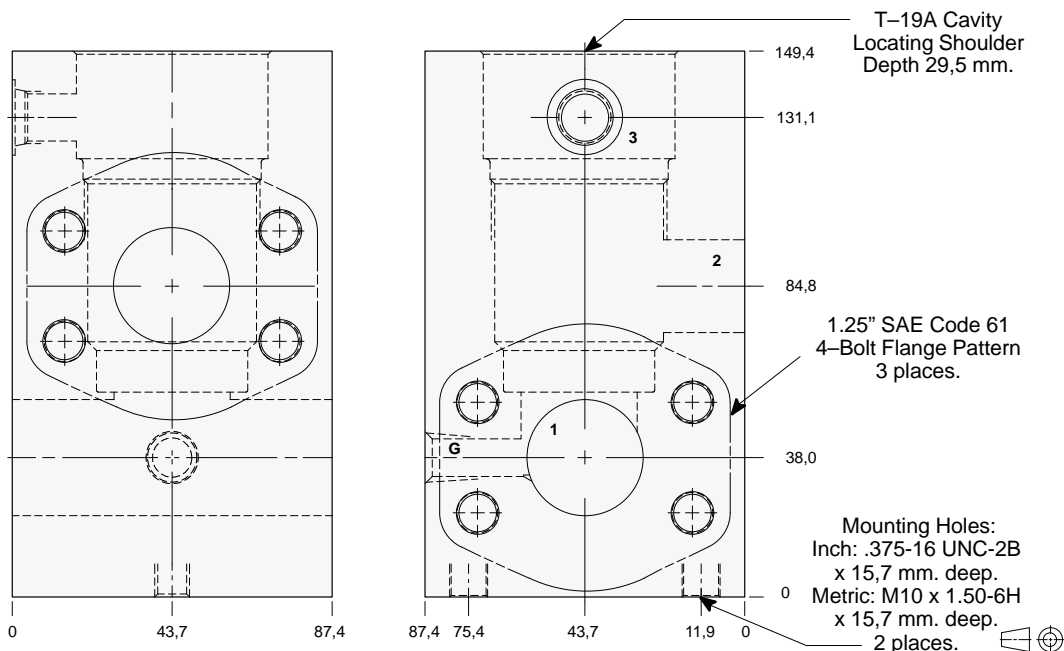
LINE MOUNT BODIES



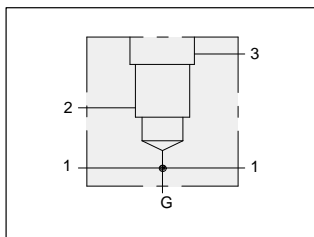
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



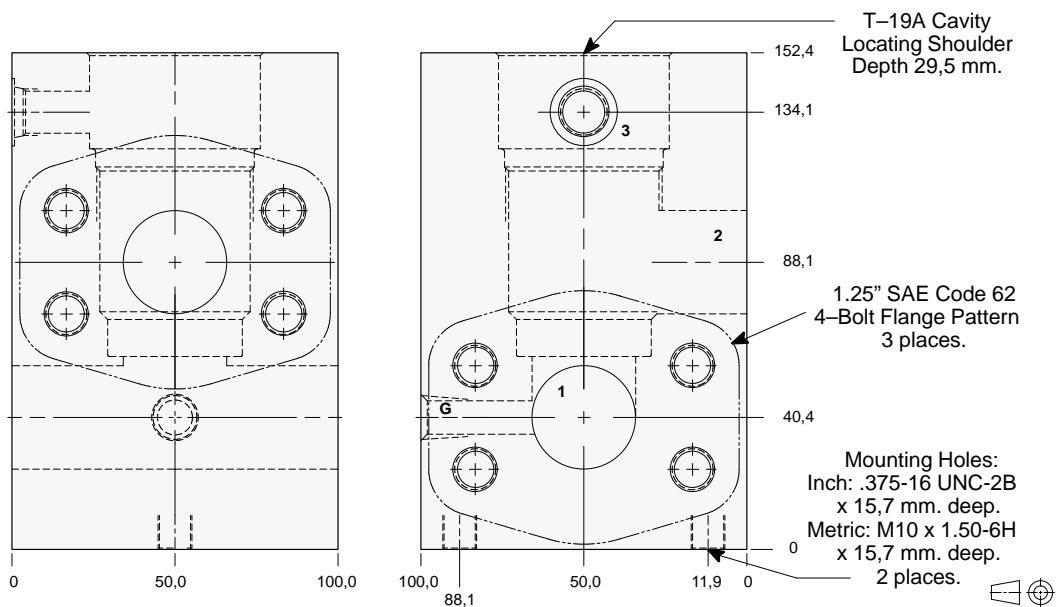
Through port 1.25" SAE Code 61 flange port body with gauge port.



Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KHQ		KHQ/S	
Metric	.25 BSPP	.25 BSPP	KHQ/M		KHQ/T	



Through port 1.25" SAE Code 62 flange port body with gauge port.



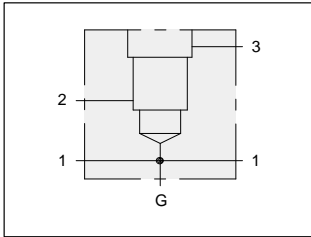
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KH5		KH5/S	
Metric	.25 BSPP	.25 BSPP	KH5/M		KH5/T	



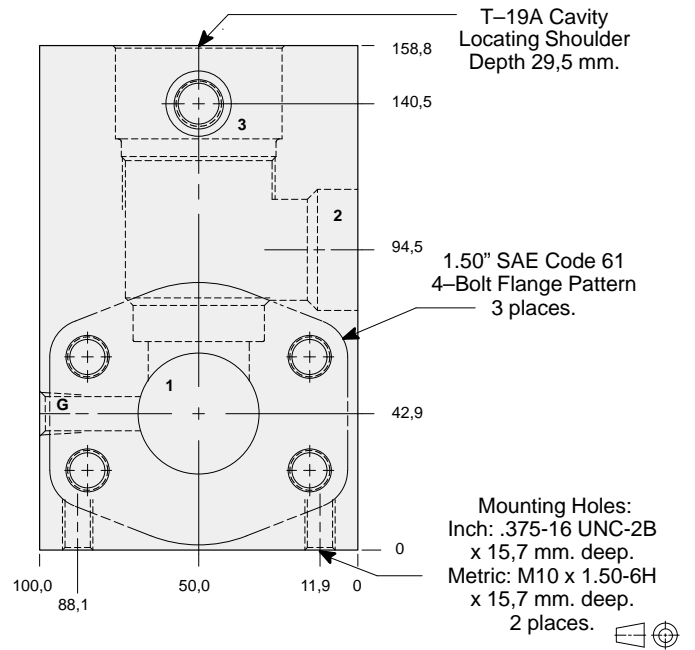
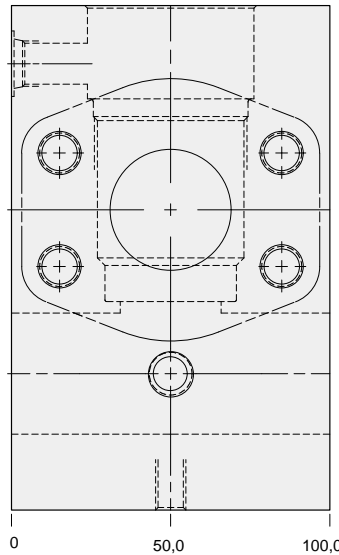
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Through port 1.50" SAE Code 61 flange port body with gauge port.

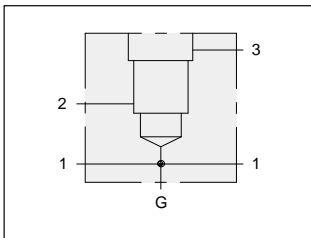


TYPICAL CARTRIDGES USED WITH THIS BODY

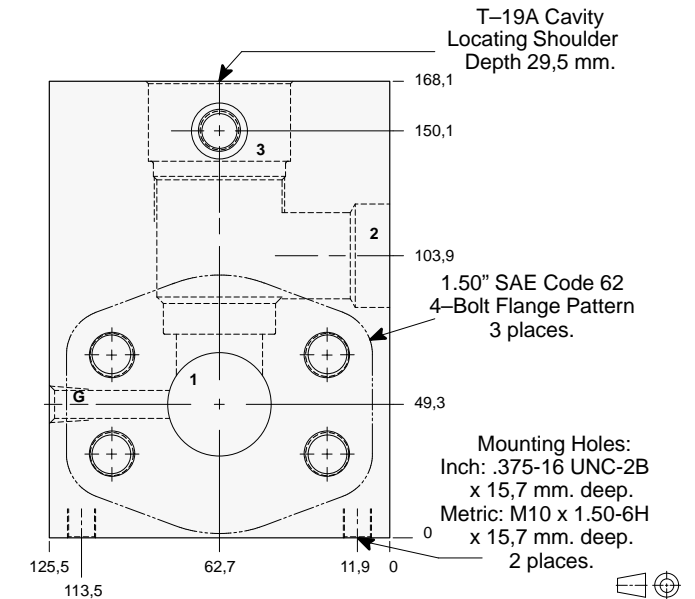
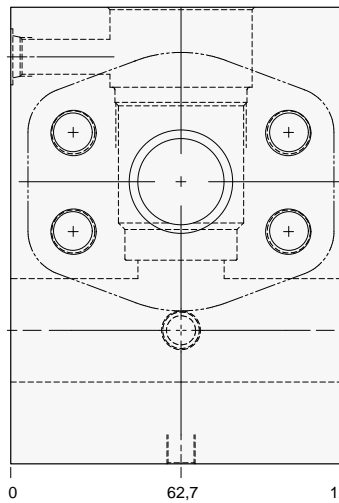
RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
PBJB - ***	Page	3.07
PBJC - ***	Page	3.09

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KHR		KHR/S	
Metric	.25 BSPP	.25 BSPP	KHR/M		KHR/T	



Through port 1.50" SAE Code 62 flange port body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
PBJB - ***	Page	3.07
PBJC - ***	Page	3.09

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KH6		KH6/S	
Metric	.25 BSPP	.25 BSPP	KH6/M		KH6/T	

Series 4 T-19A

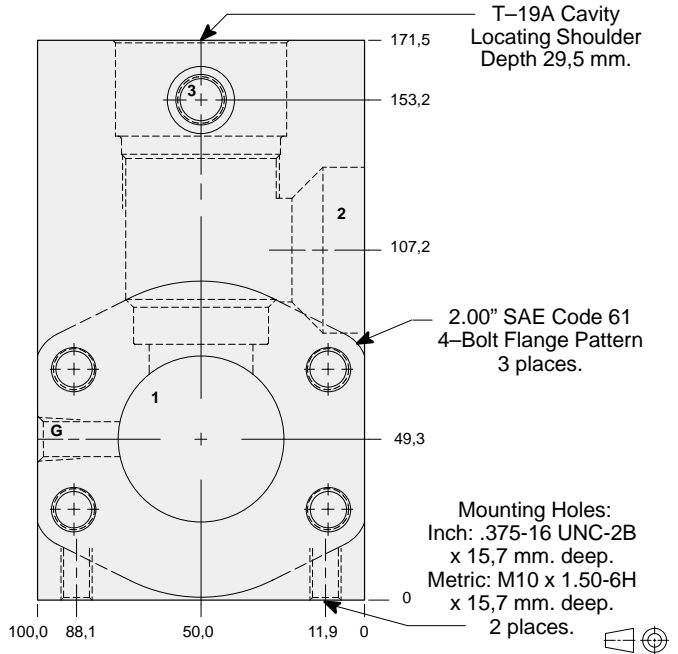
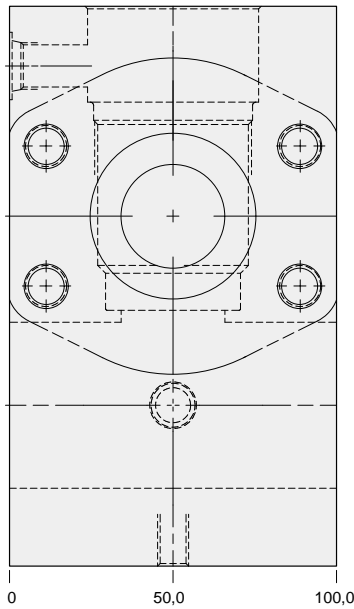
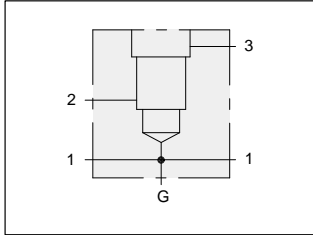


LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Through port 2.00" SAE Code 61 flange port body with gauge port.



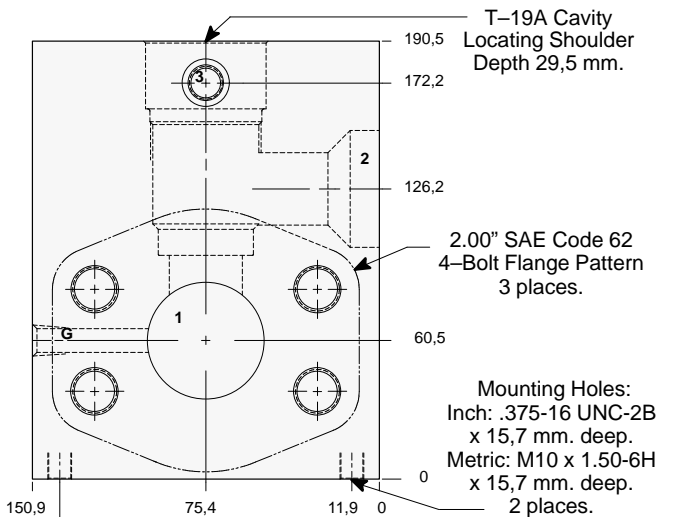
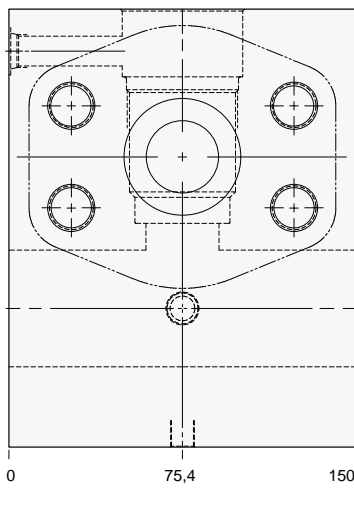
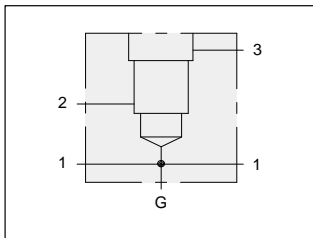
TYPICAL CARTRIDGES USED WITH THIS BODY

- RVIA - *** Page 1.19
- RSJC - *** Page 2.07
- SQJB - *** Page 2.09
- RSJE - *** Page 2.11
- SCIA - *** Page 2.13
- PBJB - *** Page 3.07
- PBJC - *** Page 3.09

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KHS		KHS/S	
Metric	.25 BSPP	.25 BSPP	KHS/M		KHS/T	

Through port 2.00" SAE Code 62 flange port body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RVIA - *** Page 1.19
- RSJC - *** Page 2.07
- SQJB - *** Page 2.09
- RSJE - *** Page 2.11
- SCIA - *** Page 2.13
- PBJB - *** Page 3.07
- PBJC - *** Page 3.09

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	KH8		KH8/S	
Metric	.25 BSPP	.25 BSPP	KH8/M		KH8/T	

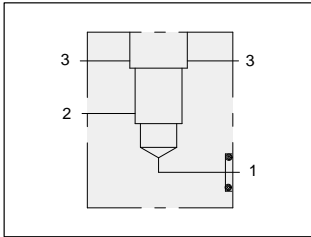
Series 4 T-19A



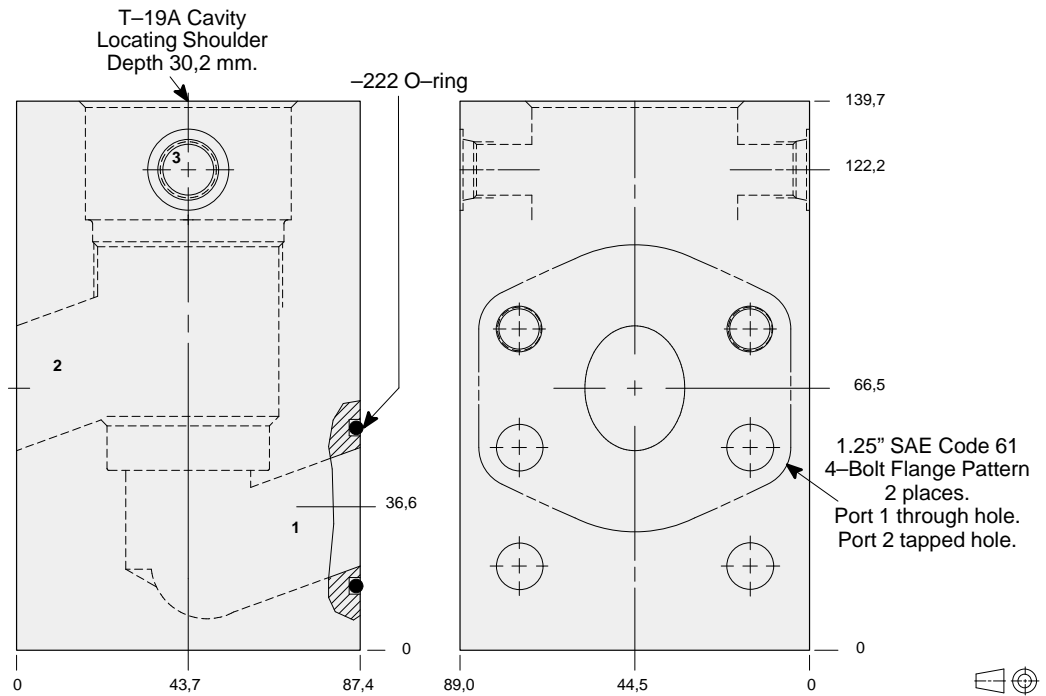
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Direct mount 1.25" SAE Code 61 body.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

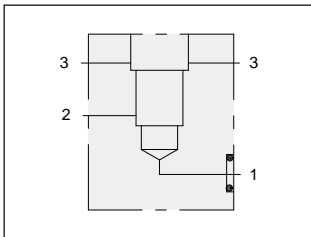
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

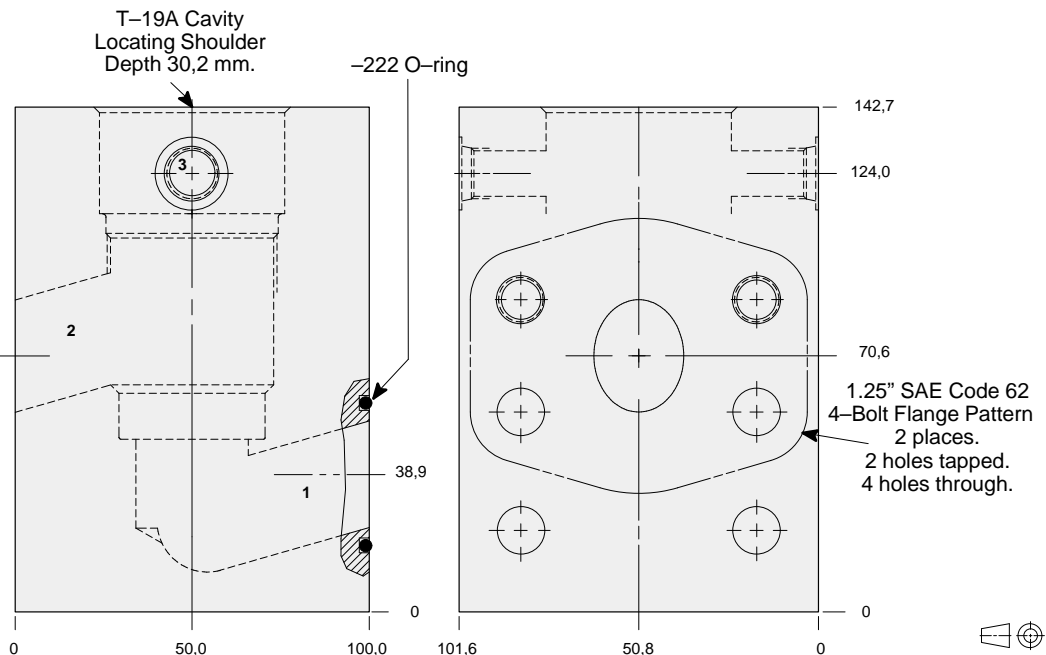
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZNX		ZNX/S	
Metric	.25 BSPP	ZNX/M		ZNX/T	



Direct mount 1.25" SAE Code 62 body.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA	- ***	Page	1.19
RSJC	- ***	Page	2.07
SQJB	- ***	Page	2.09
RSJE	- ***	Page	2.11
SCIA	- ***	Page	2.13
CBIA	- ***	Page	4.11
CBIG	- ***	Page	4.13
CBIH	- ***	Page	4.15
CKIB	- ***	Page	4.17
LOJC	- ***	Page	9.09
LKJC	- ***	Page	9.11
LPJC	- ***	Page	9.13
LRJC	- ***	Page	9.15
COJA	- ***	Page	10.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

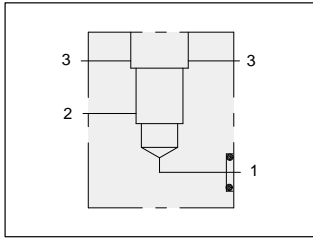
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZFD		ZFD/S	
Metric	.25 BSPP	ZFD/M		ZFD/T	



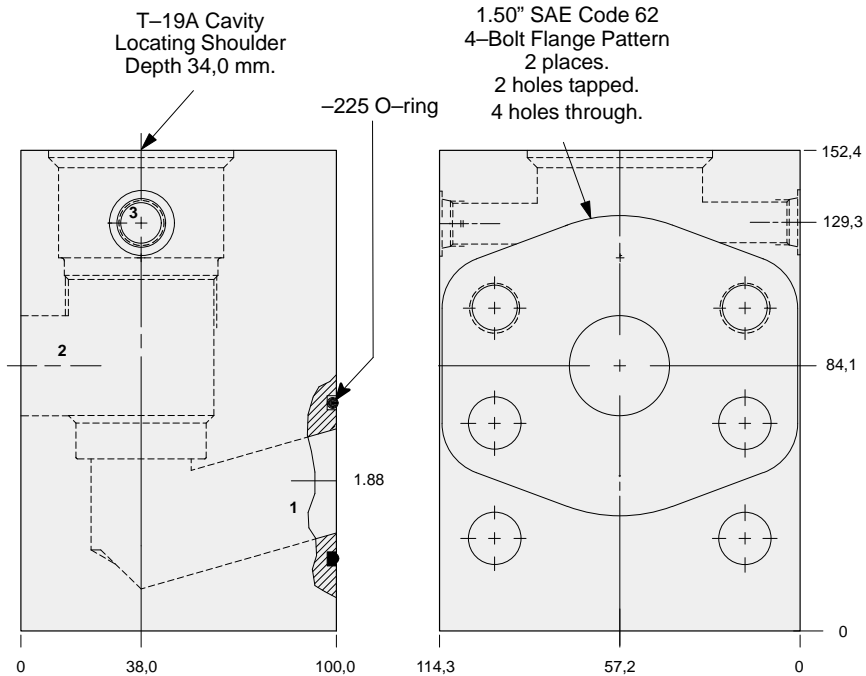
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Direct mount 1.50" SAE Code 61 body.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17
LOJC - ***	Page	9.09
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LPJC - ***	Page	9.13
LRJC - ***	Page	9.15
COJA - ***	Page	10.13

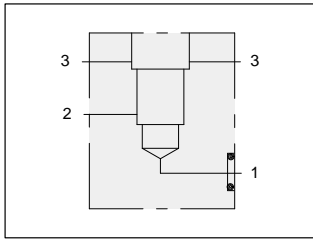
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

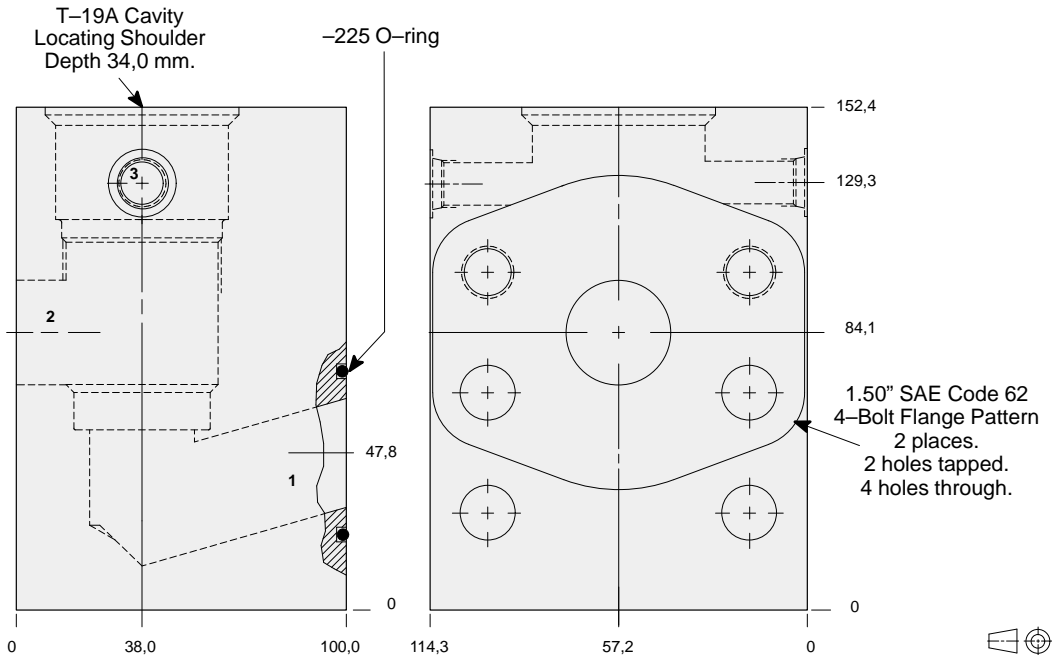
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZNY		ZNY/S	
Metric	.25 BSPP	ZNY/M		ZNY/T	



Direct mount 1.50" SAE Code 62 body



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13
CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17
LOJC - ***	Page	9.09
LKJC - ***	Page	9.11
LPJC - ***	Page	9.13
LRJC - ***	Page	9.15
COJA - ***	Page	10.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

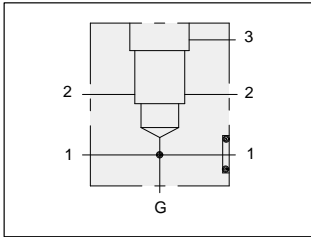
Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZDQ		ZDQ/S	
Metric	.25 BSPP	ZDQ/M		ZDQ/T	



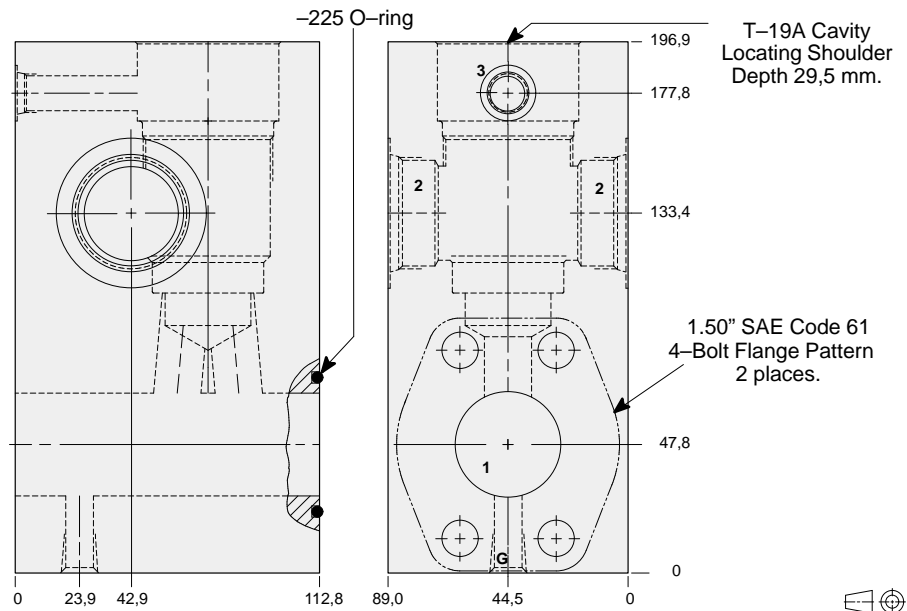
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Sandwich mount through port 1.50" SAE Code 61 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13

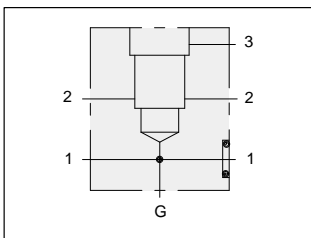
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

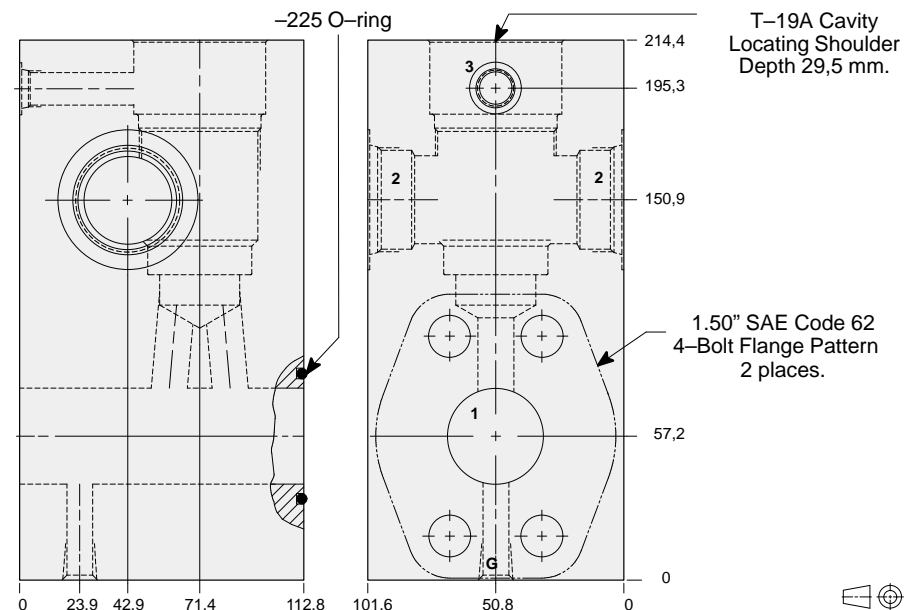
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.25 NPTF	.25 NPTF	.25 NPTF	ZMW		ZMW/S	
Inch	SAE-20	SAE-6	.25 NPTF	ZMX		ZMX/S	
Metric	1.25 BSPP	.25 BSPP	.25 BSPP	ZMY/M		ZMY/T	



Sandwich mount through port 1.50" SAE Code 62 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

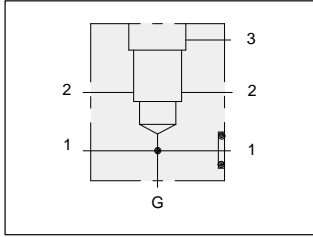
Mounting Hole Dimensions	Port 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.25 NPTF	.25 NPTF	.25 NPTF	WXT		WXT/S	
Inch	SAE-20	SAE-6	.25 NPTF	WXS		WXS/S	
Metric	1.25 BSPP	.25 BSPP	.25 BSPP	WXR/M		WXR/T	



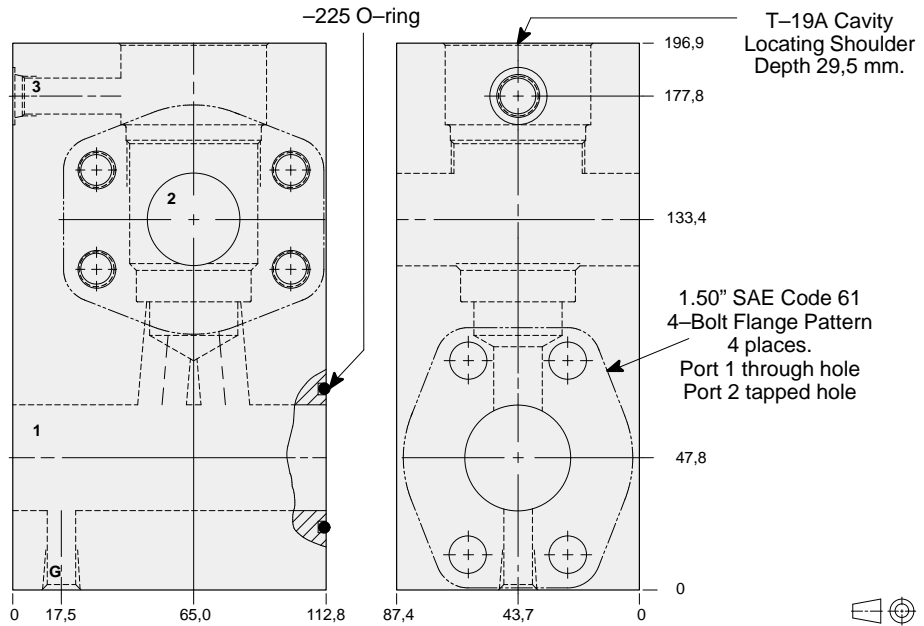
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Sandwich mount through flange port 1.50" SAE Code 61 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13

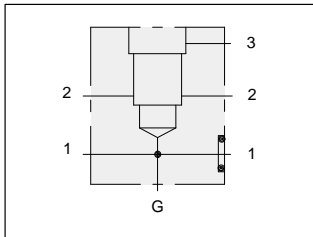
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

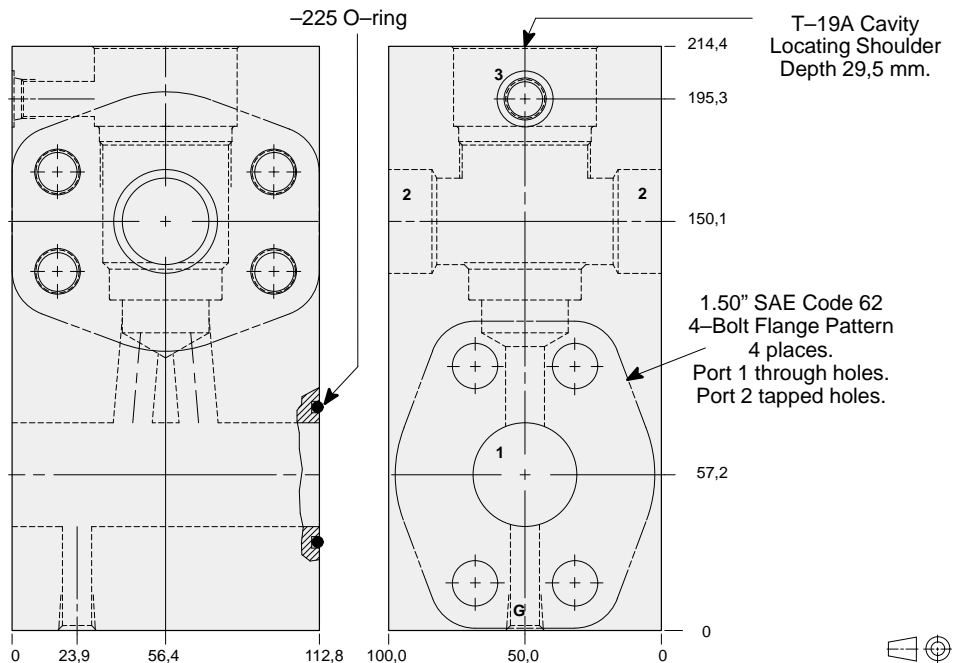
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	ZMZ		ZMZ/S	
Metric	.25 BSPP	.25 BSPP	ZMZ/M		ZMZ/T	



Sandwich mount through flange port 1.50" SAE Code 62 body with gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11
SCIA - ***	Page	2.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

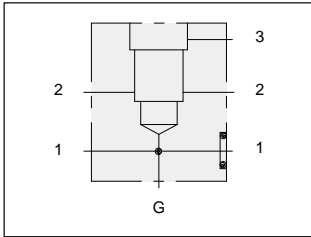
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	WYA		WYA/S	
Metric	.25 BSPP	.25 BSPP	WYA/M		WYA/T	



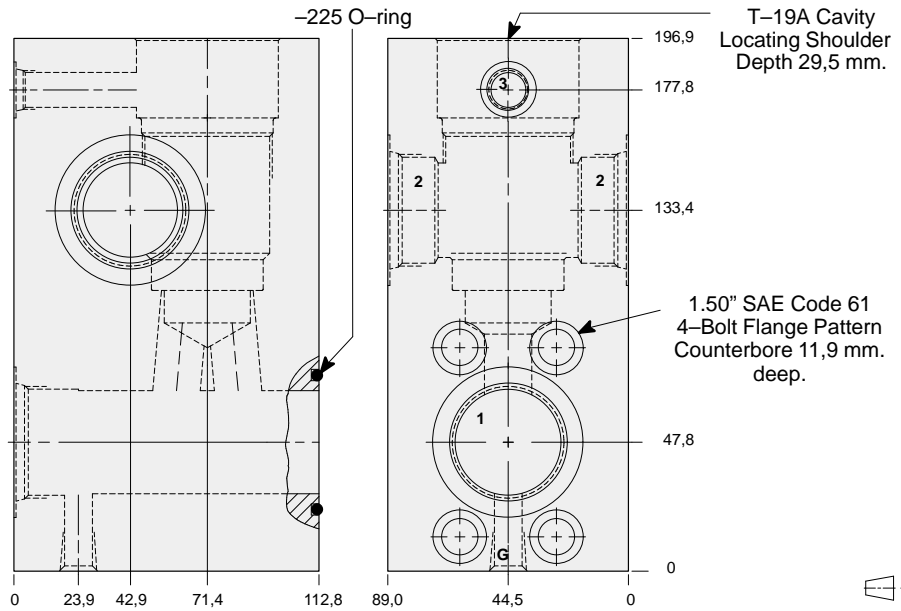
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Flange mount through port 1.50" SAE Code 61 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RVIA - *** Page 1.19
- RSJC - *** Page 2.07
- SQJB - *** Page 2.09
- RSJE - *** Page 2.11
- SCIA - *** Page 2.13

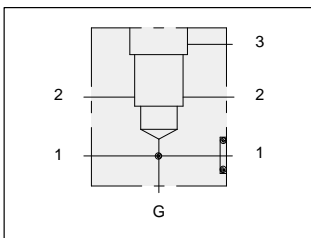
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

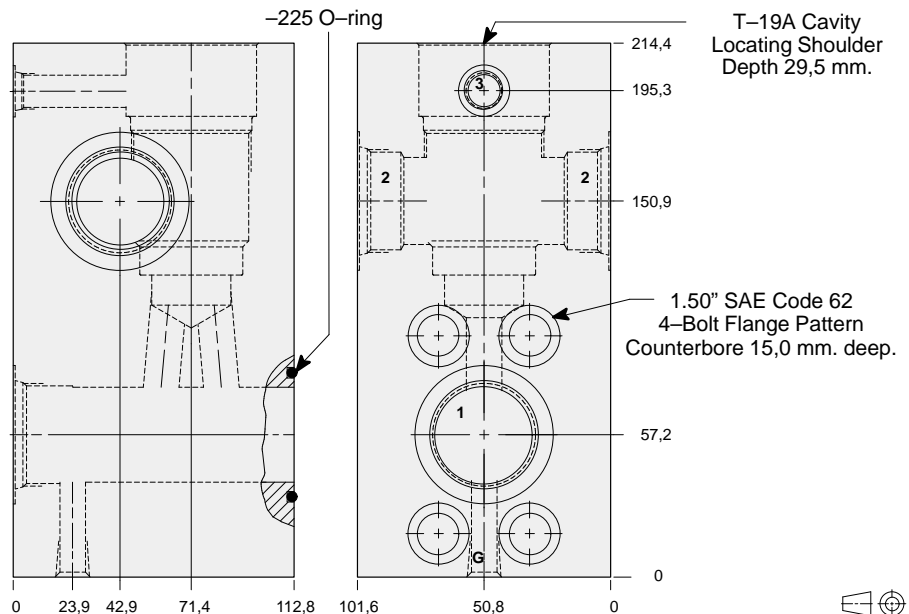
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.25 NPTF	.25 NPTF	.25 NPTF	WYQ		WYQ/S	
Inch	SAE-20	SAE-6	.25 NPTF	WYP		WYP/S	
Metric	1.25 BSPP	.25 BSPP	.25 BSPP	WYO/M		WYO/T	



Flange mount through port 1.50" SAE Code 62 body with threaded outlet and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RVIA - *** Page 1.19
- RSJC - *** Page 2.07
- SQJB - *** Page 2.09
- RSJE - *** Page 2.11
- SCIA - *** Page 2.13

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

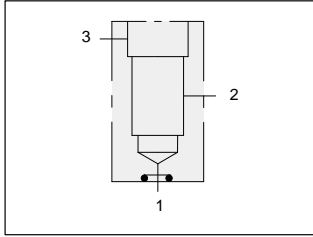
Mounting Hole Dimensions	Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.25 NPTF	.25 NPTF	.25 NPTF	WXQ		WXQ/S	
Inch	SAE-20	SAE-6	.25 NPTF	WXP		WXP/S	
Metric	1.25 BSPP	.25 BSPP	.25 BSPP	WYO/M		WYO/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

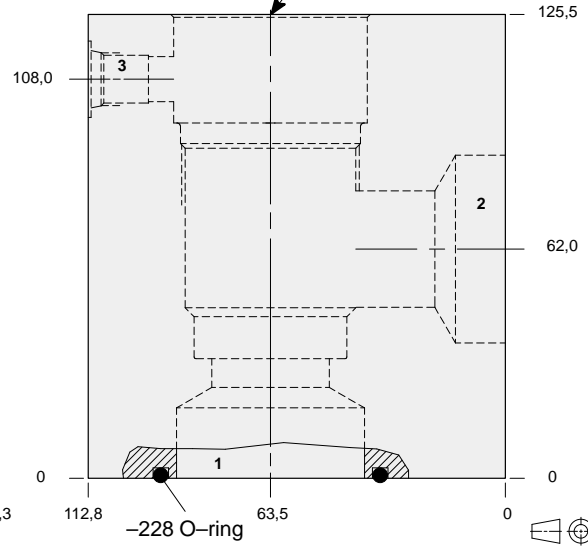
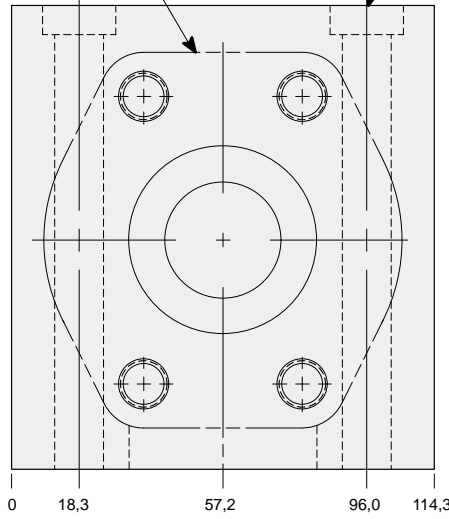


Direct mount 90 degree 2.00" SAE Code 61 flange port body.

2.00" SAE Code 61
4-Bolt Flange Pattern
2 places.
Port 1 through hole.
Port 2 tapped hole.

13,5 mm. diameter through hole,
counterbore 19,8 mm. diameter
x 7,9 mm. deep.
4 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	ZGV		ZGV/S	
Metric	.25 BSPP	ZGV/M		ZGV/T	

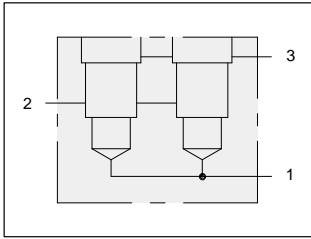
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

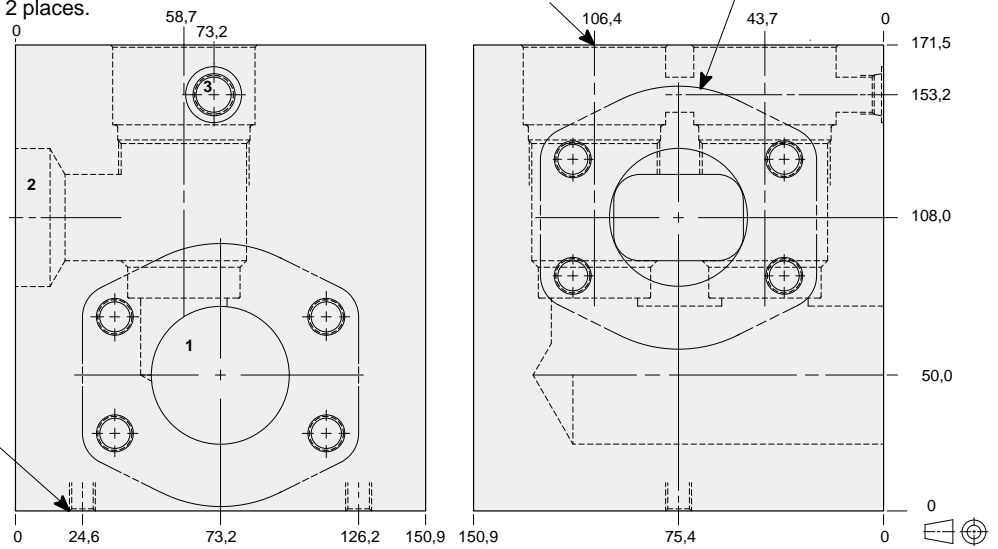


Two cavity 2.00" SAE Code 61 flange port high capacity body.

Mounting Holes:
 Inch: .375-16 UNC-2B
 x 15,7 mm. deep.
 Metric: M10 x 1.50-6H
 x 15,7 mm. deep.
 2 places.

T-19A Cavity
 Locating Shoulder
 Depth 29,5 mm.
 2 places.

2.00" SAE Code 61
 4-Bolt Flange Pattern
 2 places.

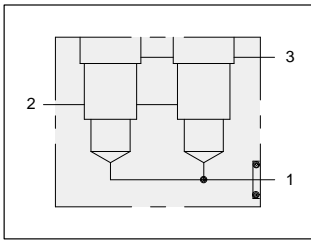


TYPICAL CARTRIDGES USED WITH THIS BODY

- CBIA - *** Page 4.11
- CBIG - *** Page 4.13
- CBIH - *** Page 4.15
- CKIB - *** Page 4.17

Instructions for ordering complete cartridge and body assemblies. Page viii
 Pressure ratings, material specifications. Page 11.02
 SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XZZ		XZZ/S	
Metric	.25 BSPP	XZZ/M		XZZ/T	

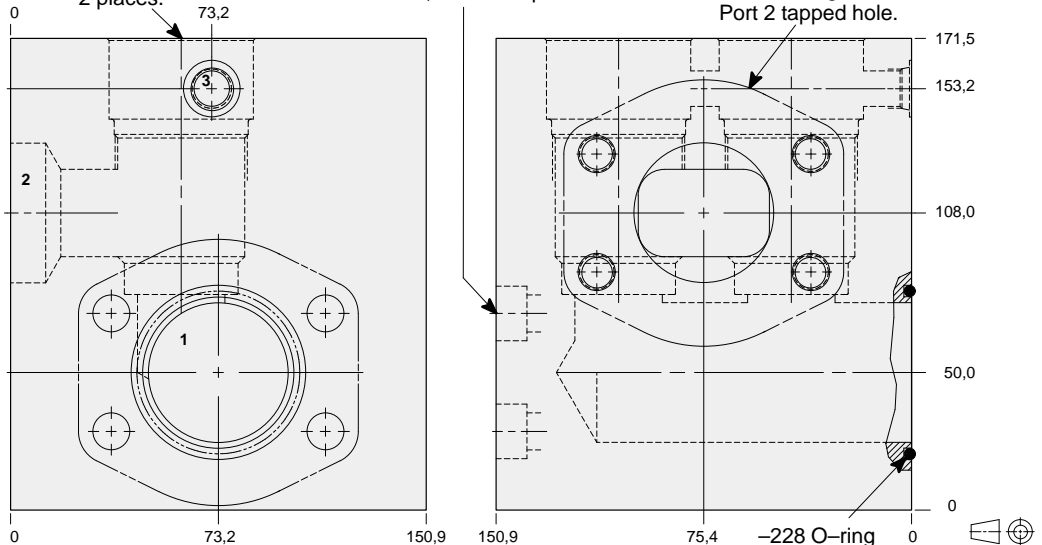


Two cavity 2.00" direct mount SAE Code 61 flange port high capacity body.

T-19A Cavity
 Locating Shoulder
 Depth 29,5 mm.
 2 places.

13,5 mm. diameter through hole,
 counterbore 19,8 mm. diameter
 x 11,2 mm. deep.

2.00" SAE Code 61
 4-Bolt Flange Pattern
 2 places.
 Port 1 through hole.
 Port 2 tapped hole.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBIA - *** Page 4.11
- CBIG - *** Page 4.13
- CBIH - *** Page 4.15
- CKIB - *** Page 4.17

Cartridge seal type determines O-ring type.
 Instructions for ordering complete cartridge and body assemblies. Page viii
 Pressure ratings, material specifications. Page 11.02
 SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XVD		XVD/S	
Metric	.25 BSPP	XVD/M		XVD/T	

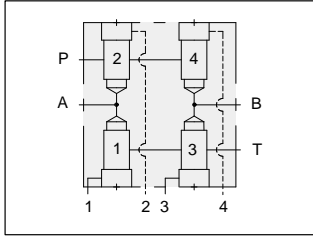
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

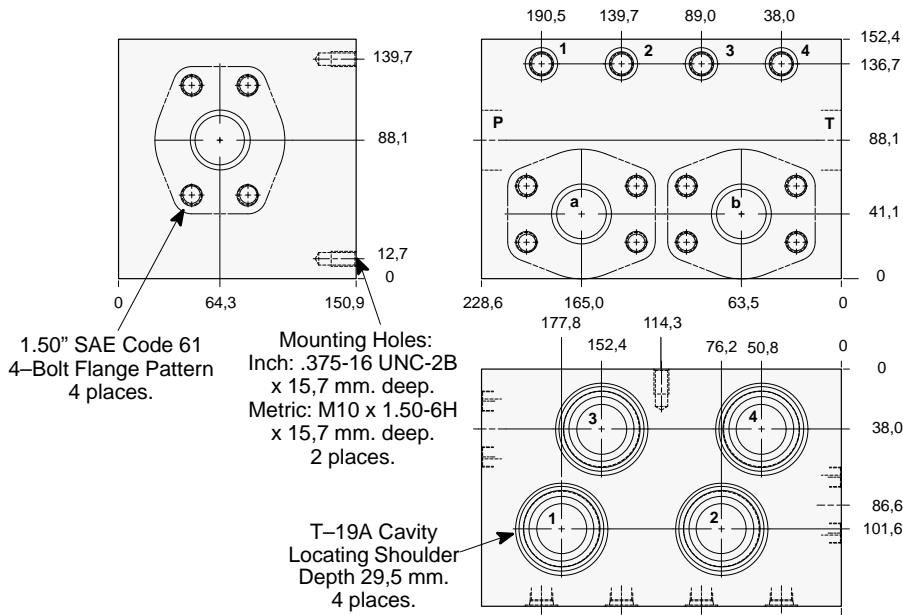


Four cavity four-way 1.50" SAE Code 61 flange port logic body for directional applications.

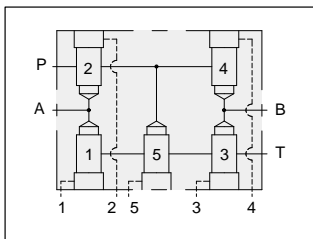
TYPICAL CARTRIDGES USED WITH THIS BODY

LOJC - ***	Page	9.09
LKJC - ***	Page	9.11
LPJC - ***	Page	9.13
LRJC - ***	Page	9.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03



Mounting Hole Dimensions	Ports 1 & 2, 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	YRD		YRD/S	
Metric	.25 BSPP	YRD/M		YRD/T	

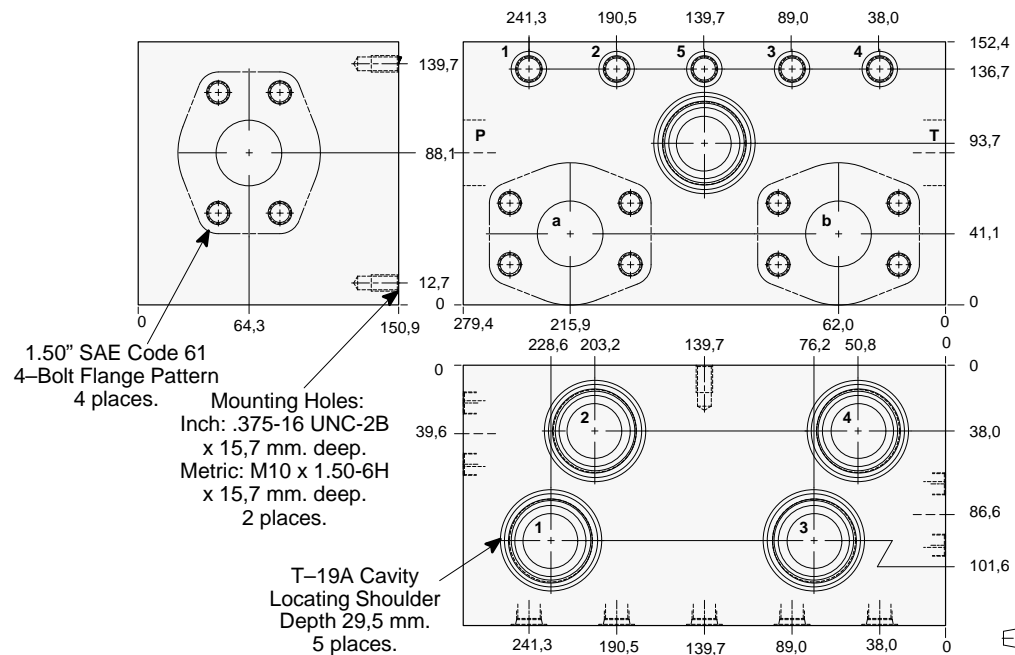


Five cavity four-way 1.50" SAE Code 61 flange port logic body for directional applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

LOJC - ***	Page	9.09
LKJC - ***	Page	9.11
LPJC - ***	Page	9.13
LRJC - ***	Page	9.15

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03



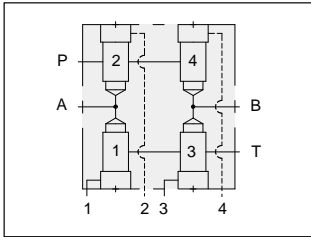
Mounting Hole Dimensions	Ports 1, 2, 3, 4 & 5	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	YQD		YQD/S	
Metric	.25 BSPP	YQD/M		YQD/T	



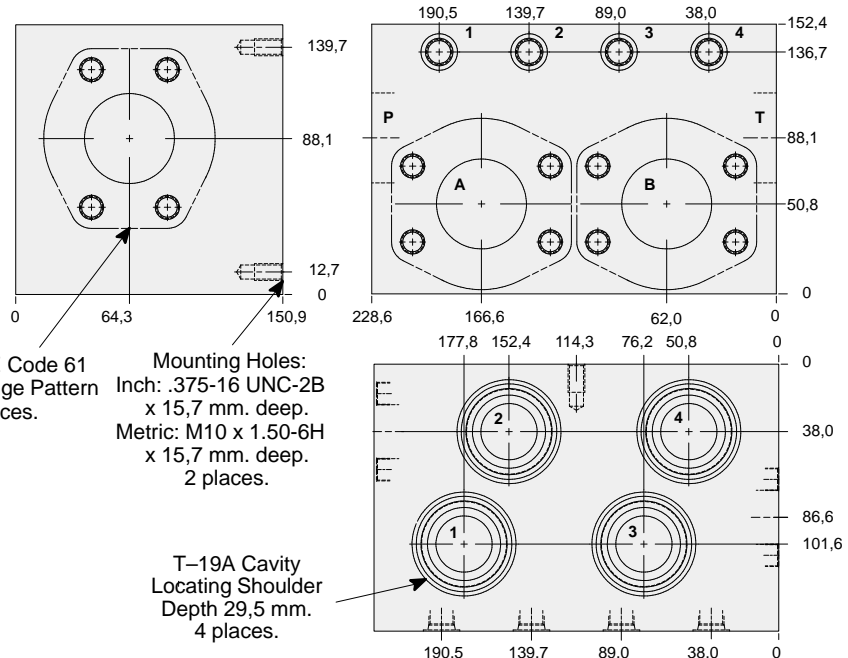
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Four cavity four-way 2.00" SAE Code 61 flange port logic body for directional applications.



2.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

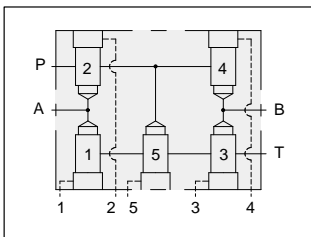
T-19A Cavity
Locating Shoulder
Depth 29,5 mm.
4 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

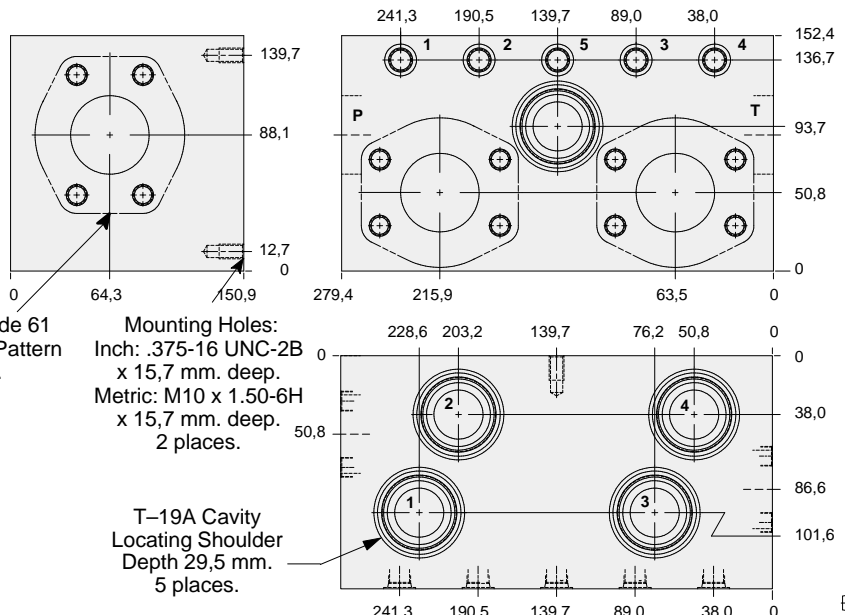
- LOJC - *** Page 9.09
- LKJC - *** Page 9.11
- LPJC - *** Page 9.13
- LRJC - *** Page 9.15

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2, 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	YRC		YRC/S	
Metric	.25 BSPP	YRC/M		YRC/T	



Five cavity four-way 2.00" SAE Code 61 flange port logic body for directional applications.



2.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.
5 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

- LOJC - *** Page 9.09
- LKJC - *** Page 9.11
- LPJC - *** Page 9.13
- LRJC - *** Page 9.15

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 1 & 2, 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	YQC		YQC/S	
Metric	.25 BSPP	YQC/M		YQC/T	

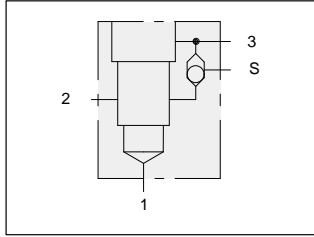
Series 4 T-19A



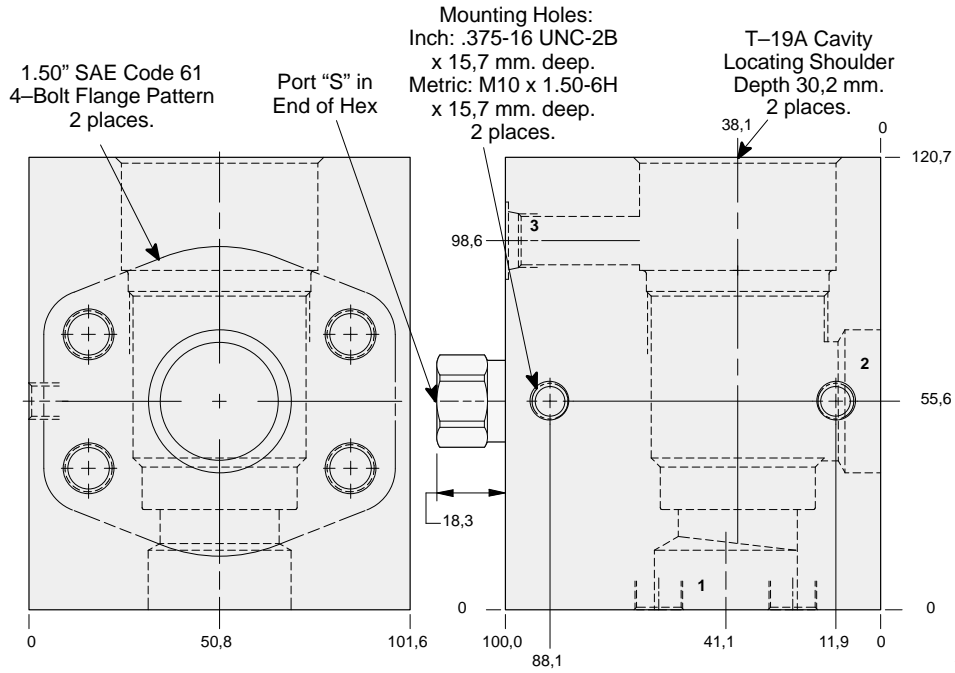
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree 1.50" SAE Code 61 flange port body with shuttle.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

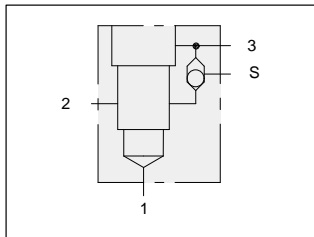
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

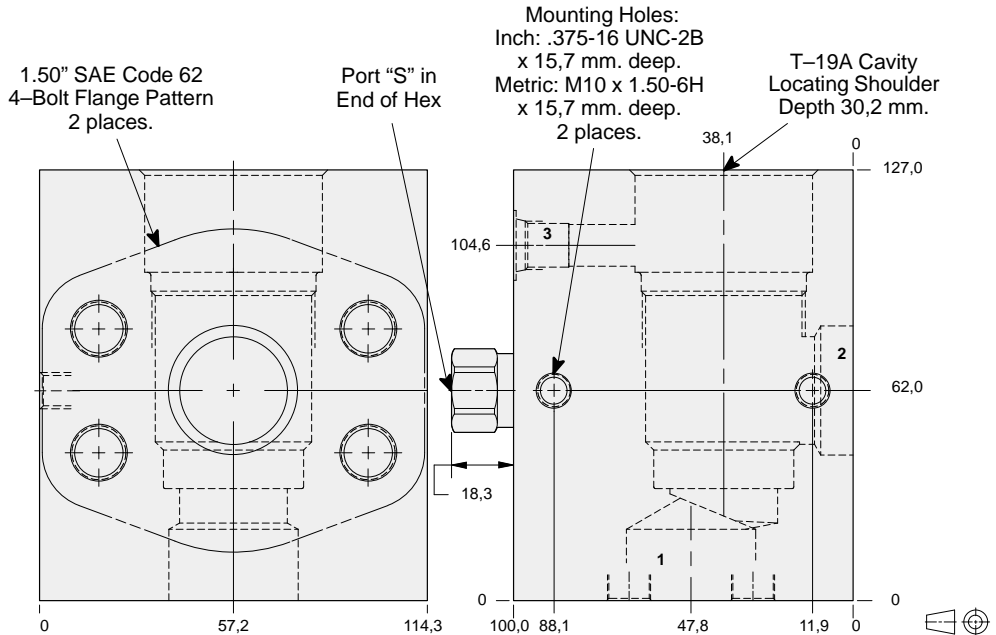
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Shuttle Cartridge	Port S	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	SAE-6	CSAA - EXN	SAE-4	KGR		KGR/S	
Metric	.25 BSPP	CSAA - BXN	.25 BSPP	KGR/M		KGR/T	



90 degree 1.50" SAE Code 62 flange port body with shuttle.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Shuttle Cartridge	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	SAE-6	CSAA - EXN	SAE-4	KG6		KG6/S	
Metric	.25 BSPP	CSAA - BXN	.25 BSPP	KG6/M		KG6/T	

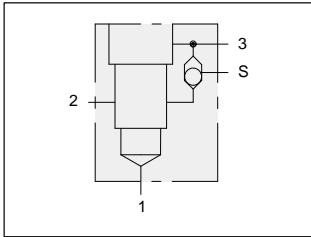
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



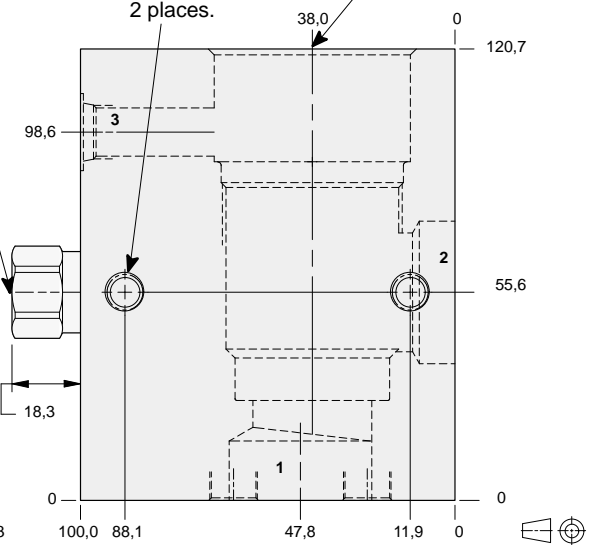
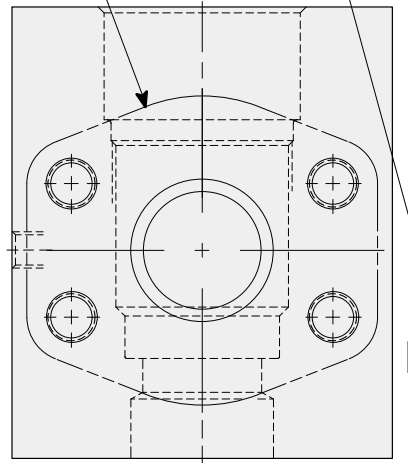
90 degree 2.00" SAE Code 61 flange port body with shuttle.

2.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

Port "S" in
End of Hex

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-19A Cavity
Locating Shoulder
Depth 30,2 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBIA - *** Page 4.11
- CBIG - *** Page 4.13
- CBIH - *** Page 4.15
- CKIB - *** Page 4.17

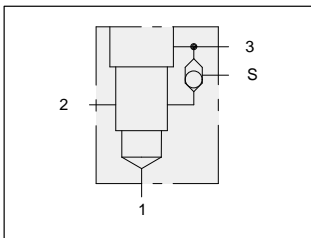
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3	Shuttle Cartridge	Port S	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	SAE-6	CSAA - EXN	SAE-4	KG8		KG8/S	
Metric	.25 BSPP	CSAA - BXN	.25 BSPP	KG8/M		KG8/T	



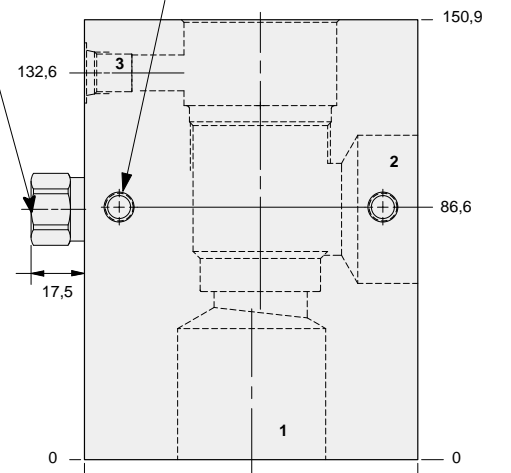
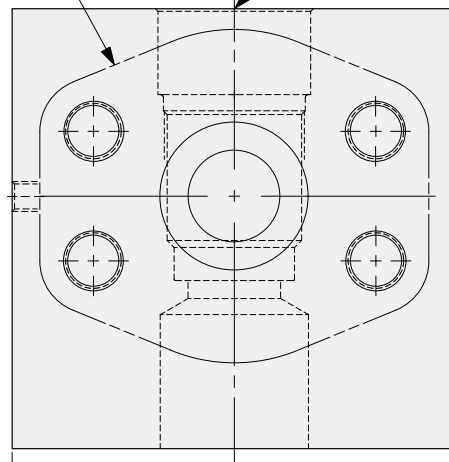
90 degree 2.00" SAE Code 62 flange port body with shuttle.

2.00" SAE Code 62
4-Bolt Flange Pattern
2 places.

T-19A Cavity
Locating Shoulder
Depth 29,5

Port "S" in
End of Hex

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CBIA - *** Page 4.11
- CBIG - *** Page 4.13
- CBIH - *** Page 4.15
- CKIB - *** Page 4.17

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

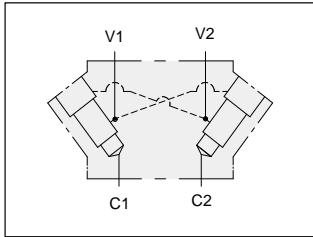
Mounting Hole Dimensions	Port 3	Shuttle Cartridge	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	SAE-6	CSAA - EXN	SAE-4	KG8		KG8/S	
Metric	.25 BSPP	CSAA - BXN	.25 BSPP	KG8/M		KG8/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Two cavity cross-piloted inline 1.50" SAE Code 61 flange port body for load control applications.

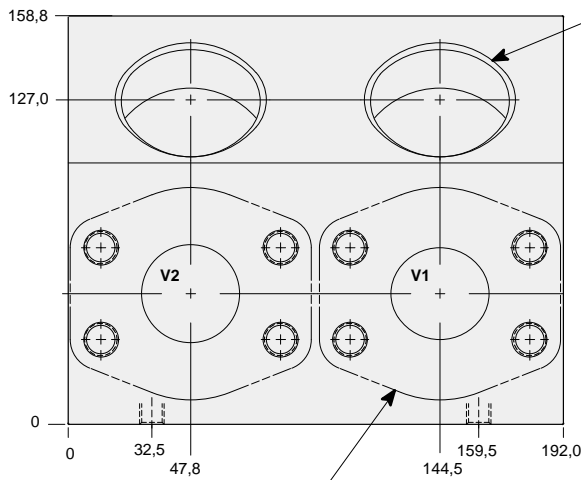
TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

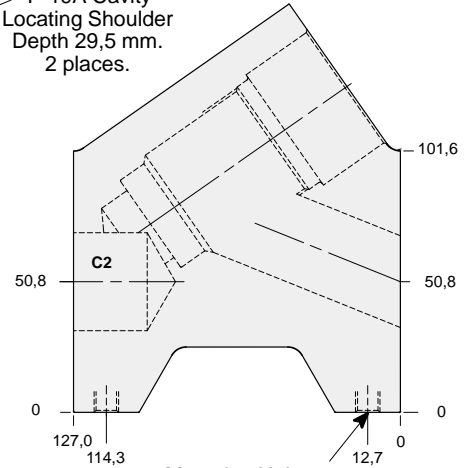
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

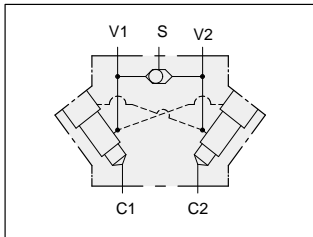


T-19A Cavity
Locating Shoulder
Depth 29,5 mm.
2 places.



Mounting Holes:
Inch: .375-16 UNC-2B
x 22,4 deep.
Metric M10 x 1.50-6 H
x 22.4 deep
4 places

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	XZP		XZP/S	
Metric	XZP/M		XZP/T	



Two cavity cross-piloted inline 1.50" SAE Code 61 flange port body with shuttle for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

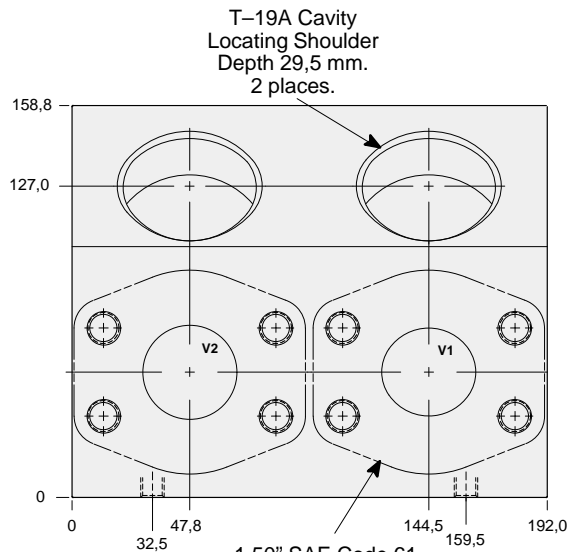
CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

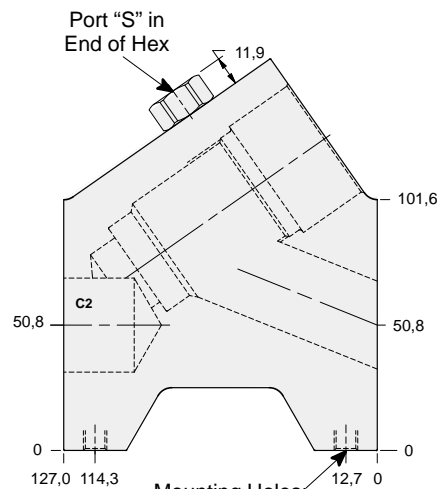
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



T-19A Cavity
Locating Shoulder
Depth 29,5 mm.
2 places.

Port "S" in
End of Hex



Mounting Holes:
Inch: .375-16 UNC-2B
x 22,4 mm. deep.
Metric: M10 x 1.50-6H
x 22,4 mm. deep.
4 places.

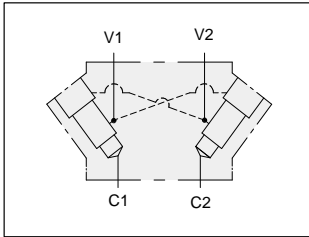
Mounting Hole Dimensions	Shuttle Cartridge	Port S	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	CSAA - EXN	SAE-4	XZQ		XZQ/S	
Metric	CSAA - BXN	.25 BSPP	XZQ/M		XZQ/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

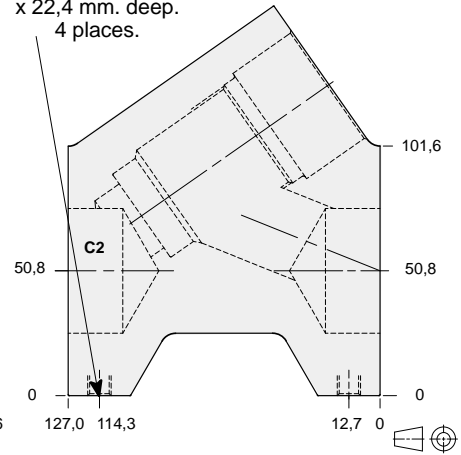
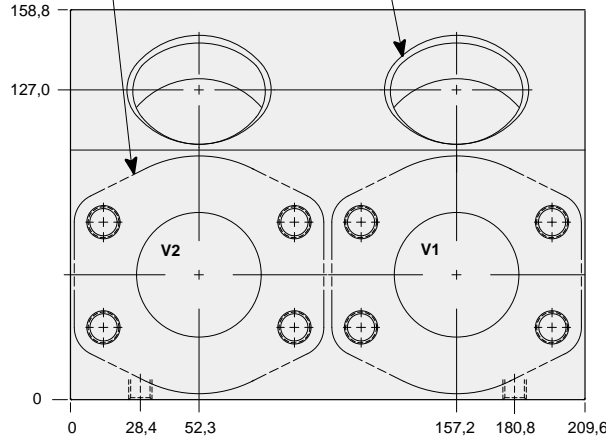


Two cavity cross-piloted inline 2.00" SAE Code 61 flange port body for load control applications.

2.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.
2 places.

Mounting Holes:
Inch: .375-16 UNC-2B
x 22,4 mm. deep.
Metric: M10 x 1.50-6H
x 22,4 mm. deep.
4 places.

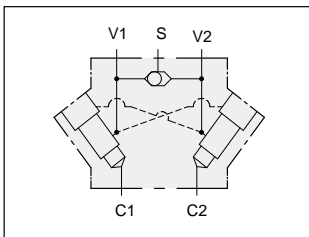


TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	XZR		XZR/S	
Metric	XZR/M		XZR/T	



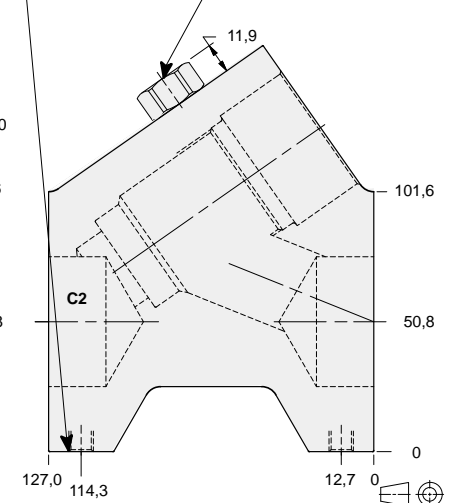
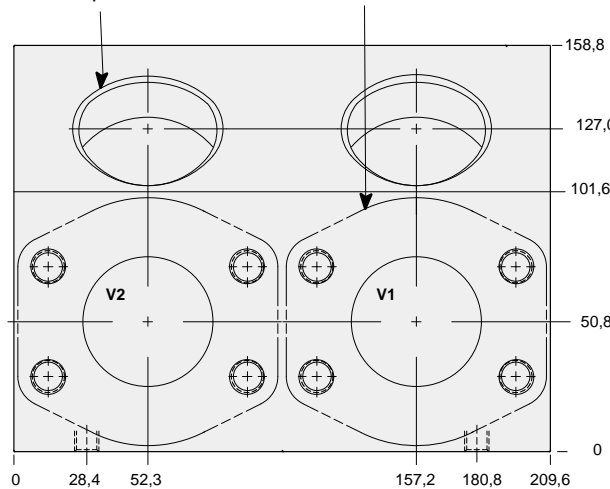
Two cavity cross-piloted inline 2.00" SAE Code 61 flange port body with shuttle for load control applications.

T-19A Cavity
Locating Shoulder
Depth 29,5 mm.
2 places.

2.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

Mounting Holes:
Inch: .375-16 UNC-2B
x 22,4 mm. deep.
Metric: M10 x 1.50-6H
x 22,4 mm. deep.
4 places.

Port "S" in End of Hex



TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Cartridge seal type determines O-ring type.		
Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	Shuttle Cartridge	Port S	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	CSAA - EXN	SAE-4	XZS		XZS/S	
Metric	CSAA - BXN	.25 BSPP	XZS/M		XZS/T	

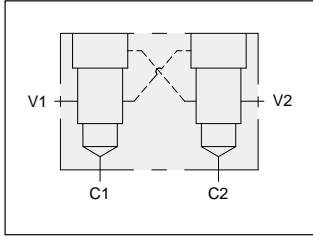
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

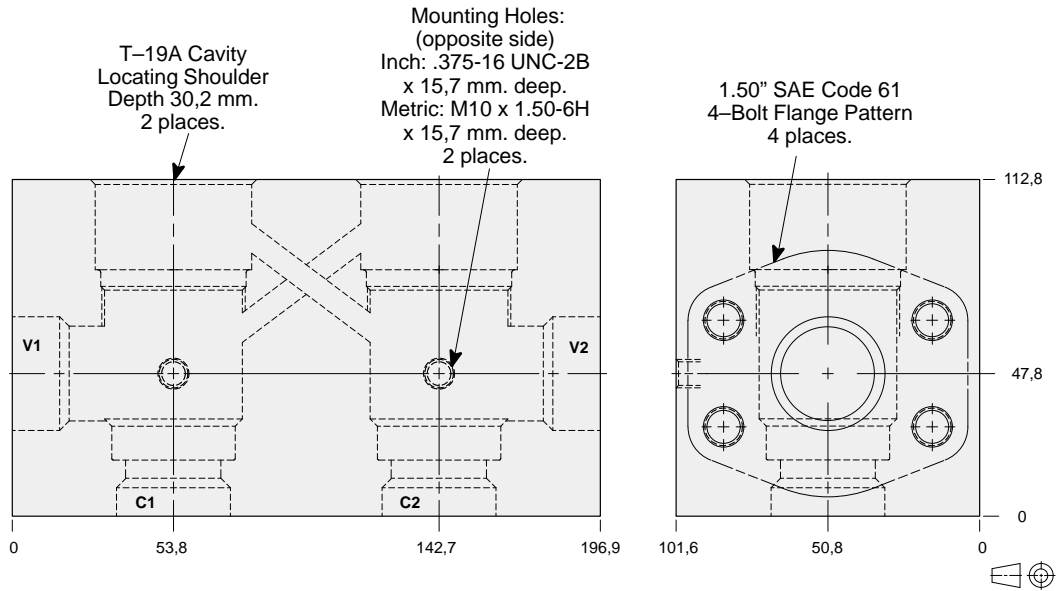


Two cavity 90 degree cross-piloted 1.50" SAE Code 61 flange port body for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

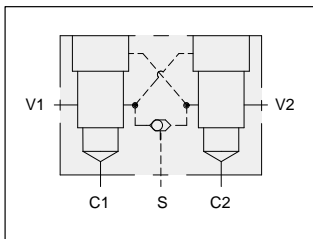
CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03



Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	YMR		YMR/S	
Metric	YMR/M		YMR/T	

Series 4 T-19A

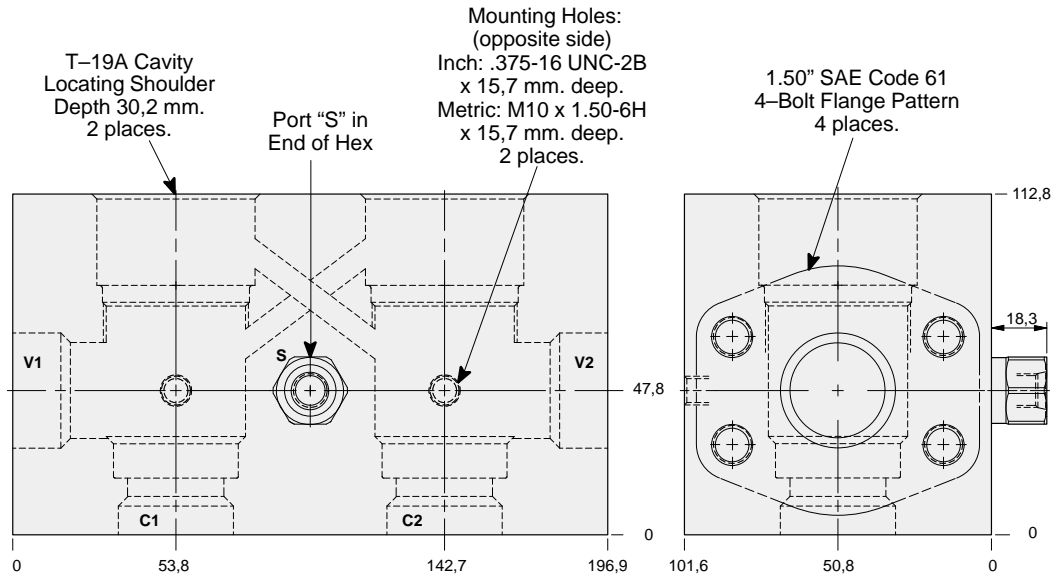


Two cavity 90 degree cross-piloted 1.50" SAE Code 61 flange port body with shuttle for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Cartridge seal type determines O-ring type.		
Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03



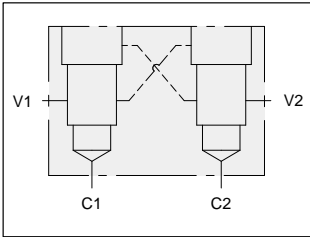
Mounting Hole Dimensions	Shuttle Cartridge	Port S	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	CSAA - EXN	SAE-4	YNR		YNR/S	
Metric	CSAA - BXN	.25 BSPP	YNR/M		YNR/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

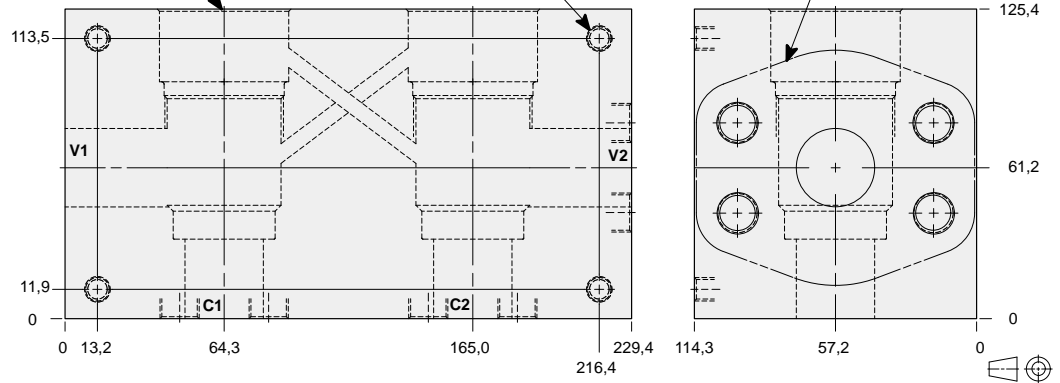


Two cavity 90 degree cross-piloted 1.50" SAE Code 62 flange port body for load control applications.

T-19A Cavity Locating Shoulder
Depth 29,5 mm.
2 places.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
4 places.

1.50" SAE Code 62
4-Bolt Flange Pattern
4 places.

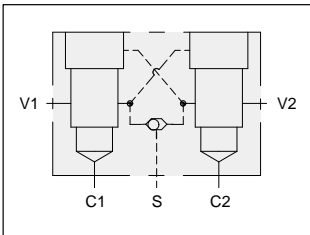


TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	YM6		YM6/S	
Metric	YM6/M		YM6/T	



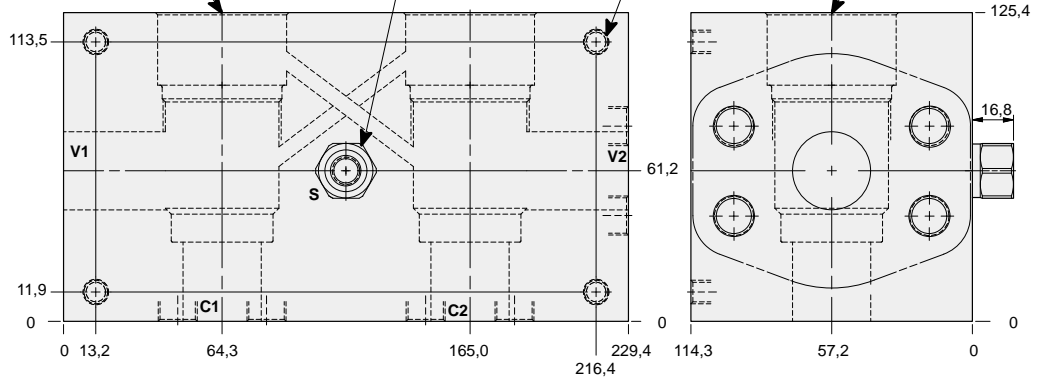
Two cavity 90 degree cross-piloted 1.50" SAE Code 62 flange port body with shuttle for load control applications.

T-19A Cavity Locating Shoulder
Depth 29,5 mm.
2 places.

Port "S" in End of Hex

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
4 places.

1.50" SAE Code 62
4-Bolt Flange Pattern
4 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Cartridge seal type determines O-ring type.		
Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03

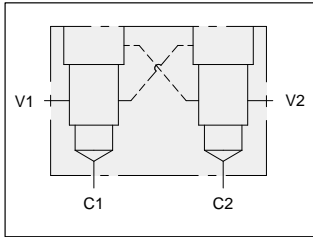
Mounting Hole Dimensions	Shuttle Cartridge	Port S	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	CSAA - EXN	SAE-4	YN6		YN6/S	
Metric	CSAA - BXN	.25 BSPP	YN6/M		YN6/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

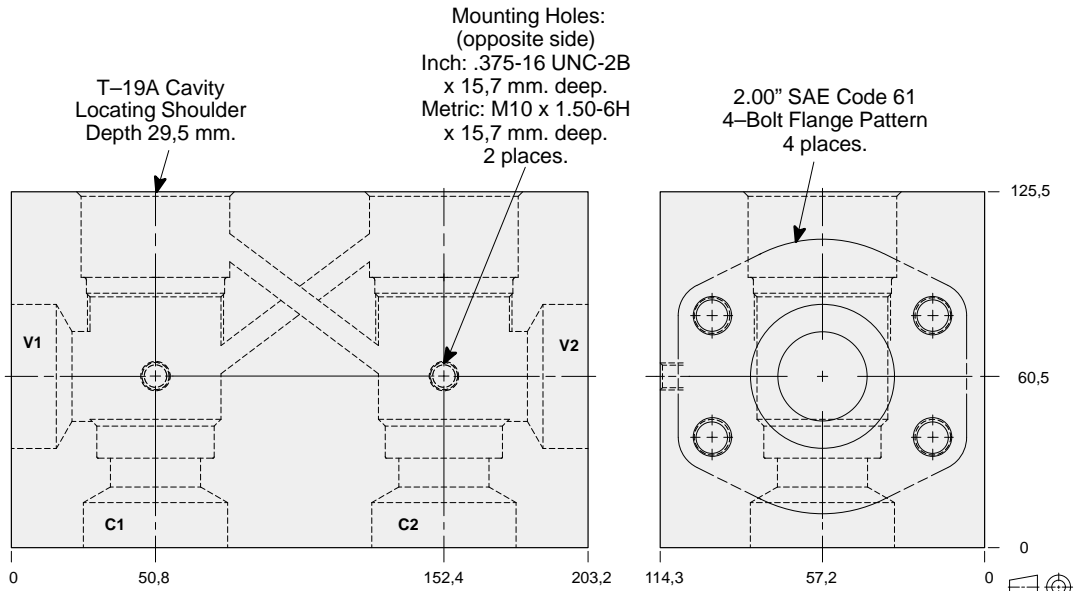


Two cavity 90 degree cross-piloted 2.00" SAE Code 61 flange port body for load control applications.

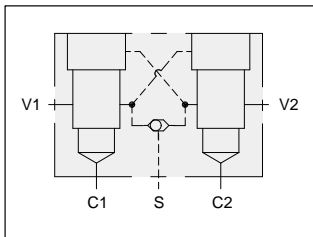
TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03



Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	YMS		YMS/S	
Metric	YMS/M		YMS/T	

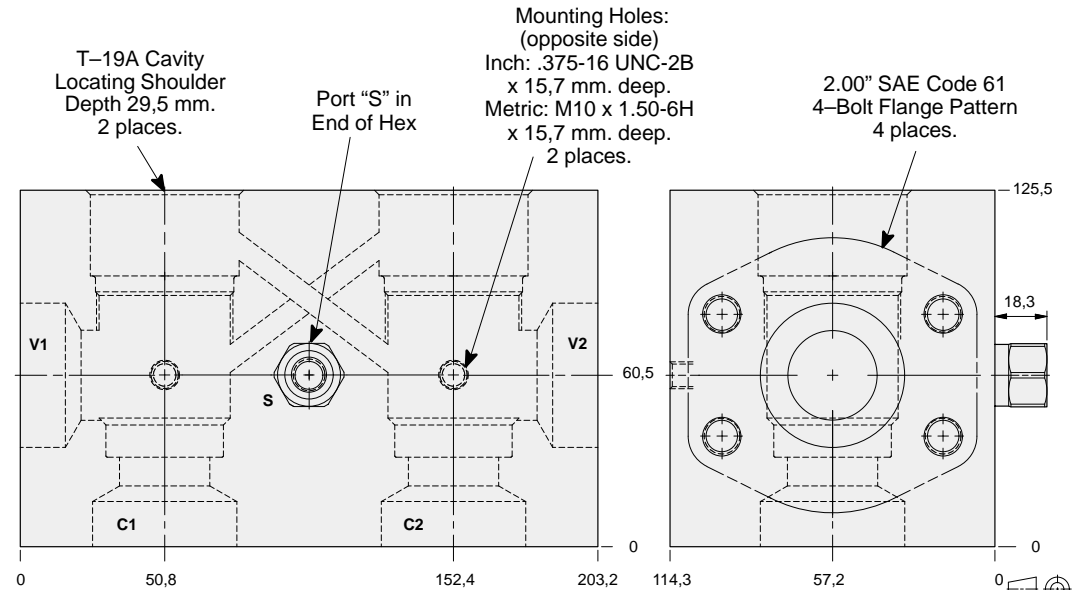


Two cavity 90 degree cross-piloted 2.00" SAE Code 61 flange port body with shuttle for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

CBIA - ***	Page	4.11
CBIG - ***	Page	4.13
CBIH - ***	Page	4.15
CKIB - ***	Page	4.17

Cartridge seal type determines O-ring type.		
Instructions for ordering complete cartridge and body assemblies.	Page	viii
Pressure ratings, material specifications.	Page	11.02
SAE Specifications.	Page	11.03



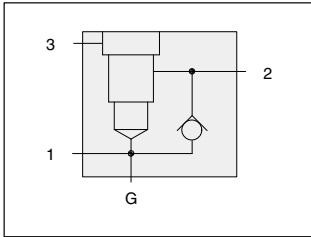
Mounting Hole Dimensions	Shuttle Cartridge	Port S	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	CSAA - EXN	SAE-4	YNS		YNS/S	
Metric	CSAA - BXN	.25 BSPP	YNS/M		YNS/T	



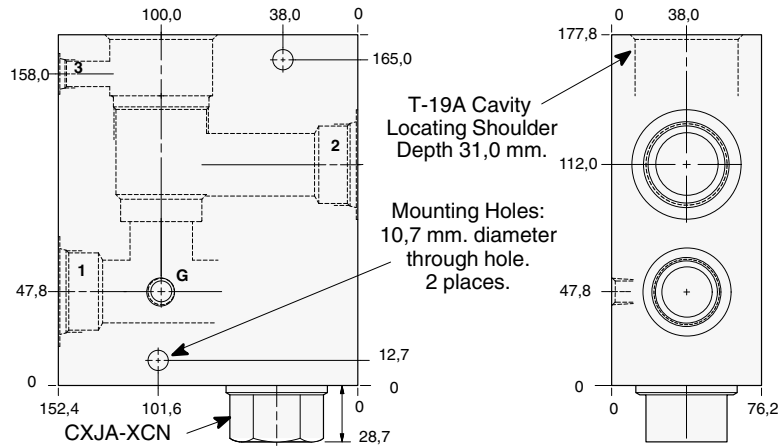
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with reverse free flow check and gauge port.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

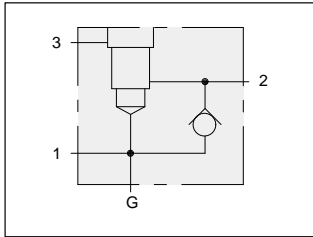
Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	.25 NPTF	K6D		K6D/S	
1.00 NPTF	.25 NPTF	.25 NPTF	K6E		K6E/S	
1.25 NPTF	.25 NPTF	.25 NPTF	K6F		K6F/S	
SAE-12	SAE-6	.25 NPTF	K6L		K6L/S	
SAE-16	SAE-6	.25 NPTF	K6M		K6M/S	
SAE-20	SAE-6	.25 NPTF	K6N		K6N/S	
.75 BSPP	.25 BSPP	.25 BSPP	K6W		K6W/S	
1.00 BSPP	.25 BSPP	.25 BSPP	K6X		K6X/S	
1.25 BSPP	.25 BSPP	.25 BSPP	K6Y		K6Y/S	



LINE MOUNT BODIES



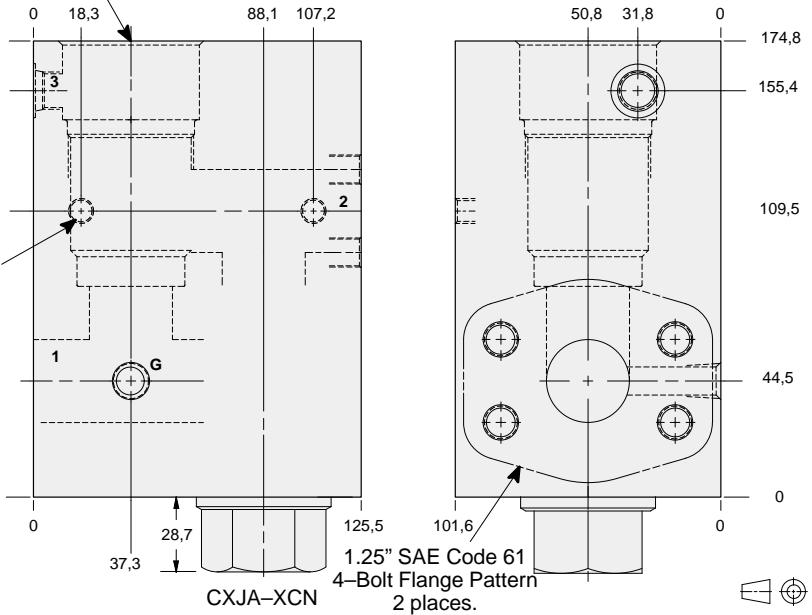
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



1.25" SAE Code 61 flange port body with reverse free flow check and gauge port.

T-19A Cavity
Locating Shoulder
Depth 30,2 mm.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11

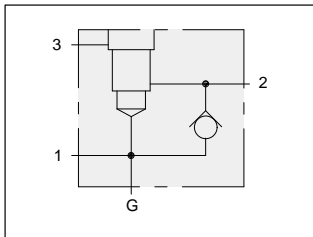
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

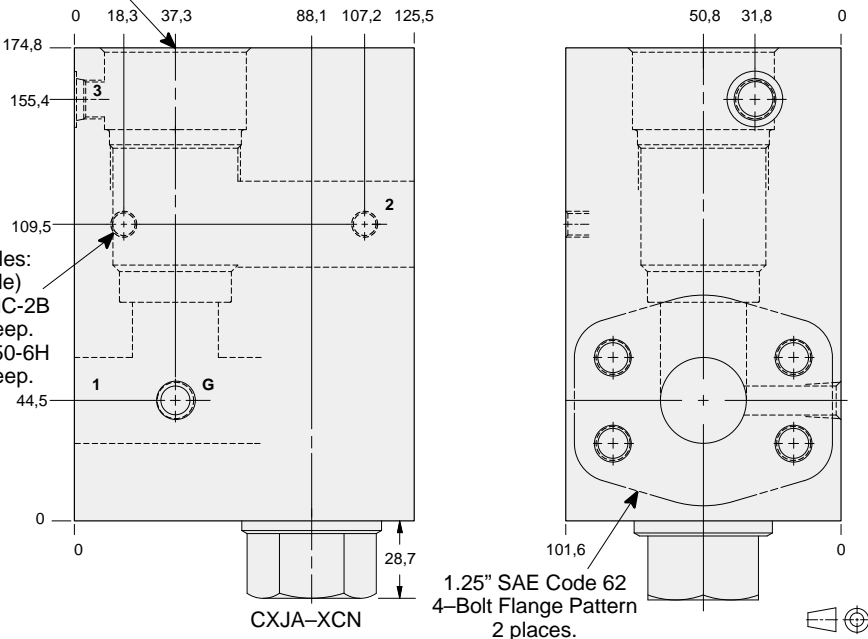
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K6Q		K6Q/S	
Metric	.25 BSPP	.25 BSPP	K6Q/M		K6Q/T	



1.25" SAE Code 62 flange port body with reverse free flow check and gauge port.

T-19A Cavity
Locating Shoulder
Depth 30,2 mm.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

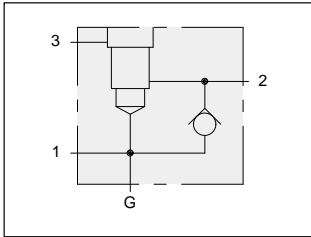
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K65		K65/S	
Metric	.25 BSPP	.25 BSPP	K65/M		K65/T	



LINE MOUNT BODIES



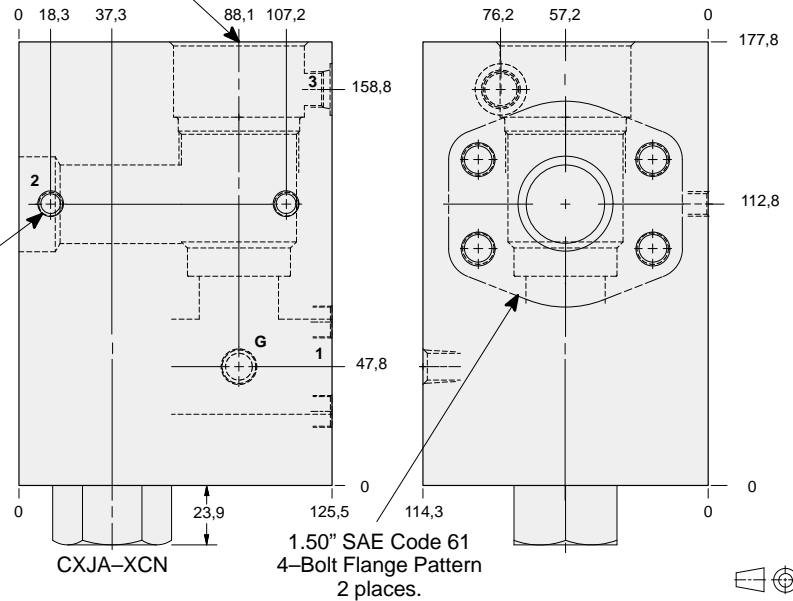
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



1.50" SAE Code 61 flange port body with reverse free flow check and gauge port.

T-19A Cavity
Locating Shoulder
Depth 30,2 mm.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11

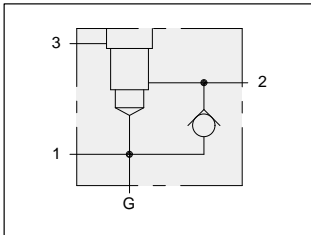
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

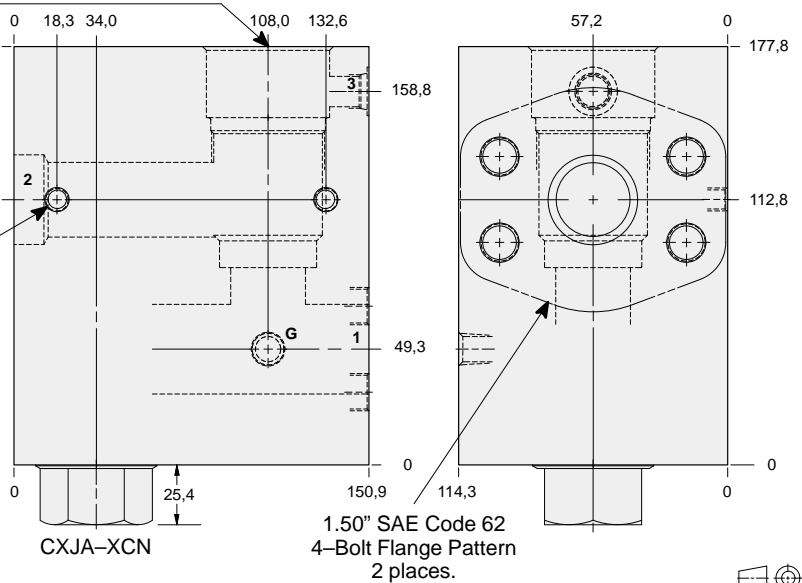
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K6R		K6R/S	
Metric	.25 BSPP	.25 BSPP	K6R/M		K6R/T	



1.50" SAE Code 62 flange port body with reverse free flow check and gauge port.

T-19A Cavity
Locating Shoulder
Depth 30,2 mm.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

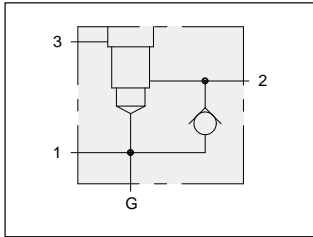
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K66		K66/S	
Metric	.25 BSPP	.25 BSPP	K66/M		K66/T	



LINE MOUNT BODIES



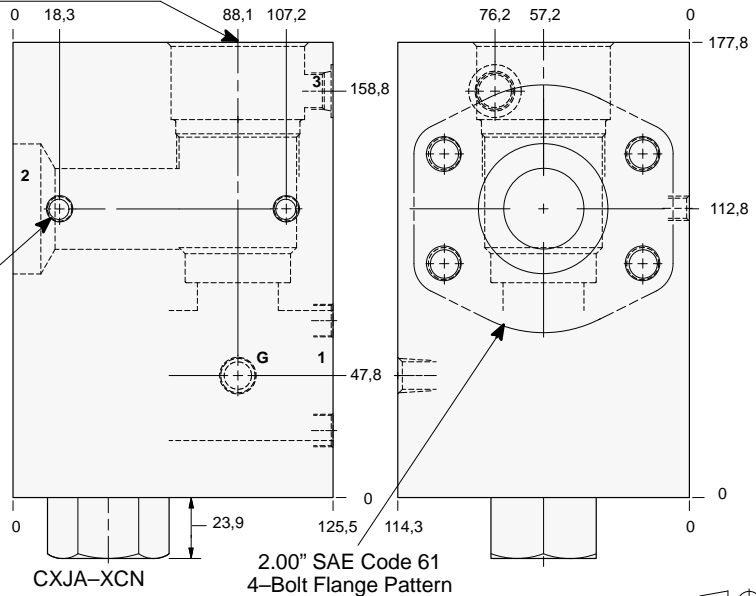
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



2.00" SAE Code 61 flange port body with reverse free flow check and gauge port.

T-19A Cavity
Locating Shoulder
Depth 30,2 mm.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11

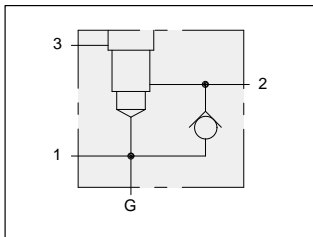
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

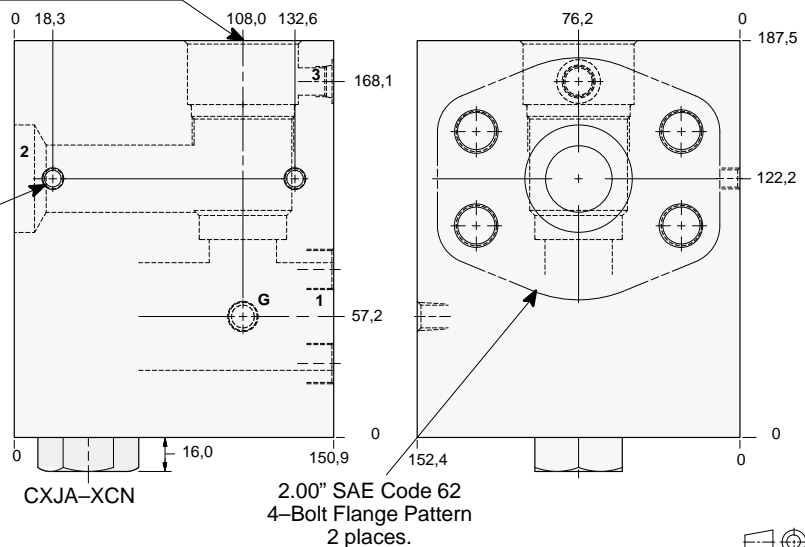
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K6S		K6S/S	
Metric	.25 BSPP	.25 BSPP	K6S/M		K6S/T	



2.00" SAE Code 62 flange port body with reverse free flow check and gauge port.

T-19A Cavity
Locating Shoulder
Depth 30,2 mm.

Mounting Holes:
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

RVIA - ***	Page	1.19
RSJC - ***	Page	2.07
SQJB - ***	Page	2.09
RSJE - ***	Page	2.11

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

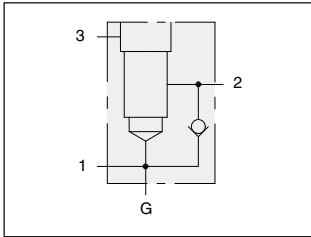
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K68		K68/S	
Metric	.25 BSPP	.25 BSPP	K68/M		K68/T	



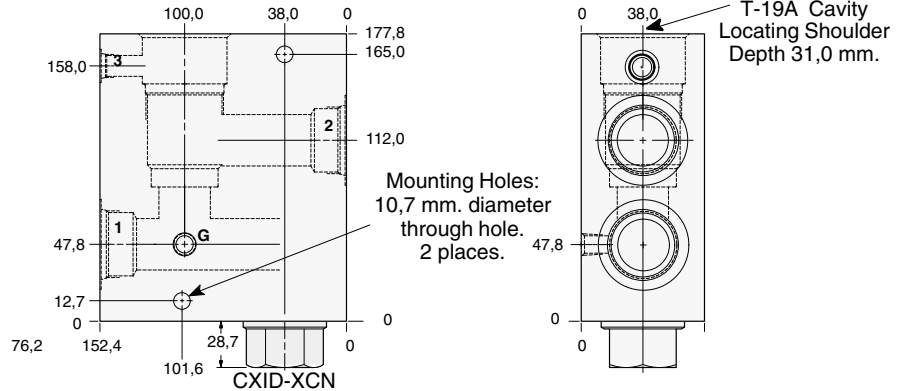
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with reverse free flow check and gauge port for reducing applications.

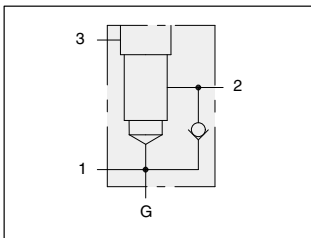


TYPICAL CARTRIDGES USED WITH THIS BODY

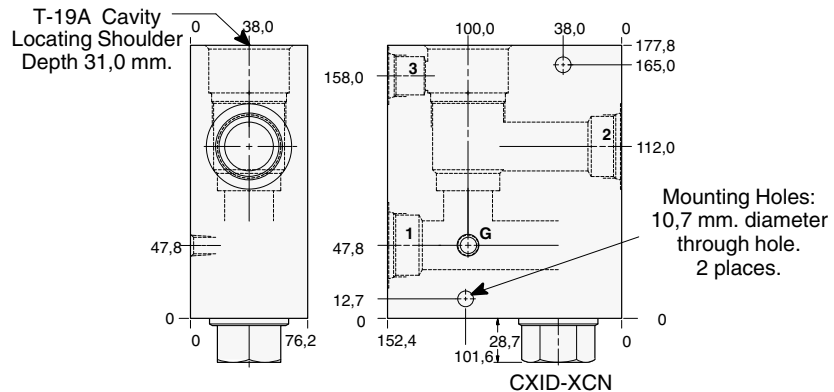
PPJB - *** Page 3.11
 PPJC - *** Page 3.13

Cartridge seal type determines check valve seal type.
 Instructions for ordering complete cartridge and body assemblies. Page viii
 Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	.25 NPTF	.25 NPTF	K2D		K2D/S	
1.00 NPTF	.25 NPTF	.25 NPTF	K2E		K2E/S	
1.25 NPTF	.25 NPTF	.25 NPTF	K2F		K2F/S	
SAE-12	SAE-6	.25 NPTF	K2L		K2L/S	
SAE-16	SAE-6	.25 NPTF	K2M		K2M/S	
SAE-20	SAE-6	.25 NPTF	K2N		K2N/S	
.75 BSPP	.25 BSPP	.25 BSPP	K2W		K2W/S	
1.00 BSPP	.25 BSPP	.25 BSPP	K2X		K2X/S	
1.25 BSPP	.25 BSPP	.25 BSPP	K2Y		K2Y/S	



Body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPJB - *** Page 3.11
 PPJC - *** Page 3.13

Cartridge seal type determines check valve seal type.
 Instructions for ordering complete cartridge and body assemblies. Page viii
 Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
.75 NPTF	.75 NPTF	.25 NPTF	K4D		K4D/S	
1.00 NPTF	.75 NPTF	.25 NPTF	K4E		K4E/S	
1.25 NPTF	.75 NPTF	.25 NPTF	K4F		K4F/S	
SAE-12	SAE-12	.25 NPTF	K4L		K4L/S	
SAE-16	SAE-12	.25 NPTF	K4M		K4M/S	
SAE-20	SAE-12	.25 NPTF	K4N		K4N/S	
.75 BSPP	.75 BSPP	.25 BSPP	K4W		K4W/S	
1.00 BSPP	.75 BSPP	.25 BSPP	K4X		K4X/S	
1.25 BSPP	.75 BSPP	.25 BSPP	K4Y		K4Y/S	

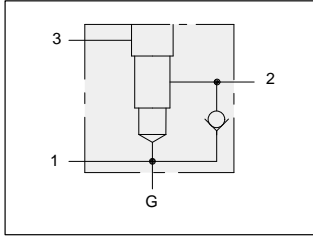
Series 4 T-19A



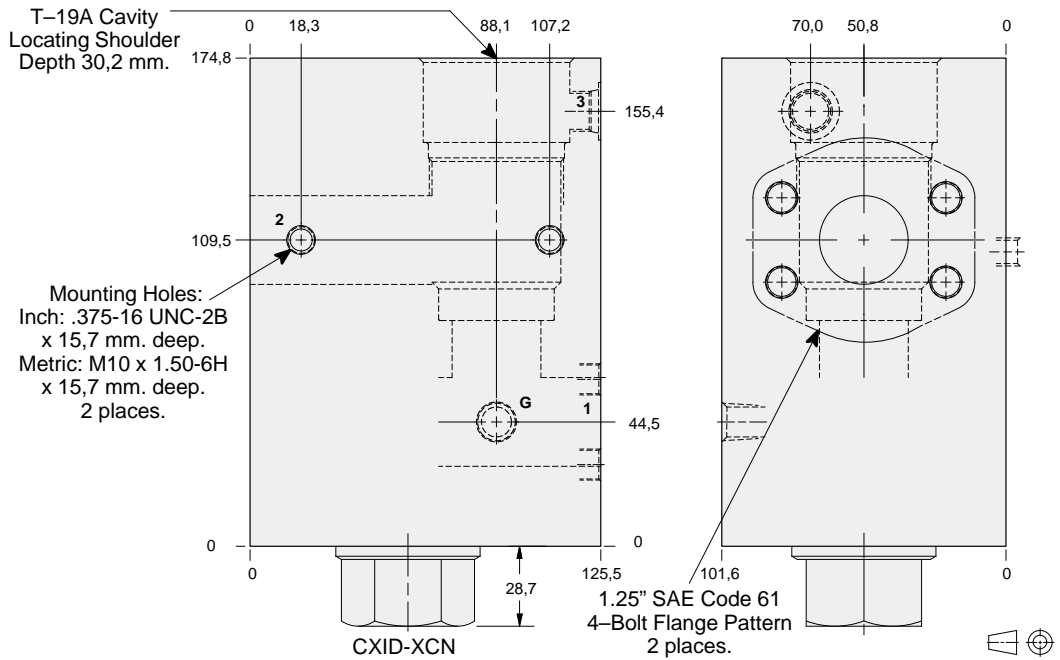
LINE MOUNT BODIES



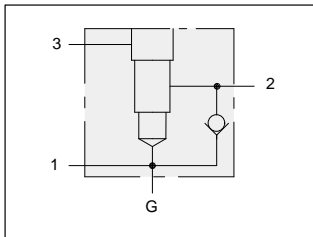
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



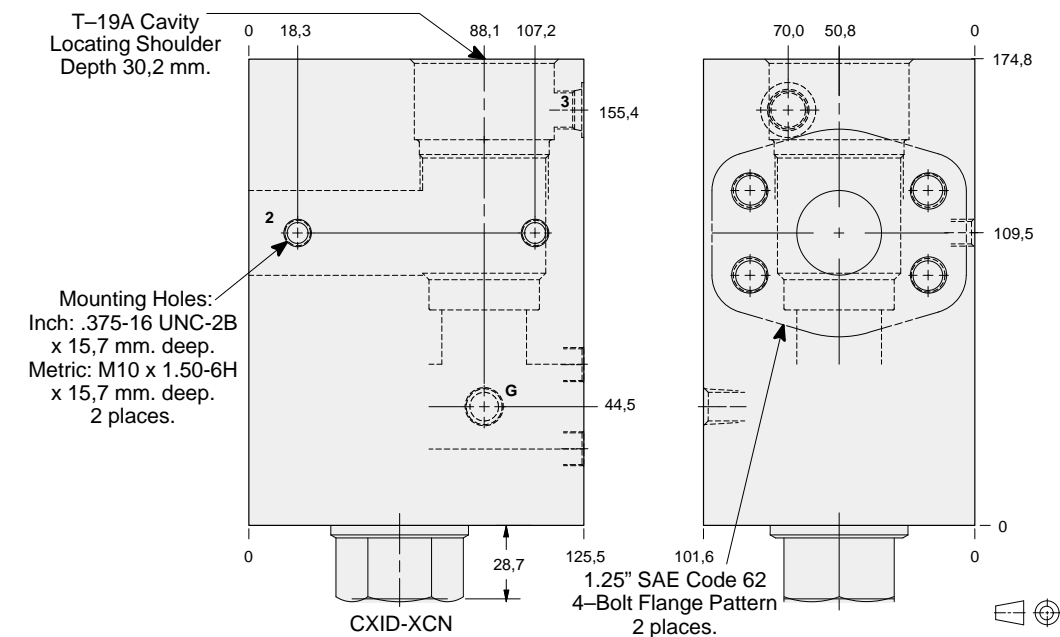
1.25" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications.



Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K2Q		K2Q/S	
Metric	.25 BSPP	.25 BSPP	K2Q/M		K2Q/T	



1.25" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications.



Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K25		K25/S	
Metric	.25 BSPP	.25 BSPP	K25/M		K25/T	

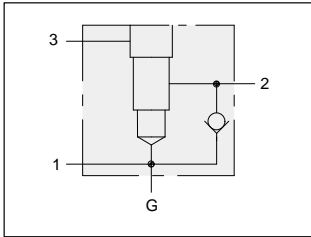
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



TYPICAL CARTRIDGES USED WITH THIS BODY

PBJB - *** Page 3.07
 PBJC - *** Page 3.09

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

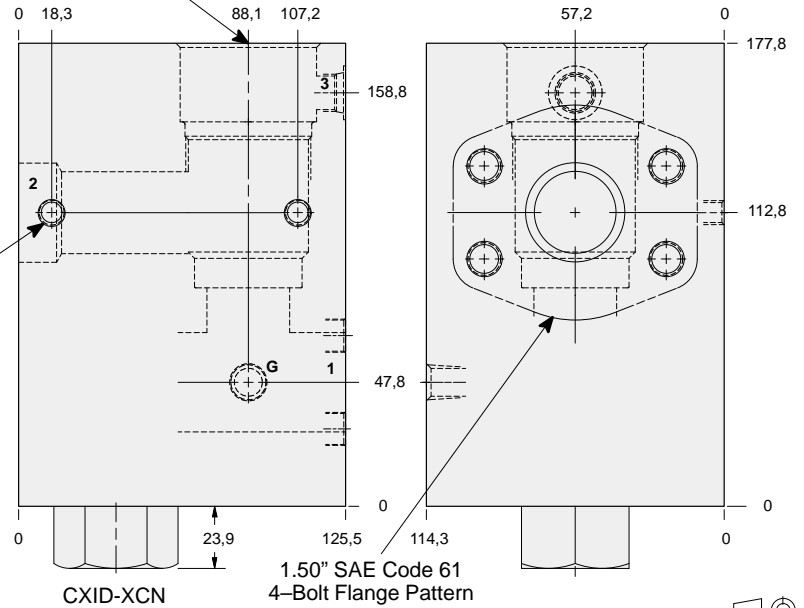
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

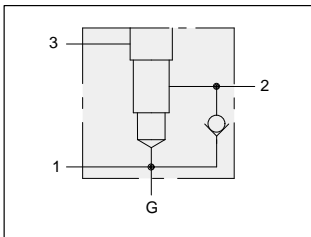
1.50" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications.

T-19A Cavity Locating Shoulder Depth 30,2 mm.

Mounting Holes:
 Inch: .375-16 UNC-2B x 15,7 mm. deep.
 Metric: M10 x 1.50-6H x 15,7 mm. deep.
 2 places.



Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K2R		K2R/S	
Metric	.25 BSPP	.25 BSPP	K2R/M		K2R/T	



TYPICAL CARTRIDGES USED WITH THIS BODY

PBJB - *** Page 3.07
 PBJC - *** Page 3.09

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

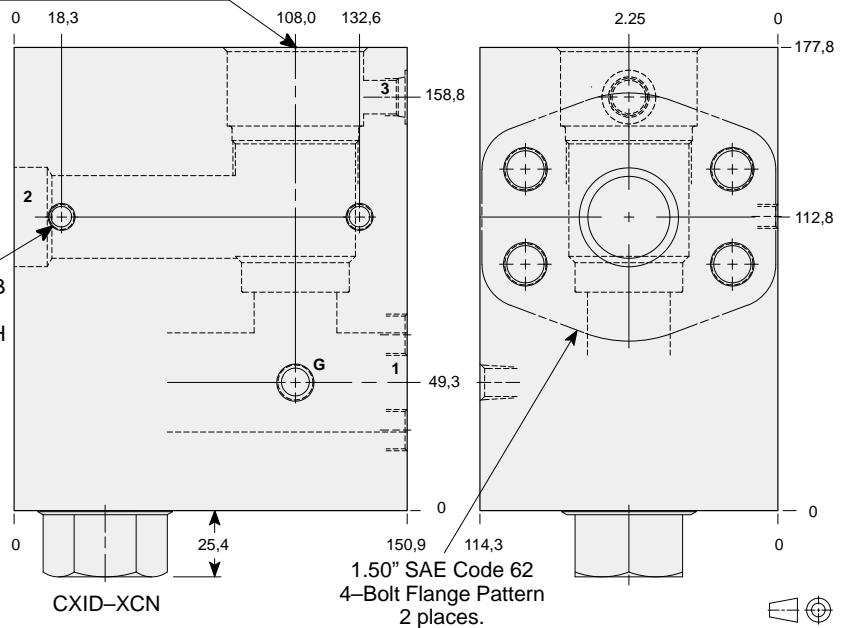
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

1.50" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications.

T-19A Cavity Locating Shoulder Depth 30,2 mm.

Mounting Holes:
 Inch: .375-16 UNC-2B x 15,7 mm. deep.
 Metric: M10 x 1.50-6H x 15,7 mm. deep.
 2 places.



Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K26		K26/S	
Metric	.25 BSPP	.25 BSPP	K26/M		K26/T	

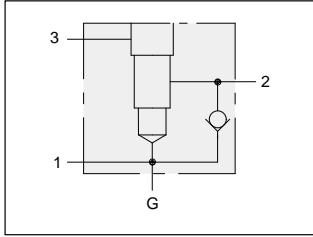
Series 4 T-19A



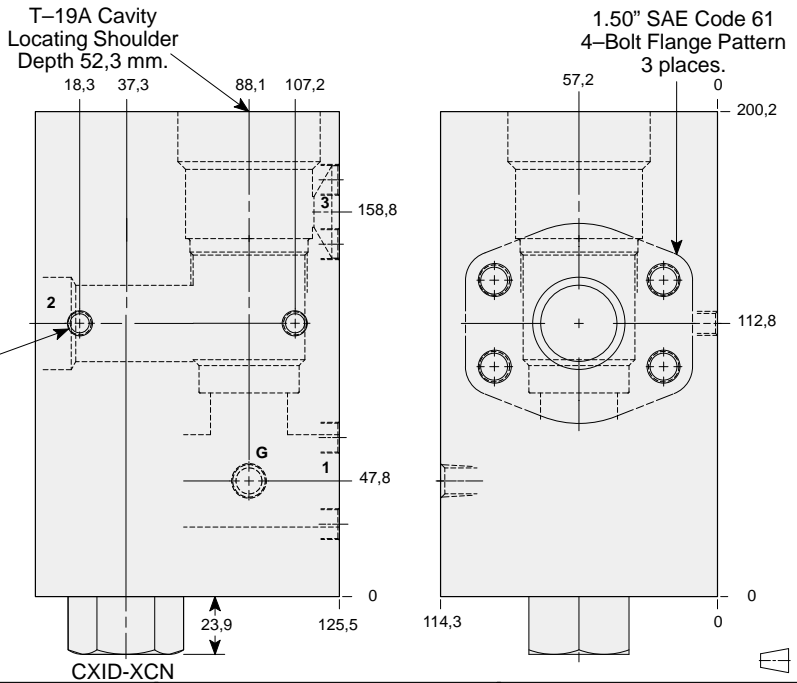
LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



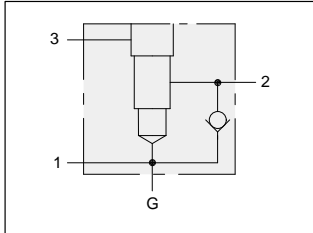
1.50" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.



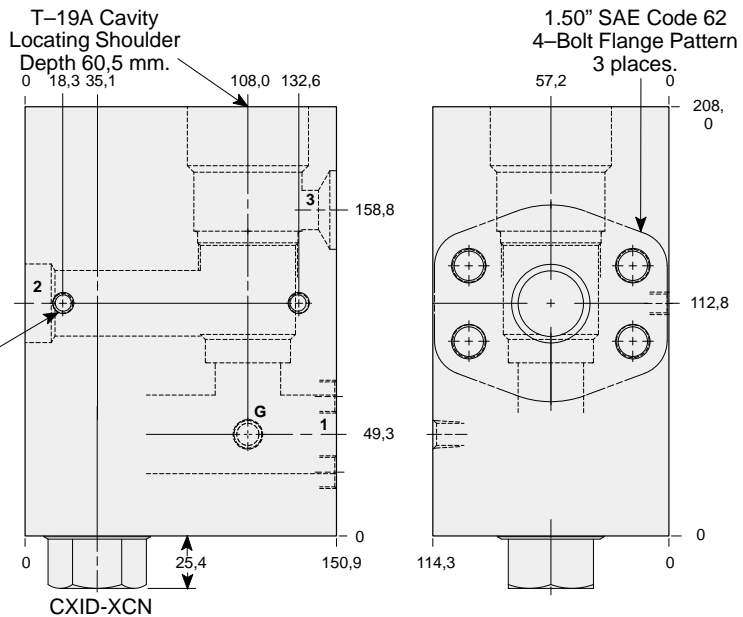
TYPICAL CARTRIDGES USED WITH THIS BODY

PPJB - ***	Page	3.11
PPJC - ***	Page	3.13
Cartridge seal type determines check valve seal type.		
Instructions for ordering complete cartridge and body assemblies.		
	Page	viii
Pressure ratings, material specifications.		
	Page	11.02
SAE Specifications.		
	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	K4R		K4R/S	
Metric	.25 BSPP	K4R/M		K4R/T	



1.50" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

PPJB - ***	Page	3.11
PPJC - ***	Page	3.13
Cartridge seal type determines check valve seal type.		
Instructions for ordering complete cartridge and body assemblies.		
	Page	viii
Pressure ratings, material specifications.		
	Page	11.02
SAE Specifications.		
	Page	11.03

Mounting Hole Dimensions	Gauge Port	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	K46		K46/S	
Metric	.25 BSPP	K46/M		K46/T	

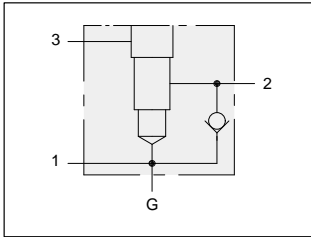
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



2.00" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

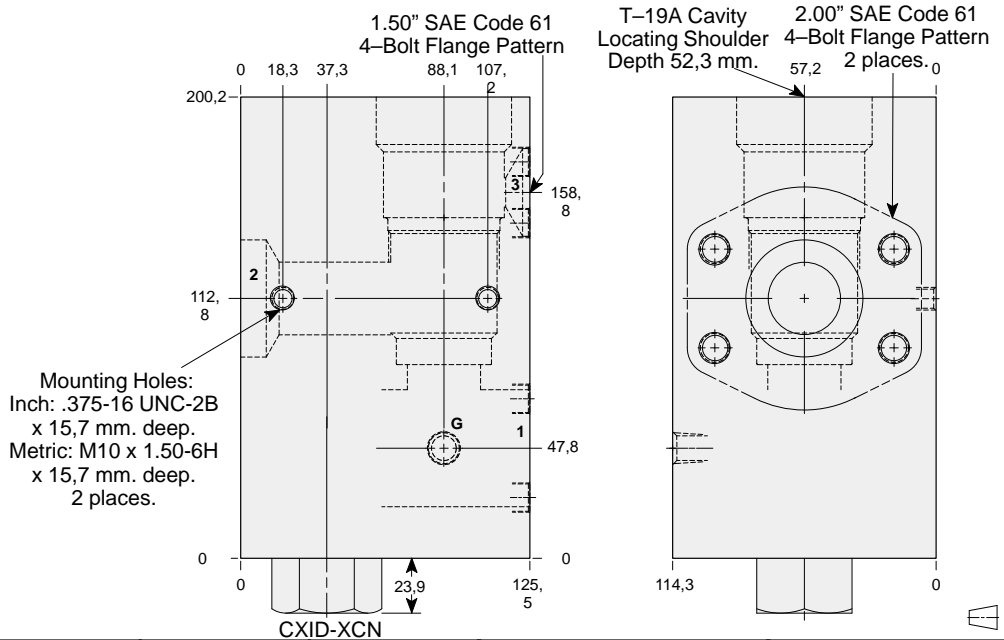
PPJB - *** Page 3.11
 PPJC - *** Page 3.13

Cartridge seal type determines check valve seal type.

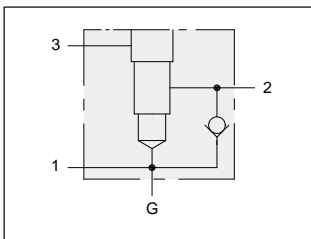
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Port 3 SAE Code 61	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.50"	.25 NPTF	K4S		K4S/S	
Metric	1.50"	.25 BSPP	K4S/M		K4S/T	



2.00" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

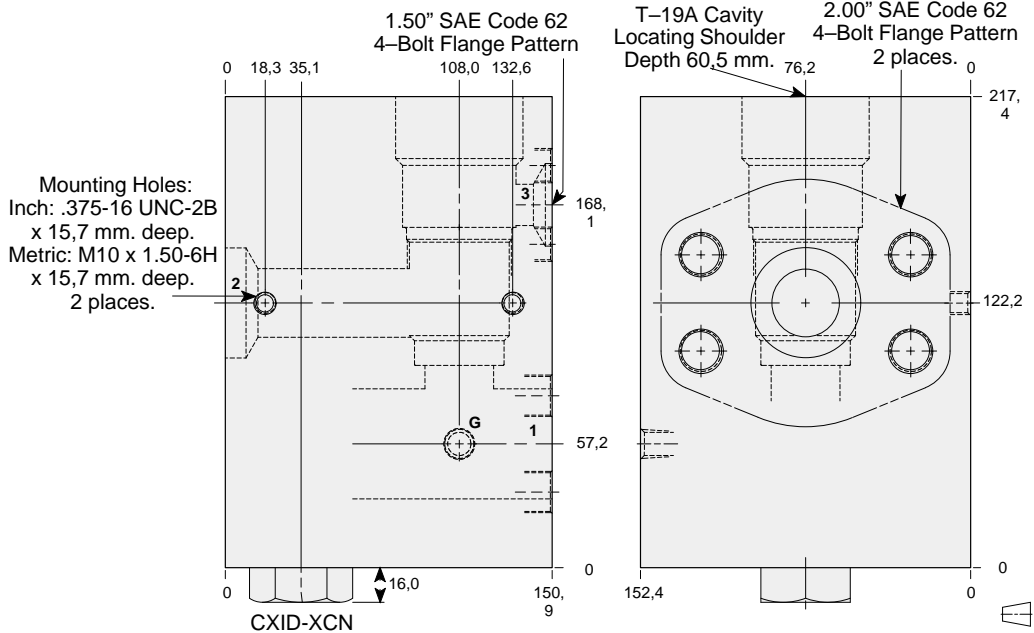
PPJB - *** Page 3.11
 PPJC - *** Page 3.13

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Port 3 SAE Code 62	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	1.50"	.25 NPTF	K48		K48/S	
Metric	1.50"	.25 BSPP	K48/M		K48/T	

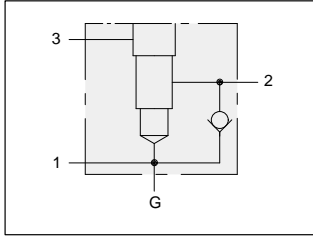
Series 4 T-19A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



2.00" SAE Code 61 flange port body with reverse free flow check and gauge port for reducing applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

PBBJ - *** Page 3.07
 PBJC - *** Page 3.09

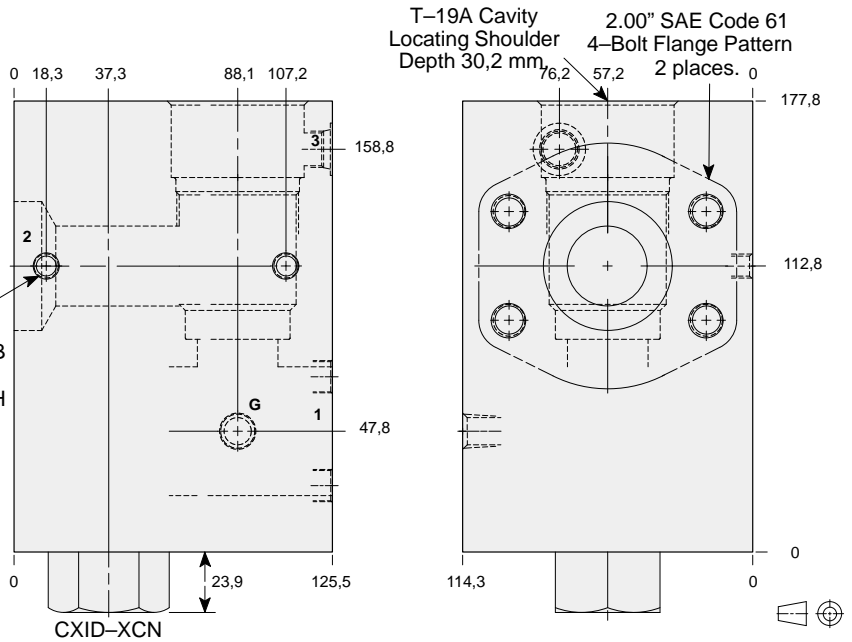
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

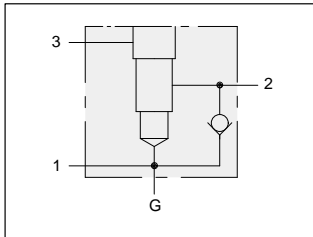
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Holes:
 Inch: .375-16 UNC-2B x 15,7 mm. deep.
 Metric: M10 x 1.50-6H x 15,7 mm. deep.
 2 places.



Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K2S		K2S/S	
Metric	.25 BSPP	.25 BSPP	K2S/M		K2S/T	



2.00" SAE Code 62 flange port body with reverse free flow check and gauge port for reducing applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

PBBJ - *** Page 3.07
 PBJC - *** Page 3.09

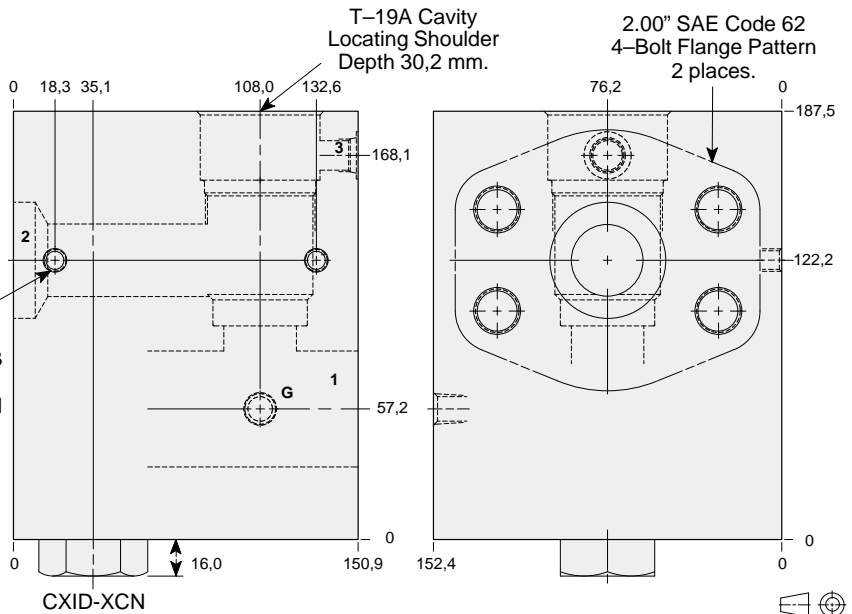
Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Holes:
 Inch: .375-16 UNC-2B x 15,7 mm. deep.
 Metric: M10 x 1.50-6H x 15,7 mm. deep.
 2 places.



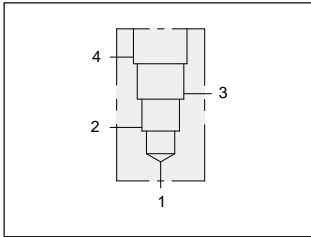
Mounting Hole Dimensions	Port 3	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	K28		K28/S	
Metric	.25 BSPP	.25 BSPP	K28/M		K28/T	



LINE MOUNT BODIES



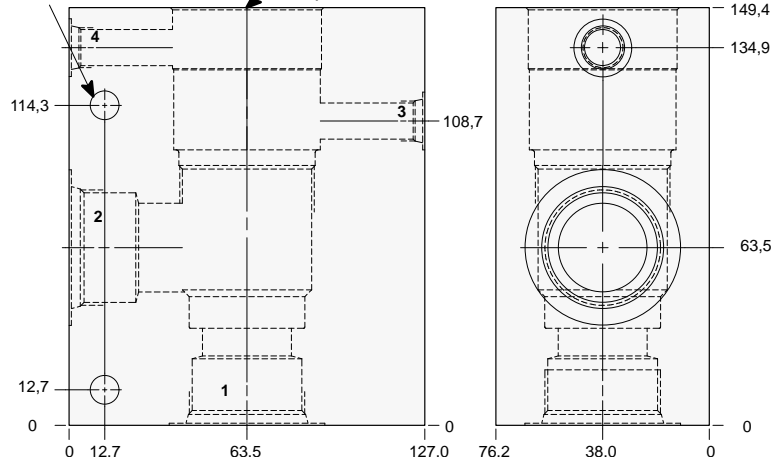
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree body.

Mounting Holes:
10,7 mm. diameter through hole.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.



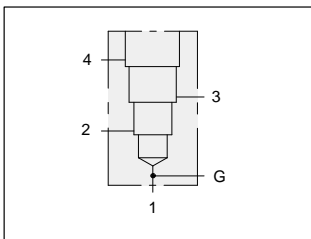
TYPICAL CARTRIDGES USED WITH THIS BODY

RVID - ***	Page	1.21
CWIA - ***	Page	4.19
CWIG - ***	Page	4.21
CVIV - ***	Page	4.23

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

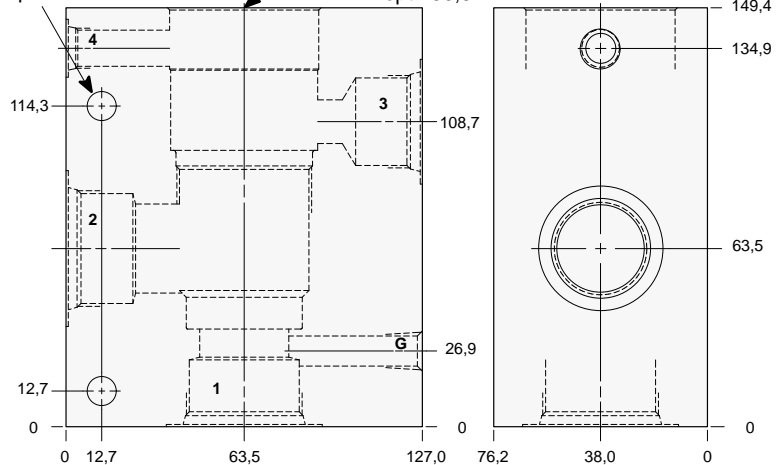
Ports 1 & 2	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
1.00 NPTF	.25 NPTF	QCE		QCE/S	
1.25 NPTF	.25 NPTF	QCF		QCF/S	
SAE-16	SAE-6	QCM		QCM/S	
SAE-20	SAE-6	QCN		QCN/S	
1.00 BSPP	.25 BSPP	QCX		QCX/S	
1.25 BSPP	.25 BSPP	QCY		QCY/S	



90 degree body with high capacity port 3 and gauge port.

Mounting Holes:
10,7 mm. diameter through hole.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

PVJA - ***	Page	3.15
PVJB - ***	Page	3.17
FVFA - ***	Page	6.05

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

Ports 1 & 2	Port 3	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
1.00 NPTF	1.00 NPTF	.25 NPTF	.25 NPTF	QAE		QAE/S	
1.25 NPTF	1.00 NPTF	.25 NPTF	.25 NPTF	QAF		QAF/S	
SAE-16	SAE-16	SAE-6	.25 NPTF	QAM		QAM/S	
SAE-20	SAE-16	SAE-6	.25 NPTF	QAN		QAN/S	
1.00 BSPP	1.00 BSPP	.25 BSPP	.25 BSPP	QAX		QAX/S	
1.25 BSPP	1.00 BSPP	.25 BSPP	.25 BSPP	QAY		QAY/S	

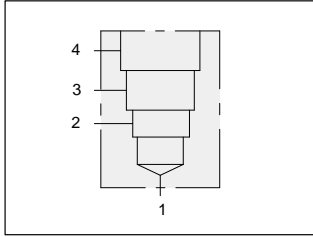
Series 4 T-24A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree 1.25" SAE Code 61 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.

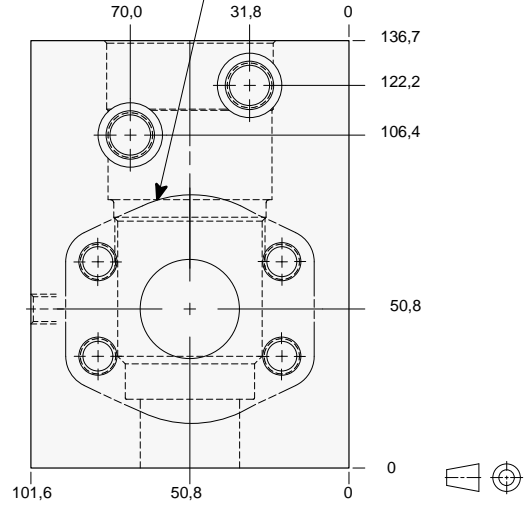
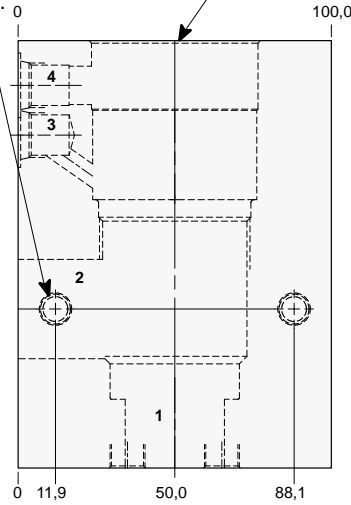
1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

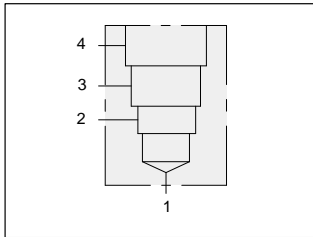
RVID - ***	Page	1.21
CWIA - ***	Page	4.19
CWIG - ***	Page	4.21
CVIV - ***	Page	4.23

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03



Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	QCQ		QCQ/S	
Metric	.25 BSPP	QCQ/M		QCQ/T	



90 degree 1.25" SAE Code 62 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.

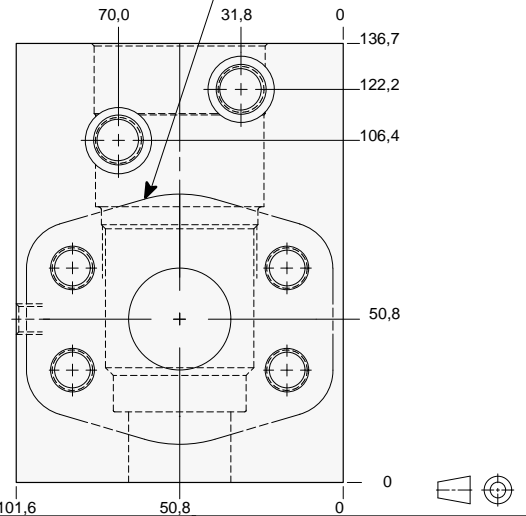
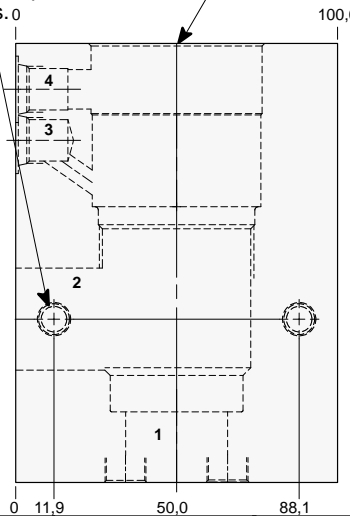
1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

RVID - ***	Page	1.21
CWIA - ***	Page	4.19
CWIG - ***	Page	4.21
CVIV - ***	Page	4.23

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02
SAE Specifications. Page 11.03



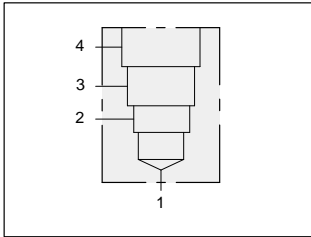
Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	QC5		QC5/S	
Metric	.25 BSPP	QC5/M		QC5/T	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

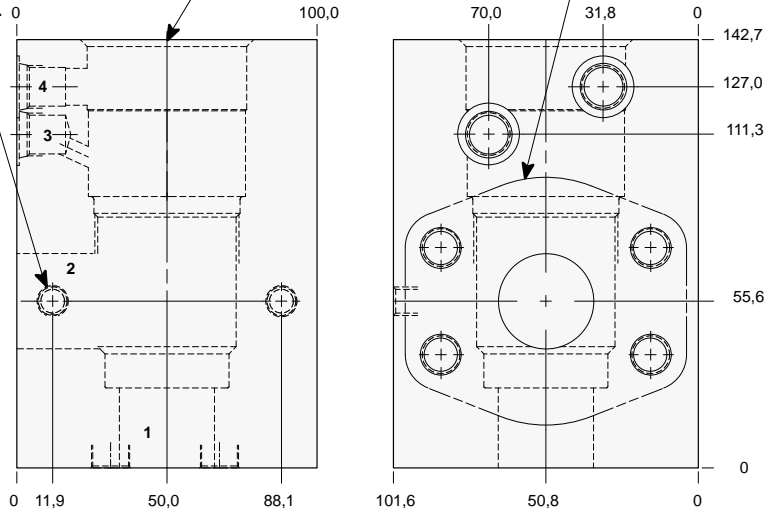


90 degree 1.50" SAE Code 61 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 52,3 mm.

1.50" SAE Code 61
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

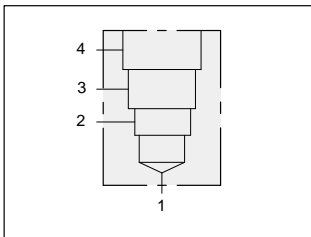
- RVID - *** Page 1.21
- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	QCR		QCR/S	
Metric	.25 BSPP	QCR/M		QCR/T	

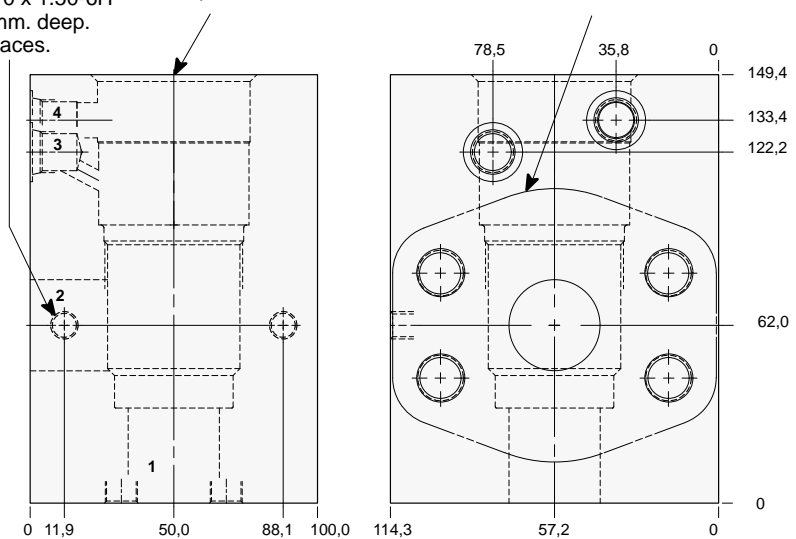


90 degree 1.50" SAE Code 62 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 52,3 mm.

1.50" SAE Code 62
4-Bolt Flange Pattern
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- RVID - *** Page 1.21
- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	QC6		QC6/S	
Metric	.25 BSPP	QC6/M		QC6/T	

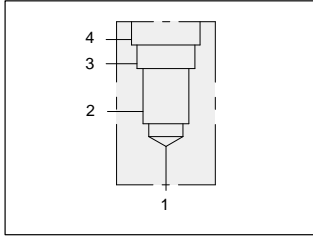
Series 4 T-24A



LINE MOUNT BODIES



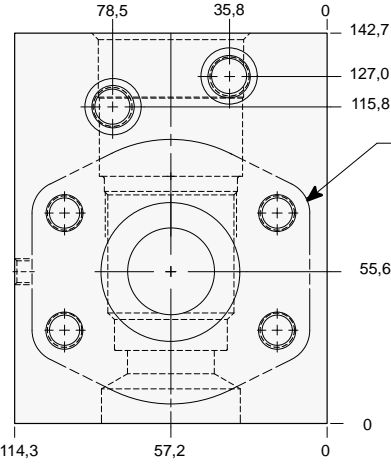
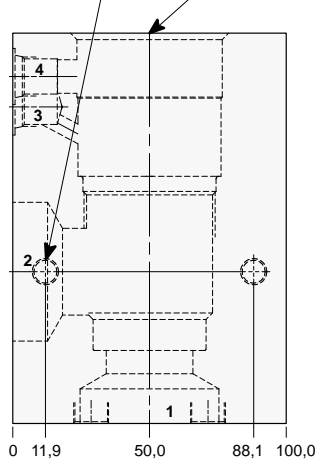
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree 2.00" SAE Code 61 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 52,3 mm.



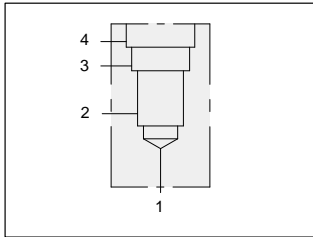
2.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

- RVID - *** Page 1.21
- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

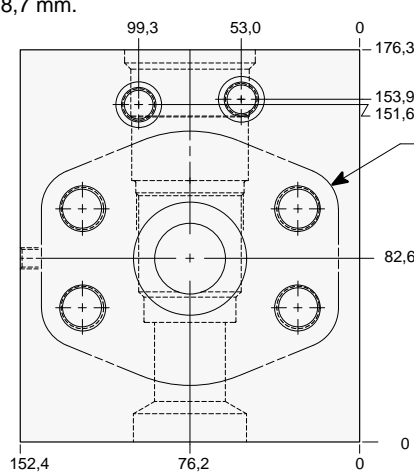
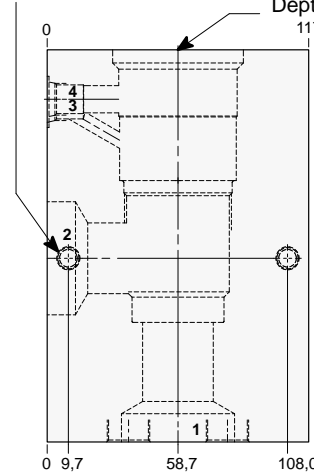
Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	QCS		QCS/S	
Metric	.25 BSPP	QCS/M		QCS/T	



90 degree 2.00" SAE Code 62 flange port body.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 58,7 mm.



2.00" SAE Code 62
4-Bolt Flange Pattern
2 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

- RVID - *** Page 1.21
- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page viii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	QC8		QC8/S	
Metric	.25 BSPP	QC8/M		QC8/T	

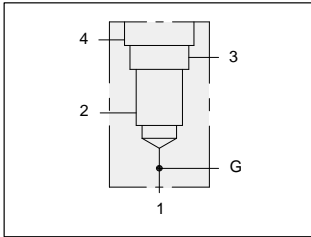
Series 4 T-24A



LINE MOUNT BODIES



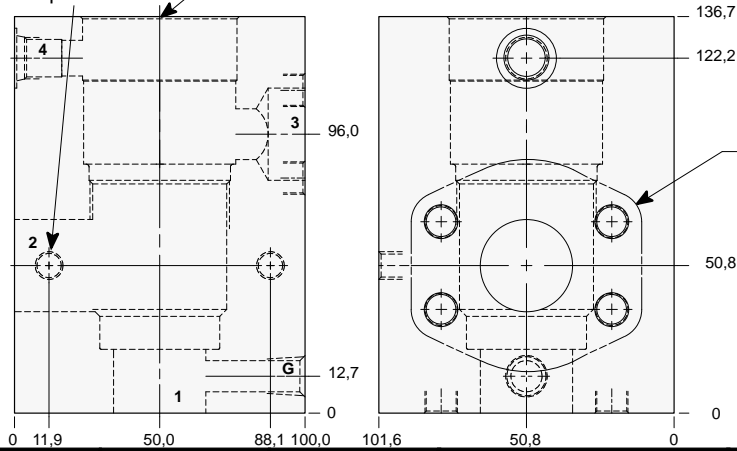
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree 1.25" SAE Code 61 high capacity flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

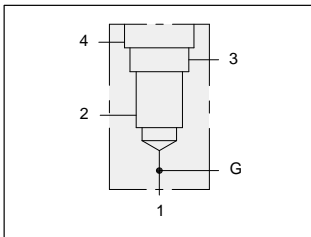
PVJA - *** Page 3.15
PVJB - *** Page 3.17
FVFA - *** Page 6.05

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

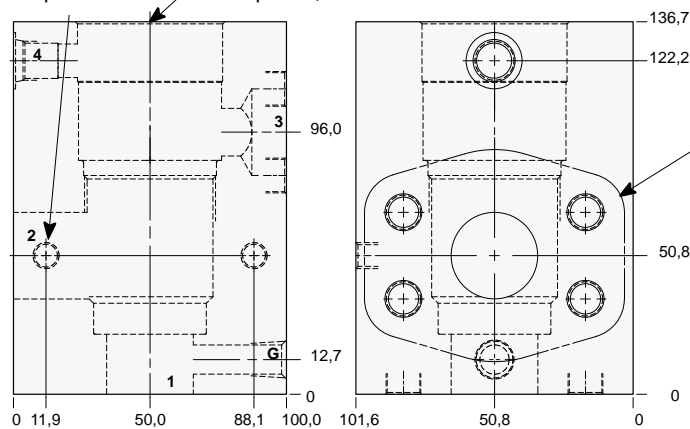
Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	QAQ		QAQ/S	
Metric	.25 BSPP	.25 BSPP	QAQ/M		QAQ/T	



90 degree 1.25" SAE Code 62 high capacity flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

PVJA - *** Page 3.15
PVJB - *** Page 3.17
FVFA - *** Page 6.05

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	QA5		QA5/S	
Metric	.25 BSPP	.25 BSPP	QA5/M		QA5/T	

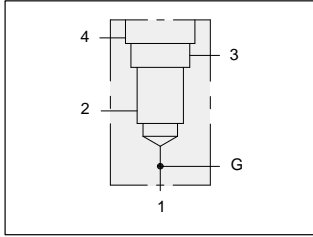
Series 4 T-24A



LINE MOUNT BODIES



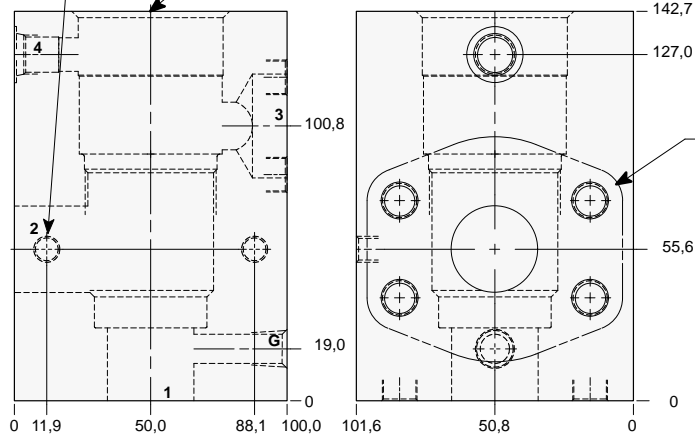
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree 1.50" SAE Code 61 high capacity flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 52,3 mm.



1.50" SAE Code 61
4-Bolt Flange Pattern
3 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

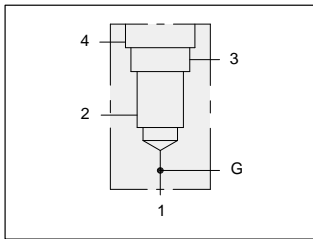
PVJA - *** Page 3.15
PVJB - *** Page 3.17
FVFA - *** Page 6.05

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

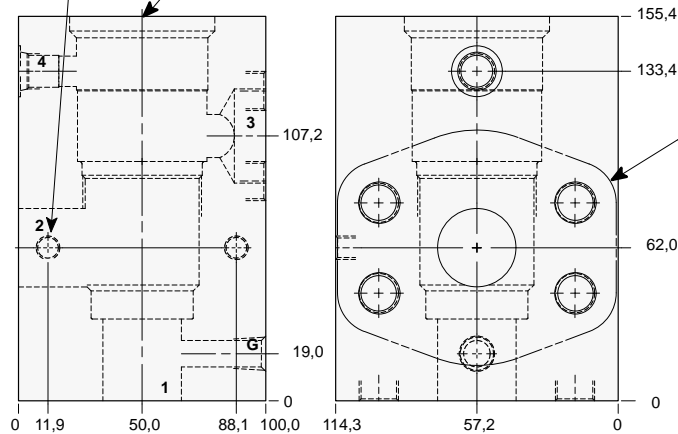
Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	QAR		QAR/S	
Metric	.25 BSPP	.25 BSPP	QAR/M		QAR/T	



90 degree 1.50" SAE Code 62 high capacity flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 58,7 mm.



1.50" SAE Code 62
4-Bolt Flange Pattern
3 places.

TYPICAL CARTRIDGES USED WITH THIS BODY

PVJA - *** Page 3.15
PVJB - *** Page 3.17
FVFA - *** Page 6.05

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

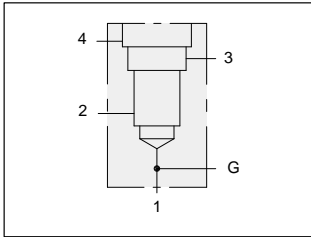
Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	QA6		QA6/S	
Metric	.25 BSPP	.25 BSPP	QA6/M		QA6/T	



LINE MOUNT BODIES



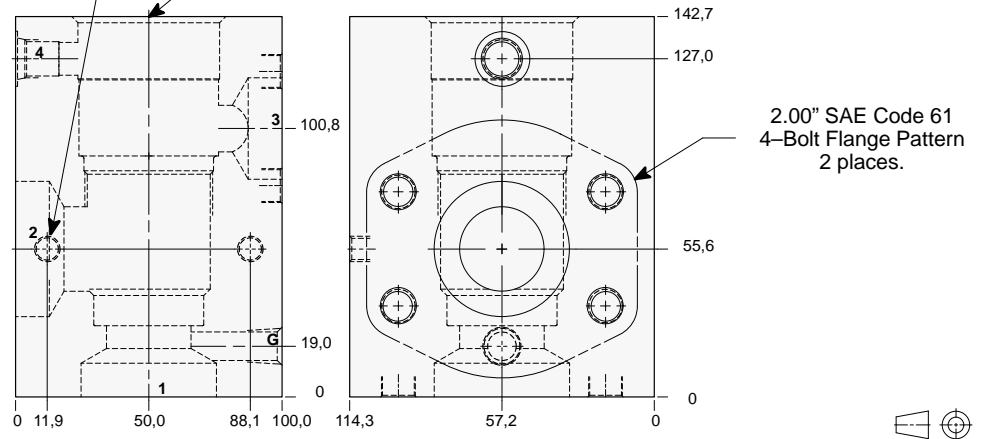
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



90 degree 2.00" SAE Code 61 high capacity flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 52,3 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

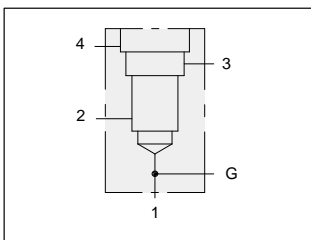
PVJA - ***	Page	3.15
PVJB - ***	Page	3.17
FVFA - ***	Page	6.05

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

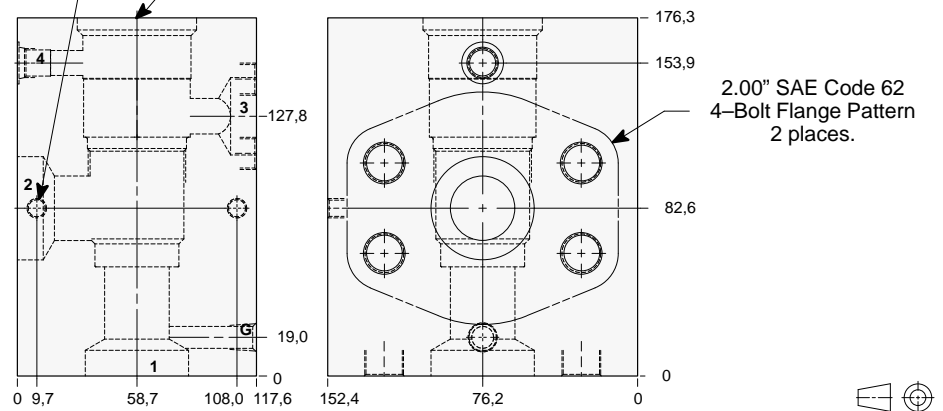
Mounting Hole Dimensions	Port 3 SAE Code 61	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.50"	SAE-6	.25 NPTF	QAS		QAS/S	
Metric	1.50"	.25 BSPP	.25 BSPP	QAS/M		QAS/T	



90 degree 2.00" SAE Code 62 high capacity flange port body with gauge port.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 19,0 mm. deep.
Metric: M10 x 1.50-6H
x 19,0 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 58,7 mm.



TYPICAL CARTRIDGES USED WITH THIS BODY

PVJA - ***	Page	3.15
PVJB - ***	Page	3.17
FVFA - ***	Page	6.05

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 3 SAE Code 62	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.50"	SAE-6	.25 NPTF	QA8		QA8/S	
Metric	1.50"	.25 BSPP	.25 BSPP	QA8/M		QA8/T	

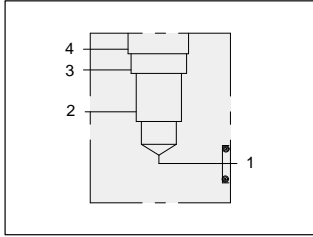
Series 4 T-24A



LINE MOUNT BODIES

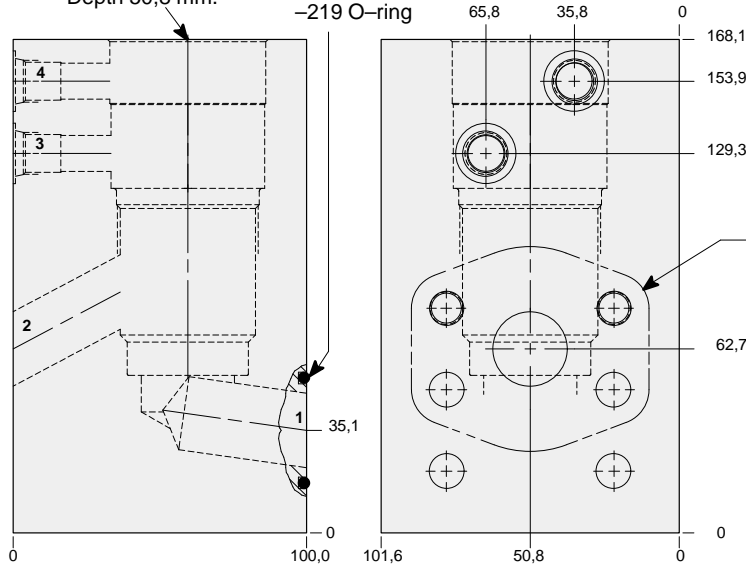


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Direct mount 1.00" SAE Code 62 body.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.



1.00" SAE Code 62
4-Bolt Flange Pattern
2 places.
2 holes tapped
4 holes through

TYPICAL CARTRIDGES USED WITH THIS BODY

- RVID - *** Page 1.21
- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

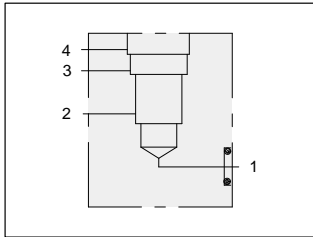
Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

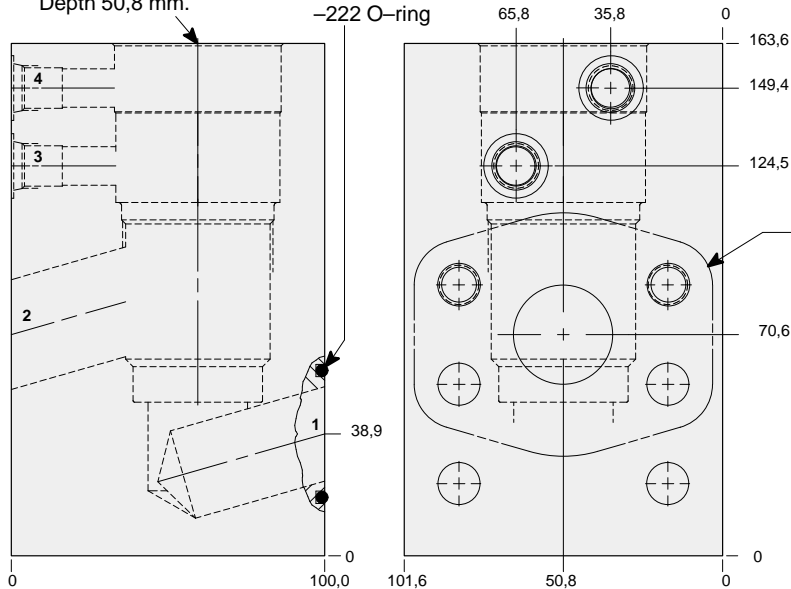
SAE Specifications. Page 11.03

Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	WGY		WGY/S	
Metric	.25 BSPP	WGY/M		WGY/T	



Direct mount 1.25" SAE Code 62 body

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.



1.25" SAE Code 62
4-Bolt Flange Pattern
2 places.
2 holes tapped
4 holes through

TYPICAL CARTRIDGES USED WITH THIS BODY

- RVID - *** Page 1.21
- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

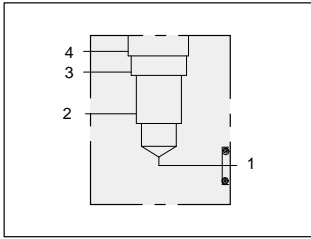
Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	WGZ		WGZ/S	
Metric	.25 BSPP	WGZ/M		WGZ/T	



LINE MOUNT BODIES



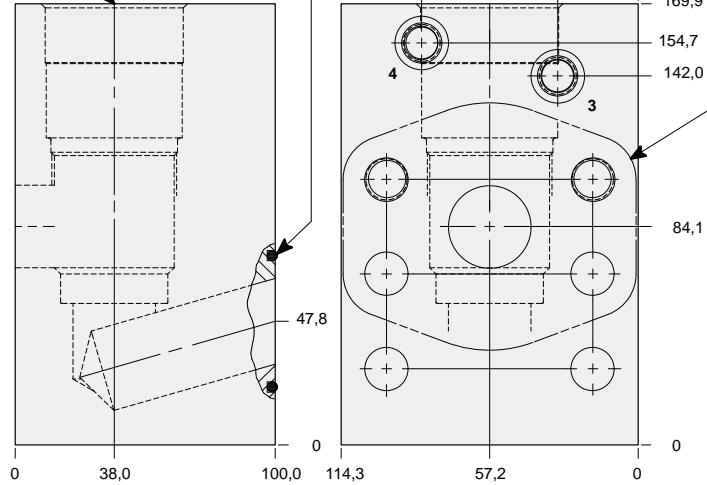
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Direct mount 1.50" SAE Code 62 body.

T-24A Cavity
Locating Shoulder
Depth 51,6 mm.

-225 O-ring



1.50" SAE Code 62
4-Bolt Flange Pattern
2 places.
2 holes tapped
4 holes through



TYPICAL CARTRIDGES USED WITH THIS BODY

RVID - ***	Page	1.21
CWIA - ***	Page	4.19
CWIG - ***	Page	4.21
CVIV - ***	Page	4.23

Cartridge seal type determines O-ring type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

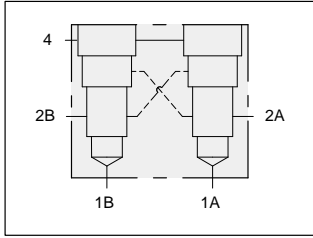
Mounting Hole Dimensions	Ports 3 & 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	WGT		WGT/S	
Metric	.25 BSPP	WGT/M		WGT/T	



LINE MOUNT BODIES



- Aluminum rated to 210 bar and SG Iron rated to 350 bar.



Two cavity cross-piloted body with common port 4 for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

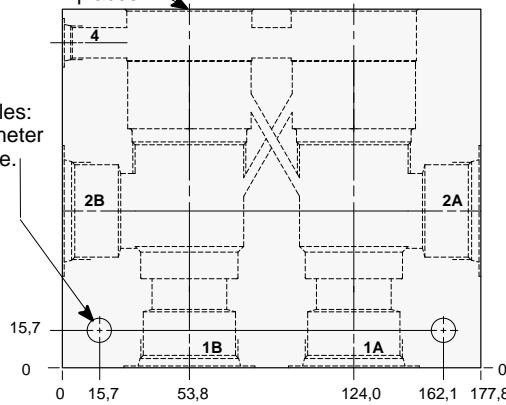
- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

Instructions for ordering complete cartridge and body assemblies. Page iii

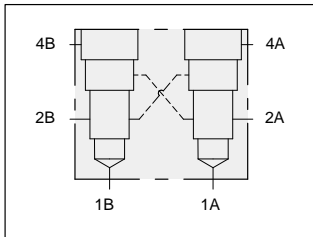
Pressure ratings, material specifications. Page 11.02

T-24A Cavity Locating Shoulder Depth 50,8 mm. 2 places.

Mounting Holes: 10,7 mm. diameter through hole. 2 places.



Ports 1A, 1B, 2A, & 2B	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
1.00 NPTF	.25 NPTF	XLE		XLE/S	
1.25 NPTF	.25 NPTF	XLF		XLF/S	
SAE-16	SAE-6	XLM		XLM/S	
SAE-20	SAE-6	XLN		XLN/S	
1.00 BSPP	.25 BSPP	XLX		XLX/S	
1.25 BSPP	.25 BSPP	XLY		XLY/S	



Two cavity cross-piloted body with independent port 4 for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

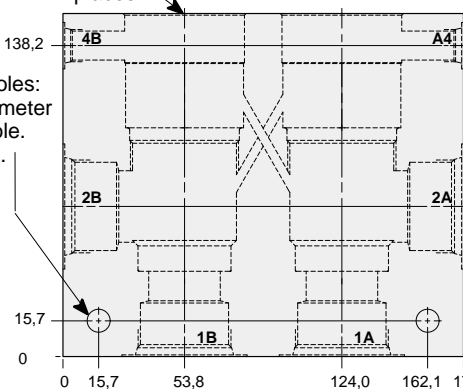
- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

T-24A Cavity Locating Shoulder Depth 50,8 mm. 2 places.

Mounting Holes: 10,7 mm. diameter through hole. 2 places.



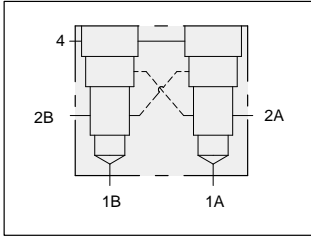
Ports 1A, 1B, 2A, & 2B	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
1.00 NPTF	.25 NPTF	XSE		XSE/S	
1.25 NPTF	.25 NPTF	XSF		XSF/S	
SAE-16	SAE-6	XSM		XSM/S	
SAE-20	SAE-6	XSN		XSN/S	
1.00 BSPP	.25 BSPP	XSX		XSX/S	
1.25 BSPP	.25 BSPP	XSY		XSY/S	



LINE MOUNT BODIES



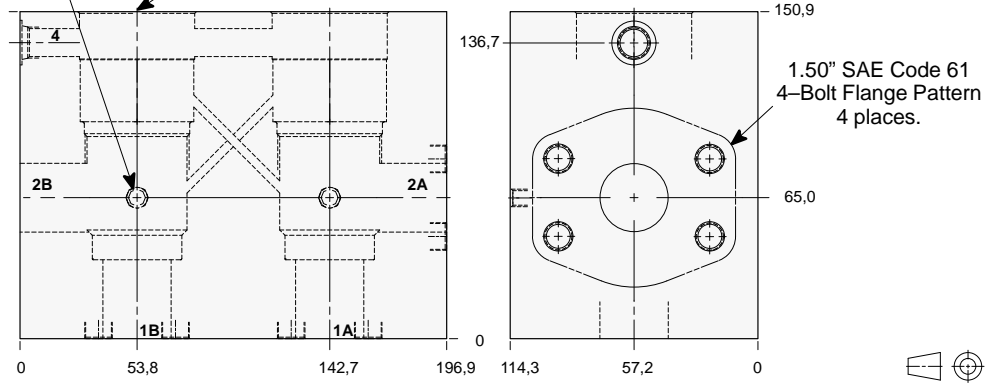
- Aluminum rated to 210 bar and SG Iron rated to 350 bar.



Two cavity cross-piloted 1.50" SAE Code 61 flange port body with common port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.
2 places.

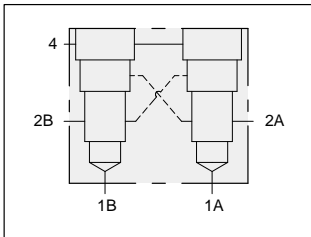


TYPICAL CARTRIDGES USED WITH THIS BODY

- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page iii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

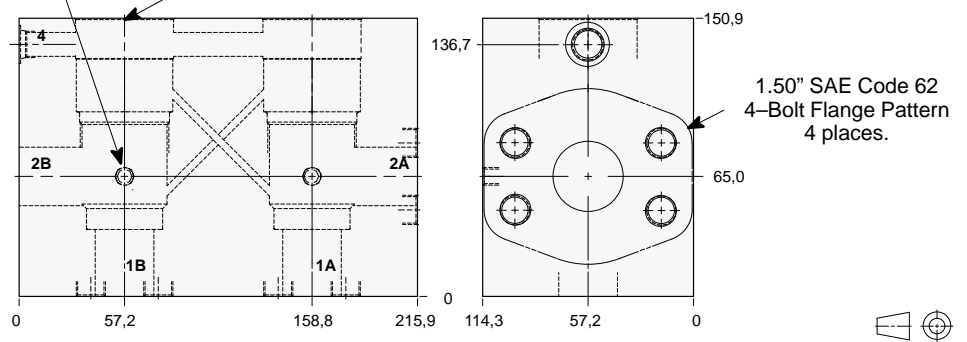
Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XLR		XLR/S	
Metric	.25 BSPP	XLR/M		XLR/T	



Two cavity cross-piloted 1.50" SAE Code 62 flange port body with common port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

- Instructions for ordering complete cartridge and body assemblies. Page iii
- Pressure ratings, material specifications. Page 11.02
- SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XL6		XL6/S	
Metric	.25 BSPP	XL6/M		XL6/T	

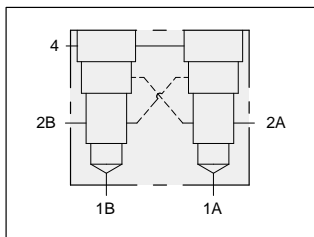
Series 4 T-24A



LINE MOUNT BODIES



- Aluminum rated to 210 bar and SG Iron rated to 350 bar.



Two cavity cross-piloted 2.00" SAE Code 61 flange port body with common port 4 for load control applications.

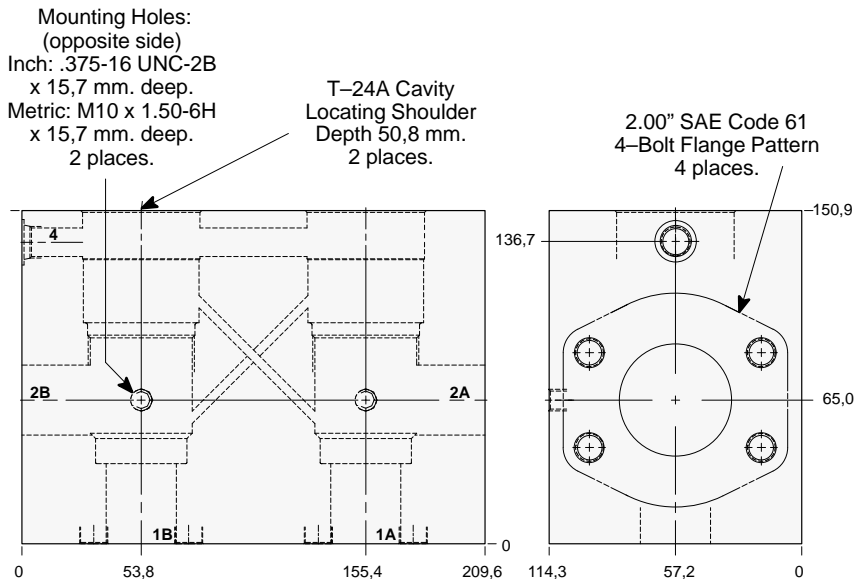
TYPICAL CARTRIDGES USED WITH THIS BODY

- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

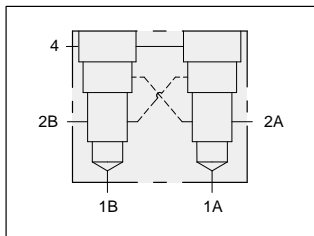
Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XLS		XLS/S	
Metric	.25 BSPP	XLS/M		XLS/T	



Two cavity cross-piloted 2.00" SAE Code 62 flange port body with common port 4 for load control applications.

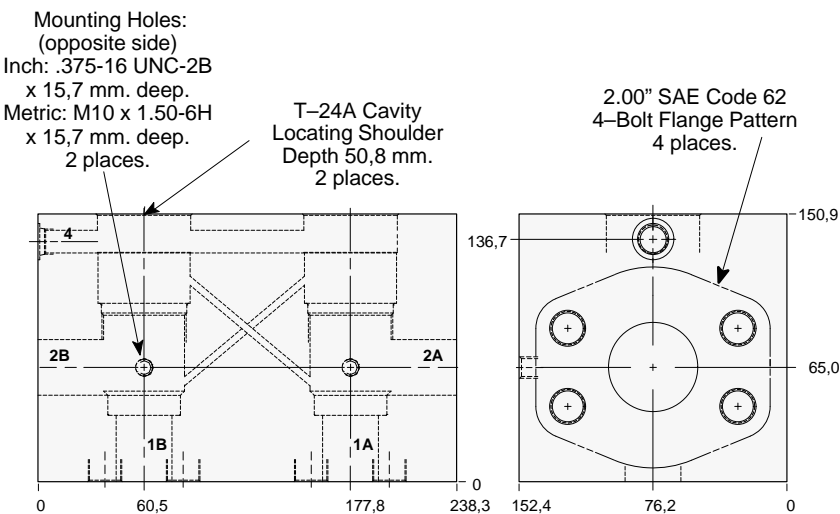
TYPICAL CARTRIDGES USED WITH THIS BODY

- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

Instructions for ordering complete cartridge and body assemblies. Page iii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



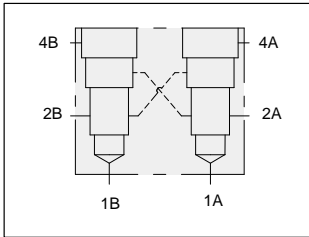
Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XL8		XL8/S	
Metric	.25 BSPP	XL8/M		XL8/T	



LINE MOUNT BODIES



- Aluminum rated to 210 bar and SG Iron rated to 350 bar.



Two cavity cross-piloted 1.50" SAE Code 61 flange port body with independent port 4 for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

CWIA - ***	Page	4.19
CWIG - ***	Page	4.21
CVIV - ***	Page	4.23

Instructions for ordering complete cartridge and body assemblies. Page viii

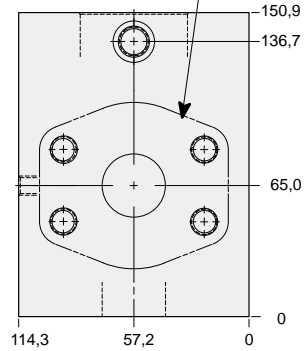
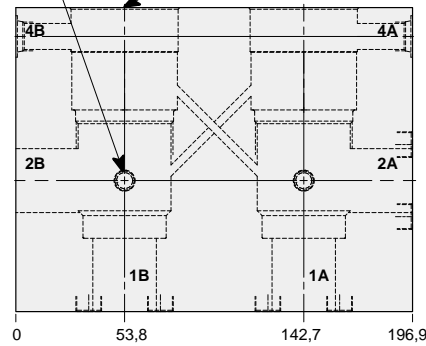
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

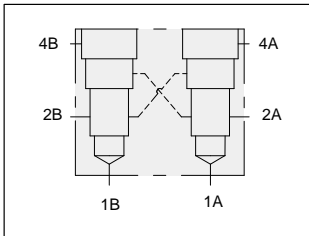
Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.
2 places.

1.50" SAE Code 61
4-Bolt Flange Pattern
4 places.



Mounting Hole Dimensions	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XSR		XSR/S	
Metric	.25 BSPP	XSR/M		XSR/T	



Two cavity cross-piloted 1.50" SAE Code 62 flange port body with independent port 4 for load control applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

CWIA - ***	Page	4.19
CWIG - ***	Page	4.21
CVIV - ***	Page	4.23

Instructions for ordering complete cartridge and body assemblies. Page viii

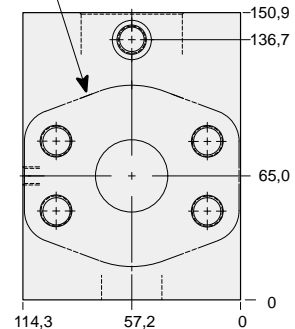
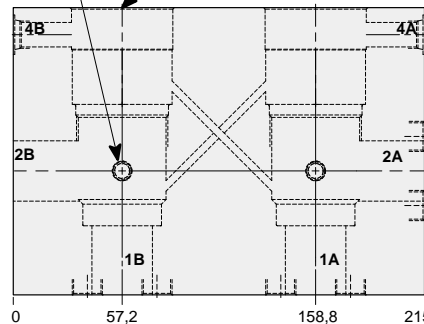
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.
2 places.

1.50" SAE Code 62
4-Bolt Flange Pattern
4 places.



Mounting Hole Dimensions	Ports 4A & 4B	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XS6		XS6/S	
Metric	.25 BSPP	XS6M		XS6/T	

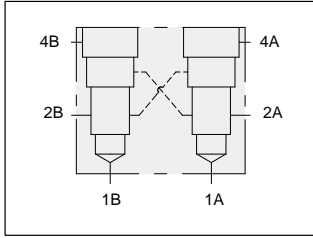
Series 4 T-24A



LINE MOUNT BODIES



- Aluminum rated to 210 bar and SG Iron rated to 350 bar.

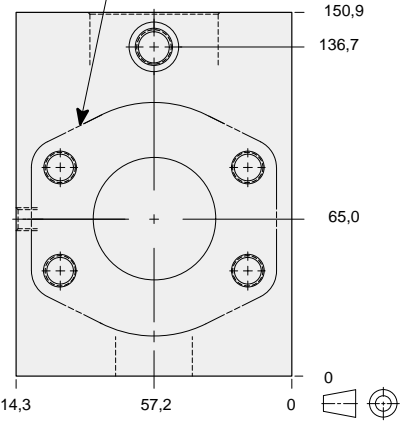
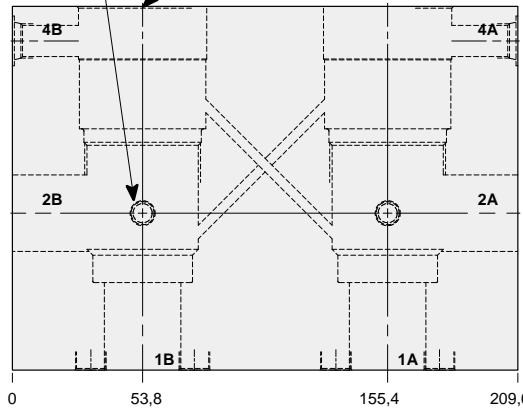


Two cavity cross-piloted 2.00" SAE Code 61 flange port body with independent port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.
2 places.

2.00" SAE Code 61
4-Bolt Flange Pattern
4 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

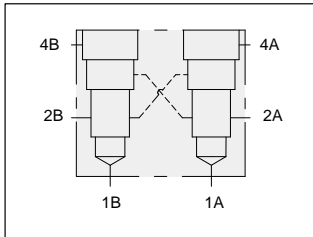
- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XSS		XSS/S	
Metric	.25 BSPP	XSS/M		XSS/T	

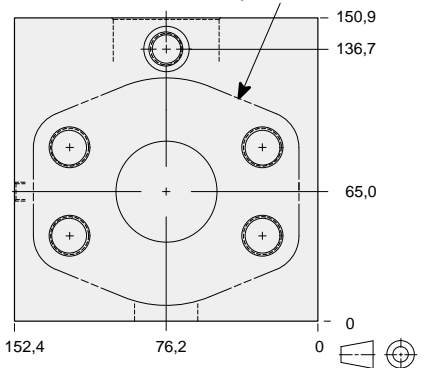
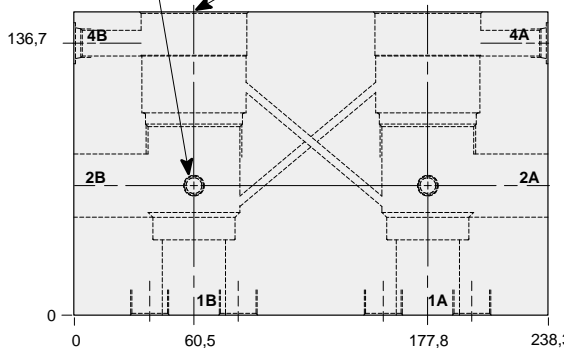


Two cavity cross-piloted 2.00" SAE Code 62 flange port body with independent port 4 for load control applications.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 mm. deep.
Metric: M10 x 1.50-6H
x 15,7 mm. deep.
2 places.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.
2 places.

2.00" SAE Code 62
4-Bolt Flange Pattern
4 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

- CWIA - *** Page 4.19
- CWIG - *** Page 4.21
- CVIV - *** Page 4.23

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

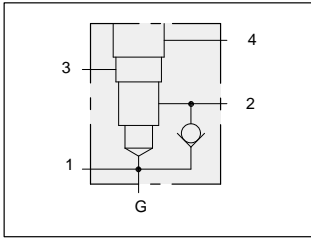
Mounting Hole Dimensions	Port 4	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	SAE-6	XS8		XS8/S	
Metric	.25 BSPP	XS8/M		XS8/T	



LINE MOUNT BODIES



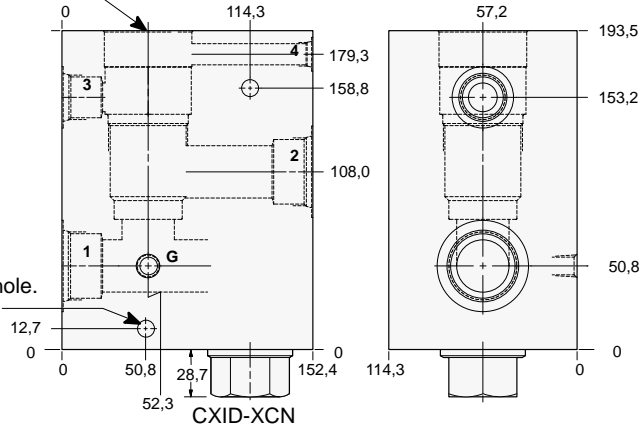
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



Body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.

T-24A Cavity
Locating Shoulder
Depth 50,8 mm.

Mounting Holes:
10,7 mm. diameter through hole.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

PVJA - *** Page 3.15
PVJB - *** Page 3.17

Cartridge seal type determines
check valve seal type.

Instructions for ordering
complete cartridge and body
assemblies. Page viii

Pressure ratings, material
specifications. Page 11.02

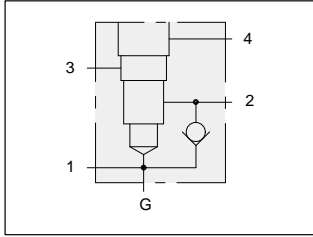
Ports 1 & 2	Port 3	Port 4	Gauge Port	ALUMINIUM		SG IRON	
				Model Code	List Price	Model Code	List Price
.75 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	Q4D		Q4D/S	
1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	Q4E		Q4E/S	
1.25 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	Q4F		Q4F/S	
SAE-12	SAE-12	SAE-6	.25 NPTF	Q4L		Q4L/S	
SAE-16	SAE-12	SAE-6	.25 NPTF	Q4M		Q4M/S	
SAE-20	SAE-12	SAE-6	.25 NPTF	Q4N		Q4N/S	
.75 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	Q4W		Q4W/S	
1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	Q4X		Q4X/S	
1.25 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	Q4Y		Q4Y/S	



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



1.50" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

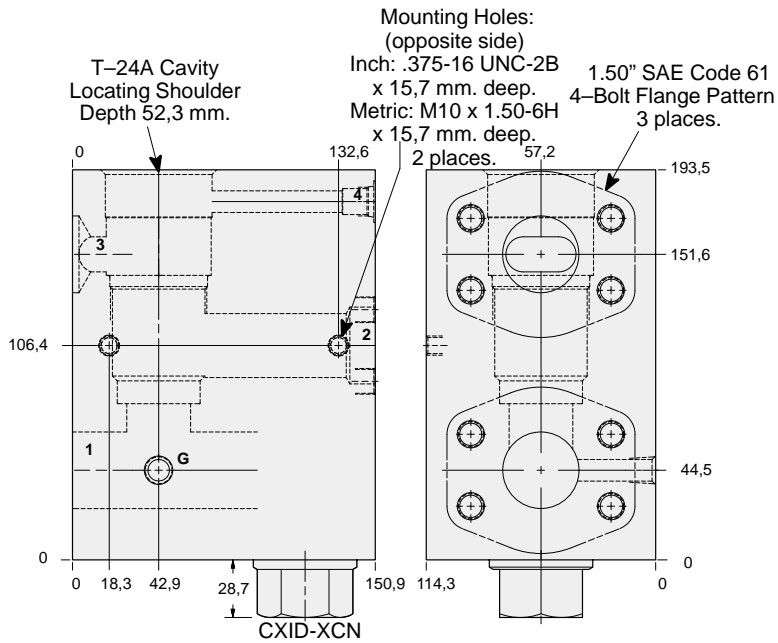
- PVJA - *** Page 3.15
- PVJB - *** Page 3.17

Cartridge seal type determines check valve seal type.

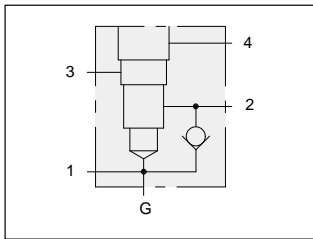
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	Q4R		Q4R/S	
Metric	.25 BSPP	.25 BSPP	Q4R/M		Q4R/T	



1.50" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

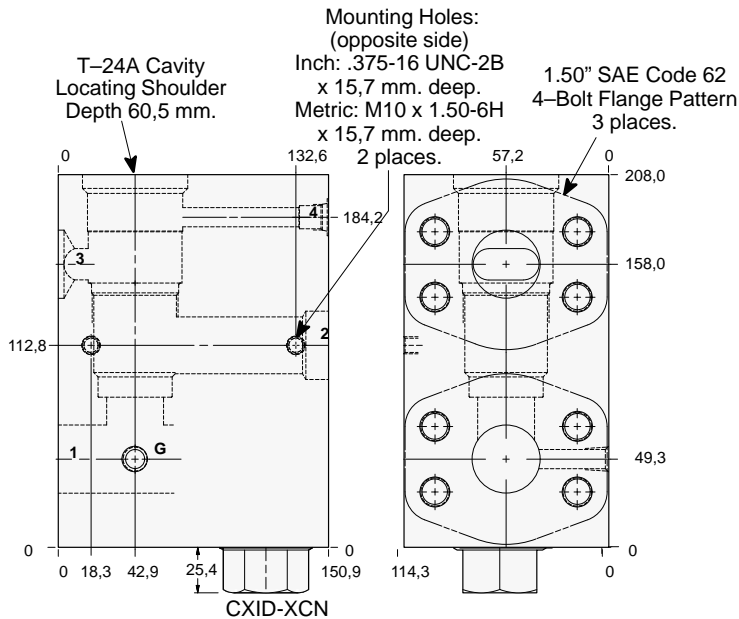
- PVJA - *** Page 3.15
- PVJB - *** Page 3.17

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	Q46		Q46/S	
Metric	.25 BSPP	.25 BSPP	Q46/M		Q46/T	

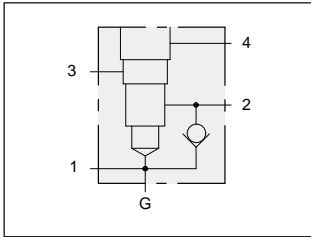
Series 4 T-24A



LINE MOUNT BODIES



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.



2.00" SAE Code 61 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

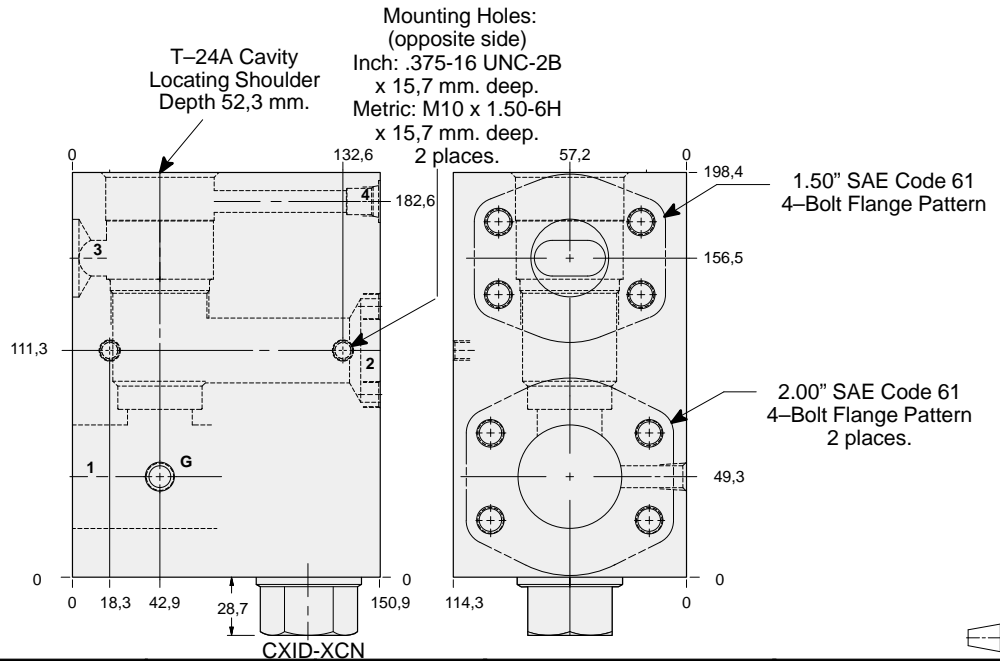
PVJA - *** Page 3.15
 PVJB - *** Page 3.17

Cartridge seal type determines check valve seal type.

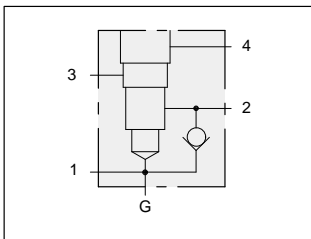
Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	Q4S		Q4S/S	
Metric	.25 BSPP	.25 BSPP	Q4S/M		Q4S/T	



2.00" SAE Code 62 flange port body with high capacity port 3 reverse free flow check and gauge port for reducing/relieving applications.

TYPICAL CARTRIDGES USED WITH THIS BODY

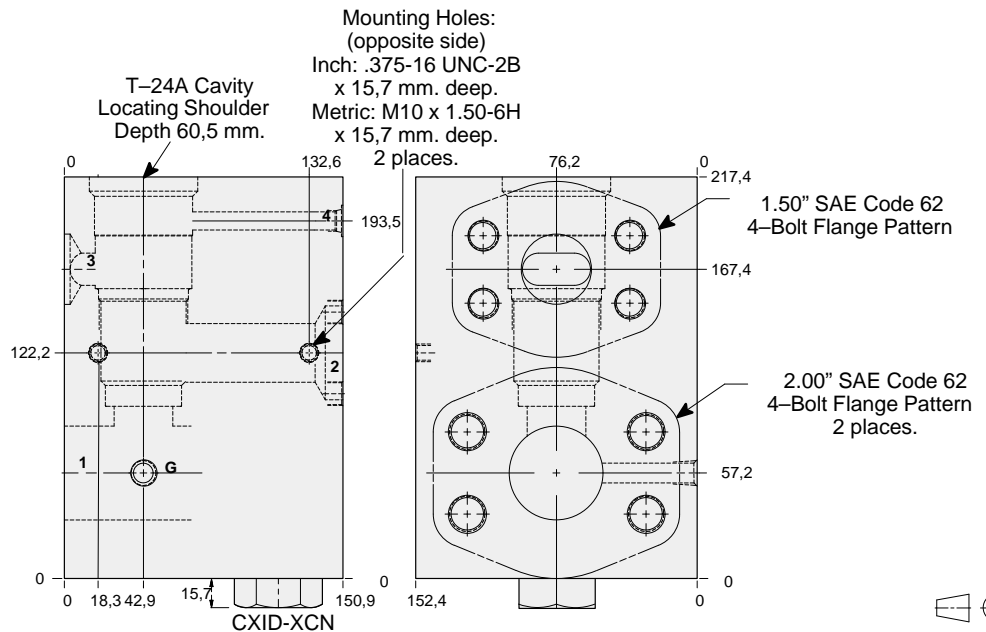
PVJA - *** Page 3.15
 PVJB - *** Page 3.17

Cartridge seal type determines check valve seal type.

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03



Mounting Hole Dimensions	Port 4	Gauge Port	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	SAE-6	.25 NPTF	Q48		Q48/S	
Metric	.25 BSPP	.25 BSPP	Q48/M		Q48/T	

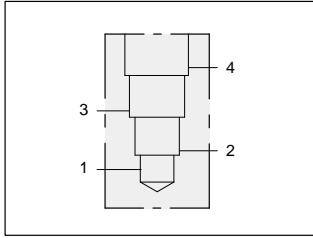
Series 4 T-24A



LINE MOUNT BODIES



- Aluminum rated to 210 bar and SG Iron rated to 350 bar.



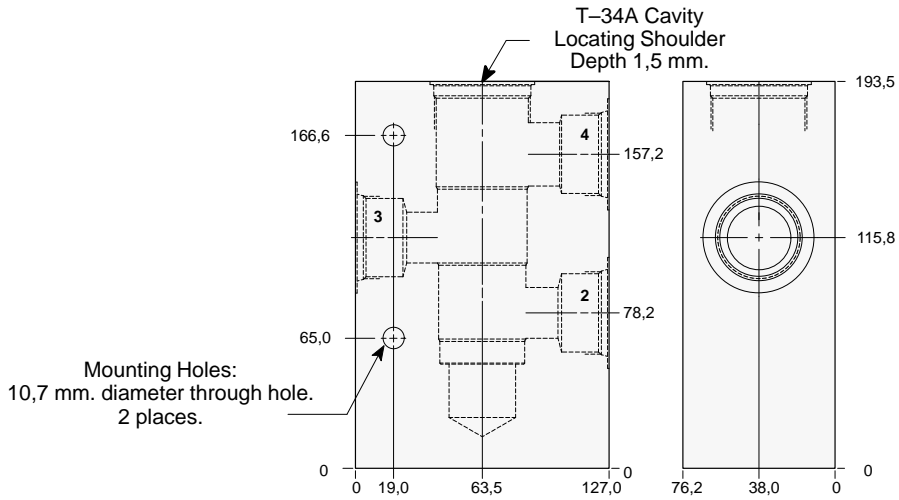
TYPICAL CARTRIDGES USED WITH THIS BODY

FSDA - ***	Page	7.10
FSFA - ***	Page	7.11
FSFS - ***	Page	7.13
FSFH - ***	Page	7.15
DSIH - ***	Page	10.07

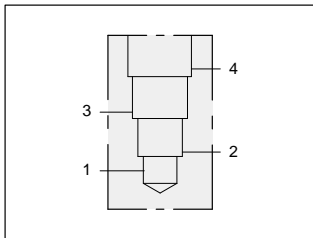
Instructions for ordering complete cartridge and body assemblies. Page **viii**

Pressure ratings, material specifications. Page **11.02**

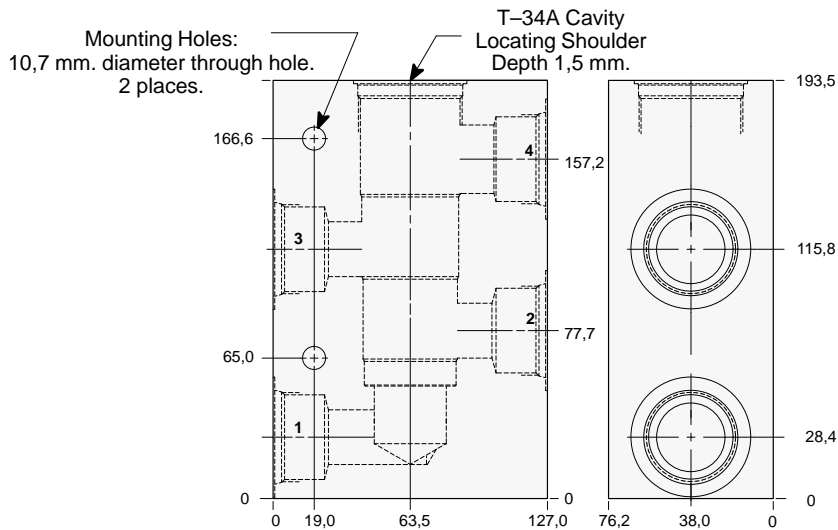
Body for flow divider/combiner applications.



Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
1.00 NPTF	QME		QME/S	
1.25 NPTF	QMF		QMF/S	
SAE-16	QMM		QMM/S	
SAE-20	QMN		QMN/S	
1.00 BSPP	QMX		QMX/S	
1.25 BSPP	QMY		QMY/S	



Four port body.



Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
1.00 NPTF	QNE		QNE/S	
1.25 NPTF	QNF		QNF/S	
SAE-16	QNM		QNM/S	
SAE-20	QNN		QNN/S	
1.00 BSPP	QNX		QNX/S	
1.25 BSPP	QNY		QNY/S	

Series 4 T-24A

Instructions for ordering complete cartridge and body assemblies. Page **viii**

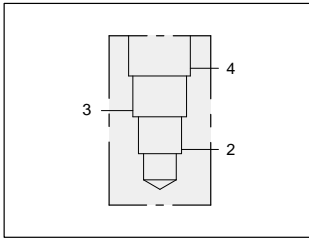
Pressure ratings, material specifications. Page **11.02**



LINE MOUNT BODIES

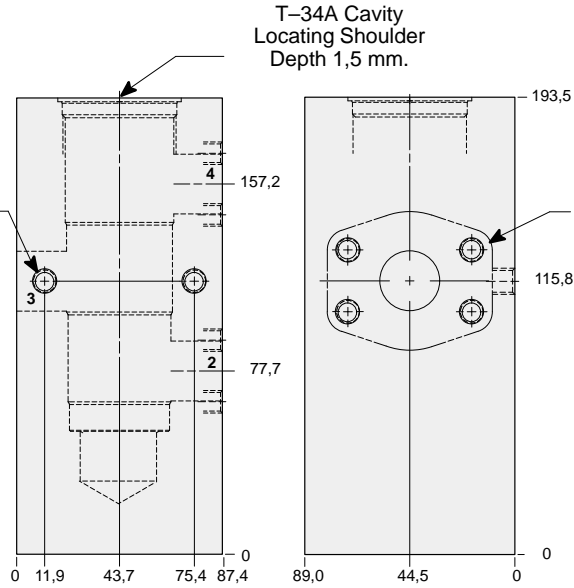


- Aluminum rated to 210 bar and SG Iron rated to 350 bar.



1.00" SAE Code 61 flange port body for flow divider/combiner applications.

Mounting Holes:
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

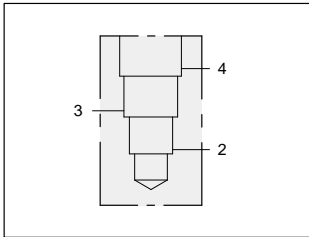
FSFD - ***	Page	7.09
FSFA - ***	Page	7.11
FSFS - ***	Page	7.13
FSFH - ***	Page	7.15
DSIH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

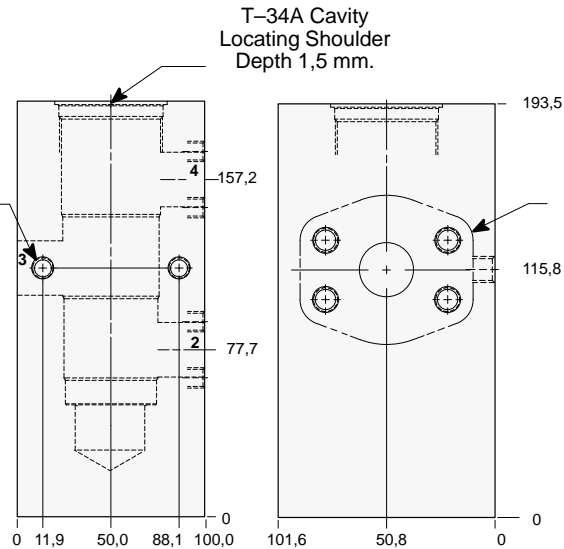
SAE Specifications. Page 11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	QMP		QMP/S	
Metric	QMP/M		QMP/T	



1.00" SAE Code 62 flange port body for flow divider/combiner applications.

Mounting Holes:
Inch: .375-16 UNC-2B x 15,7 mm. deep.
Metric: M10 x 1.50-6H x 15,7 mm. deep.
2 places.



TYPICAL CARTRIDGES USED WITH THIS BODY

FSFD - ***	Page	7.09
FSFA - ***	Page	7.11
FSFS - ***	Page	7.13
FSFH - ***	Page	7.15
DSIH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	QM4		QM4/S	
Metric	QM4/M		QM4/T	

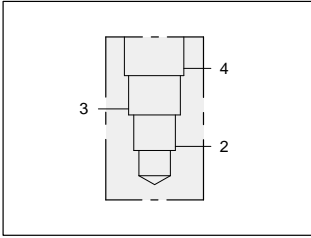
Series 4 T-24A



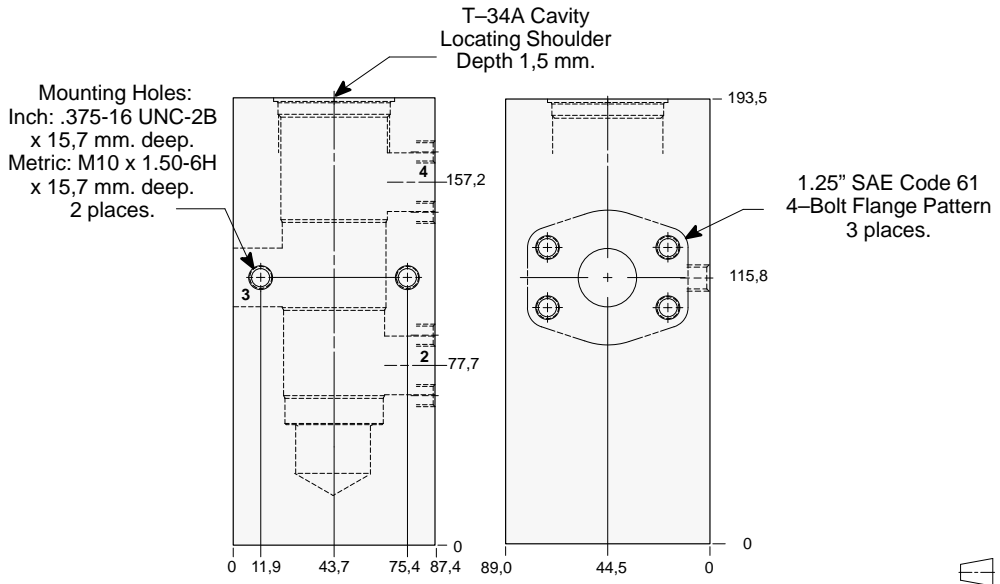
LINE MOUNT BODIES



- Aluminum rated to 210 bar and SG Iron rated to 350 bar.



1.25" SAE Code 61 flange port body for flow divider/combiner applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

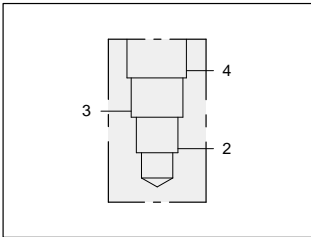
FSFD - ***	Page	7.09
FSFA - ***	Page	7.11
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FSFH - ***	Page	7.15
DSIH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies. Page viii

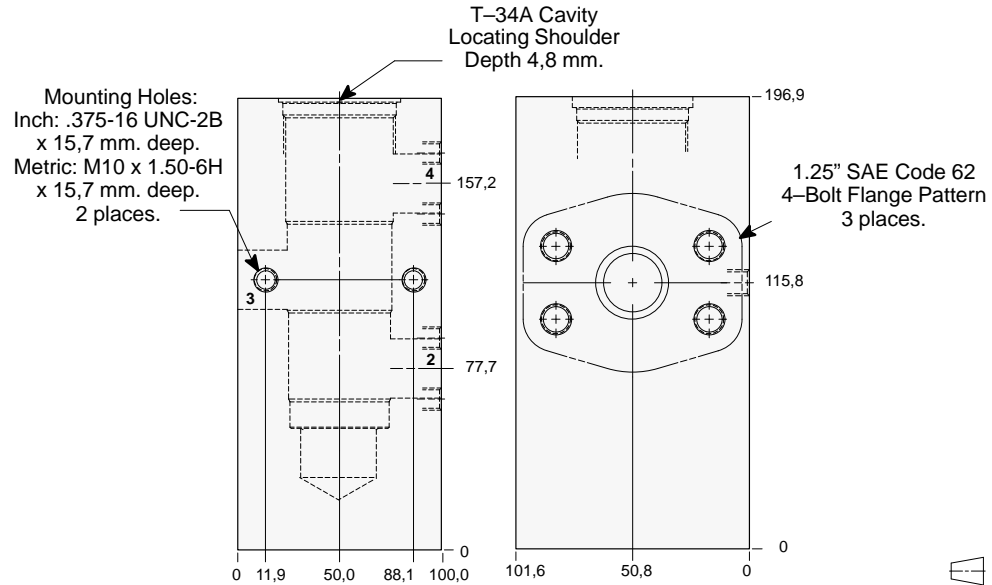
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	QM _Q		QM _{Q/S}	
Metric	QM _{Q/M}		QM _{Q/T}	



1.25" SAE Code 62 flange port body for flow divider/combiner applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

FSFD - ***	Page	7.09
FSFA - ***	Page	7.11
FSFS - ***	Page	7.13
FSFH - ***	Page	7.15
DSIH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies. Page viii

Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

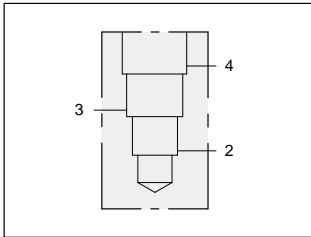
Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	QM ₅		QM _{5/S}	
Metric	QM _{5/M}		QM _{5/T}	



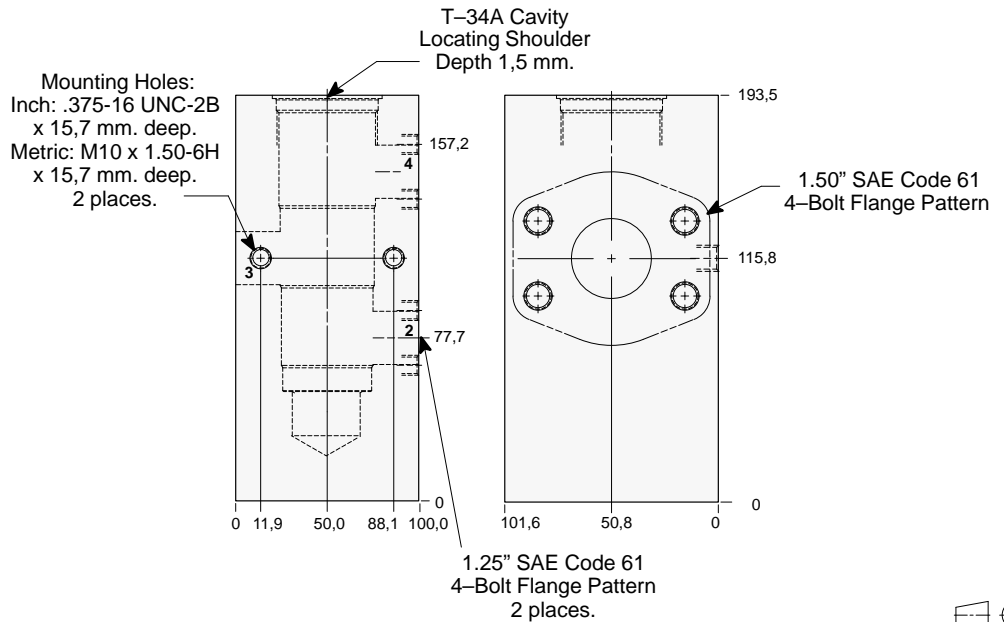
LINE MOUNT BODIES



- Aluminum rated to 210 bar and SG Iron rated to 350 bar.



1.50" SAE Code 61 flange port body for flow divider/combiner applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

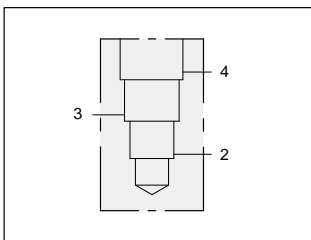
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FSFA - ***	Page	7.11
FSFS - ***	Page	7.13
FSFH - ***	Page	7.15
DSIH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies. Page viii

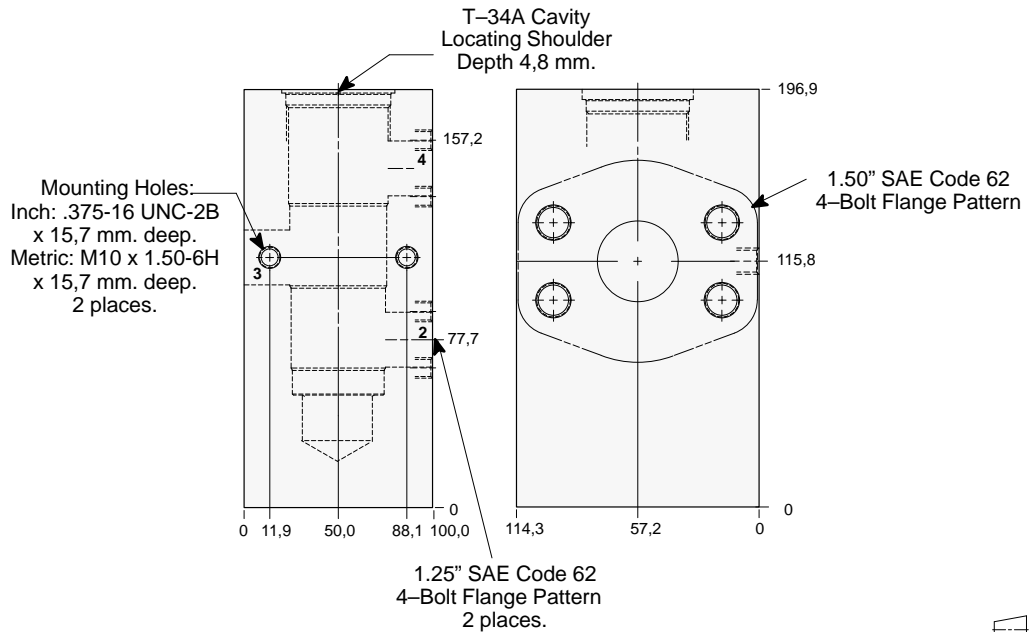
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	QMR		QMR/S	
Metric	QMR/M		QMR/T	



1.50" SAE Code 62 flange port body for flow divider/combiner applications.



TYPICAL CARTRIDGES USED WITH THIS BODY

FSFD - ***	Page	7.09
FSFA - ***	Page	7.11
FSFS - ***	Page	7.13
FSFH - ***	Page	7.15
DSIH - ***	Page	10.07

Instructions for ordering complete cartridge and body assemblies. Page viii

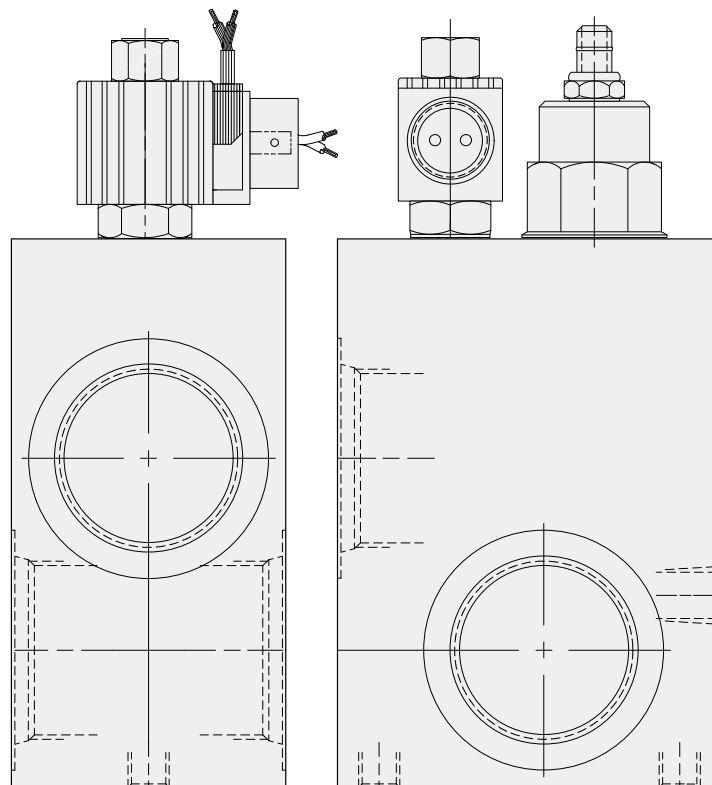
Pressure ratings, material specifications. Page 11.02

SAE Specifications. Page 11.03

Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Model Code	List Price	Model Code	List Price
Inch	QM6		QM6/S	
Metric	QM6/M		QM6/T	

Series 4 T-24A

VALVE ASSEMBLY PACKAGES





VALVE ASSEMBLY PACKAGE LOCATOR



VALVE PACKAGE	FUNCTION	ASSEMBLY		CARTRIDGE INCLUDED	
		MODEL CODE	PAGE	MODEL CODE	PAGE
Solenoid Operated Ventable Relief Assembly <i>Normally open</i>		YRCG-LAN-**	13.02	RVCA	1.18
		YREG-LAN-**	13.04	RVEA	1.18
		YRFG-LAN-**	13.06, 13.07	RVGA	1.19
		YRHG-LAN-**	13.10, 13.11	RVIA	1.19
		YROG-LAN-**	13.03	RVCA	1.18
		YRPG-LAN-**	13.05	RVEA	1.18
		YRQG-LAN-**	13.08, 13.09	RVGA	1.19
		YRRG-LAN-**	13.12, 13.13	RVIA	1.19
Solenoid Operated Ventable Relief Assembly <i>Normally Closed</i>		YRCH-LAN-**	13.02	RVCA	1.18
		YREH-LAN-**	13.04	RVEA	1.18
		YRFH-LAN-**	13.06, 13.07	RVGA	1.19
		YRHH-LAN-**	13.10, 13.11	RVIA	1.19
		YROH-LAN-**	13.03	RVCA	1.18
		YRPH-LAN-**	13.05	RVEA	1.18
		YRQH-LAN-**	13.08, 13.09	RVGA	1.19
		YRRH-LAN-**	13.12, 13.13	RVIA	1.19
Solenoid and Pilot Relief Assembly <i>Normally Open</i>		YRAG-LAN-**	13.14	RBAC	1.16
Solenoid and Pilot Relief Assembly <i>Normally Closed</i>		YRAH-LAN-**	13.14	RBAC	1.16
Cross-Port Relief Assembly with Shuttle and Solenoid Operated Vent <i>Normally Open</i>		YVCG-LAN-**	13.15	RVCA	1.18
				CSAB	10.08
		YVEG-LAN-**	13.16	RVEA	1.18
				CSAB	10.08
	YVFG-LAN-**	13.17, 13.18, 13.19	RVGA	1.19	
			CSAB	10.08	



VALVE ASSEMBLY PACKAGE LOCATOR



VALVE PACKAGE	FUNCTION	ASSEMBLY		CARTRIDGE INCLUDED		
		MODEL CODE	PAGE	MODEL CODE	PAGE	
Cross-Port Relief Assembly with Shuttle and Solenoid Operated Vent <i>Normally Closed</i>		YVCH-LAN-**	13.15	RVCA	1.18	
					CSAB	10.08
		YVEH-LAN-**	13.16	RVEA	1.18	
				CSAB	10.08	
		YVFH-LAN-**	13.17, 13.18, 13.19	RVGA	1.19	
				CSAB	10.08	
Hydrostatic Transmission Assembly		XRDB-LCN-A*	13.20, 13.21	DSCH	10.06	
				RDDA	1.10	
				RPEC	1.06	
		XRFB-LCN-A*	13.22, 13.23	DSEH	10.06	
				RDFA	1.10	
				RPEC	1.06	
		XRHB-LCN-A*	13.24, 13.25	DSGH	10.07	
				RDHA	1.11	
				RPGC	1.06	
		XRJB-LCN-A*	13.26, 13.27	DSIH	10.07	
				RDJA	1.11	
				RPIC	1.07	
Hot Oil Shuttle and Relief Assembly		XRDC-LNN-A*	13.28, 13.29	DSCH	10.06	
				RPEC	1.06	
		XRFC-LNN-A*	13.30, 13.31	DSEH	10.06	
				RPEC	1.06	
		XRHC-LNN-A*	13.32, 13.33	DSGH	10.07	
				RPGC	1.06	
		XRJC-LNN-A*	13.35, 13.36, 13.37	DSIH	10.07	
				RPIC	1.07	
Flow Divider/Combiner Tractive Drive Assembly		YGCB-XAN-**	13.38	FSCH	7.14	
		YGDB-XAN-**	13.39	FSDH	7.14	
		YGEB-XAN-**	13.40	FSEH	7.15	
		YGFB-XAN-**	13.41	FSFH	7.15	



VALVE ASSEMBLY PACKAGE LOCATOR

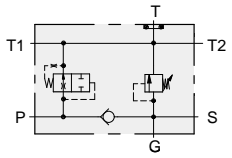
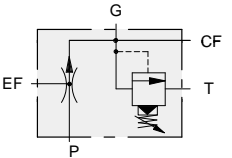


VALVE PACKAGE	FUNCTION	ASSEMBLY		CARTRIDGE INCLUDED			
		MODEL CODE	PAGE	MODEL CODE	PAGE		
Regeneration Assembly Pressure Sensitive		YDCC-LHN-A*	13.43	CODA	10.12		
				CBCA	4.10		
		YDEC-LHN-A*	13.44	COFA	10.12		
				CBEA	4.10		
		YDGC-LHN-A*	13.45	COHA	10.13		
				CBGA	4.11		
		YDHC-LHN-A*	13.47	COHA (2)	10.13		
				CBGA (2)	4.11		
		YDJC-LHN-A*	13.48	COJA	10.13		
				CBIA	4.11		
		YDJC-LHN-A*	13.49	COJA (2)	10.13		
				CBIA (2)	4.11		
Regeneration Assembly Pressure Sensitive with Load Locking Pilot Operated Check		YDCD-LHN-A*	13.43	CODA	10.12		
				CBCA	4.10		
				CKEB	4.16		
		YDED-LHN-A*	13.44	COFA	10.12		
				CBEA	4.10		
				CKEB	4.16		
		YDGD-LHN-A*	13.46	COHA	10.13		
				CBGA	4.11		
				CKGB	4.17		
		Accumulator Dump Assembly		YCFE-XAN-A*	13.50	CXFA	5.08
						COFA	10.12
				YCHE-XAN-A*	13.51	CXHA	5.09
				CODA	10.12		
Pump Circuit Manifold for Multiple Pump Circuits		YFRC-LAN-A*	13.52	CXFA	5.08		
				NQEB	10.16		
				RPGC	1.06		
		YFRE-LAN-A*	13.52	CXHA	5.09		
				NQEB	10.16		
				RPIC	1.07		



VALVE ASSEMBLY PACKAGE LOCATOR



VALVE PACKAGE	FUNCTION	ASSEMBLY		CARTRIDGE INCLUDED	
		MODEL CODE	PAGE	MODEL CODE	PAGE
Pump Circuit Mainfold for Single Pump Circuits		YFRD-LAN-A*	13.53	CXFA	5.08
				NQEB	10.16
				RPGC	1.06
		YFRF-LAN-A*	13.53	CXHA	5.09
				NQEB	10.16
				RPIC	1.07
Priority Flow Control with Controlled Flow Port Relief Valve		YRDR-LAN-**	13.54	FRCA	6.02
				RPEC	1.06
		YREM-LAN-**	13.54	FRDA	6.02
				RPEC	1.06
		YRFF-LAN-**	13.55	FREA	6.03
				RPEC	1.06
		YRHF-LAN-**	13.56	FRFA	6.03
				RPGC	1.06



VALVE ASSEMBLY PACKAGE CROSS REFERENCE CHART



This catalogue contains many new bodies that incorporate a free flow check valve and are designated by a three-position model code. These new products provide a functional replacement, and in most cases a physical replacement, for products that were offered only as valve assemblies in previous catalogues. (A SUN Valve Assembly (or Y Assembly), by definition, contains two or more dissimilar cartridges to provide a specific hydraulic function.)

In all cases where a new body with free flow check is available, it is offered in place of the older configuration valve assemblies that have appeared in previous catalogues. **No models that appeared in previous catalogues have been obsolete. All previously catalogued products can still be ordered using their original model codes.** However, the preferred method of ordering these products is now as follows: **Old Model Code:** YPEF-ABN-BA, **New Model Code:** Cartridge-PBFC-ABN and **Body**-BB2.

The new method of ordering combines the seven-position cartridge model code (PBFC-ABN) with the three-position body model code (BB2) to create the new valve assembly model code. The cross references that follow detail the differences between older SUN catalogues and this SUN catalogue in regard to valve assemblies.

FUNCTIONAL AND PHYSICAL REPLACEMENTS

Assembly Model Code	Catalogue Code Cartridge Body	Assembly Model Code	Catalogue Code Cartridge Body	Assembly Model Code	Catalogue Code Cartridge Body
YCCD-***-A*	CBCA-***-EM*	YCGH-***-G*	CBGG-***-HN*	YPFJ-BBN-BB	PBHC-BBN-BKJ
YCCD-***-G*	CBCG-***-EM*	YCGH-***-H*	CBGH-***-HN*	YPFK-BBN-BB	PPHC-BBN-BK2
YCCD-***-H*	CBCH-***-EM*	YCHC-***-A*	RPIC-***-IN*	YPGA-***-C*	PBHB-***-H2*
YCCE-***-A*	CBCA-***-EP*	YCJC-***-AS	RPKC-***-LNS	YPGB-***-C*	PBHB-***-H3*
YCCE-***-G*	CBCG-***-EP*	YPCA-***-AA	PBDB-***-EB2	YPGC-***-C*	PPHB-***-H4*
YCCE-***-H*	CBCH-***-EP*	YPCB-***-AA	PBDB-***-EB3	YPGD-***-CA	PBHB-***-HBK
YCCG-***-A*	CBCA-***-EQ*	YPCR-***-AA	PPDB-***-EB3	YPGE-***-CA	PPHB-***-HBK
YCCG-***-G*	CBCG-***-EQ*	YPCS-***-AA	PPDB-***-EB2	YPJA-***-C*	PBJB-***-K2*
YCCG-***-H*	CBCH-***-EQ*	YPDB-***-C*	PBDB-***-E3*	YPJC-***-C*	PPJB-***-K4*
YCCH-***-A*	CBCA-***-EN*	YPDD-***-C*	PPDB-***-E4*	YRCA-***-AA	RPEC-***-FB2
YCCH-***-G*	CBCG-***-EN*	YPDE-***-C*	PPDB-***-E5*	YRDK-***-A*	RPEC-***-FM*
YCCH-***-H*	CBCH-***-EN*	YPEB-***-BA	PBFB-***-BB2	YREC-***-BA	RPGC-***-CB2
YCDC-***-**	RPEC-***-FN*	YPED-***-BA	PBFB-***-BB3	YRER-***-BB	RPGC-***-CJ2
YCED-***-A*	CBEA-***-BM*	YPEE-***-BB	PBFB-***-BJ2	YRFK-***-A*	RPGC-***-CM*
YCED-***-G*	CBEG-***-BM*	YPEF-ABN-BA	PBFC-ABN-BB2	YRHK-***-A*	RPIC-***-IM*
YCED-***-H*	CBEH-***-BM*	YPEG-ABN-BA	PBFC-ABN-BB3	YSCB-***-AA	RSDC-***-EB5
YCEE-***-A*	CBEA-***-BP*	YPEH-ABN-BA	PPFC-ABN-BB2	YSCC-***-AA	RSDC-***-EB4
YCEE-***-G*	CBEG-***-BP*	YPEI-ABN-BA	PPFC-ABN-BB3	YSDB-***-C*	RSDC-***-E7*
YCEE-***-H*	CBEH-***-BP*	YPEL-***-C*	PPFB-***-B4*	YSDC-***-C*	RSDC-***-E8*
YCEG-***-A*	CBEA-***-BQ*	YPEM-***-C*	PPFB-***-B5*	YSEB-***-C*	RSFC-***-B7*
YCEG-***-G*	CBEG-***-BQ*	YPER-***-BA	PPFB-***-BB2	YSEC-***-C*	RSFC-***-B8*
YCEG-***-H*	CBEH-***-BQ*	YPER-***-BA	PPFB-***-BB3	YSEF-***-BA	RSFC-***-BB5
YCEH-***-A*	CBEA-***-BN*	YPET-***-BB	PBFB-***-BJ3	YSEG-***-BA	RSFC-***-BB4
YCEH-***-G*	CBEG-***-BN*	YPEU-ABN-BB	PBFC-ABN-BJ2	YSEI-***-BB	RSFC-***-BJ5
YCEH-***-H*	CBEH-***-BN*	YPEV-ABN-BB	PBFC-ABN-BJ3	YSEL-***-C*	RSFC-***-B6*
YCFC-***-**	RPGC-***-CN*	YPEW-ABN-BB	PPFC-ABN-BJ2	YSEJ-***-BB	RSFC-***-BJ4
YCGD-***-A*	CBGA-***-HM*	YPEX-ABN-BB	PPFC-ABN-BJ3	YSFB-***-AB	RSHC-***-BK4
YCGD-***-G*	CBGG-***-HM*	YPEY-***-BB	PPFB-***-BJ2	YSFC-***-AB	RSHC-***-BK5
YCGD-***-H*	CBGH-***-HM*	YPEZ-***-BB	PPFB-***-BJ3	YSGA-***-CA	RSHC-***-HB4
YCGE-***-A*	CBGA-***-HP*	YPDF-***-C*	PBFB-***-B3*	YSHA-***-C*	RSHC-***-H6*
YCGE-***-G*	CBGG-***-HP*	YPFE-***-AB	PBHB-***-BK2	YSHB-***-C*	RSHC-***-H7*
YCGE-***-H*	CBGH-***-HP*	YFFF-***-AB	PBHB-***-BKJ	YSHC-***-C*	RSJC-***-K8*
YCGG-***-A*	CBGA-***-HQ*	YPIFG-***-AB	PPHB-***-BK2		
YCGG-***-G*	CBGG-***-HQ*	YPIFH-***-AB	PPHB-***-BKJ		
YCGG-***-H*	CBGH-***-HQ*	YPIFI-BBN-BB	PBHC-BBN-BK2		
YCGH-***-A*	CBGA-***-HN*	YPIFL-BBN-BB	PPHC-BBN-BKJ		

Continued on next page

FUNCTIONAL ONLY REPLACEMENTS

New nine-position model codes in the following chart are physically different than the old Valve Assembly models. Differences may include physical size as well as port locations, so make sure these products are suitable to your application before ordering.

The new XR** hydrostatic transmission valve assemblies referenced below are not only physically different, but also represent a new design. This new version hydrostatic transmission valve assembly offers superior performance characteristics and greater application flexibility compared to the older version YR** hydrostatic transmission assemblies.

<i>Valve Assembly</i>	<i>Replacement</i>
YPDA-***-**	PBDB-***-E2*
YRDL-LQN-AK	XRDC-LNN-A*
YRDE-LQN-AL	XRDC-LNN-A*
YRDM-LQN-AM	XRFC-LNN-A*
YRDM-LQN-AM	XRFC-LNN-A*
YRGH-LCN-A*	XRFB-LCN-A*
YRGN-LCN-AQ	XRFB-LCN-AQ
YRGP-LCN-A*	XRDB-LCN-A*
YSDA-***-**	RSDC-***-E6*
YPFB-***-**	PBFB-***-B2

NO REPLACEMENT AND NOT IN THIS CATALOGUE

The Valve assemblies listed in the chart below appeared in previous SUN catalogues but do not appear in this catalogue. **These products can still be ordered using the original model code. Contact your distributor for pricing information.**

YCEJ	YFEM	YNEK	YRGD
YDFD	YFEN	YNEM	YRGJ
YFCH	YFEO	YRDC	YRGG
YFCI	YNCF	YREL	YSEH
YFED	YNEJ	YRES	YSEK

This section of the SUN's catalogue includes valve assembly packages designed for specific hydraulic functions. SUN's valve assemblies typically contain two or more different cartridges and provide several hydraulic functions.

Section	Page
<i>Valve Assemblies:</i>	
Solenoid Operated Ventable Relief	13.02–13.13
Solenoid and Relief Pilot Flow	13.14
Cross-Port Relief with Shuttle and Solenoid Operated Vent	13.15–13.19
Hydrostatic Transmission	13.20–13.27
Hot Oil Shuttle and Relief	13.28–13.37
Flow Divider/Combiner Tractive Drive	13.38–13.41
Regeneration	13.42–13.49
Accumulator Dump Circuits	13.50–13.51
Pump Circuits Control	13.52–13.53
Pressure-Compensated Priority Flow Control	13.54–13.56

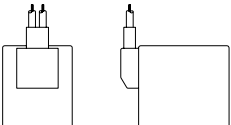
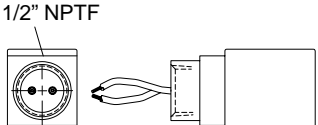
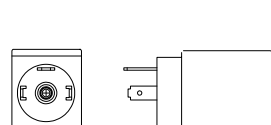
Ordering

Use a nine-digit part number when ordering valve assemblies. You must select a number of different options to complete a part number.

We have supplied pricing in Sun's most recent Price List for a basic part number that gives you a configuration that provides the required performance characteristics for the majority of applications. If you desire to change a cartridge option (controls or adjustment range) in a valve assembly, we have provided you with the cartridge page number for those cartridges where we allow option substitution.

Designated cartridge option pricing must be added to (or subtracted from) the basic pricing to obtain the complete pricing of the valve assembly. Like all other mounting configurations in this catalogue, all valve assemblies are available in both aluminium and SG iron with a variety of porting options. Consult Sun's most recent Price List for basic prices and option prices.

Electrical Connector Options for Solenoid Operated Assemblies

WIRE LEADS	CONDUIT	ISO/DIN
 <p>18 Gauge 0,6 meter Long</p> <p>J-12 V DC-6 metre Leads K-24 V DC-6 metre Leads</p>	 <p>1/2" NPTF</p> <p>18 Gauge 0,6 meter Long</p> <p>N-115 V 50/60hz-Conduit O-230 V 50/60hz-Conduit</p>	 <p>DIN 43650 Plug Face</p> <p>S-12 V DC ISO/DIN T-24 V DC ISO/DIN V-230 V 50/60hz ISO/DIN W 120 V 50/60Hz ISO/DIN</p>



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY INLINE BODY WITH GAUGE PORT



YRC*-LAN-**

Consult the Sun Web Site for
[Conversion List \(Old-to-New Model Code Cross Reference\)](#)



**SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY
.75" SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT**



YRO*-LAN-**

Consult the Sun Web Site for
Conversion List (Old-to-New Model Code Cross Reference)



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY INLINE BODY WITH GAUGE PORT



YRE*-LAN-**

Consult the Sun Web Site for
[Conversion List \(Old-to-New Model Code Cross Reference\)](#)



**SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY
1.00"SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT**



YRP*-LAN-**

Consult the Sun Web Site for
Conversion List (Old-to-New Model Code Cross Reference)



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY INLINE BODY WITH GAUGE PORT



YRF*-LAN-**

Consult the Sun Web Site for
[Conversion List \(Old-to-New Model Code Cross Reference\)](#)



SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY SAE CODE 61 FLANGE PORT BODY



YRF*-LAN-**

Consult the Sun Web Site for
Conversion List (Old-to-New Model Code Cross Reference)



**SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY
1.25" SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT**



YRQ*-LAN-**

Consult the Sun Web Site for
Conversion List (Old-to-New Model Code Cross Reference)



YRQ*-LAN-**

Consult the Sun Web Site for
[Conversion List \(Old-to-New Model Code Cross Reference\)](#)



**SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY
1.50" SAE CODE 61 FLANGE PORT BODY WITH GAUGE PORT**



YRH*-LAN-**

Consult the Sun Web Site for
Conversion List (Old-to-New Model Code Cross Reference)



**SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY
2.00" SAE CODE 61 FLANGE PORT BODY WITH GAUGE PORT**



YRH*-LAN-**

Consult the Sun Web Site for
[Conversion List \(Old-to-New Model Code Cross Reference\)](#)



**SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY
1.50" SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT**



YRR*-LAN-**

Consult the Sun Web Site for
Conversion List (Old-to-New Model Code Cross Reference)



**SOLENOID OPERATED VENTABLE RELIEF ASSEMBLY
1.50" SAE CODE 61 SANDWICH MOUNT BODY WITH GAUGE PORT**



YRR*-LAN-**

Consult the Sun Web Site for
Conversion List (Old-to-New Model Code Cross Reference)



**SOLENOID AND RELIEF PILOT CONTROL ASSEMBLY
FOR PILOT FLOW USE ONLY (1 L/min maximum flow)**



YRA*-LAN-**

Consult the Sun Web Site for
Conversion List (Old-to-New Model Code Cross Reference)



CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT

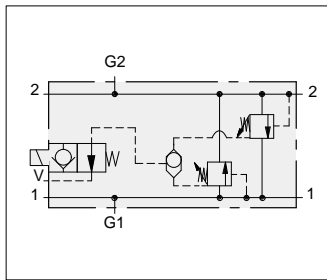


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

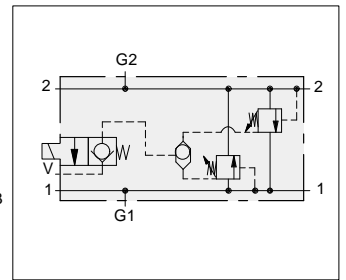
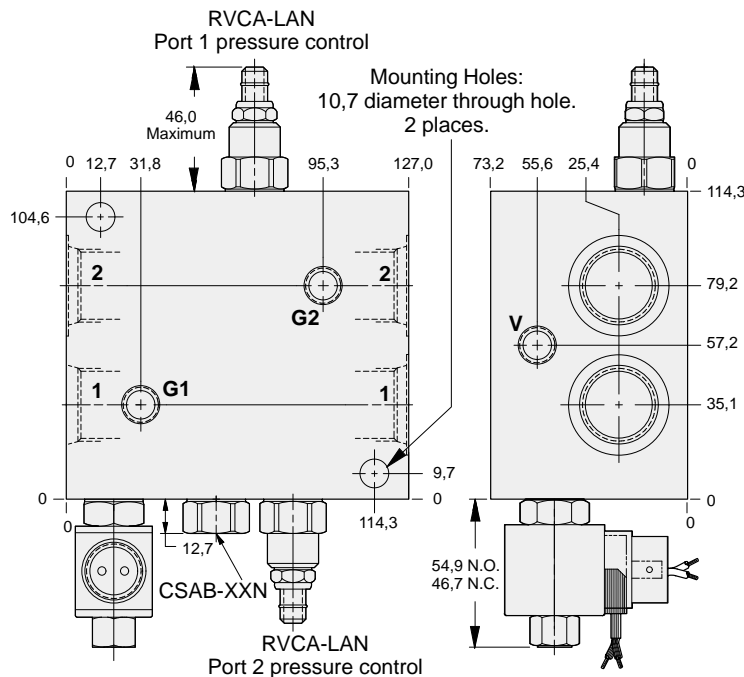
YVCG: Normally Open

YVCH: Normally Closed

ALUMINIUM		SG IRON		Ports 1 & 2	Port V	Ports G1 & G2	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
A		A/S		.25 NPTF	.25 NPTF	.25 NPTF	A		A/S	
B		B/S		.375 NPTF	.25 NPTF	.25 NPTF	B		B/S	
C		C/S		.50 NPTF	.25 NPTF	.25 NPTF	C		C/S	
D		D/S		.75 NPTF	.25 NPTF	.25 NPTF	D		D/S	
I		I/S		SAE-6	SAE-6	.25 NPTF	I		I/S	
J		J/S		SAE-8	SAE-6	.25 NPTF	J		J/S	
K		K/S		SAE-10	SAE-6	.25 NPTF	K		K/S	
L		L/S		SAE-12	SAE-6	.25 NPTF	L		L/S	
T		T/S		.25 BSPP	.25 BSPP	.25 BSPP	T		T/S	
U		U/S		.375 BSPP	.25 BSPP	.25 BSPP	U		U/S	
V		V/S		.50 BSPP	.25 BSPP	.25 BSPP	V		V/S	
W		W/S		.75 BSPP	.25 BSPP	.25 BSPP	W		W/S	



Normally Open Solenoid Valve



Normally Closed Solenoid Valve

OPTIONS		YVC * - LAN **			
	CARTRIDGE	SOLENOID COILS		PORTS	
G	Normally Open RVCA Pg 1.18	J	12 volt DC, 0,6 metre leads	T	24 volt DC, ISO/DIN
H	Normally Closed For Viton Seals Change LAN to LAV. Customer Specified Setting Stamped on Hex	K	24 volt DC, 0,6 metre leads	V	230 volt, 50/60 Hz, ISO/DIN
		N	115 volt, 50/60 Hz, conduit	W	120 volt, 50/60 Hz, ISO/DIN
		O	230 volt, 50/60 Hz, conduit		
		S	12 volt DC, ISO/DIN		See Chart above



CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT

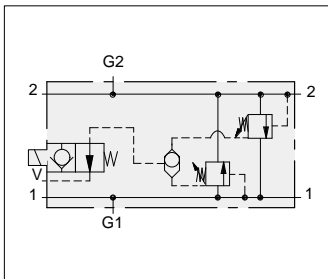


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

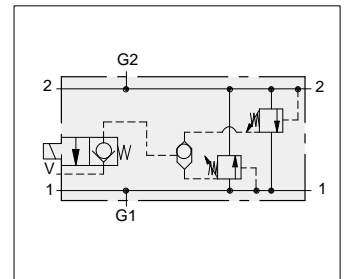
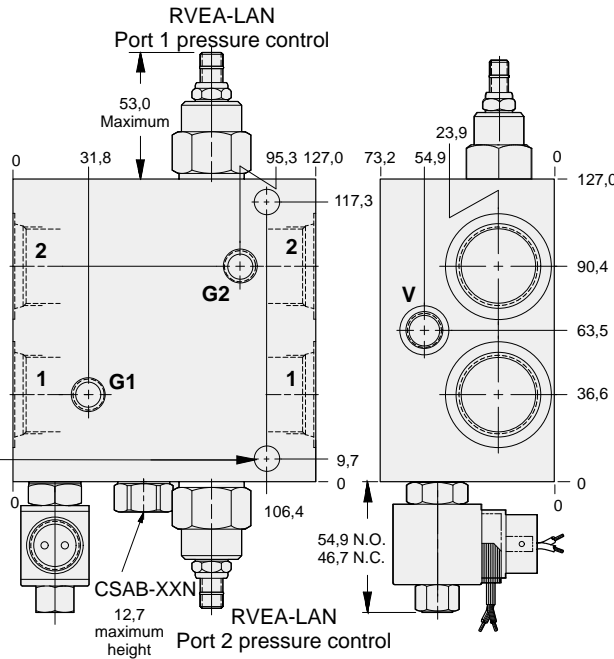
YVEG: Normally Open

YVEH: Normally Closed

ALUMINIUM		SG IRON		Ports 1 & 2	Port V	Ports G1 & G2	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
B		B/S		.375 NPTF	.25 NPTF	.25 NPTF	B		B/S	
C		C/S		.50 NPTF	.25 NPTF	.25 NPTF	C		C/S	
D		D/S		.75 NPTF	.25 NPTF	.25 NPTF	D		D/S	
E		E/S		1.00 NPTF	.25 NPTF	.25 NPTF	E		E/S	
I		I/S		SAE-6	SAE-6	.25 NPTF	I		I/S	
J		J/S		SAE-8	SAE-6	.25 NPTF	J		J/S	
K		K/S		SAE-10	SAE-6	.25 NPTF	K		K/S	
L		L/S		SAE-12	SAE-6	.25 NPTF	L		L/S	
M		M/S		SAE-16	SAE-6	.25 NPTF	M		M/S	
U		U/S		.375 BSPP	.25 BSPP	.25 BSPP	U		U/S	
V		V/S		.50 BSPP	.25 BSPP	.25 BSPP	V		V/S	
W		W/S		.75 BSPP	.25 BSPP	.25 BSPP	W		W/S	
X		X/S		1.00 BSPP	.25 BSPP	.25 BSPP	X		X/S	



Normally Open
Solenoid Valve



Normally Closed
Solenoid Valve

Mounting Holes:
10,7 diameter through hole.
2 places.

OPTIONS

YVE * - LAN **

CARRIDGE		SOLENOID COILS		PORTS
G Normally Open	RVEA Pg 1.18	J 12 volt DC, 0,6 metre leads	T 24 volt DC, ISO/DIN	See Chart above
H Normally Closed	For Viton Seals Change LAN to LAV. Customer Specified Setting Stamped on Hex	K 24 volt DC, 0,6 metre leads	V 230 volt, 50/60 Hz, ISO/DIN	
		N 115 volt, 50/60 Hz, conduit	W 120 volt, 50/60 Hz, ISO/DIN	
		O 230 volt, 50/60 Hz, conduit		
		S 12 volt DC, ISO/DIN		



CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT

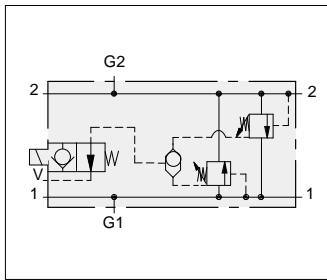


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

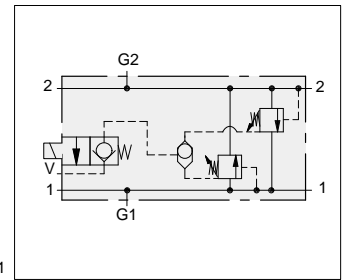
YVFG: Normally Open

YVFH: Normally Closed

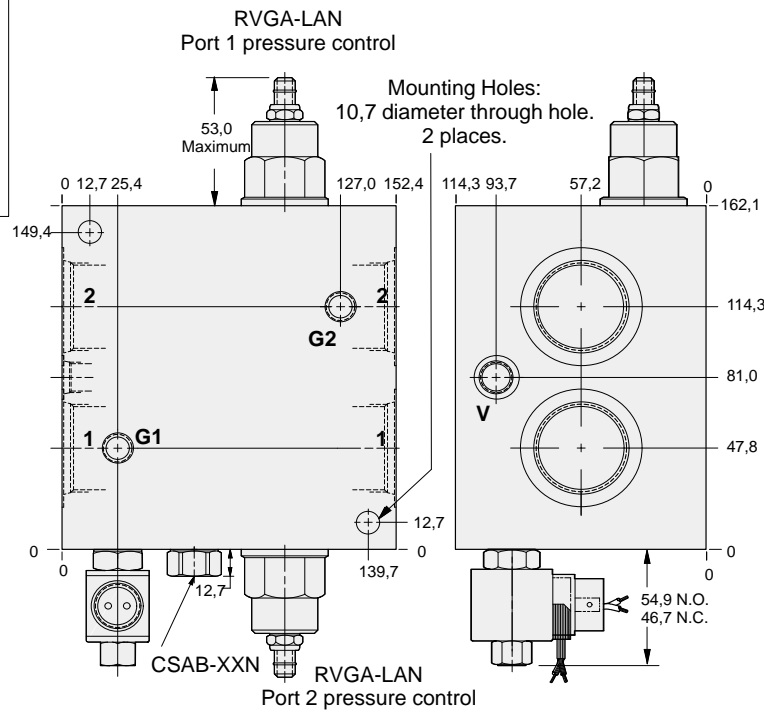
ALUMINIUM		SG IRON		Ports 1 & 2	Port V	Ports G1 & G2	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
D		D/S		.75 NPTF	.25 NPTF	.25 NPTF	D		D/S	
E		E/S		1.00 NPTF	.25 NPTF	.25 NPTF	E		E/S	
F		F/S		1.25 NPTF	.25 NPTF	.25 NPTF	F		F/S	
L		L/S		SAE-12	SAE-6	.25 NPTF	L		L/S	
M		M/S		SAE-16	SAE-6	.25 NPTF	M		M/S	
N		N/S		SAE-20	SAE-6	.25 NPTF	N		N/S	
W		W/S		.75 BSPP	.25 BSPP	.25 BSPP	W		W/S	
X		X/S		1.00 BSPP	.25 BSPP	.25 BSPP	X		X/S	
Y		Y/S		1.25 BSPP	.25 BSPP	.25 BSPP	Y		Y/S	



Normally Open Solenoid Valve



Normally Closed Solenoid Valve



OPTIONS		YVF * - LAN **		
G Normally Open	CARTRIDGE	SOLENOID COILS		PORTS
H Normally Closed	RVGA Pg 1.19	J 12 volt DC, 0,6 metre leads	T 24 volt DC, ISO/DIN	See Chart above
	For Viton Seals Change LAN to LAV.	K 24 volt DC, 0,6 metre leads	V 230 volt, 50/60 Hz, ISO/DIN	
	Customer Specified Setting Stamped on Hex	N 115 volt, 50/60 Hz, conduit	W 120 volt, 50/60 Hz, ISO/DIN	
		O 230 volt, 50/60 Hz, conduit		
		S 12 volt DC, ISO/DIN		



CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT

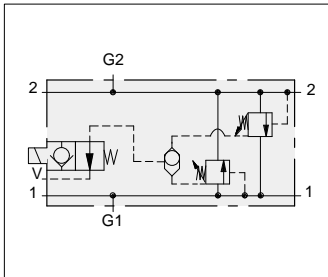


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

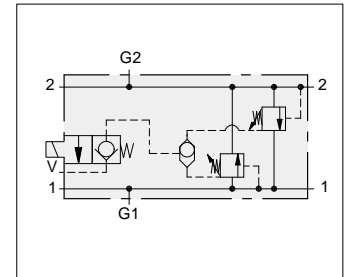
YVFG: Normally Open

YVFH: Normally Closed

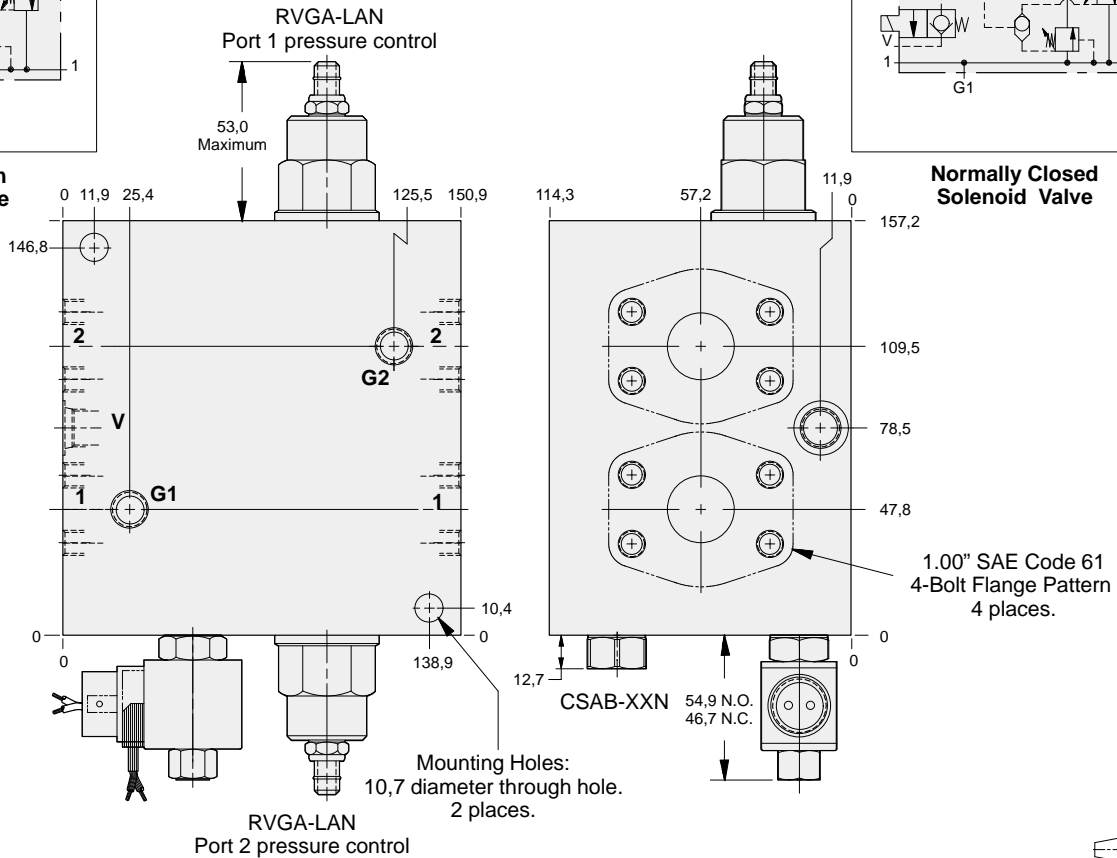
ALUMINIUM		SG IRON		Mounting Hole Dimensions	Port V	Ports G1 & G2	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
P		P/S		Inch	SAE-6	.25 NPTF	P		P/S	
P/M		P/T		Metric	.25 BSPP	.25 BSPP	P/M		P/T	



Normally Open Solenoid Valve



Normally Closed Solenoid Valve



OPTIONS

YVF * - LAN - **

	CARTRIDGE	SOLENOID COILS	PORTS
G	Normally Open RVGA Pg 1.19	J 12 volt DC, 0,6 metre leads	T 24 volt DC, ISO/DIN
H	Normally Closed For Viton Seals Change LAN to LAV. Customer Specified Setting Stamped on Hex	K 24 volt DC, 0,6 metre leads	V 230 volt, 50/60 Hz, ISO/DIN
		N 115 volt, 50/60 Hz, conduit	W 120 volt, 50/60 Hz, ISO/DIN
		O 230 volt, 50/60 Hz, conduit	
		S 12 volt DC, ISO/DIN	See Chart above



CROSS-PORT RELIEF ASSEMBLY WITH SHUTTLE AND SOLENOID OPERATED VENT

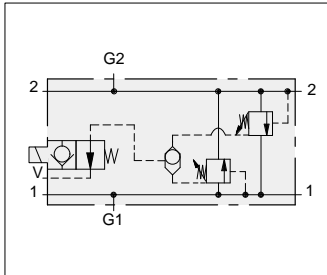


- Maximum operating pressure 210 bar.
- Power requirement: 12 watts.

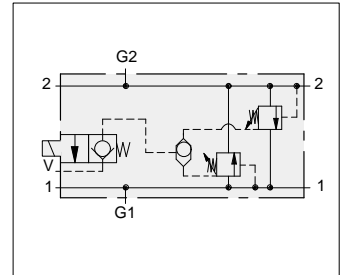
YVFG: Normally Open

YVFH: Normally Closed

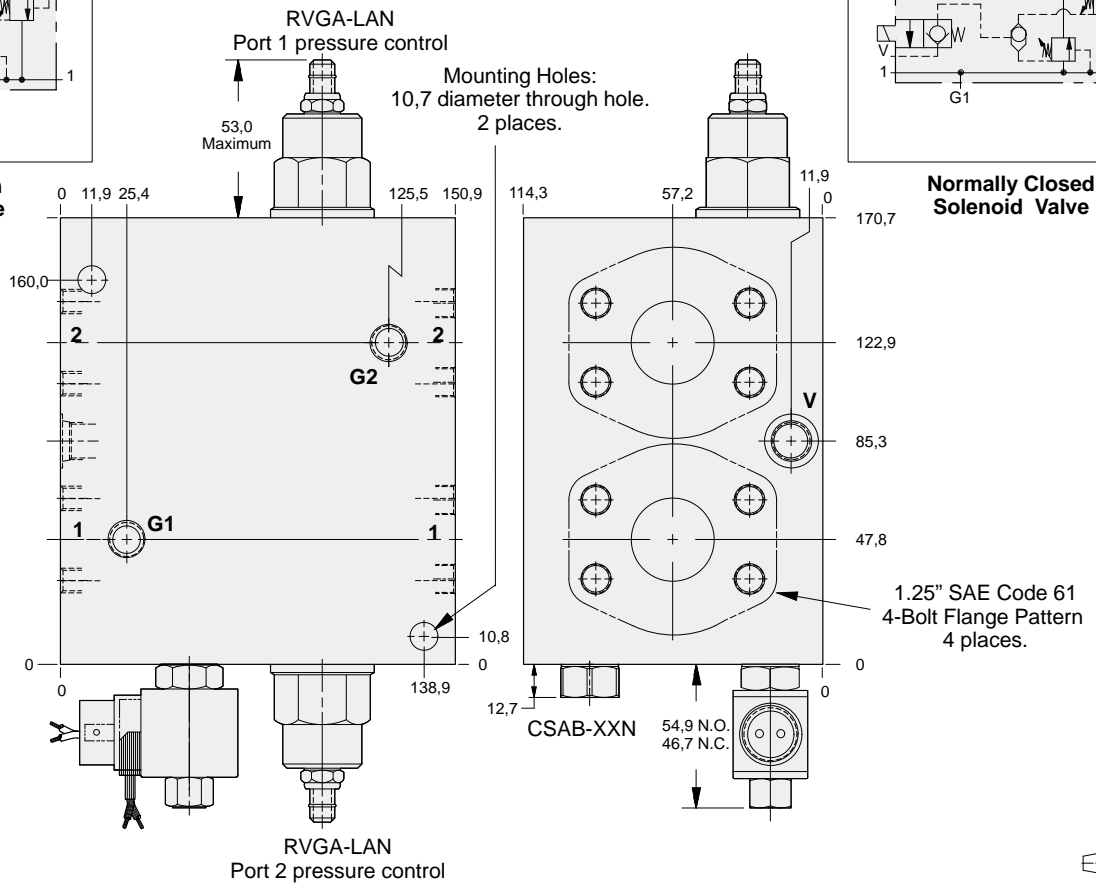
ALUMINIUM		SG IRON		Mounting Hole Dimensions	Port V	Ports G1 & G2	ALUMINIUM		SG IRON	
Port Code	List Price	Port Code	List Price				Port Code	List Price	Port Code	List Price
Q		Q/S		Inch	SAE-6	.25 NPTF	Q		Q/S	
Q/M		Q/T		Metric	.25 BSPP	.25 BSPP	Q/M		Q/T	



Normally Open Solenoid Valve



Normally Closed Solenoid Valve



OPTIONS		YVF * - LAN - **		
G Normally Open	CARTRIDGE	J 12 volt DC, 0,6 metre leads	SOLENOID COILS	T 24 volt DC, ISO/DIN
H Normally Closed	RVGA Pg 1.19	K 24 volt DC, 0,6 metre leads		V 230 volt, 50/60 Hz, ISO/DIN
	For Viton Seals Change LAN to LAV.	N 115 volt, 50/60 Hz, conduit		W 120 volt, 50/60 Hz, ISO/DIN
	Customer Specified Setting Stamped on Hex	O 230 volt, 50/60 Hz, conduit		
		S 12 volt DC, ISO/DIN		
				PORTS See Chart above



HYDROSTATIC TRANSMISSION ASSEMBLY INLINE BODY

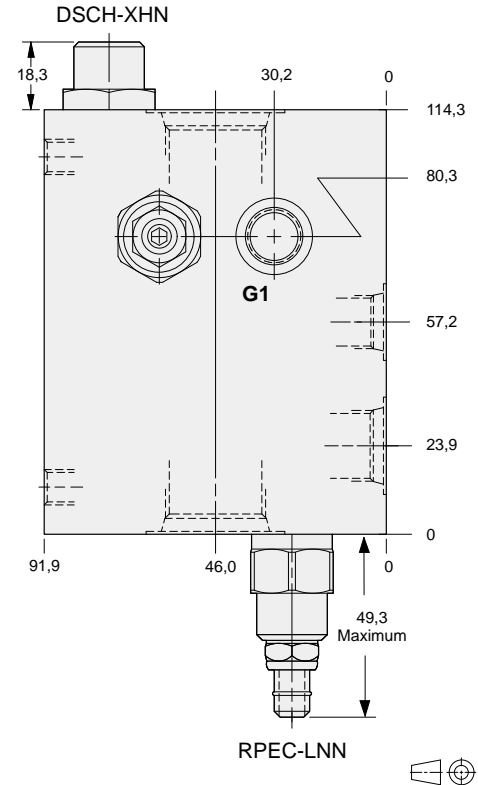
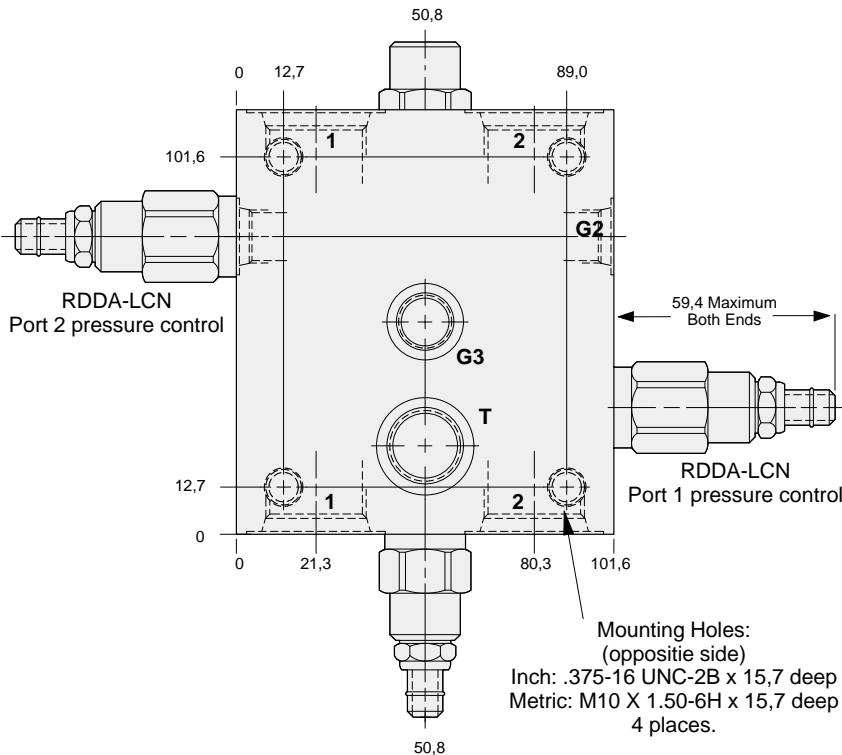
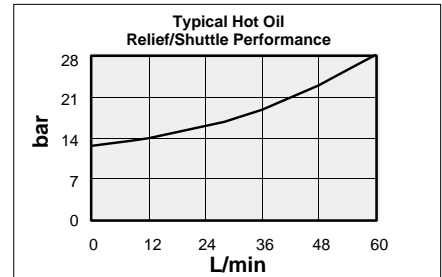
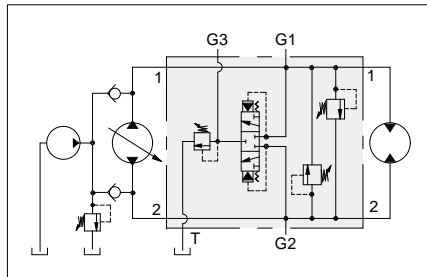


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-12	SAE-8	.25 NPTF	L		L/S	
Metric	.75 BSPP	.375 BSPP	.25 BSPP	W		W/S	



13

OPTIONS	XRDB - LCN - A*	
CARTRIDGE RDDA Pg 1.10 For Viton Seals Change LCN to LCV.	Customer Specified Setting Stamped on Hex	PORTS See Chart above

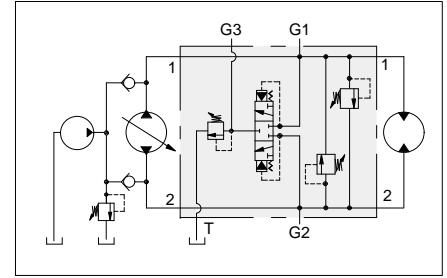


HYDROSTATIC TRANSMISSION ASSEMBLY .75" SAE FLANGE PORT BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

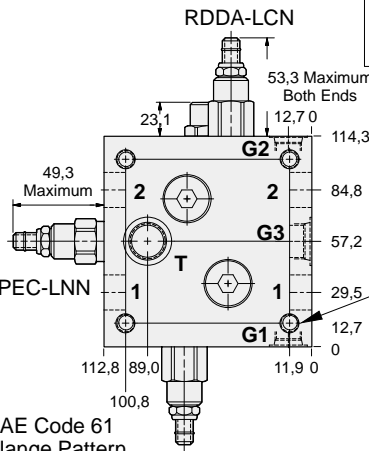
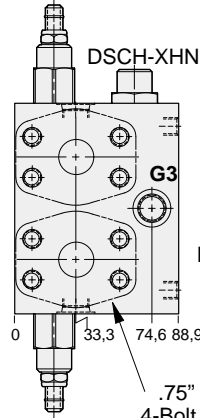
Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-8	SAE-6	O		O/S	
Metric	Code 61	.375 BSPP	.25 BSPP	O/M		O/T	



These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

RDDA-LCN
Port 1 pressure control

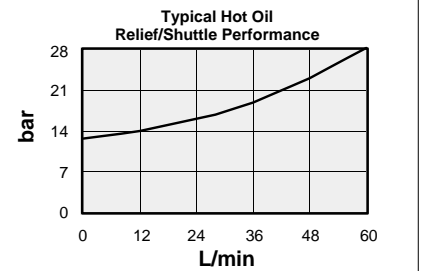
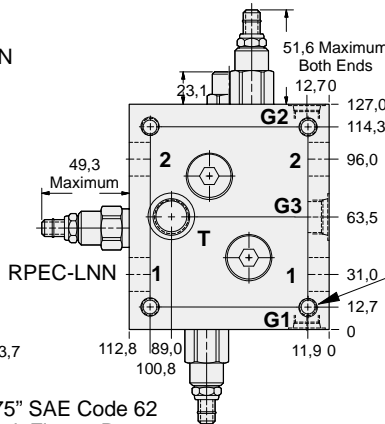
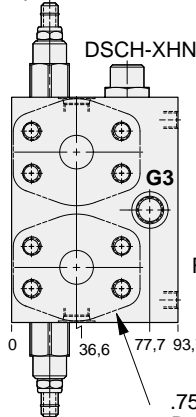


Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 19,0 deep
Metric: M10 X 1.50-6H x 19,0 deep
4 places.

RDDA-LCN
Port 2 pressure control

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-8	SAE-6	3		3/S	
Metric	Code 62	.375 BSPP	.25 BSPP	3/M		3/T	

RDDA-LCN
Port 1 pressure control



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 19,0 deep
Metric: M10 X 1.50-6H x 19,0 deep
4 places.

RDDA-LCN
Port 2 pressure control

OPTIONS	XRDB - LCN - A*		PORTS See Chart above
	CARTRIDGE RDDA Pg 1.10 For Viton Seals Change LCN to LCV.	Customer Specified Setting Stamped on Hex	



HYDROSTATIC TRANSMISSION ASSEMBLY INLINE BODY

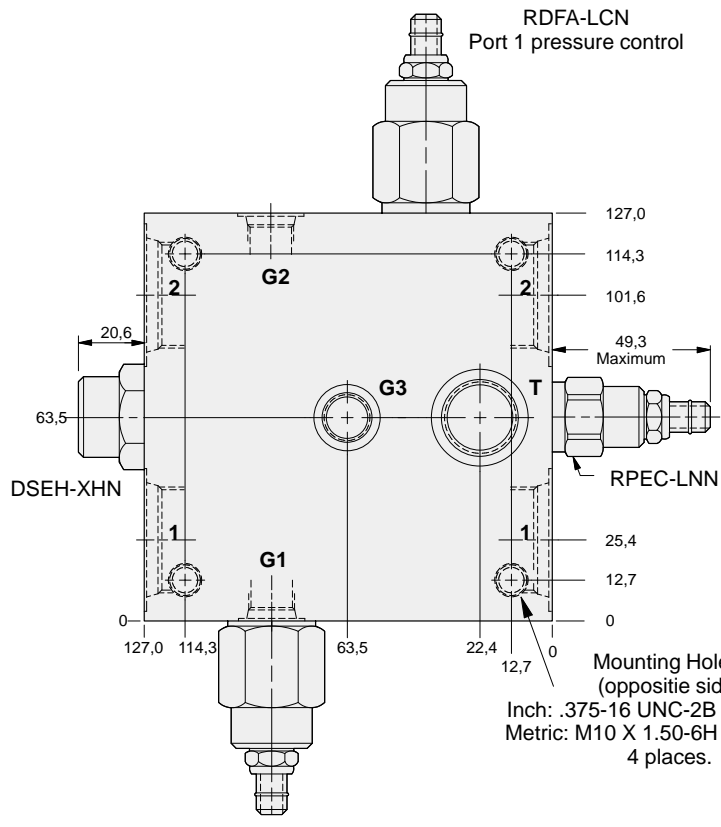
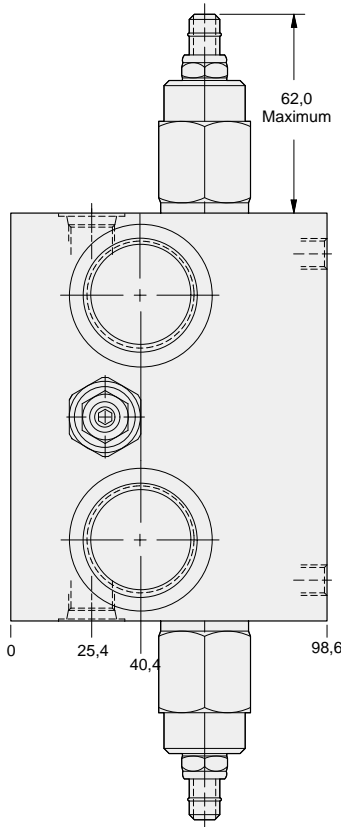
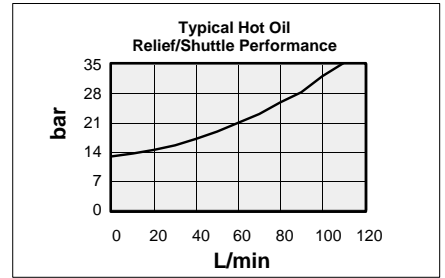
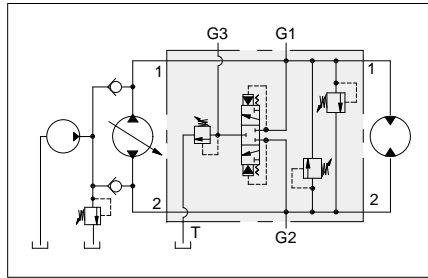


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-16	SAE-10	SAE-6	M		M/S	
Metric	1.00 BSPP	.50 BSPP	.25 BSPP	X		X/S	



RDFA-LCN
Port 1 pressure control

RDFA-LCN
Port 2 pressure control

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

13

OPTIONS

XRFB - LCN - A*

CARTRIDGE

RDFA Pg 1.10
For Viton Seals Change LCN to LCV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart above



HYDROSTATIC TRANSMISSION ASSEMBLY 1.25" SAE CODE 61 FLANGE PORT BODY

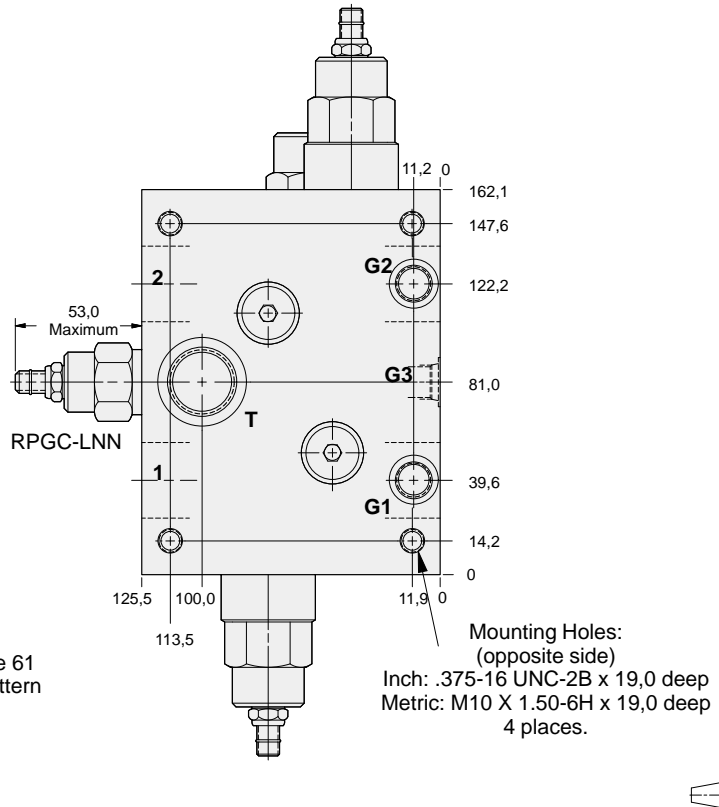
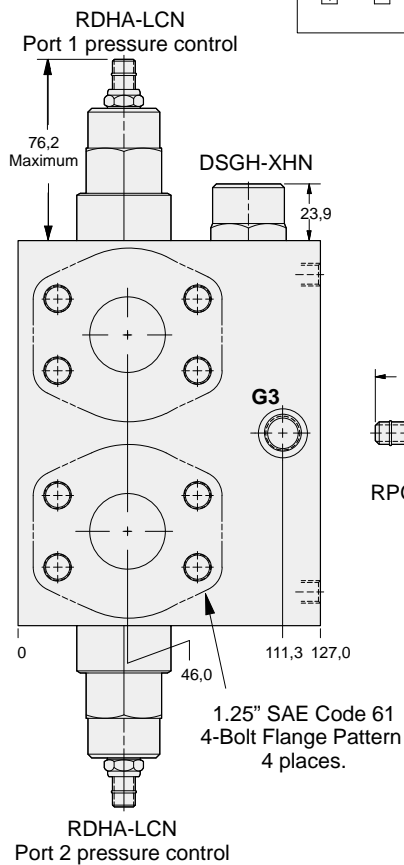
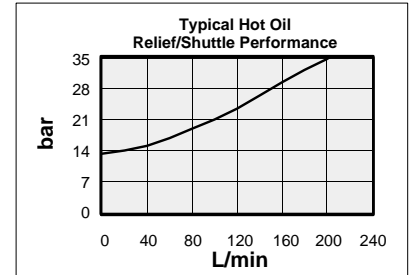
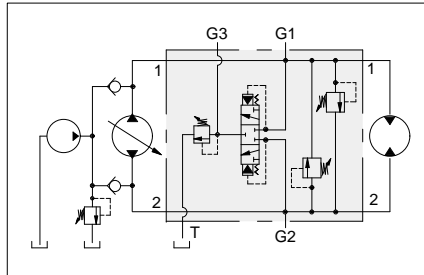


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPGC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

Mounting Hole Dimensions	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
Inch	SAE-12	SAE-6	Q		Q/S	
Metric	.75 BSPP	.25 BSPP	Q/M		Q/T	



OPTIONS

XRHB - LCN - A*

CARTRIDGE

RDHA Pg 1.11
For Viton Seals Change LCN to LCV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart above





HYDROSTATIC TRANSMISSION ASSEMBLY 1.25" SAE CODE 62 FLANGE PORT BODY

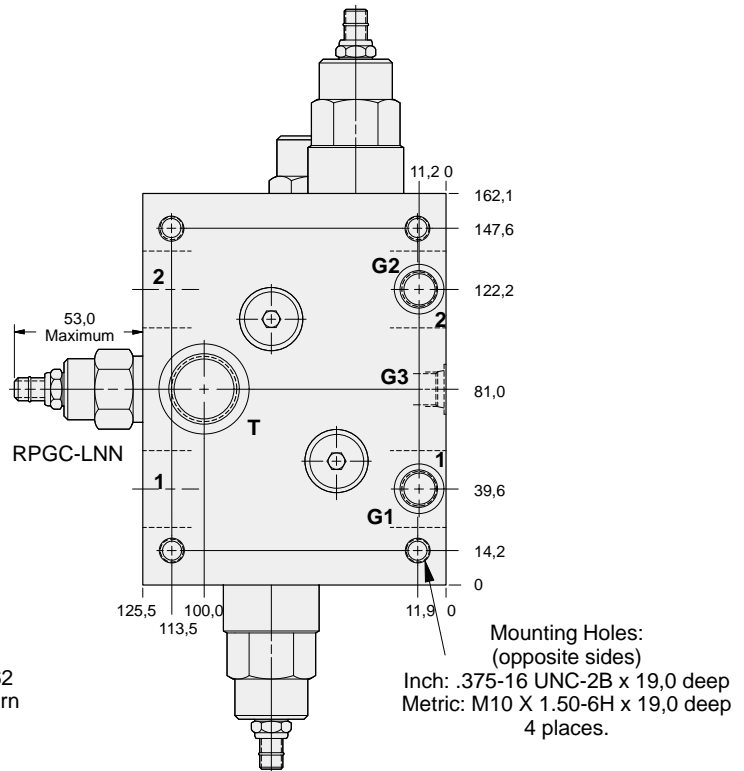
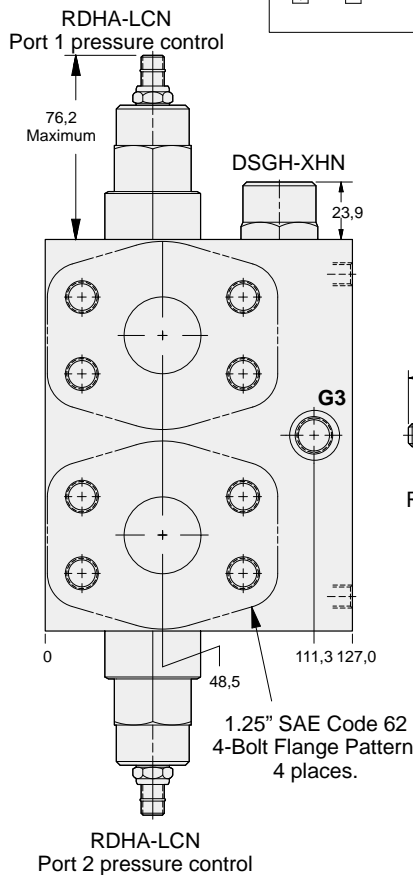
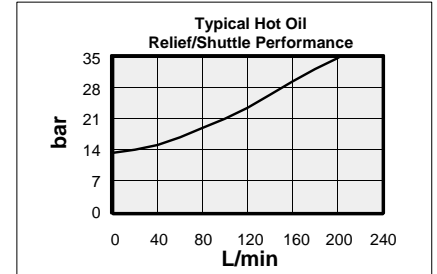
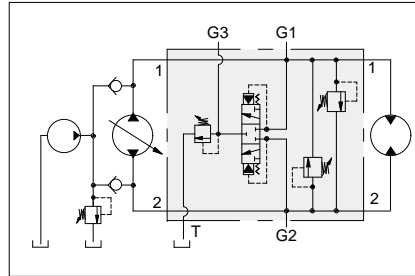


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPGC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.

Mounting Hole Dimensions	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
Inch	SAE-12	SAE-6	5		5/S	
Metric	.75 BSPP	.25 BSPP	5/M		5/T	



Mounting Holes:
(opposite sides)
Inch: .375-16 UNC-2B x 19,0 deep
Metric: M10 X 1.50-6H x 19,0 deep
4 places.

OPTIONS	XRHB - LCN - A*		PORTS
	CARTRIDGE RDHA Pg 1.11 For Viton Seals Change LCN to LCV.	Customer Specified Setting Stamped on Hex	See Chart above

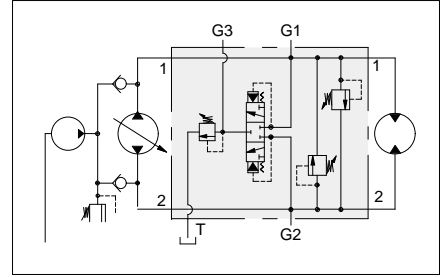


HYDROSTATIC TRANSMISSION ASSEMBLY 1.50" SAE FLANGE PORT BODY



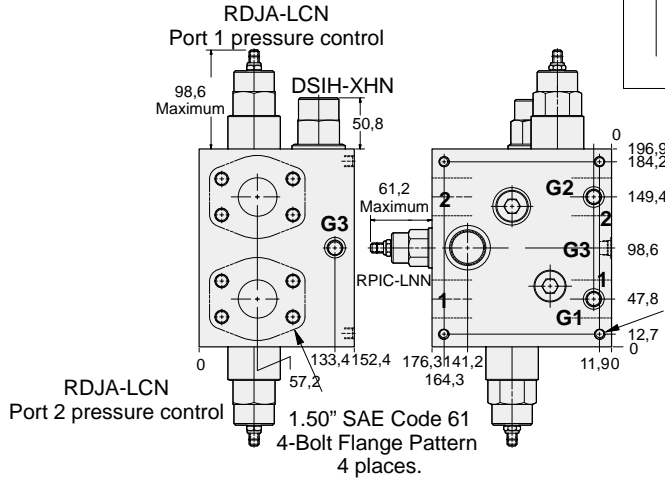
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-16	SAE-6	R		R/S	
Metric	Code 61	1.00 BSPP	.25 BSPP	R/M		R/T	



These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

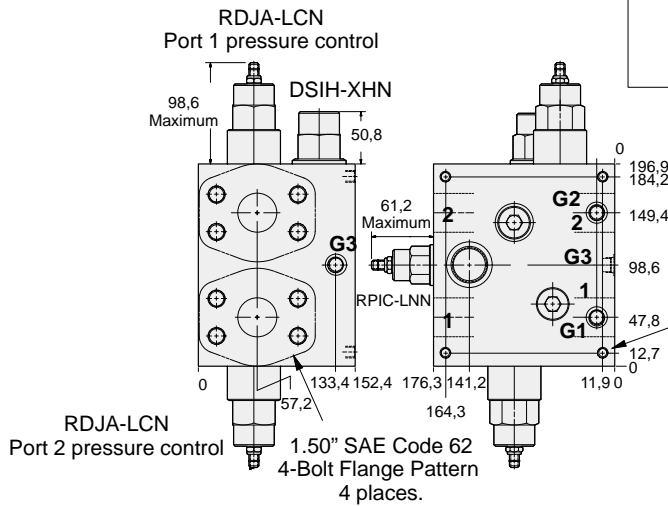
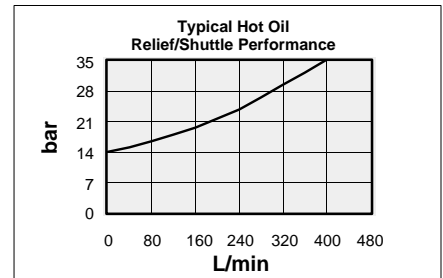
NOTE: A mechanical brake is recommended to positively lock any stopped live load.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 22,4 deep
Metric: M10 X 1.50-6H x 22,4 deep
4 places.



Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-16	SAE-6	6		6/S	
Metric	Code 62	1.00 BSPP	.25 BSPP	6/M		6/T	



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 22,4 deep
Metric: M10 X 1.50-6H x 22,4 deep
4 places.



OPTIONS

XRJB - LCN - A*

CARTRIDGE

RDJA Pg 1.11
For Viton Seals Change LCN to LCV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart above

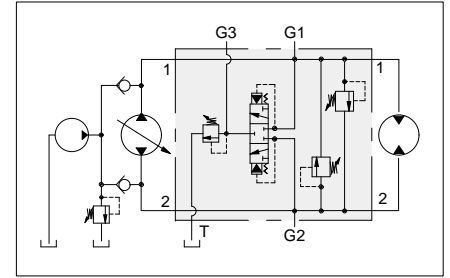


HYDROSTATIC TRANSMISSION ASSEMBLY 2.00" SAE FLANGE PORT BODY



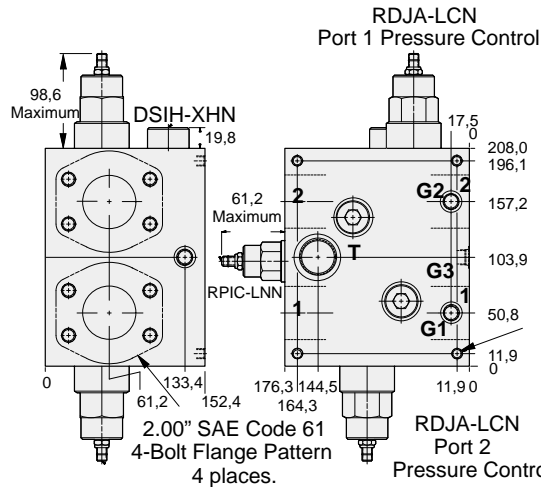
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-16	SAE-6	S		S/S	
Metric	Code 61	1.00 BSPP	.25 BSPP	S/M		S/T	



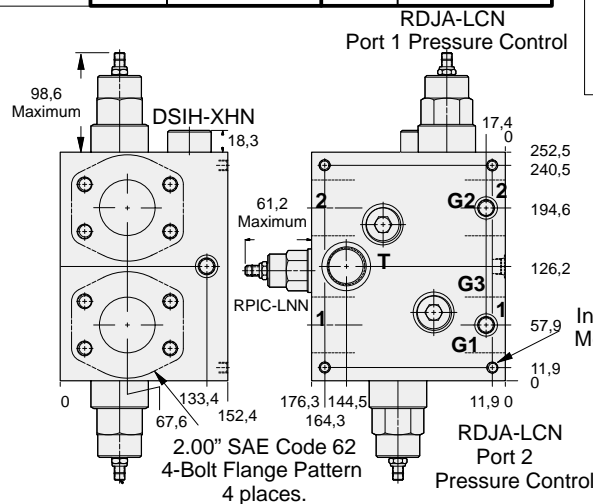
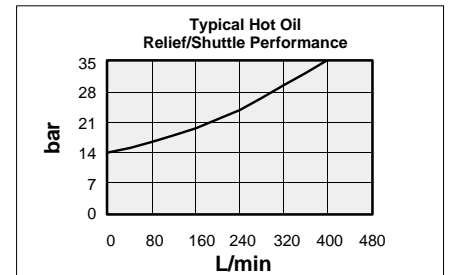
These SUN valve assemblies are for use with hydrostatic transmissions to provide overload relief valve protection for the main circuit in both directions. Additionally, an auxiliary shuttle valve allows bleed-off of hot oil from the low pressure side. Hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. Hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

NOTE: A mechanical brake is recommended to positively lock any stopped live load.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 22,4 deep
Metric: M10 X 1.50-6H x 22,4 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Ports G1, G2, & G3	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-16	SAE-6	8		8/S	
Metric	Code 62	1.00 BSPP	.25 BSPP	8/M		8/T	



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 22,4 deep
Metric: M10 X 1.50-6H x 22,4 deep
4 places.

OPTIONS		XRJB - LCN - A*	
CARTRIDGE	RDJA Pg 1.11 For Viton Seals Change LCN to LCV.	Customer Specified Setting Stamped on Hex	PORTS See Chart above



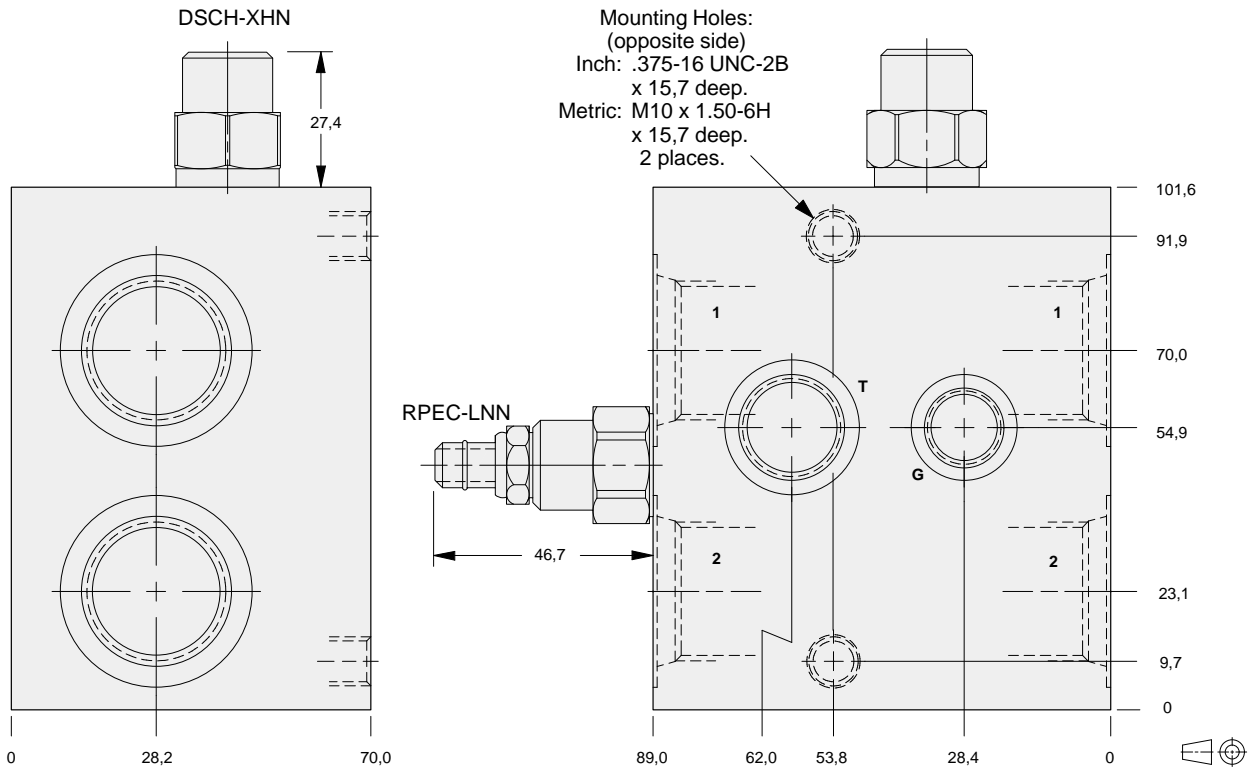
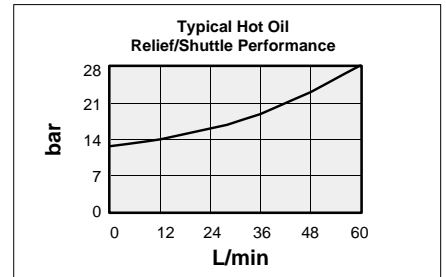
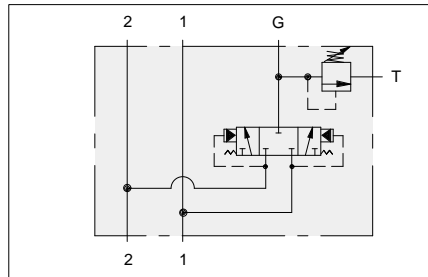
HOT OIL SHUTTLE AND RELIEF ASSEMBLY INLINE BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-10	SAE-8	SAE-6	K		K/S	
Inch	SAE-12	SAE-8	SAE-6	L		L/S	
Metric	.50 BSPP	.375 BSPP	.25 BSPP	V		V/S	
Metric	.75 BSPP	.375 BSPP	.25 BSPP	W		W/S	



13

OPTIONS	XRDC - LNN - A*		
	CARTRIDGE RPEC Pg 1.11 For Viton Seals Change LNN to LNV.	Customer Specified Setting Stamped on Hex	PORTS See Chart above

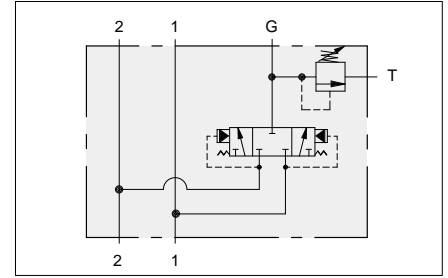


HOT OIL SHUTTLE AND RELIEF ASSEMBLY .75" SAE FLANGE PORT BODY



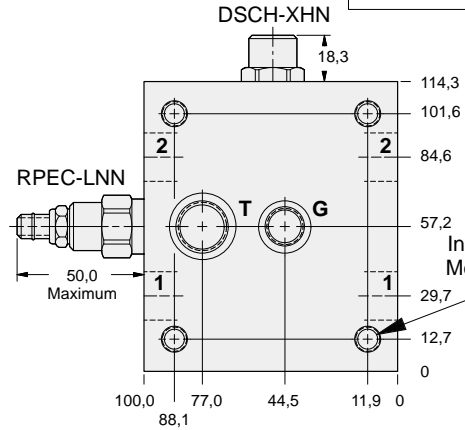
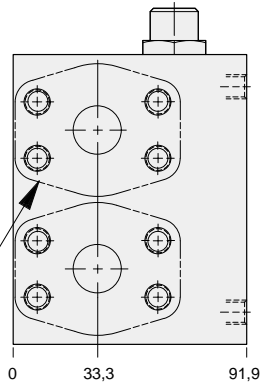
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-8	SAE-6	O		O/S	
Metric	Code 61	.375 BSPP	.25 BSPP	O/M		O/T	



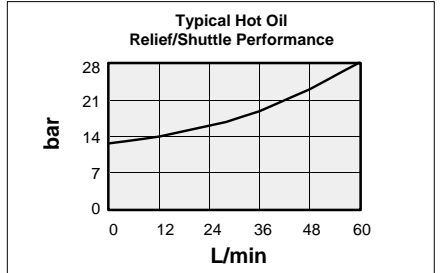
These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

.75" SAE Code 61
4-Bolt Flange Pattern
4 places.

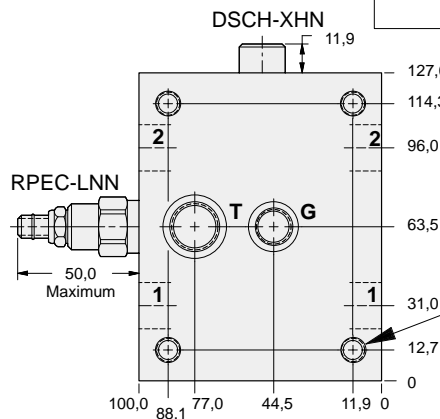
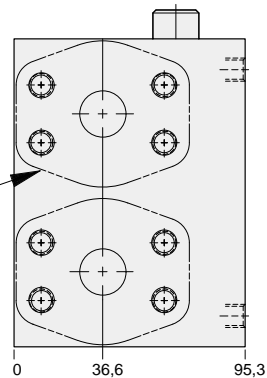


Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-8	SAE-6	3		3/S	
Metric	Code 62	.375 BSPP	.25 BSPP	3/M		3/T	



.75" SAE Code 62
4-Bolt Flange Pattern
4 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

OPTIONS		XRDC - LNN - A*	
CARTRIDGE	RPEC Pg 1.06 For Viton Seals Change LNN to LNV.	Customer Specified Setting Stamped on Hex	PORTS See Chart above



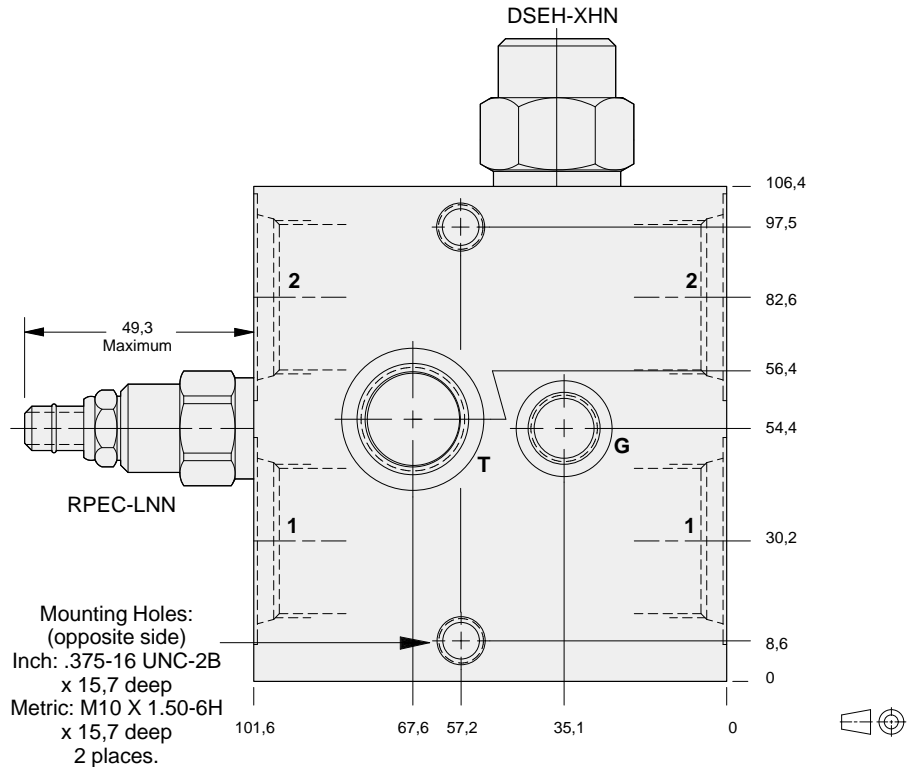
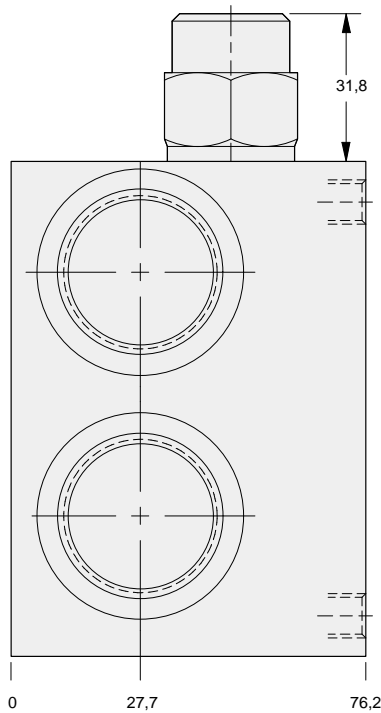
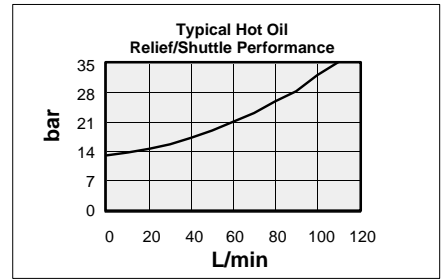
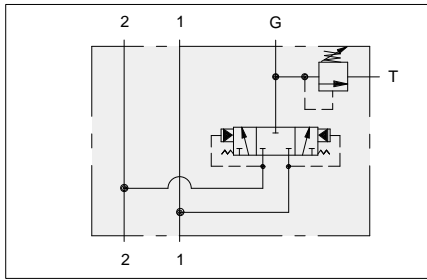
HOT OIL SHUTTLE AND RELIEF ASSEMBLY INLINE BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-12	SAE-10	SAE-6	L		L/S	
Inch	SAE-16	SAE-10	SAE-6	M		M/S	
Metric	.75 BSPP	.50 BSPP	.25 BSPP	W		W/S	
Metric	1.00 BSPP	.50 BSPP	.25 BSPP	X		X/S	



13

OPTIONS	XRFC - LNN		A*
	CARTRIDGE RPEC Pg 1.06 For Viton Seals Change LNN to LNV.		Customer Specified Setting Stamped on Hex
			PORTS See Chart above

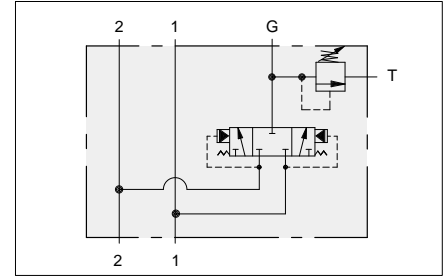


HOT OIL SHUTTLE AND RELIEF ASSEMBLY 1.00" SAE FLANGE PORT BODY

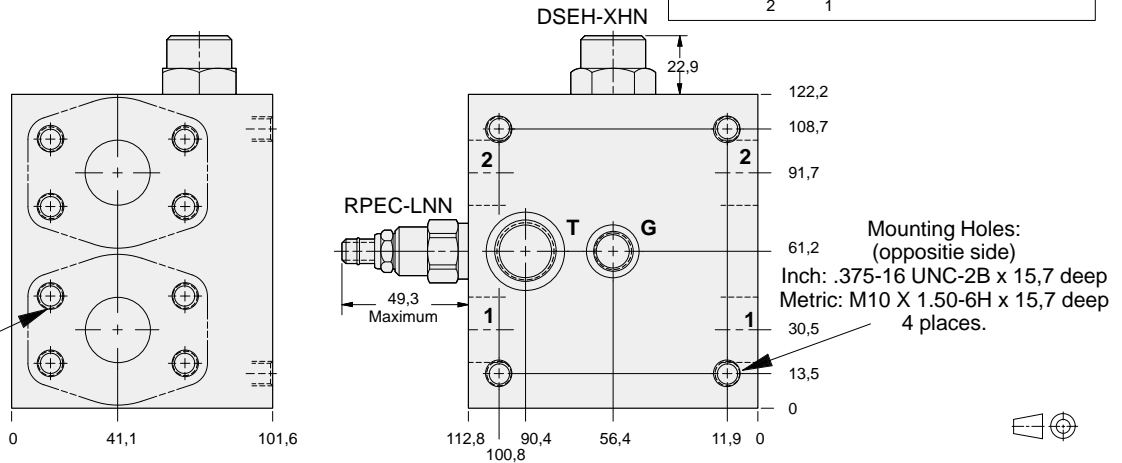


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-10	SAE-6	P		P/S	
Metric	Code 61	.50 BSPP	.25 BSPP	P/M		P/T	

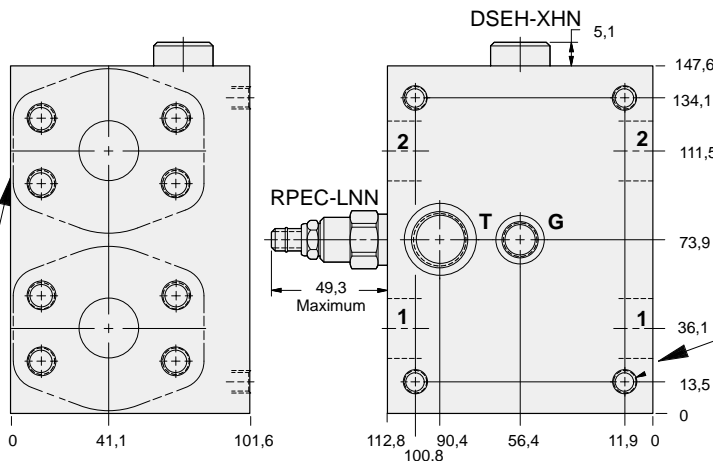
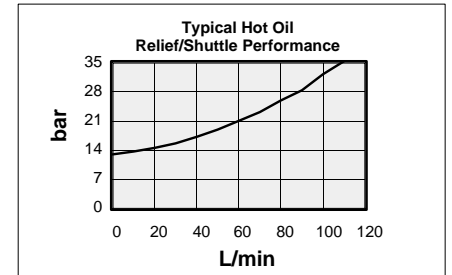


These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPEC cartridge is set below the hydrostatic charge pressure relief valve.



1.00" SAE Code 61
4-Bolt Flange Pattern
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-10	SAE-6	4		4/S	
Metric	Code 62	.50 BSPP	.25 BSPP	4/M		4/T	



1.00" SAE Code 62
4-Bolt Flange Pattern
4 places.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

OPTIONS	XRFC - LNN - A*		PORTS
	CARTRIDGE		
	RPEC Pg 1.06 For Viton Seals Change LNN to LNV.	Customer Specified Setting Stamped on Hex	See Chart above



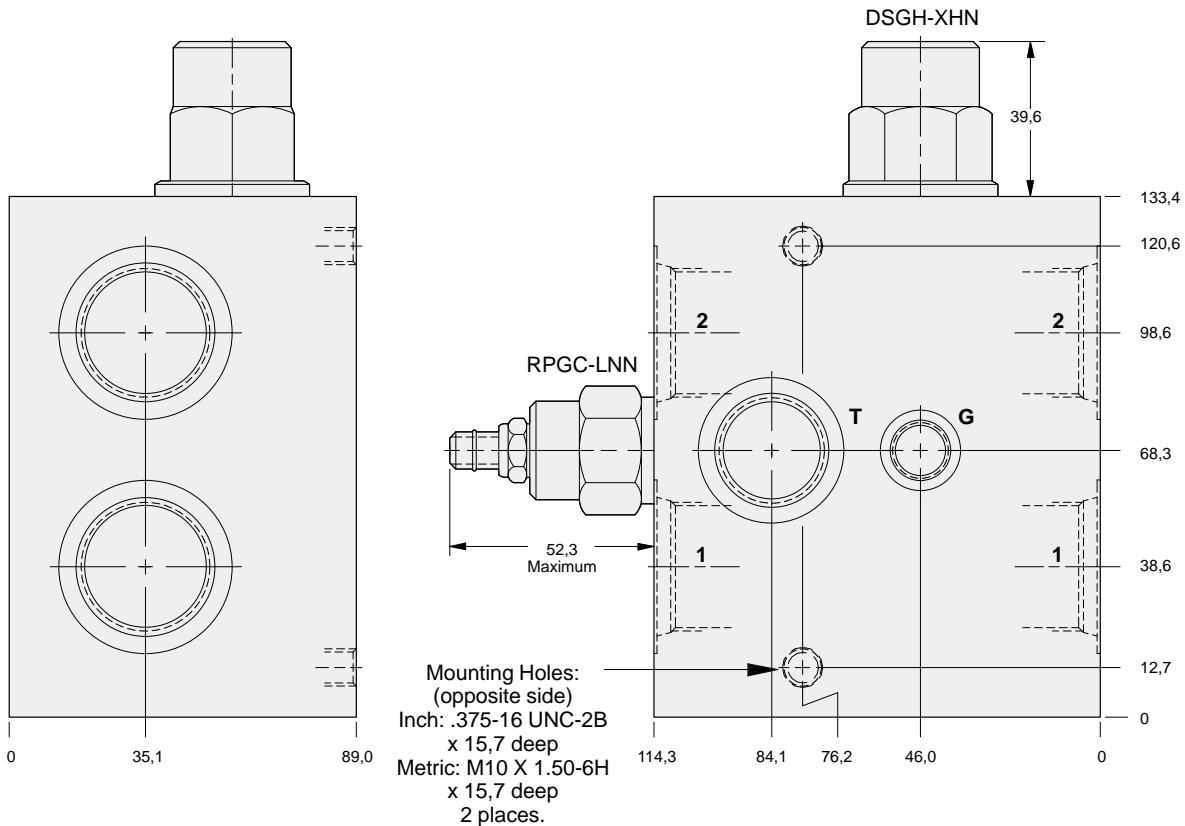
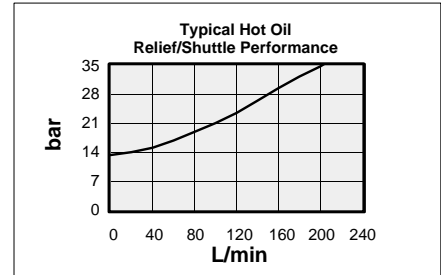
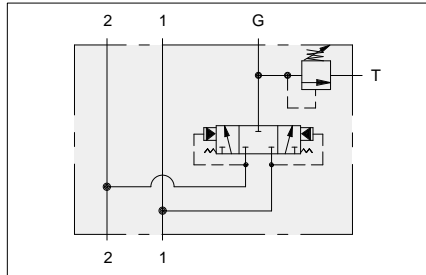
HOT OIL SHUTTLE AND RELIEF ASSEMBLY INLINE BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPGC cartridge is set below the hydrostatic charge pressure relief valve.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-16	SAE-12	SAE-6	M		M/S	
Metric	1.00 BSPP	.75 BSPP	.25 BSPP	X		X/S	



13

OPTIONS	XRHC - LNN - A*	
	CARTRIDGE RPGC Pg 1.06 For Viton Seals Change LNN to LNV.	PORTS See Chart above
	Customer Specified Setting Stamped on Hex	

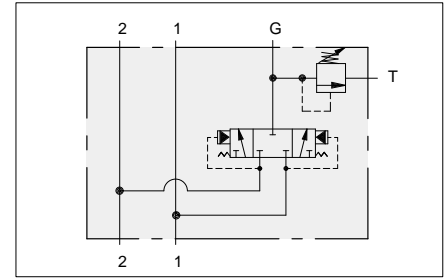


HOT OIL SHUTTLE AND RELIEF ASSEMBLY 1.25" SAE FLANGE PORT BODY



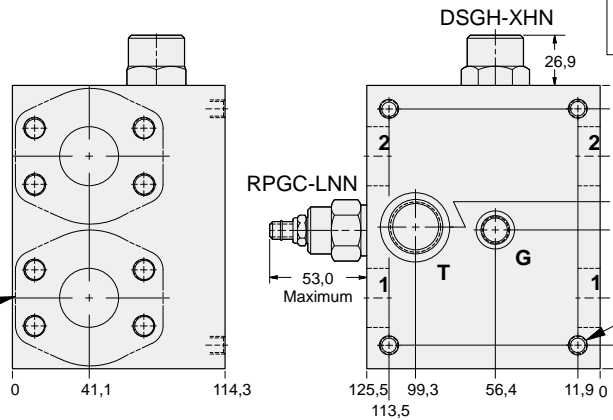
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-12	SAE-6	Q		Q/S	
Metric	Code 61	.75 BSPP	.25 BSPP	Q/M		Q/T	



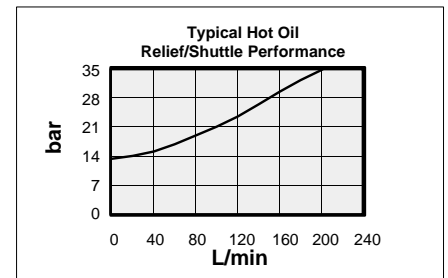
These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPGC cartridge is set below the hydrostatic charge pressure relief valve.

1.25" SAE Code 61
4-Bolt Flange Pattern
4 places.

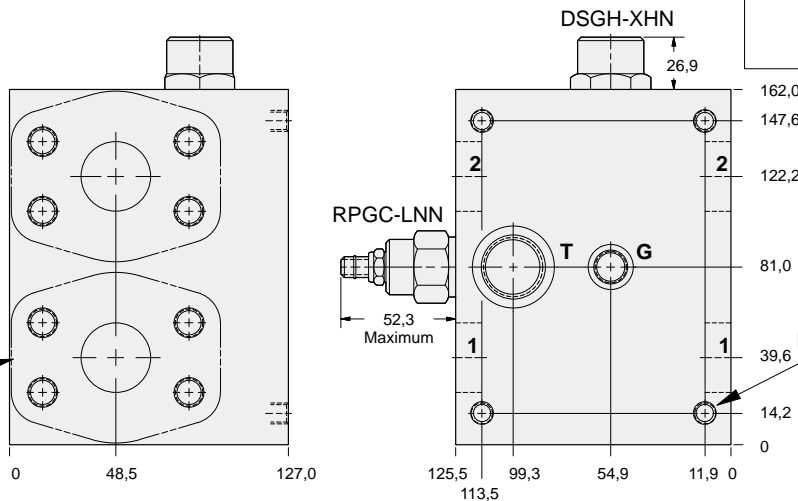


Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15.7 deep
Metric: M10 X 1.50-6H x 15.7 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-12	SAE-6	5		5/S	
Metric	Code 62	.75 BSPP	.25 BSPP	5/M		5/T	



1.25" SAE Code 62
4-Bolt Flange Pattern
4 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15.7 deep
Metric: M10 X 1.50-6H x 15.7 deep
4 places.

OPTIONS

XRHC - LNN - A*

CARTRIDGE

RPGC Pg 1.06
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart above



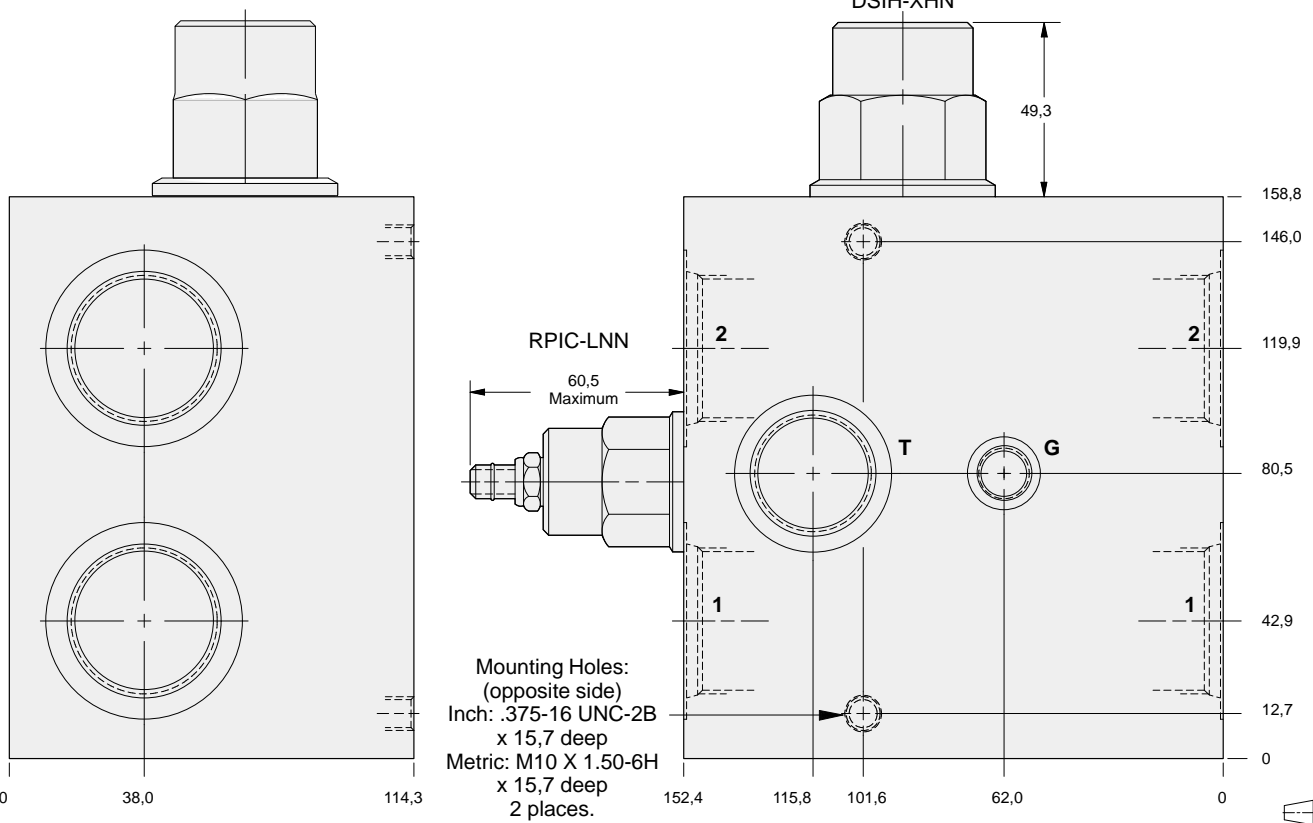
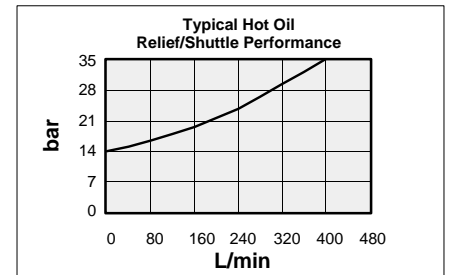
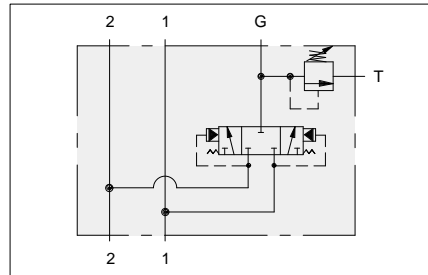
HOT OIL SHUTTLE AND RELIEF ASSEMBLY INLINE BODY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	SAE-20	SAE-16	SAE-6	M		M/S	
Metric	1.25 BSPP	1.00 BSPP	.25 BSPP	X		X/S	



13

OPTIONS		XRJC - LNN - A*	
CARTRIDGE	RPIC Pg 1.07 For Viton Seals Change LNN to LNV.	Customer Specified Setting Stamped on Hex	PORTS See Chart above

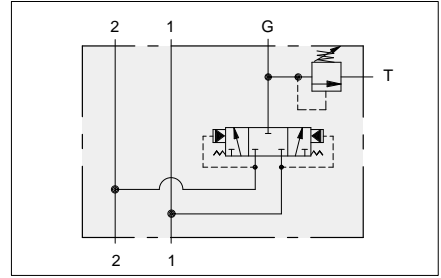


HOT OIL SHUTTLE AND RELIEF ASSEMBLY 1.50" SAE FLANGE PORT BODY



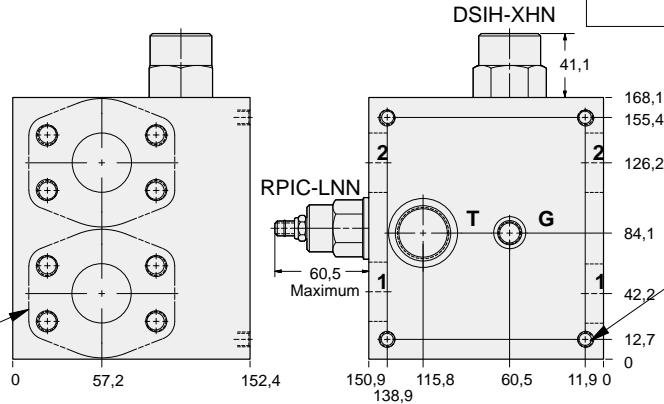
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-16	SAE-6	R		R/S	
Metric	Code 61	1.00 BSPP	.25 BSPP	R/M		R/T	



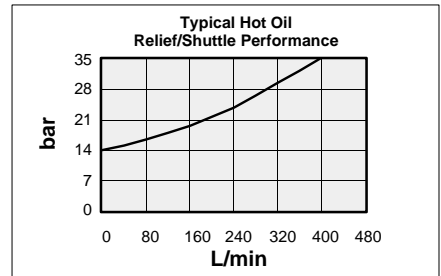
These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

1.50" SAE Code 61
4-Bolt Flange Pattern
4 places.



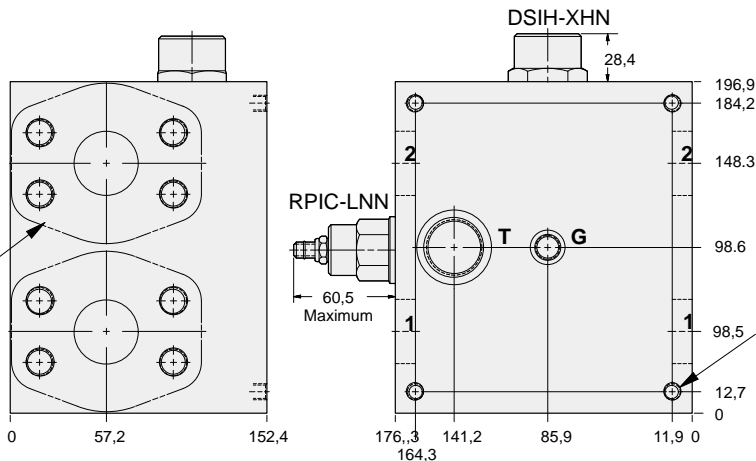
Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-16	SAE-6	6		6/S	
Metric	Code 62	1.00 BSPP	.25 BSPP	6/M		6/T	



13

1.50" SAE Code 62
4-Bolt Flange Pattern
4 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

OPTIONS

XRJC - LNN - A*

CARTRIDGE

RPIC Pg 1.07
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart above

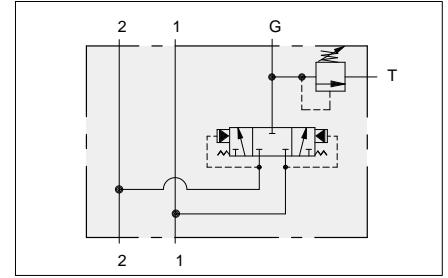


HOT OIL SHUTTLE AND RELIEF ASSEMBLY 2.00" SAE FLANGE PORT BODY



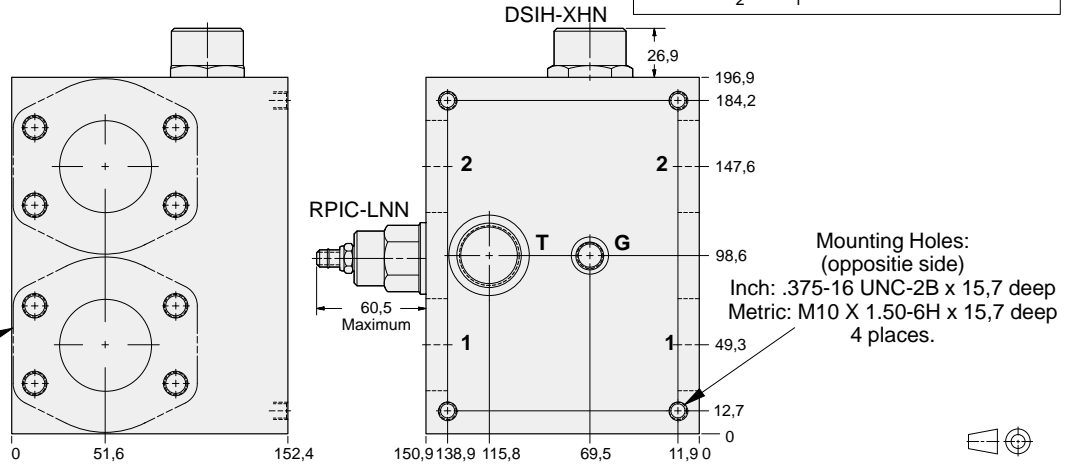
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Hot oil pressure can be confirmed and/or set with transmission in neutral.

Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 61	SAE-16	SAE-6	S		S/S	
Metric	Code 61	1.00 BSPP	.25 BSPP	S/M		S/T	

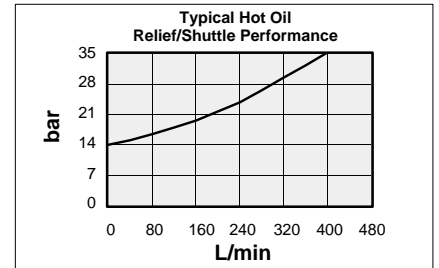


These SUN valve assemblies are for use in bleed-off of hot oil from the low pressure side of a hydrostatic transmission circuit. The hot oil can be cooled, filtered, or used as a source of oil for flushing other pump and motor cases. The hot oil is removed from the loop when the SUN RPIC cartridge is set below the hydrostatic charge pressure relief valve.

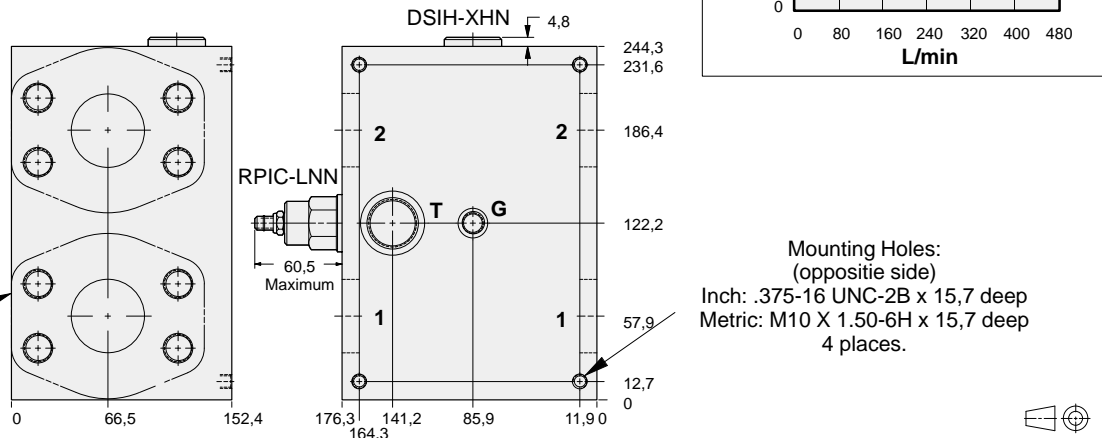
2.00" SAE Code 61
4-Bolt Flange Pattern
4 places.



Mounting Hole Dimensions	Ports 1 & 2	Port T	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	Code 62	SAE-16	SAE-6	8		8/S	
Metric	Code 62	1.00 BSPP	.25 BSPP	8/M		8/T	



2.00" SAE Code 62
4-Bolt Flange Pattern
4 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15.7 deep
Metric: M10 X 1.50-6H x 15.7 deep
4 places.

OPTIONS

XRJC - LNN - A*

CARTRIDGE

RPIC Pg 1.07
For Viton Seals Change LNN to LNV.

Customer Specified Setting
Stamped on Hex

PORTS

See Chart
above



FLOW DIVIDER/COMBINER TRACTIVE DRIVE ASSEMBLY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Replaceable slip orifices.

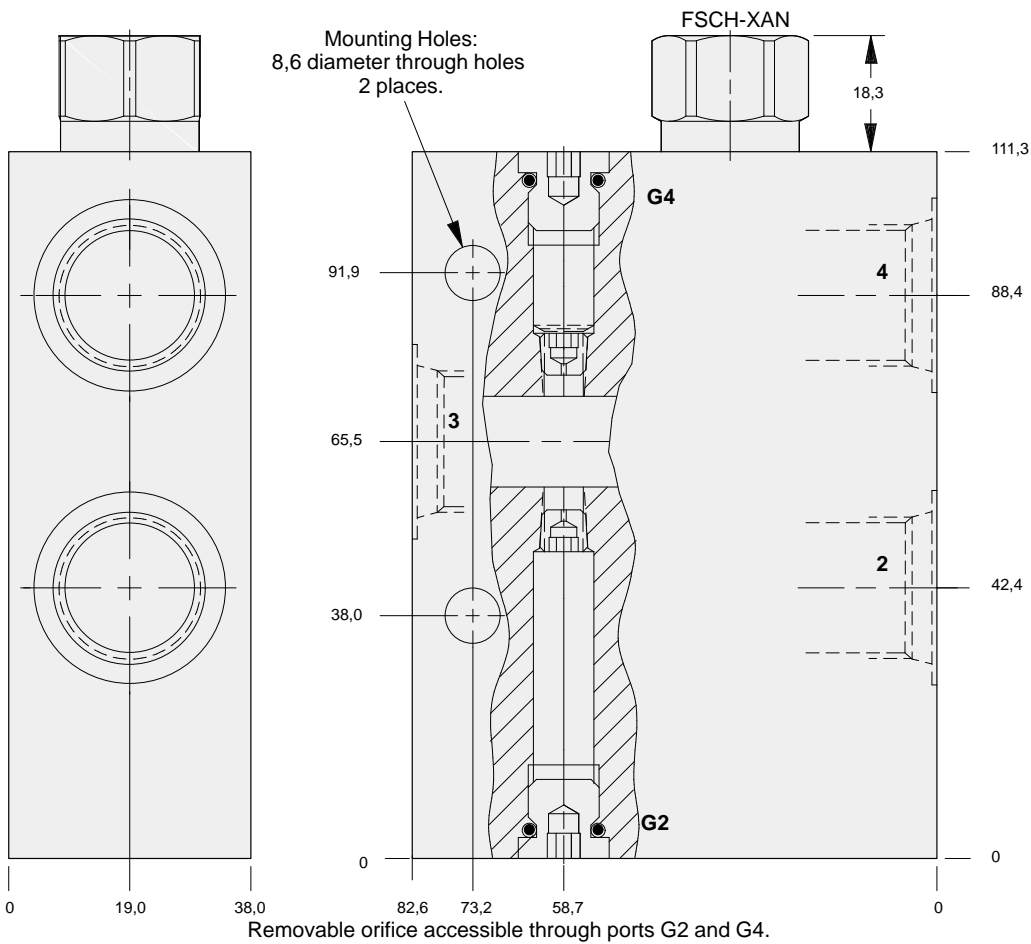
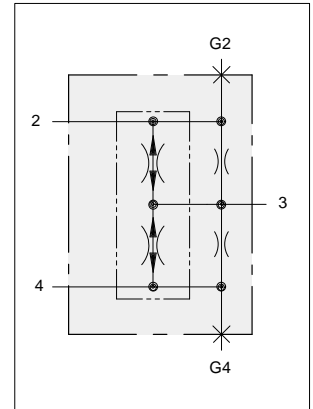
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
L	2,6	7,2
P	6,4	17,8
R	10,5	29,1

Other slip ranges are available, and are detailed on SUN drawing #280-038. Slip at 25 bar is additive to basic capacity.

Port Options

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.25 NPTF	A		A/S	
.375 NPTF	B		B/S	
.50 NPTF	C		C/S	
SAE-6	I		I/S	
SAE-8	J		J/S	
SAE-10	K		K/S	
.25 BSPP	T		T/S	
.375 BSPP	U		U/S	
.50 BSPP	V		V/S	



OPTIONS

YGCB - XAN - * *

CARTRIDGE

FSCH Pg 7.14
For Viton Seals Change
XAN to XAV.

Customer Specified Setting
Stamped on Hex

ORIFICE

See Chart
above

PORTS

See Chart
above



FLOW DIVIDER/COMBINER TRACTIVE DRIVE ASSEMBLY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Replaceable slip orifices.

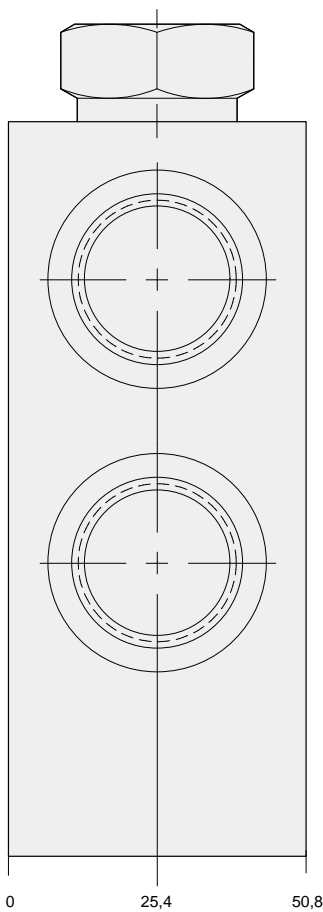
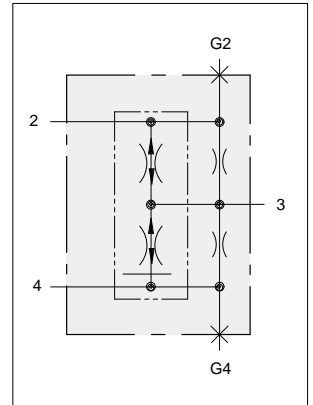
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
N	4,5	12,0
S	13	35,0
U	23,0	61,0

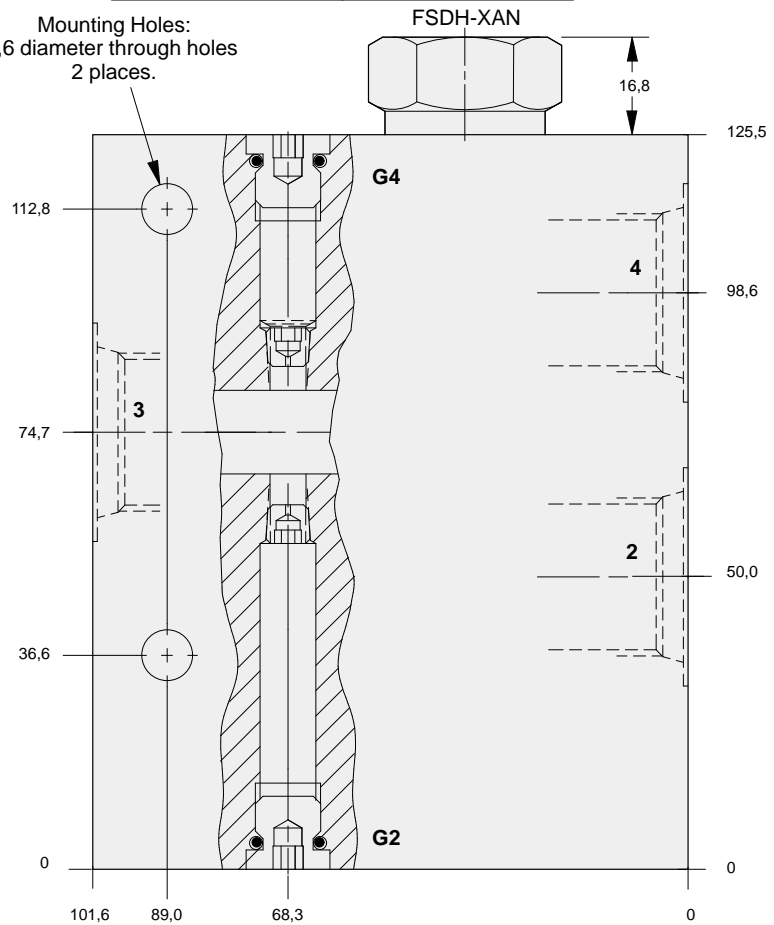
Other slip ranges are available, and are detailed on SUN drawing #280-038. Slip at 25 bar is additive to basic capacity.

Port Options

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.375 NPTF	B		B/S	
.50 NPTF	C		C/S	
.75 NPTF	D		D/S	
SAE-8	J		J/S	
SAE-10	K		K/S	
SAE-12	L		L/S	
.375 BSPP	U		U/S	
.50 BSPP	V		V/S	
.75 BSPP	W		W/S	



Mounting Holes:
8,6 diameter through holes
2 places.



Removable orifice accessible through ports G2 and G4.



OPTIONS		YGDB - XAN - * *		
CARTRIDGE	FSDH Pg 7.14 For Viton Seals Change XAN to XAV.	Customer Specified Setting Stamped on Hex	ORIFICE	See Chart above
			PORTS	See Chart above



FLOW DIVIDER/COMBINER TRACTIVE DRIVE ASSEMBLY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Replaceable slip orifices.

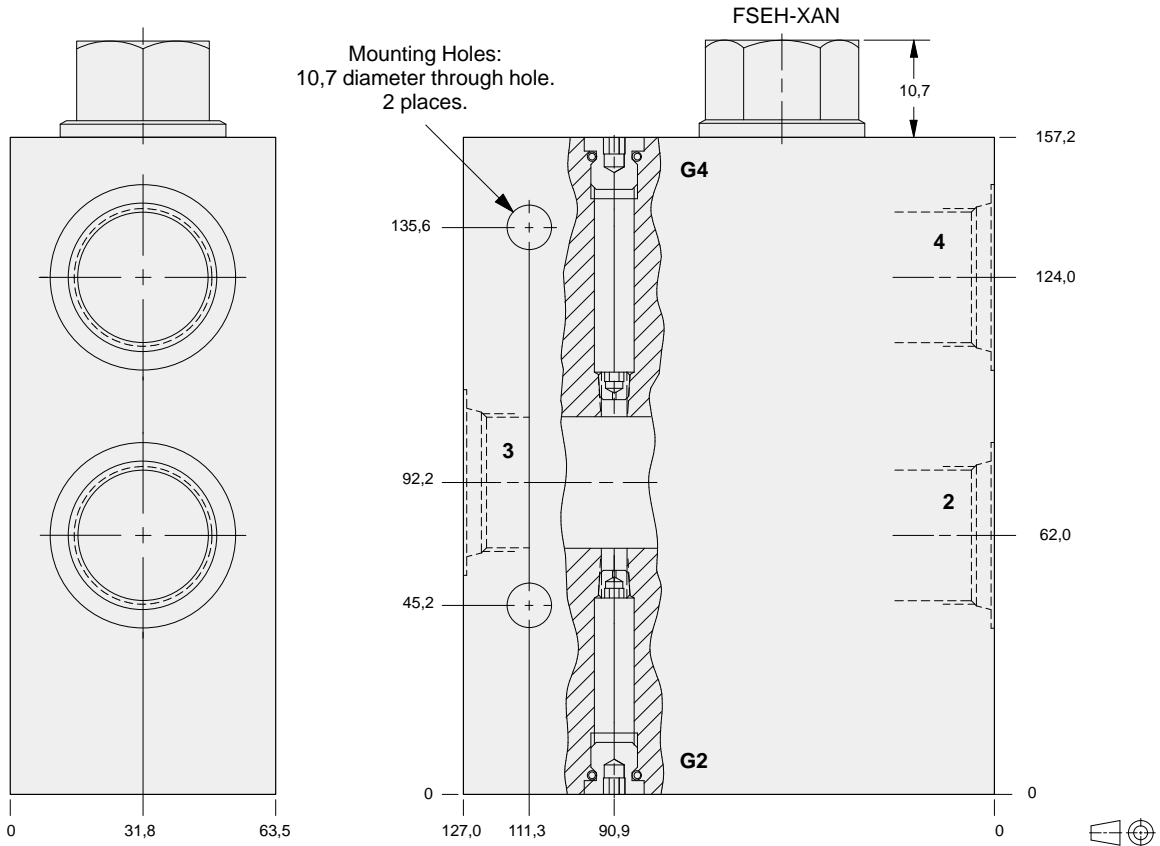
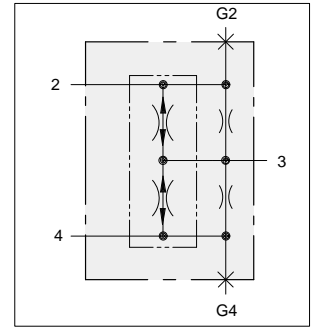
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
Q	8,7	24,0
U	23,0	61,0
W	35,0	96,0

Other slip ranges are available, and are detailed on SUN drawing #280-038. Slip at 25 bar additive to basic capacity.

Port Options

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.75 NPTF	D		D/S	
1.00 NPTF	E		E/S	
SAE-12	L		L/S	
SAE-16	M		M/S	
.75 BSPP	W		W/S	
1.00 BSPP	X		X/S	



Removable orifice accessible through ports G2 and G4.

OPTIONS

YGEB - XAN - * *

CARTRIDGE

FSEH Pg 7.15
For Viton Seals Change
XAN to XAV.

Customer Specified Setting
Stamped on Hex

ORIFICE

See Chart
above

PORTS

See Chart
above



FLOW DIVIDER/COMBINER TRACTIVE DRIVE ASSEMBLY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.
- Replaceable slip orifices.

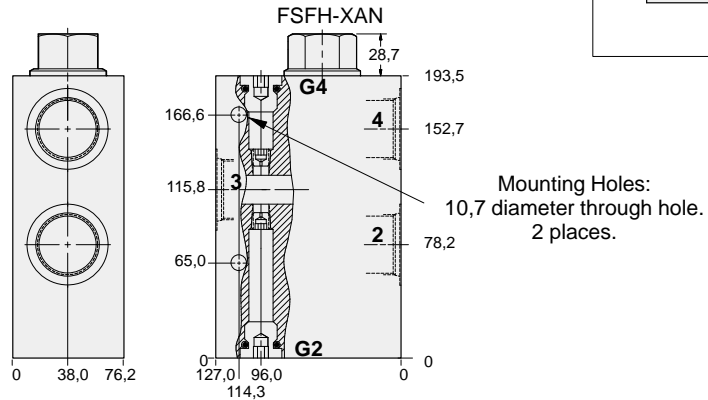
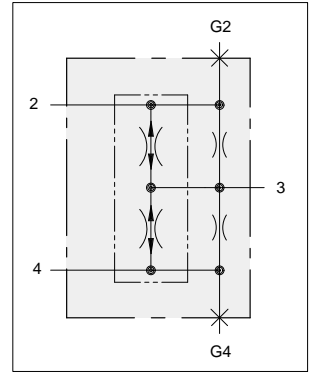
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
T	17,0	45,0
X	50,0	140,0
Y	90,0	245,0

Other slip ranges are available, and are detailed on SUN drawing #280-040. Slip at 25 bar is additive to basic capacity.

Port Options

Ports 2, 3 & 4	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
1.00 NPTF	E		E/S	
1.25 NPTF	F		F/S	
SAE-16	M		M/S	
SAE-20	N		N/S	
1.00 BSPP	X		X/S	
1.25 BSPP	Y		Y/S	



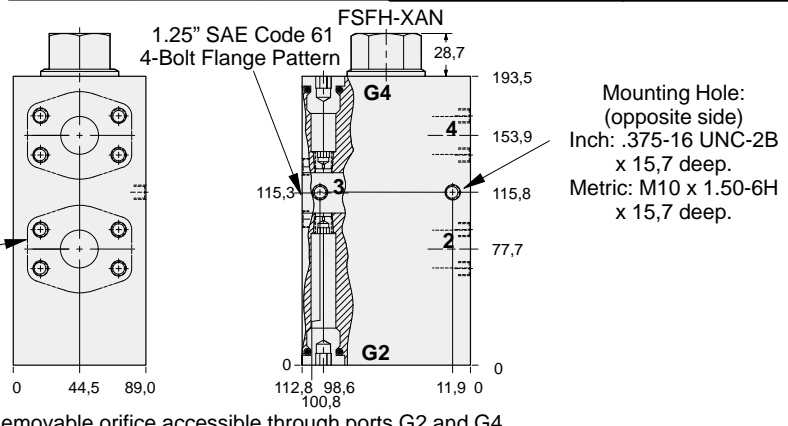
Orifice Options

Orifice Code	Slip at 25 bar	Slip at 210 bar
	Flow (L/min)	Flow (L/min)
A	0	0
T	17,0	45,0
X	50,0	140,0
Y	90,0	245,0

Other slip ranges are available, and are detailed on SUN drawing #280-040. Slip at 25 bar is additive to basic capacity.

Removable orifice accessible through ports G2 and G4.

Mounting Holes:	Port 3 Code 61	Port 2 & 4 Code 61	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
Inch	1.25"	1.00"	Q		Q/S	
Metric	1.25"	1.00"	Q/M		Q/T	



1.00" SAE Code 61
4-Bolt Flange Pattern
2 places.

Removable orifice accessible through ports G2 and G4.

OPTIONS

YGFB - XAN - * *

CARTRIDGE

FSFH Pg.7.15
For Viton Seals Change XAN to XAV.

Customer Specified Setting
Stamped on Hex

ORIFICE

See Chart above

PORTS

See Chart above

Applications

Regenerative circuits allow a cylinder to be advanced more rapidly than it could be with pump flow alone. To achieve this, oil from the rod end of a cylinder is added to the pump flow to the blind end, increasing the rate of advance.

NOTE: Regeneration circuits apply only to single rod cylinders in the extended direction.

SUN Hydraulics offers two types of regenerative valve assemblies, pressure sensitive and continuous regeneration.

Determination of the type of regenerative circuit to be used is dependent upon the system requirements. In making this determination, several areas need careful consideration.

Pressure sensitive regenerative valves will provide regenerative flow to the blind end of the cylinder until the load induced pressure reaches the setting of the counterbalance valve, at which time rod end oil is automatically diverted to tank. The circuit then becomes non-regenerative and full system pressure is applied to the full blind area, allowing it to develop maximum force.

Continuous (or full time) regenerative valves will provide regenerative flow to the blind end of the cylinder during the complete extension cycle.

Hydraulic cylinders are manufactured with an almost unlimited combination of cylinder-to-rod ratios. These ratios can have a dramatic effect on the speed of extension and retraction of the cylinders.

A 2:1 cylinder (i.e. The blind end piston area is twice the rod end area.) will extend and retract at the same speed if regeneration is used. Without regeneration, the extend speed would be 50% of the retract speed.

Cylinders with large rod diameters typically offer small amounts of oil for use in cylinder extension in regenerative circuits. Rod extension speed therefore may not be increased substantially. In contrast, when retracting a large rod diameter cylinder in a regenerative circuit, the speed may be so great, due the small volume of oil required, that the system may become unstable and generate shock. Conversely, cylinders with small rod diameters may produce shock on rod extension, and retract slowly.

When applying pressure sensitive regenerative valve assemblies, several factors must be considered:

- The pressure required to move a cylinder.
- Rod-to-diameter ratio.
- Pressure adjustment methods required to control the setting of the SUN counterbalance valve.

Losses due to high flows and seal friction may prevent a circuit from staying in regeneration. *Be conservative in system design.*

NOTE: In applications where the load tends to extend the cylinder, a vented pilot to open check valve or a vented counterbalance valve may be installed in the cylinder rod port to positively lock the cylinder.

Formulae to calculate flow in regenerative circuits include:

$$\text{Regenerative Flow (flow out the rod end)} = \frac{Db^2 - Dr^2}{Dr^2} \times \text{Pump Flow}$$

$$\text{Combined Flow (pump flow plus regenerative flow)} = \frac{Db^2}{Dr^2} \times \text{Pump Flow}$$

$$\text{Retraction Flow (flow out of the blind end during retraction)} = \frac{Db^2}{Db^2 - Dr^2} \times \text{Pump Flow}$$

Db = Bore Diameter

Dr = Rod Diameter

Design Concepts and Features

SUN's pressure sensitive regenerative valve assembly incorporates a pressure adjustable counterbalance valve that provides a smooth transition when the work is engaged and pressure in the blind end rises to approximately 25% of the set point of the counterbalance valve, at which time the regenerative flow decreases smoothly until rod end flow is fully diverted to tank. Full pump pressure is then applied to the blind end area developing maximum force.

SUN's full time regenerative valve assembly utilizes a standard check valve in place of the counterbalance valve. This allows flow from the rod end to be supplied to the blind end continuously during the complete extension cycle.

SUN's regenerative valve assemblies are available in various flow rates and packaged as inline, ISO sandwich assemblies, and subplate versions.



REGENERATION ASSEMBLY PRESSURE SENSITIVE

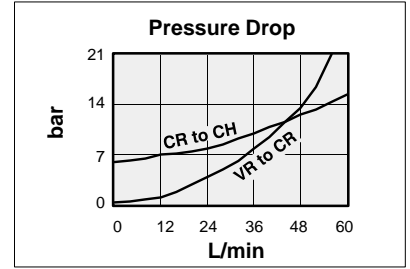
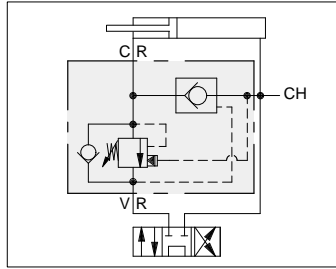


Refer to page 13.42 for further technical information.

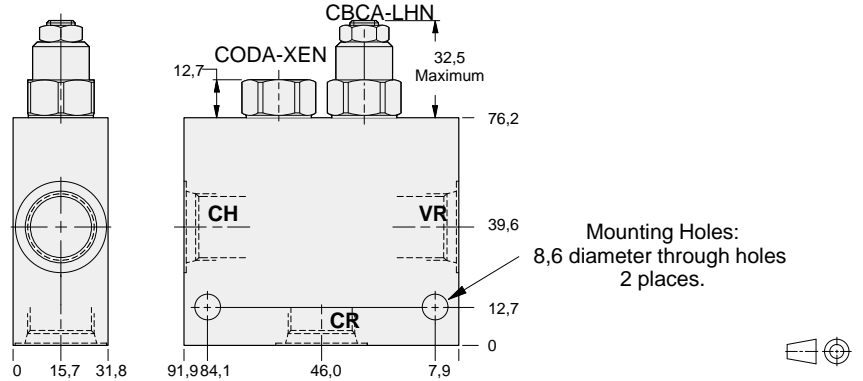
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YDCC: 60 L/min maximum regenerative flow. Regeneration diminishes progressively above setting of CBCA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.50 NPTF	C		C/S	
SAE-10	K		K/S	
.50 BSPP	V		V/S	

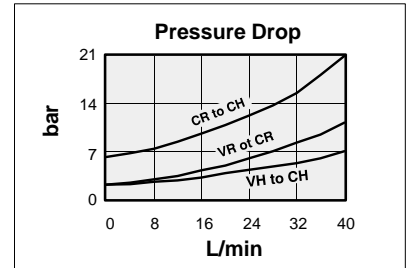
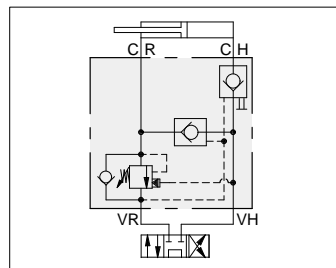


NOTE: Refer to page 13.42 if load causes cylinder to extend.

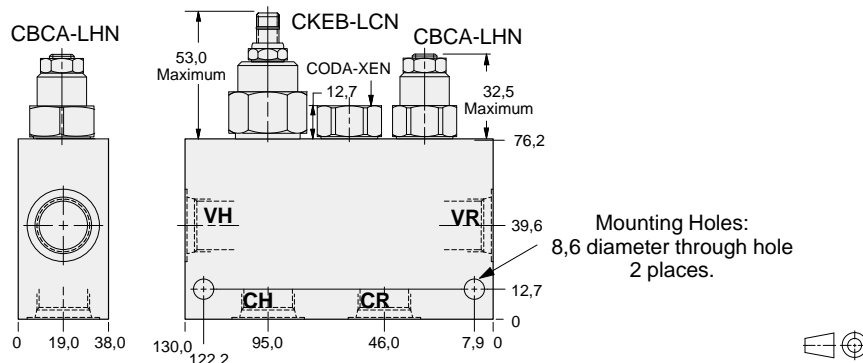


YDCD: 40 L/min maximum regenerative flow, with load holding check valve. Regeneration diminishes progressively above setting of CBCA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.50 NPTF	C		C/S	
SAE-10	K		K/S	
.50 BSPP	V		V/S	



NOTE: Refer to page 13.42 if load causes cylinder to extend.



OPTIONS		YDC* - LHN - A*		PORTS	
C	Less CKEB Load Holding Check	For Viton Seals Change LHN to LHV.		See Chart above	
D	Includes CKEB Load Holding Check See Pg 4.16	For Viton Seals Change LHN to LHV.	Customer Specified Setting Stamped on Hex		



REGENERATION ASSEMBLY PRESSURE SENSITIVE



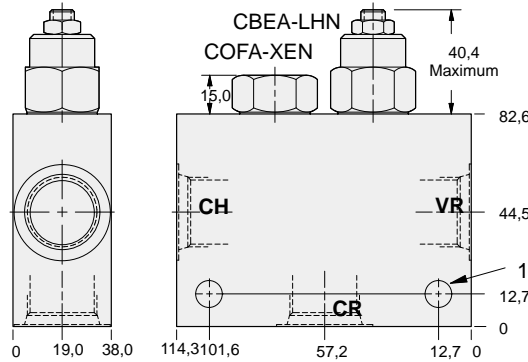
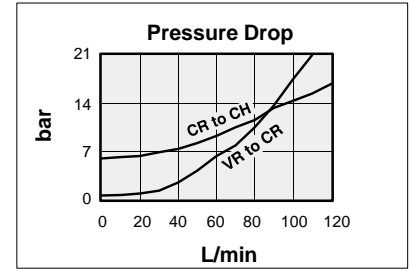
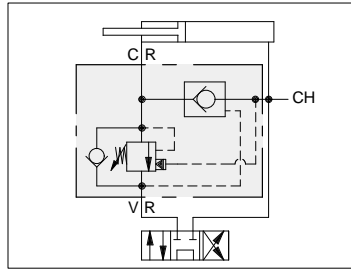
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YDEC: 120 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBEA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.75 NPTF	D		D/S	
SAE-12	L		L/S	
.75 BSPP	W		W/S	

NOTE: Refer to page 13.42 if load causes cylinder to extend.

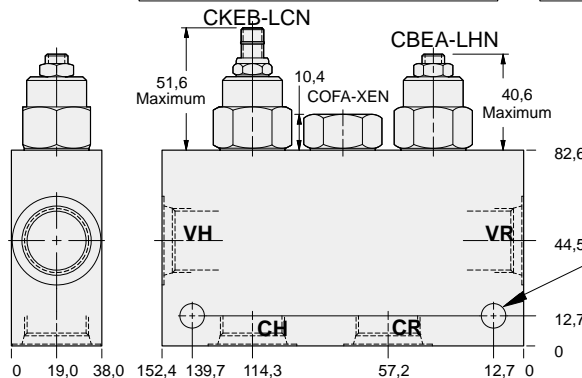
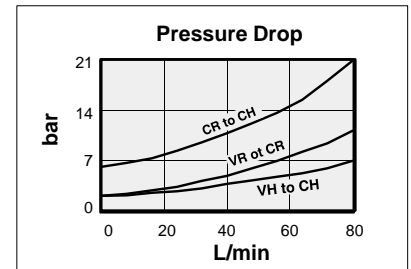
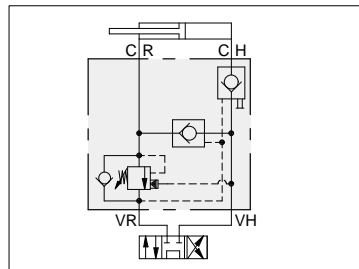


Mounting Holes:
10,7 diameter through hole.
2 places.

YDED: 80 L/min maximum total flow, with load holding check valve. Regeneration diminishes progressively above setting of CBEA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.75 NPTF	D		D/S	
SAE-12	L		L/S	
.75 BSPP	W		W/S	

NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
10,7 diameter through hole.
2 places.

OPTIONS

YDE* - LHN - A*

FUNCTION

- C** Less CKEB
Load Holding Check
- D** Includes CKEB
Load Holding Check
See Pg 4.16

For Viton Seals Change
LHN to LHV.
For Viton Seals Change
LHN to LHV.

PORTS

See Chart
above

Customer Specified Setting
Stamped on Hex



REGENERATION ASSEMBLY PRESSURE SENSITIVE

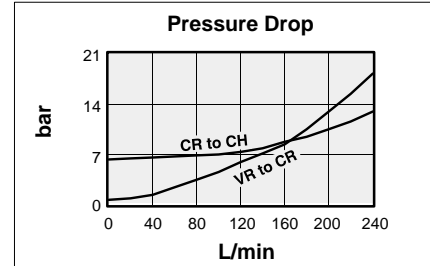
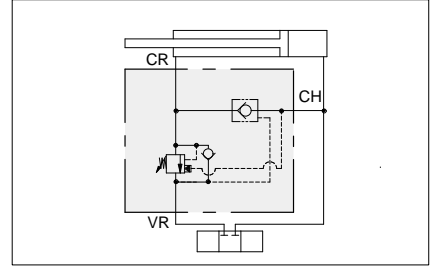


Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

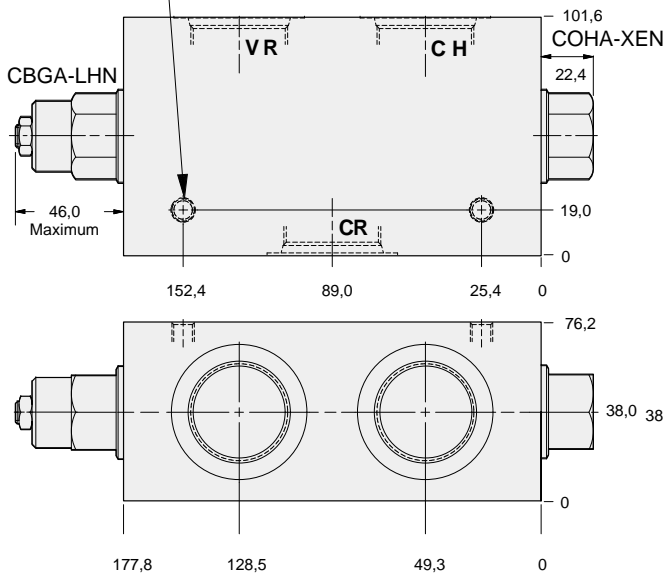
YDGC: 240 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBGA .

Mounting Hole Dimensions	Ports CR, CH & VR	ALUMINIUM		SG IRON	
		Port Code	List Price	Port Code	List Price
Inch	.75 NPTF	D		D/S	
Inch	1.00 NPTF	E		E/S	
Inch	1.25 NPTF	F		F/S	
Inch	SAE-12	L		L/S	
Inch	SAE-16	M		M/S	
Inch	SAE-20	N		N/S	
Metric	.75 BSPP	W		W/S	
Metric	1.00 BSPP	X		X/S	
Metric	1.25 BSPP	Y		Y/S	
Inch	1.00" SAE Code 61	P		P/S	
Metric		P/M		P/T	

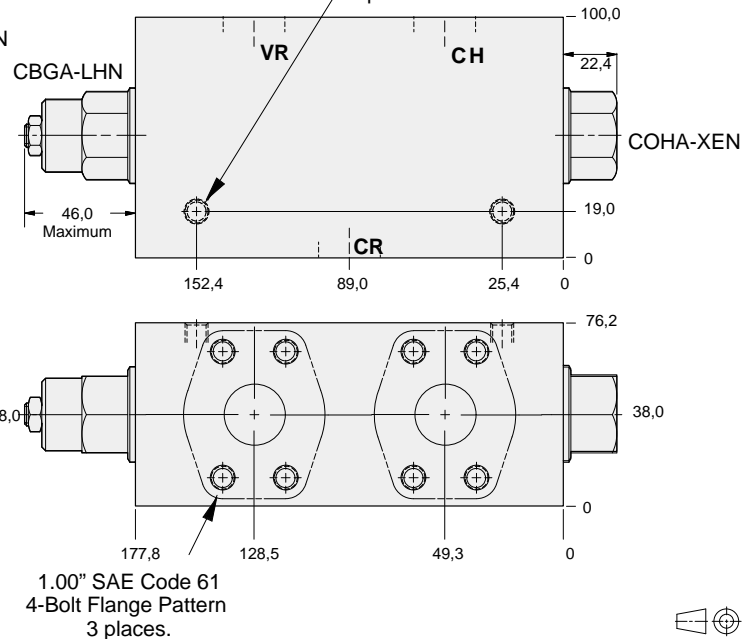


NOTE: Refer to page 13.42 if load causes cylinder to extend.

Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



OPTIONS	YDGC - LHN - A *			PORTS See Chart above
	For Viton Seals Change LHN to LHV.			
	Customer Specified Setting Stamped on Hex			



REGENERATION ASSEMBLY PRESSURE SENSITIVE

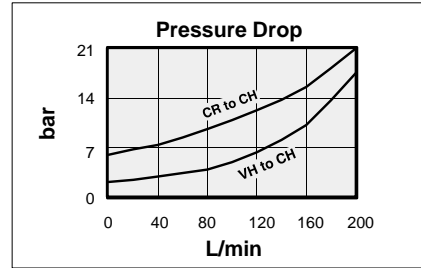
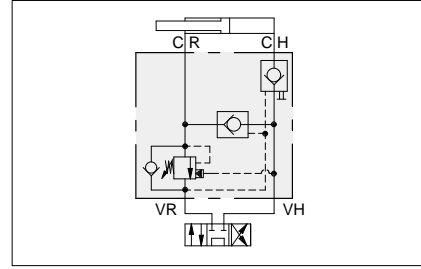
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and Ductile Iron rated to 350 bar.

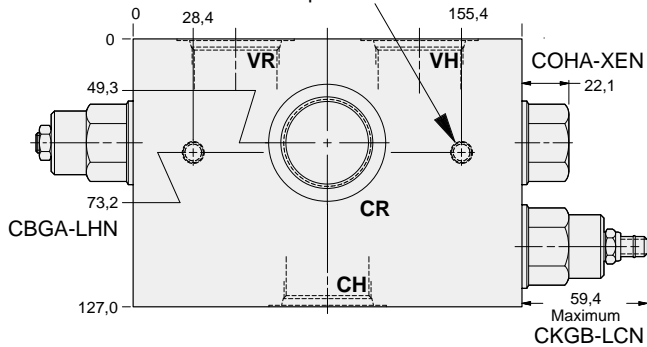
YDGD: 200 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBGA.

Mounting Hole Dimensions	Ports CH, CR & VR	ALUMINIUM		SG IRON	
		Port Code	List Price	Port Code	List Price
Inch	.75 NPTF	D		D/S	
Inch	1.00 NPTF	E		E/S	
Inch	1.25 NPTF	F		F/S	
Inch	SAE-12	L		L/S	
Inch	SAE-16	M		M/S	
Inch	SAE-20	N		N/S	
Metric	.75 BSPP	W		W/S	
Metric	1.00 BSPP	X		X/S	
Metric	1.25 BSPP	Y		Y/S	
Inch	1.25" SAE Code 61	Q		Q/S	
Metric		Q/M		Q/T	

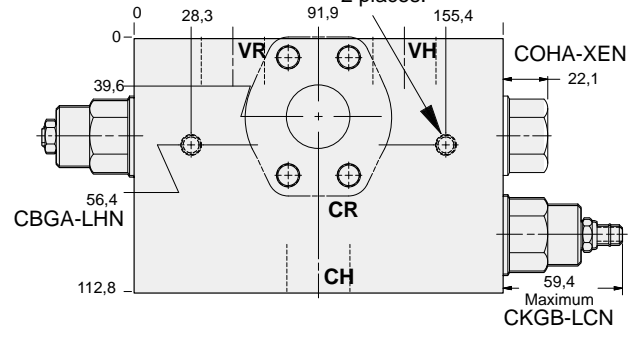
NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.



1.25" SAE Code 61
4-Bolt Flange Pattern
2 places.



OPTIONS

YDGD - LHN - A*

For Viton Seals Change
LHN to LHV.
Customer Specified Setting
Stamped on Hex

PORTS
See Chart
above



REGENERATION ASSEMBLY PRESSURE SENSITIVE

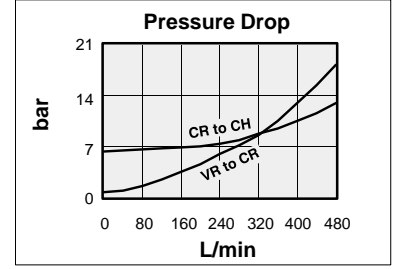
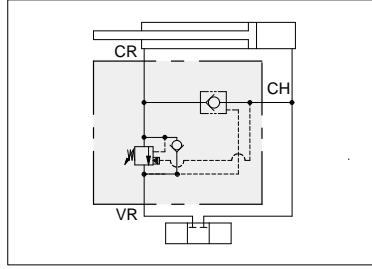


Refer to page 13.42 for further technical information.

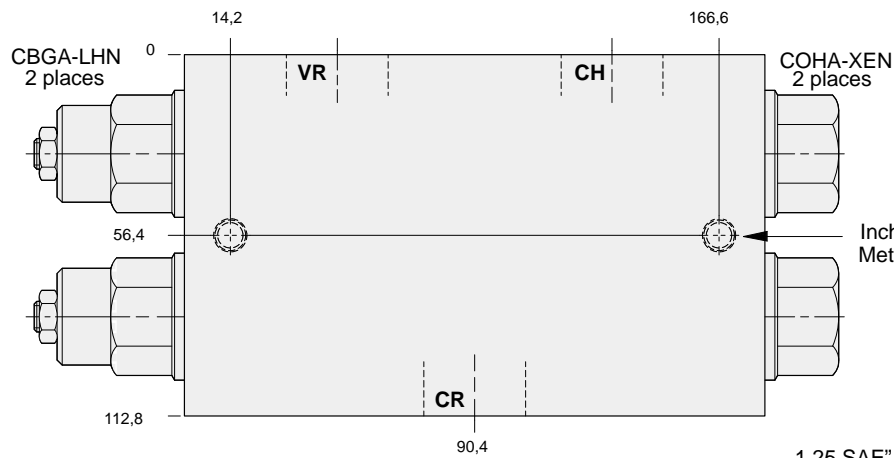
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YDHC: 480 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBGA.

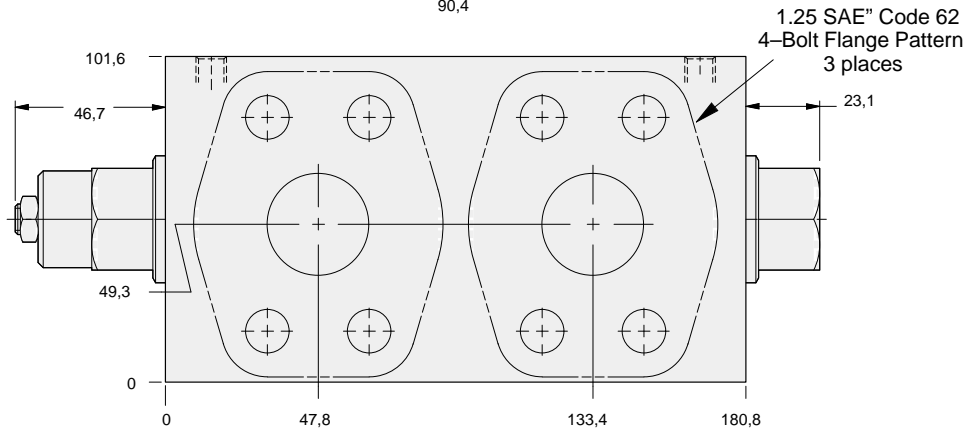
Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
Inch	5		5/S	
Metric	5/M		5/T	



NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 19,0 deep
Metric: M10 X 1.50-6H x 19,0 deep
2 places.



OPTIONS	YDHC - LHN - A*		
<p>For Viton Seals Change LHN to LHV.</p> <p>Customer Specified Setting Stamped on Hex</p>			<p>PORTS See Chart above</p>



REGENERATION ASSEMBLY PRESSURE SENSITIVE



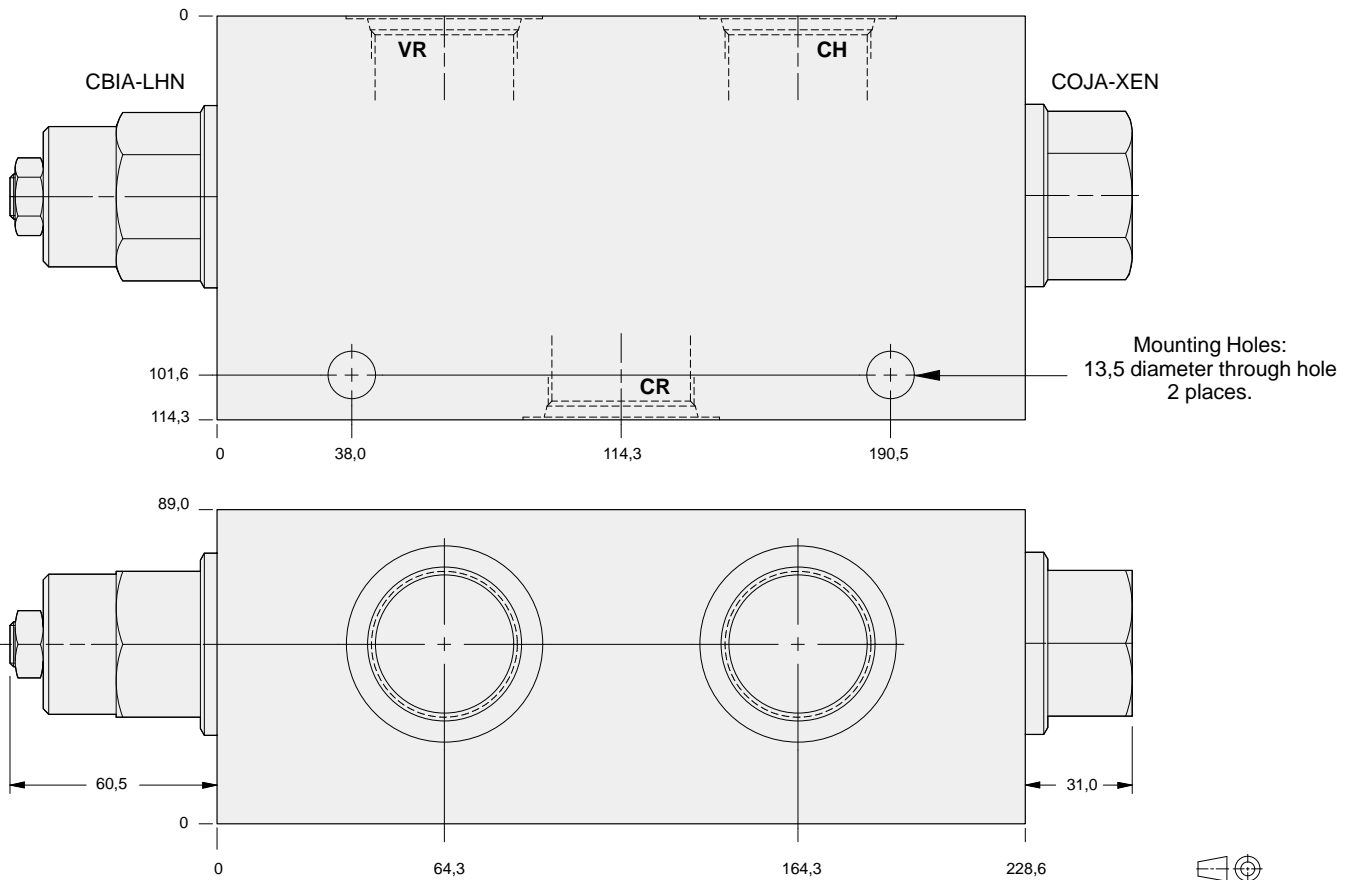
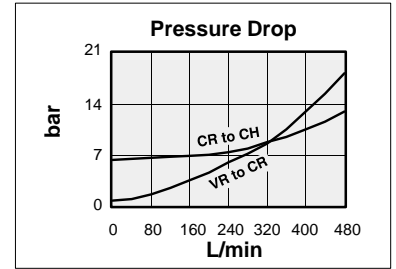
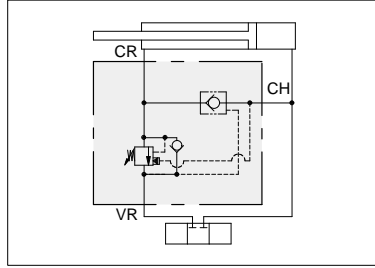
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YDJC: 480 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBIA.

Ports CH CR & VR	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
SAE-20	N		N/S	

NOTE: Refer to page 13.42 if load causes cylinder to extend.



13

OPTIONS	YDJC - LHN - A*			
<p>For Viton Seals Change LHN to LHV.</p> <p>Customer Specified Setting Stamped on Hex</p>				<p>PORTS</p> <p>See Chart above</p>



REGENERATION ASSEMBLY PRESSURE SENSITIVE



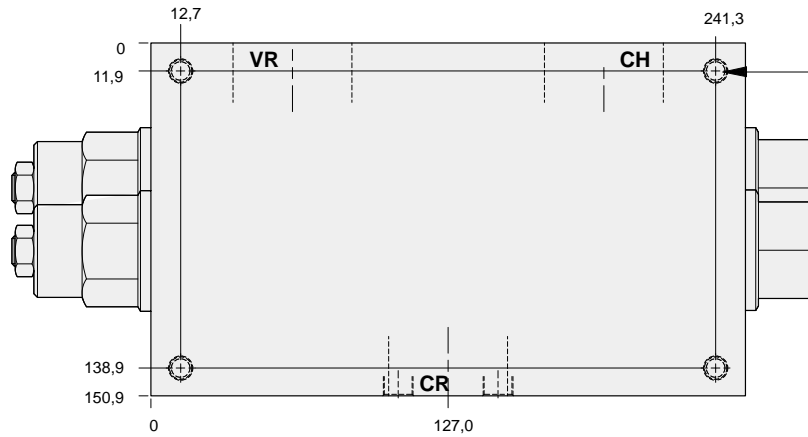
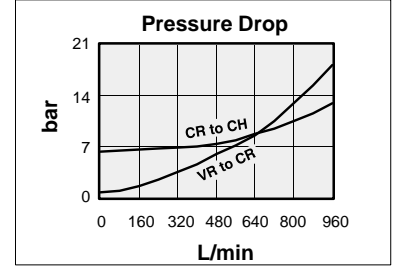
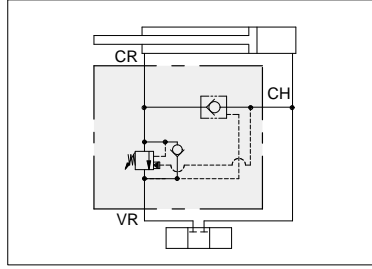
Refer to page 13.42 for further technical information.

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YDJC: 960 L/min maximum regeneration flow. Regeneration diminishes progressively above setting of CBIA.

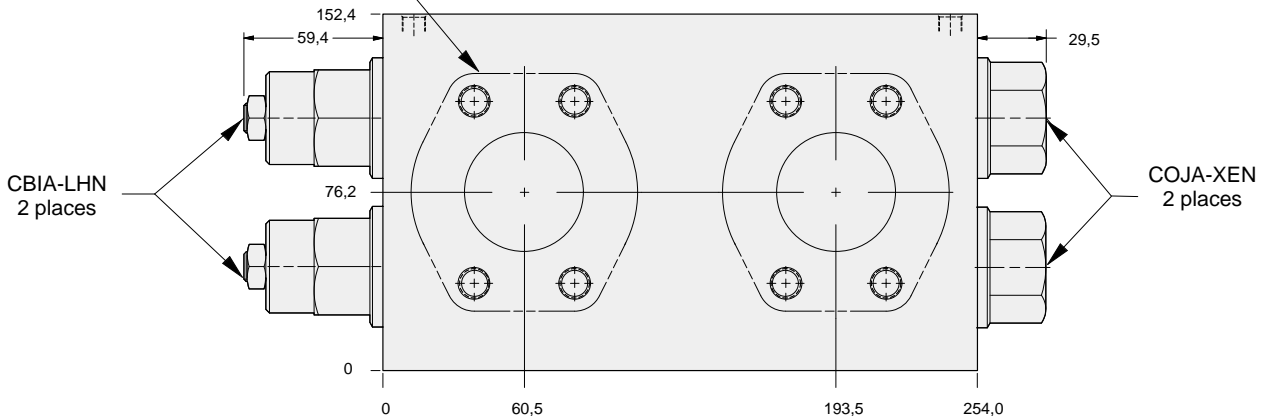
Mounting Hole Dimensions	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
Inch	S		S/S	
Metric	S/M		S/T	

NOTE: Refer to page 13.42 if load causes cylinder to extend.



Mounting Holes:
(opposite side)
Inch: .375-16 UNC-2B x 15,7 deep
Metric: M10 X 1.50-6H x 15,7 deep
4 places.

2.00" SAE Code 61
4-Bolt Flange Pattern
3 places.



Refer to page 13.42 if load causes cylinder to extend.

OPTIONS

YDJC - LHN - A*

For Viton Seals Change
LHN to LHV.
Customer Specified Setting
Stamped on Hex

PORTS
See Chart
above

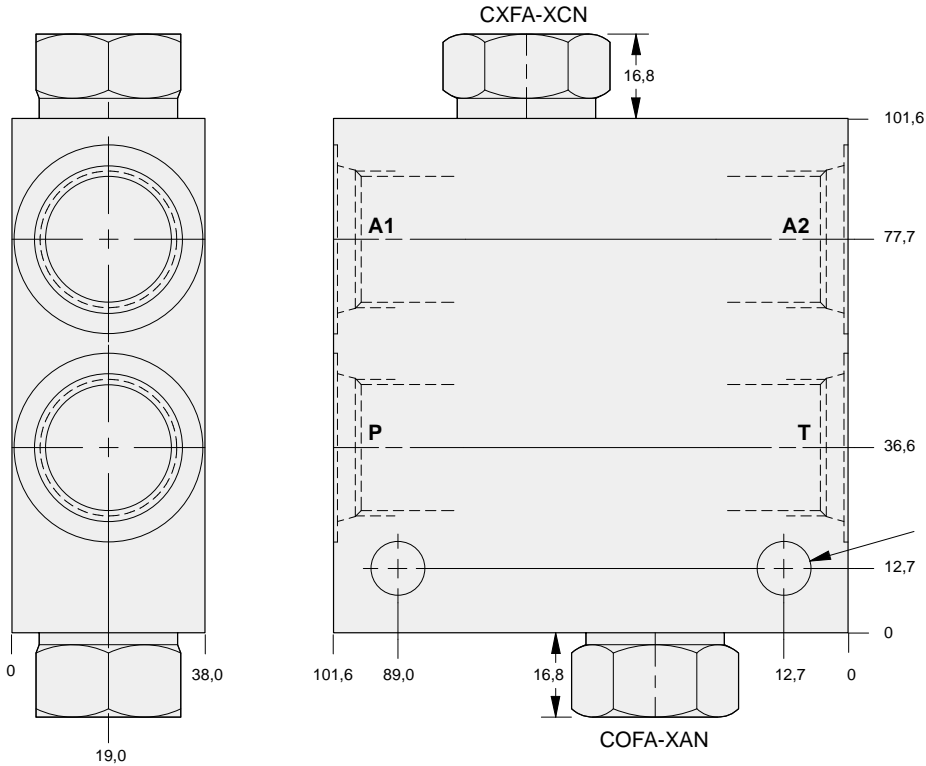
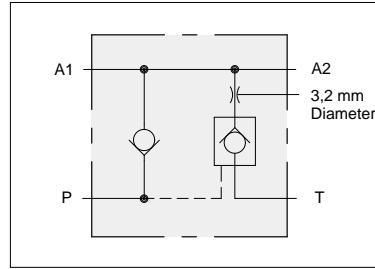


ACCUMULATOR DUMP ASSEMBLY



- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Ports P, T A1 & A2	ALUMINIUM		SG IRON	
	Port Code	List Price	Port Code	List Price
.25 NPTF	A		A/S	
.375 NPTF	B		B/S	
.50 NPTF	C		C/S	
.75 NPTF	D		D/S	
SAE-6	I		I/S	
SAE-8	J		J/S	
SAE-10	K		K/S	
SAE-12	L		L/S	
.25 BSPP	T		T/S	
.375 BSPP	U		U/S	
.50 BSPP	V		V/S	
.75 BSPP	W		W/S	



OPTIONS

YCFE - XAN - A*

For Viton Seals Change
XAN to XAV.

PORTS
See Chart
above

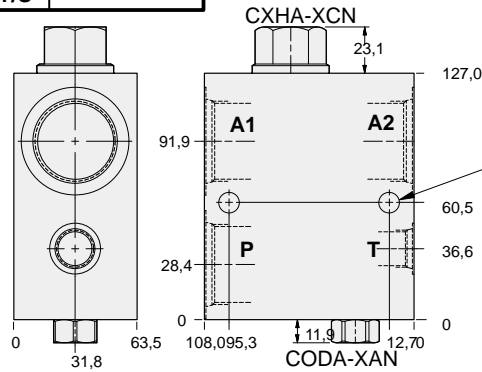
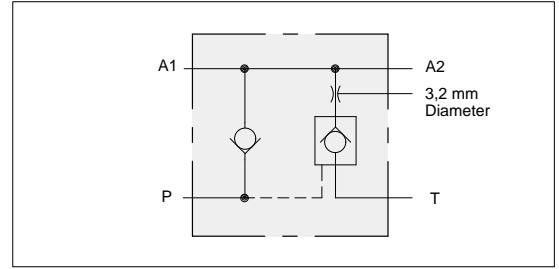


ACCUMULATOR DUMP ASSEMBLY



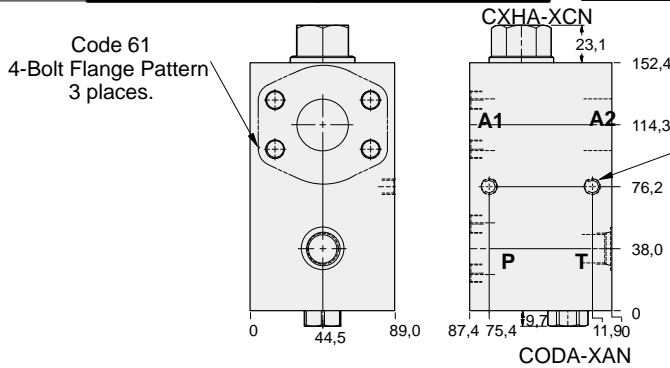
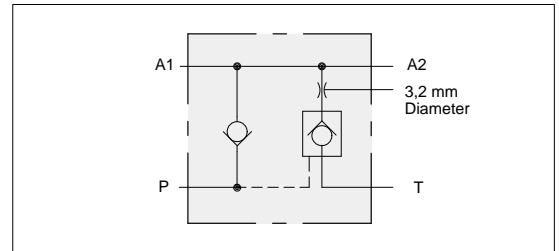
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

Ports P, A1 & A2	Port T	ALUMINIUM		SG IRON	
		Port Code	List Price	Port Code	List Price
.75 NPTF	.50 NPTF	D		D/S	
1.00 NPTF	.50 NPTF	E		E/S	
1.25 NPTF	.50 NPTF	F		F/S	
SAE-12	SAE-8	L		L/S	
SAE-16	SAE-8	M		M/S	
SAE-20	SAE-8	N		N/S	
.75 BSPP	.50 BSPP	W		W/S	
1.00 BSPP	.50 BSPP	X		X/S	
1.25 BSPP	.50 BSPP	Y		Y/S	



Mounting Holes:
10,7 diameter through hole.
2 places.

Mounting Hole Dimensions	Ports A1, A2, P Code 61	Port T	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
Inch	1.00"	SAE-8	P		P/S	
Metric	1.00"	.50 BSPP	P/M		P/T	
Inch	1.25"	SAE-8	Q		Q/S	
Metric	1.25"	.50 BSPP	Q/M		Q/T	



Mounting Holes:
(opposite sides)
Inch: .375-16 UNC-2B
x 15,7 deep
Metric: M10 X 1.50-6H
x 15,7 deep
2 places.

OPTIONS	YCHE - XAN - A*
<p>For Viton Seals Change XAN to XAV.</p>	<p>PORTS See Chart above</p>



PUMP CIRCUIT CONTROL ASSEMBLY SUITABLE FOR RESERVIOR MOUNTING FOR USE WITH MULTIPLE PUMP CIRCUITS

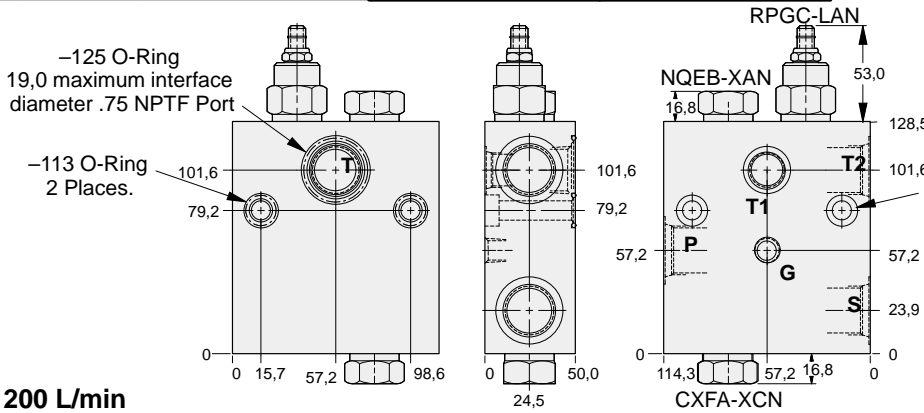


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YFRC: 95 L/min

Mounting Hole Dimensions	Port P, S, & T2	Port T1	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	.75 NPTF	.50 NPTF	.25 NPTF	D		D/S	
Inch	SAE-12	SAE-8	.25 NPTF	L		L/S	
Metric	.75 BSPP	.50 BSPP	.25 BSPP	W		W/S	

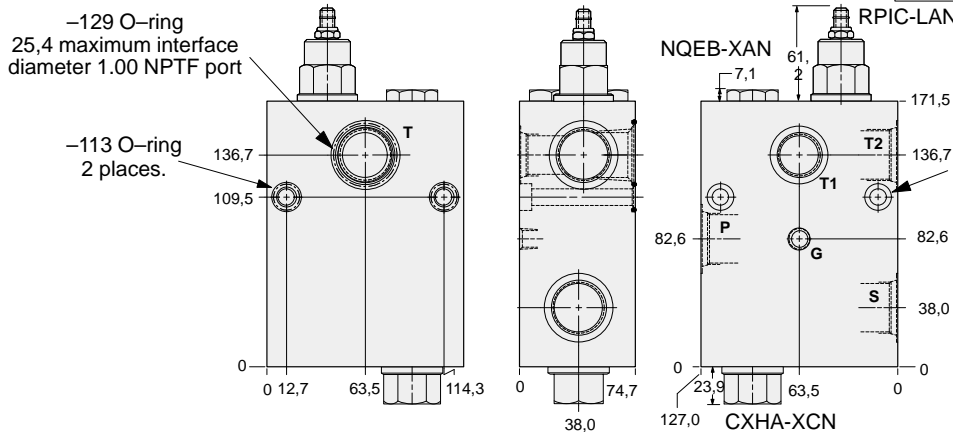
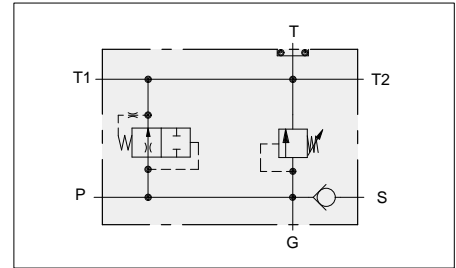
YFRC and YFRE valves are suitable for multiple pump circuits when connected directly to each pump in the system. They provide air-bleed and relief protection for each pump and the check valve position isolates the other pumps from the valve assembly.



Mounting Holes:
Inch: 10,4 diameter through hole, counterbore 15,0 diameter x 7,9 deep.
Metric: 10,7 diameter through hole, counterbore 17,3 diameter x 7,9 deep 2 places.

YFRE: 200 L/min

Mounting Hole Dimensions	Port P, S, & T2	Port T1	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	1.00 NPTF	.75 NPTF	.25 NPTF	E		E/S	
Inch	SAE-16	SAE-12	.25 NPTF	M		M/S	
Metric	1.00 BSPP	.75 BSPP	.25 BSPP	X		X/S	



Mounting Holes:
Inch: 10,4 diameter through hole, counterbore 15,0 diameter x 7,9 deep.
Metric: 10,7 diameter through hole, counterbore 17,3 diameter x 7,9 deep 2 places.

OPTIONS

YFR* - LAN - A*

FLOW CAPABILITY

C 95 L/min
RPGC Cartridge

E 200 L/min
RPIC Cartridge

Customer Specified Setting
Stamped on Hex

For Viton Seals Change
LAN to LAV.

For Viton Seals Change
LAN to LAV.

PORTS

See Chart
above



PUMP CIRCUIT CONTROL ASSEMBLY SUITABLE FOR RESERVIOR MOUNTING FOR USE WITH SINGLE PUMP CIRCUITS

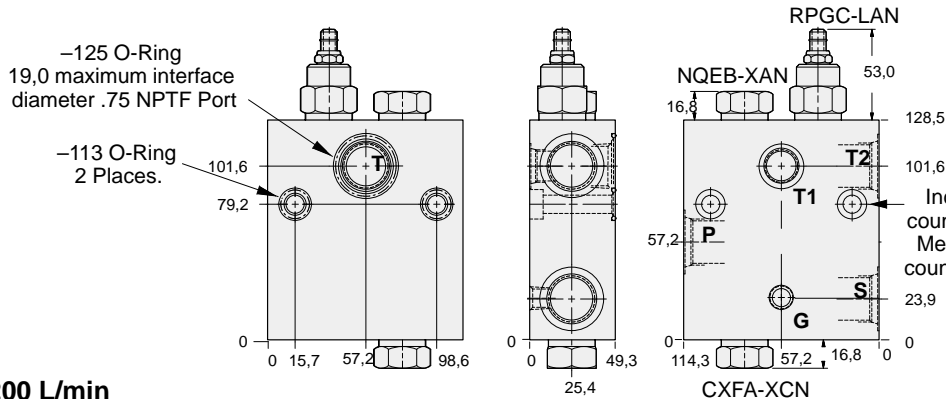


- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YFRD: 95 L/min

Mounting Hole Dimensions	Port P, S, & T2	Port T1	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	.75 NPTF	.50 NPTF	.25 NPTF	D		D/S	
Inch	SAE-12	SAE-8	.25 NPTF	L		L/S	
Metric	.75 BSPP	.50 BSPP	.25 BSPP	W		W/S	

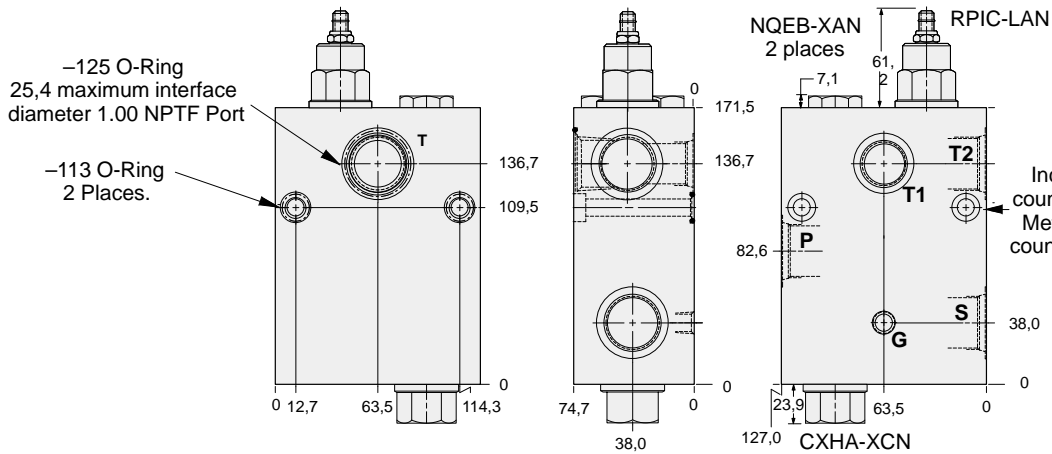
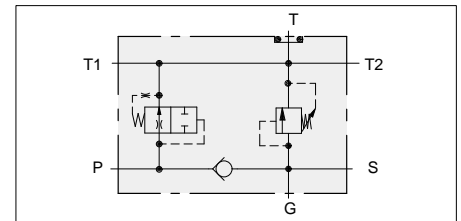
The SUN pump circuit manifold contains an air-bleed and start up valve, main system relief, and a check valve for use with any basic power unit. O-ring seals for one of the tank ports and bolt mounting holes are provided for direct reservoir mounting. All T ports are also threaded.



Mounting Holes:
Inch: 10,4 diameter through hole, counterbore 15,0 diameter x 7,9 deep.
Metric: 10,7 diameter through hole, counterbore 17,3 diameter x 7,9 deep 2 places.

YFRF: 200 L/min

Mounting Hole Dimensions	Port P, S, & T2	Port T1	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	1.00 NPTF	.75 NPTF	.25 NPTF	E		E/S	
Inch	SAE-16	SAE-12	.25 NPTF	M		M/S	
Metric	1.00 BSPP	.75 BSPP	.25 BSPP	X		X/S	



Mounting Holes:
Inch: 10,4 diameter through hole, counterbore 15,0 diameter x 7,9 deep.
Metric: 10,7 diameter through hole, counterbore 17,3 diameter x 7,9 deep 2 places.

OPTIONS

YFR* - LAN A*

FLOW CAPABILITY

D 95 L/min
RPGC Cartridge

F 200 L/min
RPIC Cartridge

Customer Specified Setting
Stamped on Hex

For Viton Seals Change
LAN to LAV.

For Viton Seals Change
LAN to LAV.

PORTS

See Chart
above



PRESSURE-COMPENSATED PRIORITY FLOW CONTROL ASSEMBLY WITH RELIEF ON CONTROLLED FLOW PORT

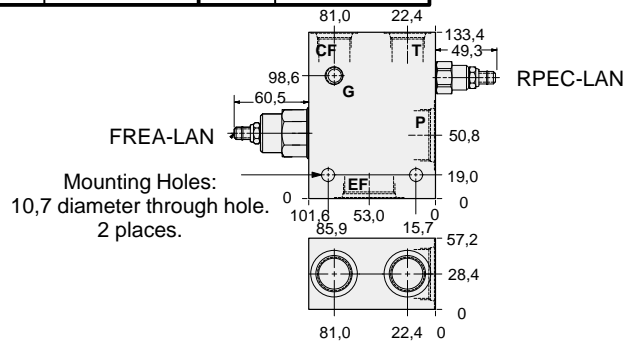
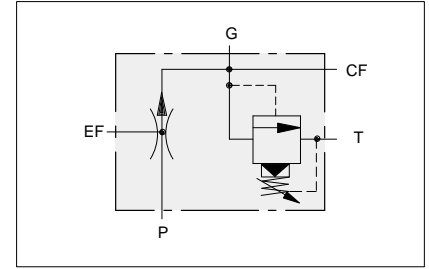


Customer Must Specify Flow ⊗

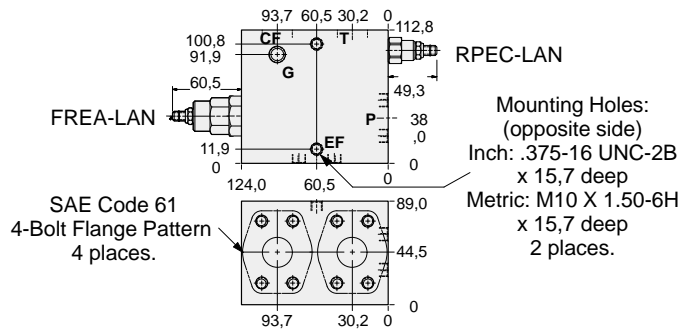
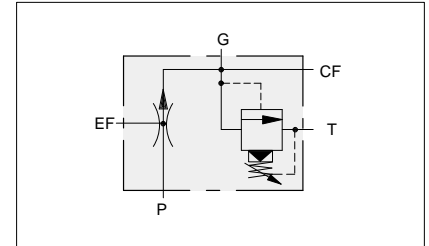
- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YRFF: Up to 95 L/min Priority Flow.

Ports EF & P	Ports CF & T	Gauge Port	ALUMINIUM		SG IRON	
			Port Code	List Price	Port Code	List Price
.75 NPTF	.75 NPTF	.25 NPTF	D		D/S	
1.00 NPTF	.75 NPTF	.25 NPTF	E		E/S	
1.25 NPTF	.75 NPTF	.25 NPTF	F		F/S	
SAE-12	SAE-12	.25 NPTF	L		L/S	
SAE-16	SAE-12	.25 NPTF	M		M/S	
SAE-20	SAE-12	.25 NPTF	N		N/S	
.75 BSPP	.75 BSPP	.25 BSPP	W		W/S	
1.00 BSPP	.75 BSPP	.25 BSPP	X		X/S	
1.25 BSPP	.75 BSPP	.25 BSPP	Y		Y/S	



Mounting Hole Dimensions	Ports EF & P Code 61	Ports CF & T Code 61	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	1.00"	1.00"	.25 NPTF	P		P/S	
Metric	1.00"	1.00"	.25 BSPP	P/M		P/T	
Inch	1.25"	1.00"	.25 NPTF	Q		Q/S	
Metric	1.25"	1.00"	.25 BSPP	Q/M		Q/T	



13

OPTIONS		YRFF - LAN - * *	
FLOW ADJUSTMENT		PORTS	
L Tuning Adjust		For Viton Seals Change LAN to LAV.	See Chart above
X Non-adjustable		Customer Specified Setting Stamped on Hex	⊗ Customer must specify flow. 0,8 to 95 L/min



PRESSURE-COMPENSATED PRIORITY FLOW CONTROL ASSEMBLY WITH RELIEF ON CONTROLLED FLOW PORT

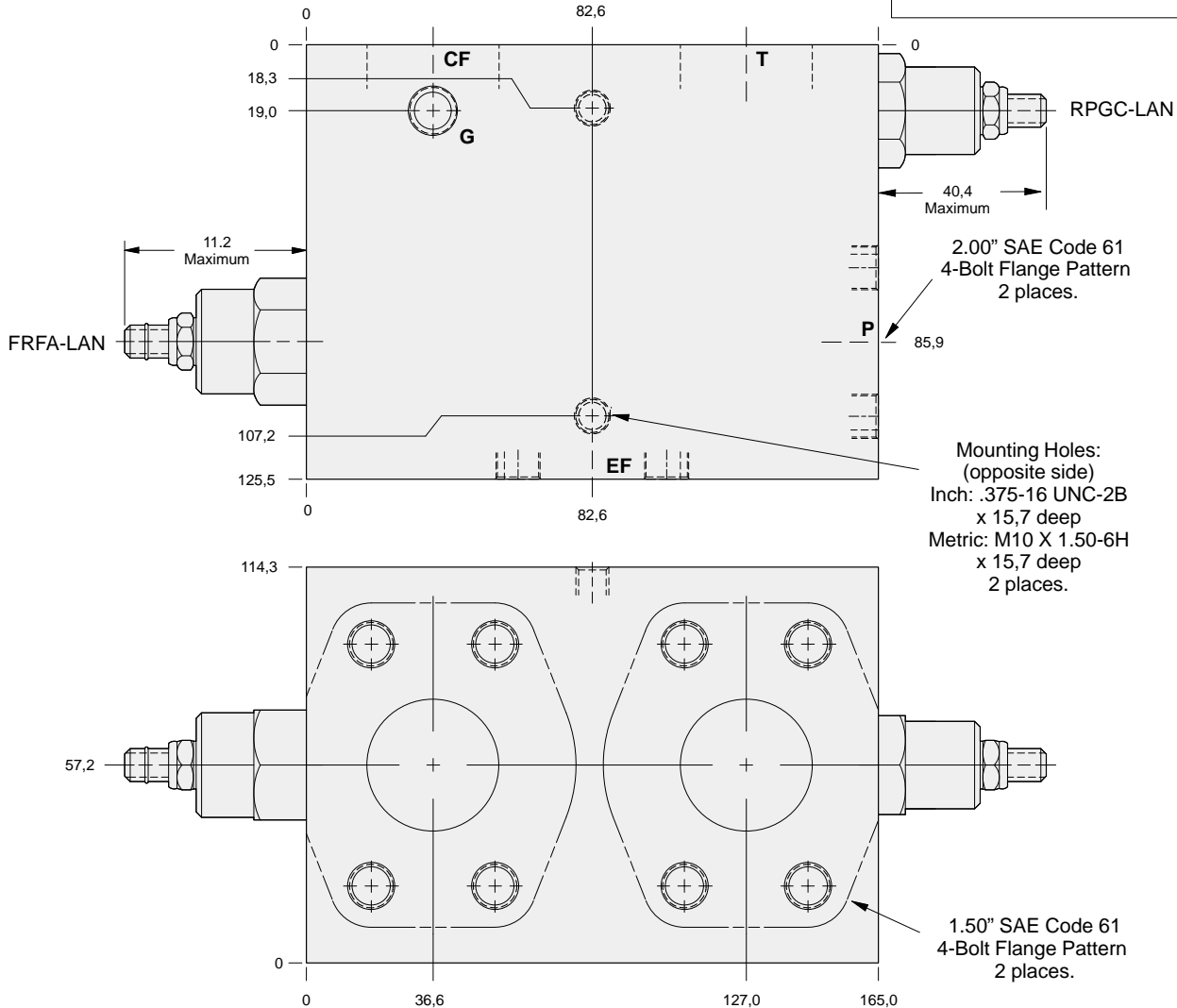
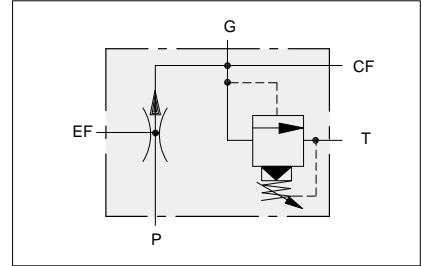


Customer Must Specify Flow ⊗

- Aluminium rated to 210 bar and SG Iron rated to 350 bar.

YRHF: Up to 200 L/min Priority Flow.

Mounting Hole Dimensions	Ports EF & P Code 61	Ports CF & T Code 61	Gauge Port	ALUMINIUM		SG IRON	
				Port Code	List Price	Port Code	List Price
Inch	2.00"	1.50"	.25 NPTF	S		S/S	
Metric	2.00"	1.50"	.25 BSPP	S/M		S/T	



OPTIONS

YRHF - LAN - * *

FLOW ADJUSTMENT

- L** Tuning Adjust
- X** Non-adjustable

For Viton Seals Change LAN to LAV.

Customer Specified Setting Stamped on Hex

PORTS

See Chart above

⊗ *Customer must specify flow. 0,8 to 200 L/min*



Contents



Warranty Information, Performance Assurance, and Application Limitation	Inside Cover
A Guide for using SUN Catalogs	iii
The SUN Code System for Ordering	viii
<i>A step-by-step explanation for using SUN's Code System to price and order cartridges, bodies and valve assembly packages. A detailed list of SUN's Model Codes for cartridges is on page xi.</i>	
SUN Product Overview	xii
SUN Cartridge	xii
Standard or Custom Circuit Design	xiii
Line Mount Bodies	xiii
Sandwich and Subplate Mount Bodies	xiii
Valve Assemblies	xiii
Direct Motor Mount Bodies	xiii
Custom Valvepaks	xiii
Technical Information about SUN Products	xiv
SUN Cartridges	xiv
Filtration	xiv
Pressure and Flow Ratings – Performance Data	xiv
Line and Sandwich Mount Bodies, Material and Port Specification	xv
Sandwich and Subplate Interfaces	xv
Testing	xv
Cartridge Service Instructions	xv
Service Kits	xv
Trouble Shooting	xv
Cartridge Control Options	xvi
General Purpose Controls	xvi
Special Purpose Controls	xvi
Counterbalance Valves	xvi

Section 12: Sandwich Bodies 12.007

Sandwich Body Technical Tips	12.002	ISO 05 Sandwich Bodies	12.093
ISO/CETOP Interface Patterns	12.002	Relief Valves	12.093
Mounting of ISO 03 Sandwiches	12.002	Sequence Valves	12.105
Rotation Example of ISO 03 Sandwiches	12.002	Reducing Valves	12.107
Assembly of ISO 03 Sandwiches	12.003	Reducing/Relieving Valves	12.114
Mounting of ISO 05 Sandwich Bodies	12.003	Counterbalance Valves	12.122
Mounting of ISO 05 X, Y Sandwich Bodies	12.004	Pilot Operated Check Valves	12.129
<i>European and U.S. Seal Kits</i>		Flow Control Valves	12.134
Studkits for ISO 03 and ISO 05		Check Valves	12.143
Sandwich Bodies	12.004	Circuit Savers	12.150
ISO 03 Studkits (Inch and Metric Standards)	12.004	Subplates	12.161
ISO 05 Studkits (Inch and Metric Standards)	12.005	Bar Manifolds	12.168
Studrod Length Determination Chart	12.005	ISO 05 x, y Sandwich Bodies	12.173
Sandwich Body Locator	12.007	Relief Valves	12.173
<i>This handy Locator lists all cataloged and some non-cataloged Sandwich Bodies and Subplates. Included are ISO/CETOP Interface Patterns, Function Descriptions and Function Symbols, with Cavities, Typical Cartridges used with each specific body and a stacking height for quick ordering. Also listed beneath each cartridge/body is a page number for location of more detailed information on each body.</i>		Sequence Valves	12.182
Sandwich Body Data Pages	12.025	Reducing Valves	12.184
ISO 03 Sandwich Bodies	12.025	Reducing/Relieving Valves	12.189
Relief Valves	12.025	Counterbalance Valves	12.196
Sequence Valves	12.035	Pilot Operated Check Valves	12.203
Reducing Valves	12.037	Flow Control Valves	12.208
Reducing/Relieving Valves	12.043	Check Valves	12.219
Counterbalance Valves	12.048	Circuit Savers	12.228
Pilot Operated Check Valves	12.054	Subplates	12.234
Flow Control Valves	12.058	Bar Manifolds	12.235
Check Valves	12.066	Cover Plates	12.241
Circuit Savers	12.073	ISO 07 Sandwich Bodies	12.245
Subplates	12.080	Relief Valves	12.245
Bar Manifolds	12.087	Sequence Valves	12.254
Bar Manifold Mounting Brackets	12.087	Reducing Valves	12.257
Cover Plates	12.090	Reducing/Relieving Valves	12.264
		Counterbalance Valves	12.269
		Pilot Operated Check Valves	12.275
		Flow Control Valves	12.280
		Check Valves	12.288
		Circuit Savers	12.296
		Subplates	12.302

Continued ►



The Sandwich Catalog

SUN offers the broadest and most comprehensive range of sandwich products in the ISO 03 to ISO 08 interface sizes of any manufacturer. All sandwiches are available in a choice of materials; aluminum for 3000 psi operation and ductile iron for 5000 psi operation. Many sandwich products are also available in both standard and high capacity versions.

The SUN Hydraulics Sandwich Catalog contains more than 300 pages of ISO 03, 05, 07, and 08 sandwich bodies, side-ported and rear-ported subplates, and one- to five-station bar manifolds. Sandwiches are available with single cavities, dual cavities, and multiple cavity variants to make unique circuit elements for mounting under standard directional control valves.

Products are cataloged by ISO/CETOP interface pattern and function, with ISO 03 bodies appearing first, followed by ISO 05, ISO 05 with x and y ports (U.S. and European), ISO 07, and ISO 08 bodies. Within each ISO interface pattern, products are cataloged by function.

Because SUN's ISO 03 sandwich bodies are designed for multi-functional use, you will see the same three letter model code appear in different functional areas. To achieve multi-functional usage, SUN ISO 03 sandwiches do not conform to the ISO standard stacking height. See page 12.003 in the Technical Tip Section for a more detailed explanation of ISO 03 sandwiches.

Technical Tips

The Technical Tip section, starting on page 12.003, provides detailed information on SUN sandwich products. The material presented in this section explains how to order and orient SUN sandwiches in a stack, and when and how to order seal plates. There is also information for ordering studkits for ISO 03 and 05 sandwiches.

Sandwich Locator (See Figure 1)

The Sandwich Body Locator on pages 12.007 through 12.024 is the easiest way to locate a specific sandwich product in this catalog. The Locator groups products by function and presents the sandwich model code and stacking height, cavity configuration, and page number for every sandwich, subplate, and bar manifold in this catalog. Most sandwich model codes are preceded by a typical cartridge model code to present a full valve assembly.

On the left side of each locator page is a pictorial description of a sandwich stack. The P, T, A, and B ports (with appropriate symbols) at the bottom of the page are connected with simulated lines to a directional valve (no center configuration shown) at the top of the page. The functional schematic renderings shown between the directional valve and P, T, A, and B ports realistically describe how a specific sandwich will function in a stack.

Once a function is selected, available sandwich bodies are listed across the page under the five different ISO/CETOP interface patterns. Simply note the model code for the sandwich you have selected and turn to the referenced page to see detailed information on that product.

Figure 1 Sandwich Locator

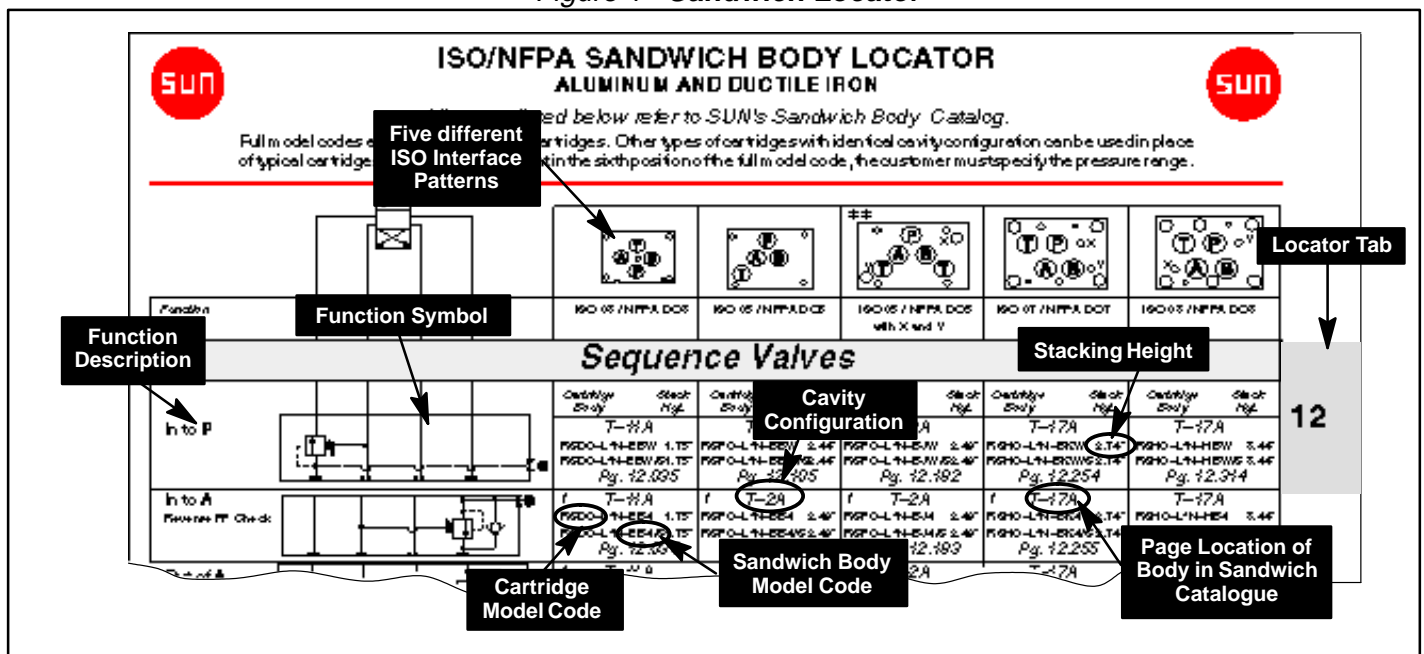




Figure 2 Sandwich Data Page

ISO 08 SANDWICH BODIES
 * Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
 See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Ordering Information Page Location

ISO Interface Pattern identified in each page heading

Function Symbol

FUNCTION
Meter-Out T

Function Description

Physical Description of Body showing Cavity, LS Depth, O-rings, and other Information

American 3rd Angle Projection Symbol

Sandwich Body Model Code

ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBT		IBTAS	

Flow Control Valves

FUNCTION
Meter-Out T (High Capacity)

Quick Reference Tabs with ISO Interface Size and Function

Cartridge Table showing Typical Cartridges used with Bodies on this page

Cartridge Function Symbol

Cartridge Model Code

Cartridge Description

Page Location of Cartridge in Cartridge Catalog

TYPICAL CARTRIDGE USED WITH BODIES SHOWN ABOVE

08 FLOW CONTROL		Fully Adjustable Needle Valve	NPC Page 5.13	Fixed Orifice, Pressure-Compensated Flow Control	FXA Page 5.21
		Fully Adjustable Needle Valve with Reverse Free Flow Check	NC*B Page 5.17	Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check	FC*B Page 5.23
		Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow	NC*C Page 5.19	Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check	FD*A Page 5.25
	OTHER VALVES: ONO				

US Sandwich Body Catalog 5/94 #999-903-101
 CD #999-901-105 Rev. 01-Jan-96

12.350



►►► Sandwich Data Pages (See Figure 2)

Each sandwich data page presents information in a similar fashion. The function symbol(s) shown on the left part of the page replicate the same description found in the Locator, including the text description. To the right of the symbols, a complete physical description of the sandwich body is presented, including the cavity location and locating shoulder depth. (When the locating shoulder depth is subtracted from the maximum control extension dimension on a cartridge, you are able to calculate the stick-out length for the cartridge.) Convenient tabs on the outer margin of each page denote the ISO interface size and sandwich function for quick reference.

Under the physical sandwich description is a chart providing the sandwich model codes for both aluminum and ductile iron versions, and port types and sizes if there are ports in the body. ISO standard interface dimensions can be found on page 14.13 of the catalog.

At the bottom of most sandwich data pages is a box titled "Typical Cartridges used with Bodies shown above". This box contains cartridge model codes, cartridge function symbols and descriptive text for cartridges used with the sandwiches on a specific page. The key to matching cartridges to sandwich bodies is the SUN cavity. Anytime the cavity configuration of a cartridge matches the cavity configuration of a body, you are guaranteed a physical fit.

Most sandwich data pages show two sandwich bodies with identical cavities. However, sometimes the two bodies will have different cavities, especially in the case where a standard and high capacity sandwich body are shown on

the same page. (To achieve a high capacity sandwich version, SUN often uses the next size larger cartridge.) On these pages, cartridge model codes are shown with an asterisk in the third position. To complete the model code, select the cartridge model that has the identical cavity as the sandwich being used.

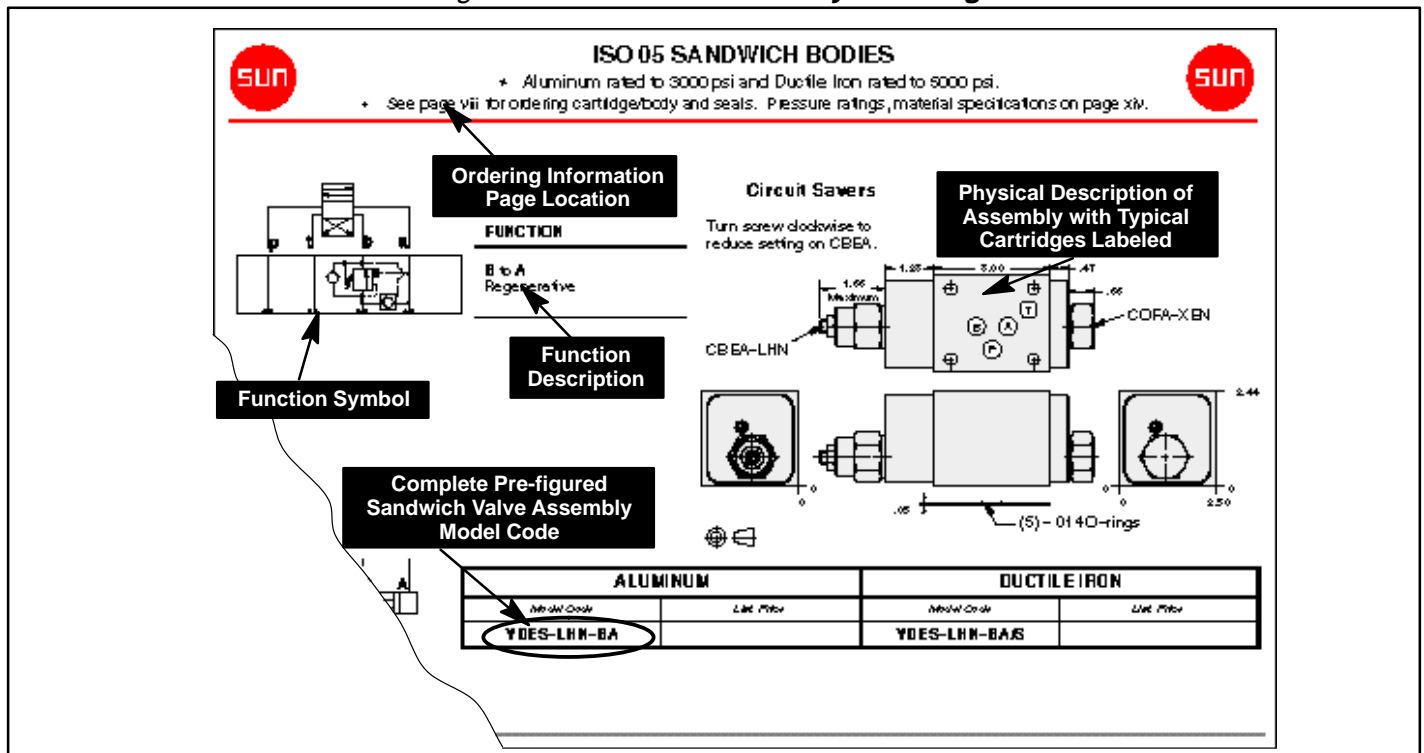
SUN Sandwich Valve Assemblies

(See Figure 3)

Some sandwich bodies are offered as complete, pre-configured valve assemblies. Sandwich Valve Assemblies typically include at least two different cartridges in the assembly and are designated by a nine-position model code. These product data pages do not include a listing of typical cartridges used as they are complete circuit elements. The cartridges used in the assembly are described with complete model codes in the physical description of the assembly. If you need to change a control or adjustment range on cartridges, please contact your SUN distributor *before* making the change.

Some sandwich valve assemblies include a solenoid valve. The model codes listed on these pages are incomplete, with an * in the eighth position of the model code. To complete the model code, the solenoid connector/voltage option must be selected from page 14.16 at the back of the catalogue or page 50 of SUN's Price List. Once the appropriate option is selected, insert the option code in place of the * and add the option price to the assembly List Price. Please note that all solenoid operated valve assemblies are limited to 3000 psi operation.

Figure 3 Sandwich Assembly Data Page





General Information Section

All SUN catalogs contain a general information section for customer reference. This section includes:

- A charted listing, by function, of direct motor mount bodies for Danfoss, Eaton, and Staffa motors.
- Cavity drawings for all SUN cavities in the catalog with model codes for cavity tooling.
- ISO standard interface dimensions with selected directional valve manufacturers' model codes.

- A listing of field service kits for SUN cartridges.
- Orifice size pressure drop curves to be used when applying flow controls.
- A listing of solenoid connector and voltage options.
- A complete model code alphabetical index for all products in all SUN catalogs. The model code index is organized by Cartridge, Cartridge Accessories, Body (Line Mount and Sandwich), Parts, and Valve Assembly Packages.

Figure 4 (Top to bottom) SUN Cavity Drawing page, ISO/CETOP standard interface page and solenoid connector and voltage options page.

CARTRIDGE CAVITIES AND CAVITY TOOLS

See Sun Price List for Tooling Prices.

3 Port SUN Cavity Series 1, T-11A

**M20 x 1.5-6H Thread

Socket Wrench Clearance Diameter

Socket Clearance: 31.75 0 mm.*
 Recommended Maximum L.S. Depth without Socket Clearance: 23.82.
 Minimum Centreline-to-Edge Distance: 15.09.
 Minimum Centreline-to-Centreline Distance: 26.97.

Sockets

Deep thin wall hex sockets are the preferred tools to use when installing SUN cartridges are readily available from Snap-On Tools Corporation. (See Chart)

Dimension Tolerances

(unless otherwise specified)

±0.05 | A | **

SOLENOID VALVE INTERFACES

ISO 03/NFPA D03

Valve Models	
Continental	VSSM, ED03M
Delta	Series 4000
Denison	A-3D01, D2D02-35
Double A	Q*-3
Parker Hannifin	D1VW
Racine	FD4
Rexroth	WE6, 4WRA6
Rivett	65**-03
Rucker/Yuken	DSGR-01, DG4V, SSG01, NG6

ISO 05/NFPA D05

Valve Models	
Continental	VS12M, ED05M
Denison	DID04, 3D02, A-D2D04
Double A	Q*-5
Parker Hannifin	D3W
Racine	FD4
Rexroth	WE8, WE10
Rivett	65**-02
Rucker/Yuken	DSG-03
Vickers	DG4S4
Nachi	SSG03, E10, E20
Racine-Bosch	NG10

Electrical Connections for Solenoid Operated

Below is a listing of current optional electrical connections for solenoid operated valve assemblies in the catalog utilize the Waterman which is available with three basic connector options and a variety of voltage configurations. The letter codes listed below are required to complete the model code and pricing of all SUN operated valve assemblies. (See Model Code Explanation in the front of this catalogue.)

WIRE LEADS

18 Gage
0,6 metres Long

J - 12 V DC-24" Leads
K - 24 V DC-24" Leads

CONDUIT

1/2" NPTF

18 Gage
0,6 metres Long

N - 115 V 50/60Hz-Conduit
O - 230 V 50/60Hz-Conduit

ISO/DIN

DIN 43650
Plug Face

S - 12 V DC ISO/DIN
T - 24 V DC ISO/DIN
V - 115 V 50/60Hz ISO/DIN
W - 230 V 50/60Hz ISO/DIN

US Sandwich Body Catalog 5/94 #999-903-101
CD #999-901-105 Rev. 01-Jan-96

vi



NOTES





Sandwich Bodies



Click Here for
MOUNTING and ASSEMBLY of SANDWICH BODIES
Technical Tips

See **Product > Technical Information > Technical Tips for Sun Products**



Click Here for
MOUNTING and ASSEMBLY of SANDWICH BODIES
Technical Tips

See **Product > Technical Information > Technical Tips for Sun Products**



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Technical Tips

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Click Here for
MOUNTING and ASSEMBLY of SANDWICH BODIES
Technical Tips

See **Product > Technical Information > Technical Tips for Sun Products**



12



ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON

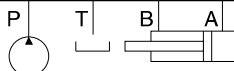


All pages listed below refer to SUN's Sandwich Body Catalog.

Full model codes are shown with typical cartridges. Other types of cartridges with identical cavity configuration can be used in place of typical cartridges shown. If a * is present in the sixth position of the full model code, the customer must specify the pressure range.

	p	t	b	a	 ISO 03 / NFPA DO3	 ISO 05 / NFPA DO5	 ISO 05 / NFPA DO5 with X and Y	 ISO 07 / NFPA DO7	 ISO 08 / NFPA DO8	
Relief Valves										
					Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
P to T					T-10A RPEC-L*N-CBE 1.94" RPEC-L*N-CBE/S1.94" Pg. 12.093	T-3A RPGC-L*N-CBP 1.94" RPGC-L*N-CBP/S1.94" Pg. 12.093	T-3A RPIC-L*N-CJP 1.99" RPIC-L*N-CJP/S 1.99" Pg. 12.173	T-3A RPGC-L*N-CKP 1.96" RPGC-L*N-CKP/S1.96" Pg. 12.245	T-3A RPGC-L*N-CDP 1.94" RPGC-L*N-CDP/S 1.94" Pg. 12.305	
P to T (High Capacity)					T-10A RPEC-L*N-FBP 1.75" RPEC-L*N-FBP/S1.75" Pg. 12.025	T-3A RPGC-L*N-CBP 1.94" RPGC-L*N-CBP/S1.94" Pg. 12.093	T-3A RPIC-L*N-CJP 1.99" RPIC-L*N-CJP/S 1.99" Pg. 12.173		T-16A RPIC-L*N-CDO 3.44" RPIC-L*N-CDO/S 3.44" Pg. 12.305	
P to T Externally Vented					† T-11A RVCA-L*N-EBC 1.75" RVCA-L*N-EBC/S1.75" Pg. 12.026	T-2A RVEA-L*N-BBC 2.44" RVEA-L*N-BBC/S2.44" Pg. 12.094	T-2A RVEA-L*N-BJC 2.49" RVEA-L*N-BJC/S2.49" Pg. 12.174	T-17A RVGA-L*N-CKQ 2.74" RVGA-L*N-CKQ/S2.74" Pg. 12.246	† T-17A RVGA-L*N-HBV 3.44" RVGA-L*N-HBV/S3.44" Pg. 12.306	
P to T N.O. Solenoid Vented					† YRCO-LAN-*A 1.75" YRCO-LAN-*A/S1.75" Pg. 12.027	† YREO-LAN-*A 2.44" YREO-LAN-*A/S 2.44" Pg. 12.095		YRFI-LAN-*B 2.74" YRFI-LAN-*B/S 2.74" Pg. 12.247	YRHI-LAN-*A 3.44" YRHI-LAN-*A/S 3.44" Pg. 12.307	
P to T N.C. Solenoid Vented					† YRCP-LAN-*A 1.75" YRCP-LAN-*A/S1.75" Pg. 12.027	† YREP-LAN-*A 2.44" YREP-LAN-*A/S2.44" Pg. 12.095		YRFJ-LAN-*B 2.74" YRFJ-LAN-*B/S 2.74" Pg. 12.247	YRHJ-LAN-*A 2.74" YRHJ-LAN-*A/S 2.74" Pg. 12.307	
Out of T								† T-16A RPIC-L*N-DKT 2.74" RPIC-L*N-DKT/S 2.74" Pg. 12.248	† T-16A RPIC-L*N-IBT 3.44" RPIC-L*N-IBT/S 3.44" Pg. 12.308	
Out of T (High Capacity)					T-10A RPEC-L*N-FBT 1.75" RPEC-L*N-FBT/S1.75" Pg. 12.028	† T-3A RPGC-L*N-CBT 1.94" RPGC-L*N-CBT/S1.94" Pg. 12.096		† T-18A RPKC-L*N-DKV 3.49" RPKC-L*N-DKV/S3.49" Pg. 12.248	† T-18A RPKC-L*N-IBV 3.44" RPKC-L*N-IBV/S 3.44" Pg. 12.308	
A to T						† T-10A RPEC-L*N-CBF 1.94" RPEC-L*N-CBF/S1.94" Pg. 12.097		T-3A RPGC-L*N-CKA 1.96" RPGC-L*N-CKA/S1.96" Pg. 12.249	T-3A RPGC-L*N-CDA 1.94" RPGC-L*N-CDA/S1.94" Pg. 12.309	
A to T (High Capacity)					T-10A RPEC-L*N-FBA 1.75" RPEC-L*N-FBA/S1.75" Pg. 12.029	† T-3A RPGC-L*N-CBA 1.94" RPGC-L*N-CBA/S1.94" Pg. 12.097	T-3A RPGC-L*N-CJA 1.99" RPGC-L*N-CJA/S1.99" Pg. 12.175		T-16A RPIC-L*N-CDC 3.44" RPIC-L*N-CDC/S 3.44" Pg. 12.309	
A to T FF Check T to B					† T-10A RPEC-L*N-FB2 1.75" RPEC-L*N-FB2/S1.75" Pg. 12.030	† T-3A RPGC-L*N-CB2 1.94" RPGC-L*N-CB2/S1.94" Pg. 12.098	† T-3A RPGC-L*N-CJ2 2.49" RPGC-L*N-CJ2/S2.49" Pg. 12.176	† T-3A RPGC-L*N-CKJ 1.96" RPGC-L*N-CKJ/S1.96" Pg. 12.250		
A to B						T-10A RPEC-L*N-CBH 1.49" RPEC-L*N-CBH/S1.49" Pg. 12.099				
A to B (High Capacity)					T-10A RPEC-L*N-FBC 1.75" RPEC-L*N-FBC/S1.75" Pg. 12.031	† T-3A RPGC-L*N-CBC 1.46" RPGC-L*N-CBC/S1.46" Pg. 12.099	T-3A RPGC-L*N-CJC 1.99" RPGC-L*N-CJC/S1.99" Pg. 12.177			
A to T Externally Vented					† T-11A RVCA-L*N-EBI 1.75" RVCA-L*N-EBI/S1.75" Pg. 12.032	T-2A RVEA-L*N-BBD 2.44" RVEA-L*N-BBD/S2.44" Pg. 12.100			† T-17A RVGA-L*N-HBE 3.44" RVGA-L*N-HBE/S3.44" Pg. 12.310	
A to T N.O. Solenoid Vented						† YREU-LAN-*A 2.49" YREU-LAN-*A/S 2.49" Pg. 12.101				
A to T N.C. Solenoid Vented						† YRET-LAN-*A 2.49" YRET-LAN-*A/S 2.49" Pg. 12.101				

Continued on next page.



****Seal plate must be ordered separately. U.S. and European X and Y available.**

* Incomplete model number. Cartridges included. Consult your SUN distributor for order information.

† These bodies do not have a gage port.

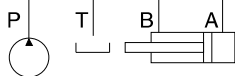
ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON



All pages listed below refer to SUN's Sandwich Body Catalog.

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Function	p	t	b	a	ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 with X and Y	ISO 07 / NFPA DO7	ISO 08 / NFPA DO8	
Relief Valves (Continued)										
					Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
A and B to T						† T-10A RPEC-L*N-CBD 1.44" RPEC-L*N-CBD/S 1.44" Pg. 12.102				
A and B to T (High Capacity)					† T-10A RPEC-L*N-FBX 1.75" RPEC-L*N-FBX/S 1.75" Pg. 12.033	† T-3A RPGC-L*N-CBX 1.44" RPGC-L*N-CBX/S 1.44" Pg. 12.102	† T-3A RPGC-L*N-CJX 1.49" RPGC-L*N-CJX/S 1.49" Pg. 12.178	† T-3A RPGC-L*N-CKX 2.74" RPGC-L*N-CKX/S 2.74" Pg. 12.251	† T-16A RPIC-L*N-CDZ 3.44" RPIC-L*N-CDZ/S 3.44" Pg. 12.311	
A to B and B to A (Cross-Port)						† T-10A RPEC-L*N-CBI 2.44" RPEC-L*N-CBI/S 2.44" Pg. 12.103	† T-10A RPEC-L*N-CJY 2.49" RPEC-L*N-CJY/S 2.49" Pg. 12.179	† T-10A RPEC-L*N-CKY 1.96" RPEC-L*N-CKY/S 1.96" Pg. 12.252	† T-3A RPGC-L*N-CDY 1.94" RPGC-L*N-CDY/S 1.94" Pg. 12.312	
A to B and B to A (High Capacity) (Cross-Port)					† T-10A RPEC-L*N-FBY 1.75" RPEC-L*N-FBY/S 1.75" Pg. 12.034	† T-3A RPGC-L*N-CBY 2.44" RPGC-L*N-CBY/S 2.44" Pg. 12.103			† T-16A RPIC-L*N-CDW 3.44" RPIC-L*N-CDW/S 3.44" Pg. 12.312	
B to T						T-10A RPEC-L*N-CBG 1.94" RPEC-L*N-CBG/S 1.94" Pg. 12.104		T-3A RPGC-L*N-CKB 1.96" RPGC-L*N-CKB/S 1.96" Pg. 12.253	T-3A RPGC-L*N-CDB 1.94" RPGC-L*N-CDB/S 1.94" Pg. 12.313	
B to T (High Capacity)					T-10A RPEC-L*N-FBA 1.75" RPEC-L*N-FBA/S 1.75" Pg. 12.029	† T-3A RPGC-L*N-CBB 1.94" RPGC-L*N-CBB/S 1.94" Pg. 12.104	T-3A RPGC-L*N-CJB 1.99" RPGC-L*N-CJB/S 1.99" Pg. 12.180		T-16A RPIC-L*N-CDD 3.44" RPIC-L*N-CDD/S 3.44" Pg. 12.313	
B to T (FF Check to T to A)					† T-10A RPEC-L*N-FB2 1.75" RPEC-L*N-FB2/S 1.75" Pg. 12.030					
B to A						T-10A RPEC-L*N-CBH 1.49" RPEC-L*N-CBH/S 1.49" Pg. 12.099				
B to A (High Capacity)					T-10A RPEC-L*N-FBC 1.75" RPEC-L*N-FBC/S 1.75" Pg. 12.031	† T-3A RPGC-L*N-CBC 1.46" RPGC-L*N-CBC/S 1.46" Pg. 12.099	T-3A RPGC-L*N-CJC 1.99" RPGC-L*N-CJC/S 1.99" Pg. 12.177			
B to T Externally Vented					† T-11A RVCA-L*N-EBI 1.75" RVCA-L*N-EBI/S 1.75" Pg. 12.032	† T-2A RVEA-L*N-BBE 2.44" RVEA-L*N-BBE/S 2.44" Pg. 12.100			† T-17A RVGA-L*N-HBF 3.44" RVGA-L*N-HBF/S 3.44" Pg. 12.310	
B to T N.O. Solenoid Vented						† YREU-LAN-*A 2.49" YREU-LAN-*A/S 2.49" Pg. 12.101				
B to T N.C. Solenoid Vented						† YRET-LAN-*A 2.49" YRET-LAN-*A/S 2.49" Pg. 12.101				



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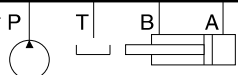


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	p	t	b	a			** 		
Function					ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 with X and Y	ISO 07 / NFPA DO7	ISO 08 / NFPA DO8
Sequence Valves									
					Cartridge Body Stack Hgt.	Cartridge Body Stack Hgt.	Cartridge Body Stack Hgt.	Cartridge Body Stack Hgt.	Cartridge Body Stack Hgt.
In to P					T-11A RSDC-L*N-EBW 1.75" RSDC-L*N-EBW/S1.75" Pg. 12.035	T-2A RSFC-L*N-BBW 2.44" RSFC-L*N-BBW/S2.44" Pg. 12.105	T-2A RSFC-L*N-BJW 2.49" RSFC-L*N-BJW/S2.49" Pg. 12.182	T-17A RSHC-L*N-BKW 2.74" RSHC-L*N-BKW/S 2.74" Pg. 12.254	T-17A RSHC-L*N-HBW 3.44" RSHC-L*N-HBW/S 3.44" Pg. 12.314
In to A Reverse FF Check					† T-11A RSDC-L*N-EB4 1.75" RSDC-L*N-EB4/S1.75" Pg. 12.036	† T-2A RSFC-L*N-BB4 2.49" RSFC-L*N-BB4/S 2.49" Pg. 12.106	† T-2A RSFC-L*N-BJ4 2.49" RSFC-L*N-BJ4/S 2.49" Pg. 12.183	† T-17A RSHC-L*N-BK4 2.74" RSHC-L*N-BK4/S 2.74" Pg. 12.255	† T-17A RSHC-L*N-HB4 3.44" RSHC-L*N-HB4/S 3.44" Pg. 12.315
Out of A Reverse FF Check					† T-11A RSDC-L*N-EB5 1.75" RSDC-L*N-EB5/S1.75" Pg. 12.036	† T-2A RSFC-L*N-BB5 2.49" RSFC-L*N-BB5/S 2.49" Pg. 12.106	† T-2A RSFC-L*N-BJ5 2.49" RSFC-L*N-BJ5/S 2.49" Pg. 12.183	† T-17A RSHC-L*N-BK6 2.74" RSFC-L*N-BJ5/S 2.74" Pg. 12.255	† T-17A RSHC-L*N-HB6 3.44" RSHC-L*N-HB6/S 3.44" Pg. 12.315
In to B Reverse FF Check					† T-11A RSDC-L*N-EB5/S1.75" Pg. 12.036	† T-2A RSFC-L*N-BB5 2.49" RSFC-L*N-BB5/S 2.49" Pg. 12.106	† T-2A RSFC-L*N-BJ5 2.49" RSFC-L*N-BJ5/S 2.49" Pg. 12.183	† T-17A RSHC-L*N-BK5 2.74" RSHC-L*N-BK5/S 2.74" Pg. 12.256	
Out of B Reverse FF Check					† T-11A RSDC-L*N-EB4 1.75" RSDC-L*N-EB4/S1.75" Pg. 12.036	† T-2A PFBF-L*N-BB4 2.49" PFBF-L*N-BB4/S 2.49" Pg. 12.106	† T-2A RSFC-L*N-BJ4 2.49" RSFC-L*N-BJ4/S 2.49" Pg. 12.183	† T-17A RSHC-L*N-BK7 2.74" RSHC-L*N-BK7/S 2.74" Pg. 12.256	† T-17A RSHC-L*N-HB7 3.44" RSHC-L*N-HB7/S 3.44" Pg. 12.316
Reducing Valves									
					Cartridge Body Stack Hgt.	Cartridge Body Stack Hgt.	Cartridge Body Stack Hgt.	Cartridge Body Stack Hgt.	Cartridge Body Stack Hgt.
On P Drained to T					T-11A PBDB-L*N-EBP 1.75" PBDB-L*N-EBP/S1.75" Pg. 12.037	T-2A PFBF-L*N-BBP 2.44" PFBF-L*N-BBP/S 2.44" Pg. 12.107	T-2A PFBF-L*N-BJP 2.49" PFBF-L*N-BJP/S 2.49" Pg. 12.184	T-17A PBHB-L*N-BKP 2.74" PBHB-L*N-BKP/S 2.74" Pg. 12.257	T-17A PBHB-L*N-HBP 3.44" PBHB-L*N-HBP/S 3.44" Pg. 12.317
On P Drained to T (High Capacity)						T-17A PBHB-L*N-WCC 3.94" PBHB-L*N-WCC/S3.94" NOT CATALOGED			T-19A PBJB-L*N-HBO 3.44" PBJB-L*N-HBO/S 3.44" Pg. 12.317
On P Drained Externally					† T-11A PBDB-L*N-EBQ 1.75" PBDB-L*N-EBQ/S1.75" Pg. 12.038	† T-2A PFBF-L*N-BBQ 2.49" PFBF-L*N-BBQ/S2.49" Pg. 12.108		T-17A PBHB-L*N-BKQ 2.74" PBHB-L*N-BKQ/S2.74" Pg. 12.258	† T-19A PBJB-L*N-HBQ 3.44" PBJB-L*N-HBQ/S 3.44" Pg. 12.318
On A Drained to B					T-11A PBDB-L*N-EBA 1.75" PBDB-L*N-EBA/S1.75" Pg. 12.039	T-2A PFBF-L*N-BBA 1.94" PFBF-L*N-BBA/S1.94" Pg. 12.109	T-2A PFBF-L*N-BJA 2.49" PFBF-L*N-BJA/S2.49" Pg. 12.185	† T-17A PBHB-L*N-BKA 2.74" PBHB-L*N-BKA/S2.74" Pg. 12.259	† T-17A PBHB-L*N-HBL 3.44" PBHB-L*N-HBL/S 3.44" Pg. 12.319
On A Drained to B (High Capacity)									† T-19A PBJB-L*N-HBA 3.44" PBJB-L*N-HBA/S 3.44" Pg. 12.319
On A Drained Externally					† T-11A PBDB-L*N-EBD 1.75" PBDB-L*N-EBD/S1.75" Pg. 12.040	† T-2A PFBF-L*N-BBF 2.49" PFBF-L*N-BBF/S 2.49" Pg. 12.110		† T-17A PBHB-L*N-BKC 2.74" PBHB-L*N-BKC/S 2.74" Pg. 12.260	† T-17A PBHB-L*N-HBG 3.44" PBHB-L*N-HBG/S 3.44" NOT CATALOGED
On A Drain to T Reverse FF Check					† T-11A PBDB-L*N-EB2 1.75" PBDB-L*N-EB2/S1.75" Pg. 12.041	† T-2A PFBF-L*N-BB2 2.49" PFBF-L*N-BB2/S 2.49" Pg. 12.111	† T-2A PFBF-L*N-BJ2 2.49" PFBF-L*N-BJ2/S 2.49" Pg. 12.186	† T-17A PBHB-L*N-BK2 2.74" PBHB-L*N-BK2/S 2.74" Pg. 12.261	† T-17A PBHB-L*N-HBK 3.44" PBHB-L*N-HBK/S 3.44" Pg. 12.320
On B Drained to A					T-11A PBDB-L*N-EBA 1.75" PBDB-L*N-EBA/S1.75" Pg. 12.039	T-2A PFBF-L*N-BBB 1.94" PFBF-L*N-BBB/S1.94" Pg. 12.112	T-2A PFBF-L*N-BJB 2.49" PFBF-L*N-BJB/S 2.49" Pg. 12.187	† T-17A PBHB-L*N-BKB 2.74" PBHB-L*N-BKB/S 2.74" Pg. 12.262	† T-17A PBHB-L*N-HBM 3.44" PBHB-L*N-HBM/S 3.44" Pg. 12.321
On B Drained to A (High Capacity)									† T-19A PBJB-L*N-HBB 3.44" PBJB-L*N-HBB/S 3.44" Pg. 12.321

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Reducing Valves (Continued)												
					Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
On B Drained Externally					† T-11A PBDB-L*N-EBD 1.75" PBDB-L*N-EBD/S 1.75" Pg. 12.040		† T-2A PFBF-L*N-BBG 2.49" PFBF-L*N-BBG/S 2.49" Pg. 12.110					
On B Drain to T Reverse FF Check					† T-11A PBDB-L*N-EB3 1.75" PBDB-L*N-EB3/S 1.75" Pg. 12.041		† T-2A PFBF-L*N-BB3 2.49" PFBF-L*N-BB3/S 2.49" Pg. 12.111		† T-2A PFBF-L*N-BJ3 2.49" PFBF-L*N-BJ3/S 2.49" Pg. 12.186		† T-17A PBHB-L*N-BKJ 2.74" PBHB-L*N-BKJ/S 2.74" Pg. 12.261	T-17A PBHB-L*N-HBJ 3.44" PBHB-L*N-HBJ/S 3.44" Pg. 12.320
On A and B Drains to Opposite Port					† T-11A PBDB-L*N-EBY 1.75" PBDB-L*N-EBY/S 1.75" Pg. 12.042		† T-2A PFBF-L*N-BBY 1.94" PFBF-L*N-BBY/S 1.94" Pg. 12.113		† T-2A PFBF-L*N-BJY 2.49" PFBF-L*N-BJY/S 2.49" Pg. 12.188		† T-17A PBHB-L*N-BKY 2.74" PBHB-L*N-BKY/S 2.74" Pg. 12.263	† T-17A PBHB-L*N-HBN 3.44" PBHB-L*N-HBN/S 3.44" Pg. 12.322
On A and B Drains to Opposite Port (High Capacity)												† T-19A PBJB-L*N-HBY 3.44" PBJB-L*N-HBY/S 3.44" Pg. 12.322
On A and B Drains to T Reverse FF Check					† T-11A PBDB-L*N-EB9 2.49" PBDB-L*N-EB9/S 2.49" NOT CATALOGED		† T-2A PFBF-L*N-BB9 2.99" PFBF-L*N-BB9/S 2.99" NOT CATALOGED		† T-2A PFBF-L*N-BJ9 2.99" PFBF-L*N-BJ9/S 2.99" NOT CATALOGED			
Reducing/Relieving Valves												
					Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
On P Tank to T Drained to T					† T-11A PPDB-L*N-EBP 1.75" PPDB-L*N-EBP/S 1.75" Pg. 12.043		T-2A PFBF-L*N-BBP 2.44" PFBF-L*N-BBP/S 2.44" Pg. 12.114		T-2A PFBF-L*N-BJP 2.49" PFBF-L*N-BJP/S 2.49" Pg. 12.189		T-17A PPHB-L*N-BKP 2.74" PPHB-L*N-BKP/S 2.74" Pg. 12.264	T-17A PPHB-L*N-HBP 3.44" PPHB-L*N-HBP/S 3.44" Pg. 12.323
On P Tank to T Drained to T (High Capacity)							T-17A PPHB-L*N-WCC 3.94" PPHB-L*N-WCC/S 3.94" Pg. 12.114					T-19A PPJB-L*N-HBO 3.44" PPJB-L*N-HBO/S 3.44" Pg. 12.323
On P Tank to T Vented Externally					† T-21A PVDB-L*N-MBP 1.75" PVDB-L*N-MBP/S 1.75" Pg. 12.044		T-22A PVFB-L*N-NBP 2.49" PVFB-L*N-NBP/S 2.49" Pg. 12.115		T-22A PVFB-L*N-NJP 2.49" PVFB-L*N-NJP/S 2.49" Pg. 12.190			T-23A PVHB-L*N-PBP 3.44" PVHB-L*N-PBP/S 3.44" Pg. 12.324
On P Tank to T Drained Externally					† T-21A PVDA-L*N-MBP 1.75" PVDA-L*N-MBP/S 1.75" Pg. 12.044		T-22A PVFA-L*N-NBP 2.49" PVFA-L*N-NBP/S 2.49" Pg. 12.115		T-22A PVFA-L*N-NJP 2.49" PVFA-L*N-NJP/S 2.49" Pg. 12.190			T-23A PVHA-L*N-PBP 3.44" PVHA-L*N-PBP/S 3.44" Pg. 12.324
On P Tank to T N.O. Solenoid on Drain					† YPCG-LAN-*A 1.75" YPCG-LAN-*A/S 1.75" NOT CATALOGED		† YPDG-LAN-*A 2.49" YPDG-LAN-*A/S 2.49" Pg. 12.116					
On P Tank to T N.C. Solenoid on Drain					† YPCH-LAN-*A 1.75" YPCH-LAN-*A/S 1.75" NOT CATALOGED		† YPDH-LAN-*A 2.49" YPDH-LAN-*A/S 2.49" Pg. 12.116					
On A Tank to B Drained to B					T-11A PPDB-L*N-EBA 1.75" PPDB-L*N-EBA/S 1.75" Pg. 12.045		T-2A PFBF-L*N-BBA 1.94" PFBF-L*N-BBA/S 1.94" Pg. 12.117		T-2A PFBF-L*N-BJA 2.49" PFBF-L*N-BJA/S 2.49" Pg. 12.191		† T-17A PPHB-L*N-BKA 2.74" PPHB-L*N-BKA/S 2.74" Pg. 12.265	† T-17A PPHB-L*N-HBL 3.44" PPHB-L*N-HBL/S 3.44" Pg. 12.325
On A Tank to B Drained to B (High Capacity)												† T-19A PPJB-L*N-HBA 3.44" PPJB-L*N-HBA/S 3.44" Pg. 12.325
On A Tank to T Drained to T Reverse FF Check					† T-11A PPDB-L*N-EB2 1.75" PPDB-L*N-EB2/S 1.75" Pg. 12.046		† T-2A PFBF-L*N-BB2 2.49" PFBF-L*N-BB2/S 2.49" Pg. 12.118		† T-2A PFBF-L*N-BJ2 2.49" PFBF-L*N-BJ2/S 2.49" Pg. 12.192		† T-17A PPHB-L*N-BK2 2.74" PPHB-L*N-BK2/S 2.74" Pg. 12.266	T-17A PPHB-L*N-HBK 3.44" PPHB-L*N-HBK/S 3.44" Pg. 12.326

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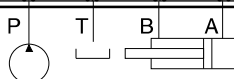
Reducing/Relieving Valves (Continued)

		Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
On A tank to T Vented Externally Reverse FF Check		† T-21A PVDB-L*N-MB2 2.44" PVDB-L*N-MB2/S 2.44" NOT CATALOGED		† T-22A PVFB-L*N-NB2 2.99" PVFB-L*N-NB2/S 2.99" Pg. 12.119		† T-22A PVFB-L*N-NJ2 2.99" PVFB-L*N-NJ2/S 2.99" Pg. 12.193					
On A tank to T Drained Externally Reverse FF Check		† T-21A PVDA-L*N-MB2 2.44" PVDA-L*N-MB2/S 2.44" NOT CATALOGED		† T-22A PVFA-L*N-NB2 2.99" PVFA-L*N-NB2/S 2.99" Pg. 12.119		† T-22A PVFA-L*N-NJ2 2.99" PVFA-L*N-NJ2/S 2.99" Pg. 12.193					
On B Tank to A Drained to A		T-11A PPDB-L*N-EBA 1.75" PPDB-L*N-EBA/S 1.75" Pg. 12.045		T-2A PPFB-L*N-BBB 1.94" PPFB-L*N-BBB/S 1.94" Pg. 12.120		T-2A PPFB-L*N-BJB 2.49" PPFB-L*N-BJB/S 2.49" Pg. 12.194		† T-17A PPHB-L*N-BKB 2.74" PPHB-L*N-BKB/S 2.74" Pg. 12.267		† T-17A PPHB-L*N-HBM 3.44" PPHB-L*N-HBM/S 3.44" Pg. 12.327	
On B Tank to A Drained to A (High Capacity)										† T-19A PPJB-L*N-HBB 3.44" PPJB-L*N-HBB/S 3.44" Pg. 12.327	
On B Tank to T Drained to T Reverse FF Check		† T-11A PPDB-L*N-EB3 1.75" PPDB-L*N-EB3/S 1.75" Pg. 12.046		† T-2A PPFB-L*N-BB3 2.49" PPFB-L*N-BB3/S 2.49" Pg. 12.118		† T-2A PPFB-L*N-BJ3 2.49" PPFB-L*N-BJ3/S 2.49" Pg. 12.192		† T-17A PPHB-L*N-BKJ 2.74" PPHB-L*N-BKJ/S 2.74" Pg. 12.266		T-17A PPHB-L*N-HBJ 3.44" PPHB-L*N-HBJ/S 3.44" Pg. 12.326	
On B Tank to T Vented Externally Reverse FF Check		† T-21A PVDB-L*N-MB3 2.44" PVDB-L*N-MB3/S 2.44" NOT CATALOGED		† T-22A PVFB-L*N-NB3 2.99" PVFB-L*N-NB3/S 2.99" Pg. 12.119		† T-22A PVFB-L*N-NJ3 2.99" PVFB-L*N-NJ3/S 2.99" Pg. 12.193					
On B Tank to T Drained Externally Reverse FF Check		† T-21A PVDA-L*N-MB3 2.44" PVDA-L*N-MB3/S 2.44" NOT CATALOGED		† T-22A PVFA-L*N-NB3 2.99" PVFA-L*N-NB3/S 2.99" Pg. 12.119		† T-22A PVFA-L*N-NJ3 2.99" PVFA-L*N-NJ3/S 2.99" Pg. 12.193					
On A and B Tanks and Drains to Opposite Port		† T-11A PPDB-L*N-EBY 1.75" PPDB-L*N-EBY/S 1.75" Pg. 12.047		† T-2A PPFB-L*N-BBY 1.94" PPFB-L*N-BBY/S 1.94" Pg. 12.121		† T-2A PPFB-L*N-BJY 2.49" PPFB-L*N-BJY/S 2.49" Pg. 12.195		† T-17A PPHB-L*N-BKY 2.74" PPHB-L*N-BKY/S 2.74" Pg. 12.268		† T-17A PPHB-L*N-HBN 3.44" PPHB-L*N-HBN/S 3.44" Pg. 12.328	
On A and B Tanks and Drains to Opposite Port (High Capacity)										† T-19A PPJB-L*N-HBY 3.44" PPJB-L*N-HBY/S 3.44" Pg. 12.328	
On A and B Tanks and Drains to T Reverse FF Check		† T-11A PPDB-L*N-EB9 2.49" PPDB-L*N-EB9/S 2.49" NOT CATALOGED		† T-2A PPFB-L*N-BB9 2.99" PPFB-L*N-BB9/S 2.99" NOT CATALOGED		† T-2A PPFB-L*N-BJ9 2.99" PPFB-L*N-BJ9/S 2.99" NOT CATALOGED					

Counterbalance Valves

		Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
On A Pilot from B		T-11A CBCA-LHN-EBA 1.75" CBCA-LHN-EBA/S 1.75" Pg. 12.048		T-2A CBEA-LHN-BBA 1.94" CBEA-LHN-BBA/S 1.94" Pg. 12.122		T-2A CBEA-LHN-BJA 2.49" CBEA-LHN-BJA/S 2.49" Pg. 12.196		† T-17A CBGA-LHN-BKA 2.74" CBGA-LHN-BKA/S 2.74" Pg. 12.269		† T-17A CBGA-LHN-HBL 3.44" CBGA-LHN-HBL/S 3.44" Pg. 12.329	
On A Pilot from B (High Capacity)										† T-19A CBIA-LHN-HBA 3.44" CBIA-LHN-HBA/S 3.44" Pg. 12.329	
On A Pilot from B Vent to T		† T-21A CWCA-LHN-MBA 1.75" CWCA-LHN-MBA/S 1.75" Pg. 12.049		† T-22A CWEA-LHN-NBA 2.49" CWEA-LHN-NBA/S 2.49" Pg. 12.123		† T-22A CWEA-LHN-NJA 2.49" CWEA-LHN-NJA/S 2.49" Pg. 12.197		† T-23A CWGA-LHN-NKA 3.52" CWGA-LHN-NKA/S 3.52" Pg. 12.270		† T-23A CWGA-LHN-PBA 3.44" CWGA-LHN-PBA/S 3.44" Pg. 12.330	
On A No Pilot Assist		† T-10A RDDA-L*N-FB4 1.75" RDDA-L*N-FB4/S 1.75" Pg. 12.050		† T-3A RDFA-L*N-CB4 2.49" RDFA-L*N-CB4/S 2.49" Pg. 12.124		† T-3A RDFA-L*N-CJ4 2.49" RDFA-L*N-CJ4/S 2.49" Pg. 12.198		† T-16A RDHA-L*N-CK4 2.74" RDHA-L*N-CK4/S 2.74" Pg. 12.271		† T-16A RDHA-L*N-CD4 3.44" RDHA-L*N-CD4/S 3.44" Pg. 12.331	

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****Seal plate must be ordered separately. U.S. and European X and Y available.**

* Incomplete model number. Cartridges included. Consult your SUN distributor for order information.

† These bodies do not have a gage port.

ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON



All pages listed below refer to SUN's Sandwich Body Catalog.

Full model codes are shown with typical cartridges. Other types of cartridges with identical cavity configuration can be used in place of typical cartridges shown. If a * is present in the sixth position of the full model code, the customer must specify the pressure range.

Function	p t b a	ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 with X and Y	ISO 07 / NFPA DO7	ISO 08 / NFPA DO8

Counterbalance Valves (Continued)

	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
On B Pilot from A	T-11A CBCA-LHN-EBA 1.75" CBCA-LHN-EBA/S 1.75" Pg. 12.048		T-2A CBEA-LHN-BBB 1.94" CBEA-LHN-BBB/S 1.94" Pg. 12.125		T-2A CBEA-LHN-BJB 2.49" CBEA-LHN-BJB/S 2.49" Pg. 12.199		T-17A CBGA-LHN-BKB 2.74" CBGA-LHN-BKB/S 2.74" Pg. 12.272		T-17A CBGA-LHN-HBM 3.44" CBGA-LHN-HBM/S 3.44" Pg. 12.332	
On B Pilot from A (High Capacity)									T-19A CBIA-LHN-HBB 3.44" CBIA-LHN-HBB/S 3.44" Pg. 12.332	
On B Pilot from A Vent to T	T-21A CWCA-LHN-MBB 1.75" CWCA-LHN-MBB/S 1.75" Pg. 12.049		T-22A CWEA-LHN-NBB 2.49" CWEA-LHN-NBB/S 2.49" Pg. 12.123		T-22A CWEA-LHN-NJB 2.49" CWEA-LHN-NJB/S 2.49" Pg. 12.197		T-23A CWGA-LHN-NKB 3.52" CWGA-LHN-NKB/S 3.52" Pg. 12.270		T-23A CWGA-LHN-PBB 3.44" CWGA-LHN-PBB/S 3.44" Pg. 12.330	
On B No pilot assist	T-10A RDDA-L*N-FB4 1.75" RDDA-L*N-FB4/S 1.75" Pg. 12.050		T-3A RDFA-L*N-CB5 2.49" RDFA-L*N-CB5/S 2.49" Pg. 12.124		T-3A RDFA-L*N-CJ5 2.49" RDFA-L*N-CJ5/S 2.49" Pg. 12.198		T-16A RDHA-L*N-CK5 3.52" RDHA-L*N-CK5/S 3.52" Pg. 12.271			
On A and B Cross-Piloted	T-11A CBCA-LHN-EBY 1.75" CBCA-LHN-EBY/S 1.75" Pg. 12.051		T-2A CBEA-LHN-BBY 1.94" CBEA-LHN-BBY/S 1.94" Pg. 12.126		T-2A CBEA-LHN-BJY 2.49" CBEA-LHN-BJY/S 2.49" Pg. 12.200		T-17A CBGA-LHN-BKY 2.74" CBGA-LHN-BKY/S 2.74" Pg. 12.273		T-17A CBGA-LHN-HBN 3.44" CBGA-LHN-HBN/S 3.44" Pg. 12.333	
On A and B Cross-Piloted (High Capacity)									T-19A CBIA-LHN-HBY 3.44" CBIA-LHN-HBY/S 3.44" Pg. 12.333	
On A and B Cross-Piloted Vents to T	T-21A CWCA-LHN-MBY 1.75" CWCA-LHN-MBY/S 1.75" Pg. 12.052		T-22A CWEA-LHN-NBY 2.49" CWEA-LHN-NBY/S 2.49" Pg. 12.127		T-22A CWEA-LHN-NJY 2.49" CWEA-LHN-NJY/S 2.49" Pg. 12.201		T-23A CWGA-LHN-NKY 3.52" CWGA-LHN-NKY/S 3.52" Pg. 12.274		T-23A CWGA-LHN-PBY 3.44" CWGA-LHN-PBY/S 3.44" Pg. 12.334	
Cushion Lock Circuit On A and B	T-11A CBCA-LHN-EB8 2.49" CBCA-LHN-EB8/S 2.49" Pg. 12.053		T-2A CBEA-LHN-BB8 2.99" CBEA-LHN-BB8/S 2.99" Pg. 12.128		T-2A CBEA-LHN-BJ8 2.99" CBEA-LHN-BJ8/S 2.99" Pg. 12.202					

Pilot Operated Check Valves

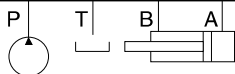
	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
On A Pilot from B	T-11A CKCB-XCN-EBA 1.75" CKCB-XCN-EBA/S 1.75" Pg. 12.054		T-2A CKEB-XCN-BBA 1.94" CKEB-XCN-BBA/S 1.94" Pg. 12.129		T-2A CKEB-XCN-BJA 2.49" CKEB-XCN-BJA/S 2.49" Pg. 12.203		T-17A CKGB-XCN-BKA 2.74" CKGB-XCN-BKA/S 2.74" Pg. 12.275		T-17A CKGB-XCN-HBL 3.44" CKGB-XCN-HBL/S 3.44" Pg. 12.335	
On A Pilot from B (High Capacity)									T-19A CKIB-XCN-HBA 3.44" CKIB-XCN-HBA/S 3.44" Pg. 12.335	
On A Pilot from B Vent to T	T-21A CVGV-XCN-MBA 1.75" CVGV-XCN-MBA/S 1.75" Pg. 12.055		T-22A CVEV-XCN-NBA 2.49" CVEV-XCN-NBA/S 2.49" Pg. 12.130		T-22A CVEV-XCN-NJA 2.49" CVEV-XCN-NJA/S 2.49" Pg. 12.204		T-23A CVGV-XCN-NKA 3.52" CVGV-XCN-NKA/S 3.52" Pg. 12.276		T-23A CVGV-XCN-PBA 3.44" CVGV-XCN-PBA/S 3.44" Pg. 12.336	
On B Pilot from A	T-11A CKCB-XCN-EBA 1.75" CKCB-XCN-EBA/S 1.75" Pg. 12.054		T-2A CKEB-XCN-BBB 1.94" CKEB-XCN-BBB/S 1.94" Pg. 12.131		T-2A CKEB-XCN-BJB 2.49" CKEB-XCN-BJB/S 2.49" Pg. 12.205		T-17A CKGB-XCN-BKB 2.74" CKGB-XCN-BKB/S 2.74" Pg. 12.277		T-17A CKGB-XCN-HBM 3.44" CKGB-XCN-HBM/S 3.44" Pg. 12.337	
On B Pilot from A (High Capacity)									T-19A CKIB-XCN-HBB 3.44" CKIB-XCN-HBB/S 3.44" Pg. 12.337	

**Seal plate must be ordered separately. U.S. and European X and Y available.

* Incomplete model number. Cartridges included. Consult your SUN distributor for order information.

† These bodies do not have a gage port.

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ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON



All pages listed below refer to SUN's Sandwich Body Catalog.

Full model codes are shown with typical cartridges. Other types of cartridges with identical cavity configuration can be used in place of typical cartridges shown. If a * is present in the sixth position of the full model code, the customer must specify the pressure range.

	p	t	b	a	ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 with X and Y	ISO 07 / NFPA DO7	ISO 08 / NFPA DO8
Pilot Operated Check Valves (Continued)									
					 Cartridge Body Stack Hgt. † T-21A CVCV-XCN-MBB 1.75" CVCV-XCN-MBB/S 1.75" Pg. 12.055	 Cartridge Body Stack Hgt. † T-22A CVEV-XCN-NBB 2.49" CVEV-XCN-NBB/S 2.49" Pg. 12.130	 Cartridge Body Stack Hgt. † T-22A CVEV-XCN-NJB 2.49" CVEV-XCN-NJB/S 2.49" Pg. 12.204	 Cartridge Body Stack Hgt. † T-23A CVGV-XCN-NKB 3.52" CVGV-XCN-NKB/S 3.52" Pg. 12.276	 Cartridge Body Stack Hgt. † T-23A CVGV-XCN-PBB 3.44" CVGV-XCN-PBB/S 3.44" Pg. 12.336
On B Pilot from A Vent to T					† T-11A CKCB-XCN-EBY 1.75" CKCB-XCN-EBY/S 1.75" Pg. 12.056	† T-2A CKEB-XCN-BBY 1.94" CKEB-XCN-BBY/S 1.94" Pg. 12.132	† T-2A CKEB-XCN-BJY 2.49" CKEB-XCN-BJY/S 2.49" Pg. 12.206	† T-17A CKGB-XCN-BKY 2.74" CKGB-XCN-BKY/S 2.74" Pg. 12.278	† T-17A CKGB-XCN-HBN 3.44" CKGB-XCN-HBN/S 3.44" Pg. 12.338
On A and B Cross-Piloted									
On A and B Cross-Piloted (High Capacity)									† T-19A CKIB-XCN-HBY 3.44" CKIB-XCN-HBY/S 3.44" Pg. 12.338
On A and B Cross-Piloted Vents to T					† T-21A CVCV-XCN-MBY 1.75" CVCV-XCN-MBY/S 1.75" Pg. 12.057	† T-22A CVEV-XCN-NBY 2.49" CVEV-XCN-NBY/S 2.49" Pg. 12.133	† T-22A CVEV-XCN-NJY 2.49" CVEV-XCN-NJY/S 2.49" Pg. 12.207	† T-23A CVGV-XCN-NKY 3.52" CVGV-XCN-NKY/S 3.52" Pg. 12.279	† T-23A CVGV-XCN-PBY 3.44" CVGV-XCN-PBY/S 3.44" Pg. 12.339
Flow Control Valves									
					Cartridge Body Stack Hgt. † T-13A NFCC-LCN-GBP 1.75" NFCC-LCN-GBP/S 1.75" Pg. 12.058	Cartridge Body Stack Hgt. † T-5A NFDC-LAN-DBP 2.44" NFDC-LAN-DBP/S 2.44" Pg. 12.134	Cartridge Body Stack Hgt. † T-5A NFDC-LAN-DJP 2.44" NFDC-LAN-DJP/S 2.44" Pg. 12.208	Cartridge Body Stack Hgt. † T-16A NFEC-LEN-DKP 2.74" NFEC-LEN-DKP/S 2.74" Pg. 12.280	Cartridge Body Stack Hgt. † T-16A NFEC-LEN-IBP 3.44" NFEC-LEN-IBP/S 3.44" Pg. 12.340
Meter-In P									
Meter-In P (High Capacity)					† T-5A NFDC-LAN-GBO 1.75" NFDC-LAN-GBO/S 1.75" Pg. 12.058		† T-16A NFEC-LEN-DJO 2.49" NFEC-LEN-DJO/S 2.49" Pg. 12.208	† T-18A NFCC-LGN-DKO 3.49" NFCC-LGN-DKO/S 3.49" Pg. 12.280	† T-18A NFCC-LGN-IBO 3.44" NFCC-LGN-IBO/S 3.44" Pg. 12.340
Bleed-Off P to T					† T-13A NCCB-LAN-GBQ 1.75" NCCB-LAN-GBQ/S 1.75" Pg. 12.059	† T-5A NCEB-LCN-DBQ 1.94" NCEB-LCN-DBQ/S 1.94" Pg. 12.135			† T-16A NCFB-LCN-CDO 3.44" NCFB-LCN-CDO/S 3.44" Pg. 12.341
Priority Flow on P					† T-11A FRCA-LAN-WBN 1.75" FRCA-LAN-WBN/S 1.75" Pg. 12.060		† T-2A FRDA-LAN-DJN 2.49" FRDA-LAN-DJN/S 2.49" Pg. 12.209		
Meter-In A					† T-13A NCCB-LCN-GBA 1.75" NCCB-LCN-GBA/S 1.75" Pg. 12.061	† T-5A NCEB-LCN-DBB 1.99" NCEB-LCN-DBB/S 1.99" Pg. 12.136	† T-5A NCEB-LCN-DJB 2.49" NCEB-LCN-DJB/S 2.49" Pg. 12.210	† T-16A NCFB-LCN-DKC 2.74" NCFB-LCN-DKC/S 2.74" Pg. 12.281	† T-16A NCFB-LCN-IBC 3.44" NCFB-LCN-IBC/S 3.44" Pg. 12.342
Meter-In A (High Capacity)					† T-5A NCEB-LCN-GBD 1.75" NCEB-LCN-GBD/S 1.75" Pg. 12.061		† T-16A NCFB-LCN-DJC 2.49" NCFB-LCN-DJC/S 2.49" Pg. 12.210	† T-18A NCGB-LCN-DKG 3.52" NCGB-LCN-DKG/S 3.52" Pg. 12.281	† T-18A NCGB-LCN-IBG 3.44" NCGB-LCN-IBG/S 3.44" Pg. 12.342
Meter-Out A					† T-13A NCCB-LCN-GBA 1.75" NCCB-LCN-GBA/S 1.75" Pg. 12.061	† T-5A NCEB-LCN-DBA 1.99" NCEB-LCN-DBA/S 1.99" Pg. 12.137	† T-5A NCEB-LCN-DJA 2.49" NCEB-LCN-DJA/S 2.49" Pg. 12.211	† T-16A NCFB-LCN-DKA 2.74" NCFB-LCN-DKA/S 2.74" Pg. 12.282	† T-16A NCFB-LCN-IBA 3.44" NCFB-LCN-IBA/S 3.44" Pg. 12.343
Meter-Out A (High Capacity)					† T-5A NCEB-LCN-GBD 1.75" NCEB-LCN-GBD/S 1.75" Pg. 12.061		† T-16A NCFB-LCN-DJD 2.49" NCFB-LCN-DJD/S 2.49" Pg. 12.211	† T-18A NCGB-LCN-DKE 3.52" NCGB-LCN-DKE/S 3.52" Pg. 12.282	† T-18A NCGB-LCN-IBE 3.44" NCGB-LCN-IBE/S 3.44" Pg. 12.343
Bleed-Off A to T					† T-13A NCCB-LCN-GBW 1.75" NCCB-LCN-GBW/S 1.75" Pg. 12.062	† T-5A NCEB-LCN-DBC 1.49" NCEB-LCN-DBC/S 1.49" Pg. 12.138			† T-16A NCFB-LCN-CDC 3.44" NCFB-LCN-CDC/S 3.44" Pg. 12.344
Bleed-Off A to T (High Capacity)					† T-5A NCEB-LCN-GBE 1.75" NCEB-LCN-GBE/S 1.75" Pg. 12.062				

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† These bodies do not have a gage port.

ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON



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Function	p	t	b	a	ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 with X and Y	ISO 07 / NFPA DO7	ISO 08 / NFPA DO8
Flow Control Valves (Continued)									
Priority Flow On A, Bypass to T Reverse FF Check							† T-2A FRDA-XAN-WHY 2.49" FRDA-XAN-WHY/S 2.49" Pg. 12.213		
Meter-In B					† T-13A NCCB-LCN-GBA 1.75" NCCB-LCN-GBA/S 1.75" Pg. 12.061	† T-5A NCEB-LCN-DBA 1.99" NCEB-LCN-DBA/S 1.99" Pg. 12.137	† T-5A NCEB-LCN-DJA 2.49" NCEB-LCN-DJA/S 2.49" Pg. 12.211	† T-16A NCFB-LCN-DKD 2.74" NCFB-LCN-DKD/S 2.74" Pg. 12.283	† T-16A NCFB-LCN-IBD 3.44" NCFB-LCN-IBD/S 3.44" Pg. 12.345
Meter-In B (High Capacity)					† T-5A NCEB-LCN-GBD 1.75" NCEB-LCN-GBD/S 1.75" Pg. 12.061		† T-16A NCFB-LCN-DJE 2.49" NCFB-LCN-DJE/S 2.49" Pg. 12.212	† T-18A NCGB-LCN-DKI 3.49" NCGB-LCN-DKI/S 3.49" Pg. 12.283	† T-18A NCGB-LCN-IBH 3.44" NCGB-LCN-IBH/S 3.44" Pg. 12.345
Meter-Out B					† T-13A NCCB-LCN-GBA 1.75" NCCB-LCN-GBA/S 1.75" Pg. 12.061	† T-5A NCEB-LCN-DBB 1.99" NCEB-LCN-DBB/S 1.99" Pg. 12.136	† T-5A NCEB-LCN-DJB 2.49" NCEB-LCN-DJB/S 2.49" Pg. 12.210	† T-16A NCFB-LCN-DKB 2.74" NCFB-LCN-DKB/S 2.74" Pg. 12.284	† T-16A NCFB-LCN-IBB 3.44" NCFB-LCN-IBB/S 3.44" Pg. 12.346
Meter-Out B (High Capacity)					† T-5A NCEB-LCN-GBD 1.75" NCEB-LCN-GBD/S 1.75" Pg. 12.061		† T-16A NCFB-LCN-DJF 2.49" NCFB-LCN-DJF/S 2.49" Pg. 12.212	† T-18A NCGB-LCN-DKF 3.49" NCGB-LCN-DKF/S 3.49" Pg. 12.284	† T-18A NCGB-LCN-IBF 3.44" NCGB-LCN-IBF/S 3.44" Pg. 12.346
Bleed-Off B to T					† T-13A NCCB-LCN-GBW 1.75" NCCB-LCN-GBW/S 1.75" Pg. 12.062	† T-5A NCEB-LCN-DBC 1.49" NCEB-LCN-DBC/S 1.49" Pg. 12.138			† T-16A NCFB-LCN-CDD 3.44" NCFB-LCN-CDD/S 3.44" Pg. 12.347
Bleed-Off B to T (High Capacity)					† T-5A NCEB-LCN-GBE 1.75" NCEB-LCN-GBE/S 1.75" Pg. 12.062				
Priority Flow On B, Bypass to T Reverse FF Check							† T-2A FRDA-XAN-WHZ 2.49" FRDA-XAN-WHZ/S 2.49" Pg. 12.213		
Meter-In A and B					† T-13A NCCB-LCN-GBY 1.75" NCCB-LCN-GBY/S 1.75" Pg. 12.063	† T-5A NCEB-LCN-DBY 1.99" NCEB-LCN-DBY/S 1.99" Pg. 12.139	† T-5A NCEB-LCN-DJY 2.49" NCEB-LCN-DJY/S 2.49" Pg. 12.214	† T-16A NCFB-LCN-DKZ 2.74" NCFB-LCN-DKZ/S 2.74" Pg. 12.285	† T-16A NCFB-LCN-IBX 3.44" NCFB-LCN-IBX/S 3.44" Pg. 12.348
Meter-In A and B (High Capacity)					† T-5A NCEB-LCN-GBZ 1.75" NCEB-LCN-GBZ/S 1.75" Pg. 12.063		† T-16A NCFB-LCN-DJZ 2.99" NCFB-LCN-DJZ/S 2.99" Pg. 12.214	† T-18A NCGB-LCN-DKU 3.52" NCGB-LCN-DKU/S 3.52" Pg. 12.285	† T-18A NCGB-LCN-IBZ 3.44" NCGB-LCN-IBZ/S 3.44" Pg. 12.348
Meter-Out A and B					† T-13A NCCB-LCN-GBY 1.75" NCCB-LCN-GBY/S 1.75" Pg. 12.063	† T-5A NCEB-LCN-DBY 1.99" NCEB-LCN-DBY/S 1.99" Pg. 12.139	† T-5A NCEB-LCN-DJY 2.49" NCEB-LCN-DJY/S 2.49" Pg. 12.214	† T-16A NCFB-LCN-DKY 2.74" NCFB-LCN-DKY/S 2.74" Pg. 12.286	† T-16A NCFB-LCN-IBW 3.44" NCFB-LCN-IBW/S 3.44" Pg. 12.349
Meter-Out A and B (High Capacity)					† T-5A NCEB-LCN-GBZ 1.75" NCEB-LCN-GBZ/S 1.75" Pg. 12.063		† T-16A NCFB-LCN-DJZ 2.99" NCFB-LCN-DJZ/S 2.99" Pg. 12.214	† T-18A NCGB-LCN-DKW 3.52" NCGB-LCN-DKW/S 3.52" Pg. 12.286	† T-18A NCGB-LCN-IBY 3.44" NCGB-LCN-IBY/S 3.44" Pg. 12.349
Bleed-Off A and B to T					† T-13A NCCB-LCN-GBX 1.75" NCCB-LCN-GBX/S 1.75" Pg. 12.064	† T-5A NCEB-LCN-DBX 1.44" NCEB-LCN-DBX/S 1.44" Pg. 12.140	† T-5A NCEB-LCN-DJX 1.49" NCEB-LCN-DJX/S 1.49" Pg. 12.215		
Bleed-Off A and B to T (High Capacity)					† T-5A NCEB-LCN-GBF 1.75" NCEB-LCN-GBF/S 1.75" Pg. 12.064				
Bleed-Off A to B and B to A					† T-13A NFCC-LCN-GBS 1.24" NFCC-LCN-GBS/S 1.24" Pg. 12.065	† T-13A NFCC-LCN-DBS 1.24" NFCC-LCN-DBS/S 1.24" Pg. 12.141	† T-13A NFCC-LCN-DJS 1.24" NFCC-LCN-DJS/S 1.24" Pg. 12.216		

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**Seal plate must be ordered separately. U.S. and European X and Y available.

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ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON

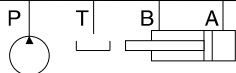


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Function	p	t	b	a	ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 With X and Y	ISO 07 / NFPA DO7	ISO 08 / NFPA DO8	
Flow Control Valves (Continued)										
Meter-Out T					Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
Meter-Out T (High Capacity)					†	T-5A	†	T-18A	†	T-18A
					NCCB-LCN-GBP	1.75"	NCEB-LCN-DBT	1.94"	NCFB-LCN-DKT	2.74"
					NCCB-LCN-GBP/S	1.75"	NCEB-LCN-DBT/S	1.94"	NCFB-LCN-DKT/S	2.74"
					Pg. 12.058	Pg. 12.142		Pg. 12.287		Pg. 12.350
					†	T-5A			†	T-18A
					NCEB-LCN-GBO	1.75"			NCEB-LCN-DKT	2.74"
					NCEB-LCN-GBO/S	1.75"			NCEB-LCN-DKT/S	2.74"
					Pg. 12.058			Pg. 12.287		Pg. 12.350
Check Valves (use only CX*A check valves)										
On P					†	T-13A	†	T-5A	†	T-16A
On P (High Capacity)					†	T-5A			†	T-18A
					CXDA-XCN-GDP	1.75"	CXFA-XCN-DBP	2.44"	CXHA-XCN-DJP	2.49"
					CXDA-XCN-GDP/S	1.75"	CXFA-XCN-DBP/S	2.44"	CXHA-XCN-DJP/S	2.49"
					Pg. 12.066	Pg. 12.143		Pg. 12.219		Pg. 12.288
					†	T-5A			†	T-18A
					CXFA-XCN-GDO	1.75"			CXHA-XCN-DJO	2.49"
					CXFA-XCN-GDO/S	1.75"			CXHA-XCN-DJO/S	2.49"
					Pg. 12.066			Pg. 12.219		Pg. 12.351
T to P					†	T-13A				
					CXDA-XAN-GDQ	1.75"				
					CXDA-XAN-GDQ/S	1.75"				
					Pg. 12.067					
On A Free Flow Out of Valve					†	T-13A	†	T-5A	†	T-16A
On A Free Flow Out of Valve (High Capacity)					†	T-5A			†	T-18A
					CXDA-XCN-GDA	1.75"	CXFA-XCN-DBK	1.99"	CXHA-XCN-DJK	2.49"
					CXDA-XCN-GDA/S	1.75"	CXFA-XCN-DBK/S	1.99"	CXHA-XCN-DJK/S	2.49"
					Pg. 12.068	Pg. 12.144		Pg. 12.220		Pg. 12.289
					†	T-5A			†	T-18A
					CXFA-XCN-GDD	1.75"			CXHA-XCN-DJC	2.49"
					CXFA-XCN-GDD/S	1.75"			CXHA-XCN-DJC/S	2.49"
					Pg. 12.068			Pg. 12.220		Pg. 12.352
On A Free Flow Into Valve					†	T-13A	†	T-5A	†	T-16A
On A Free Flow Into Valve (High Capacity)					†	T-5A			†	T-18A
					CXDA-XCN-GDA	1.75"	CXFA-XCN-DBJ	1.99"	CXHA-XCN-DJK	2.49"
					CXDA-XCN-GDA/S	1.75"	CXFA-XCN-DBJ/S	1.99"	CXHA-XCN-DJK/S	2.49"
					Pg. 12.068	Pg. 12.145		Pg. 12.221		Pg. 12.290
					†	T-5A			†	T-18A
					CXFA-XCN-GDD	1.75"			CXHA-XCN-DJD	2.49"
					CXFA-XCN-GDD/S	1.75"			CXHA-XCN-DJD/S	2.49"
					Pg. 12.068			Pg. 12.221		Pg. 12.290
T to A					†	T-13A				
					CXDA-XAN-GDW	1.75"				
					CXDA-XAN-GDW/S	1.75"				
					Pg. 12.069					
T to A (High Capacity)					†	T-5A	†	T-16A	†	T-18A
					CXFA-XAN-GDE	1.75"	CXHA-XAN-DBM	2.99"	CXHA-XAN-DJM	2.99"
					CXFA-XAN-GDE/S	1.75"	CXHA-XAN-DBM/S	2.99"	CXHA-XAN-DJM/S	2.99"
					Pg. 12.069	NOT CATALOGED		NOT CATALOGED		NOT CATALOGED
					†	T-13A				
					CXDA-XAN-GBS	1.24"	CXDA-XAN-DBS	1.24"	CXDA-XAN-DJS	1.24"
					CXDA-XAN-GBS/S	1.24"	CXDA-XAN-DBS/S	1.24"	CXDA-XAN-DJS/S	1.24"
					Pg. 12.070	Pg. 12.146		Pg. 12.222		
On B Free Flow Out of Valve					†	T-13A	†	T-5A	†	T-16A
On B Free Flow Out of Valve (High Capacity)					†	T-5A			†	T-18A
					CXDA-XCN-GDA	1.75"	CXFA-XCN-DBJ	1.99"	CXHA-XCN-DJK	2.49"
					CXDA-XCN-GDA/S	1.75"	CXFA-XCN-DBJ/S	1.99"	CXHA-XCN-DJK/S	2.49"
					Pg. 12.068	Pg. 12.145		Pg. 12.221		Pg. 12.291
					†	T-5A			†	T-18A
					CXFA-XCN-GDD	1.75"			CXHA-XCN-DKE	3.52"
					CXFA-XCN-GDD/S	1.75"			CXHA-XCN-DKE/S	3.52"
					Pg. 12.068			Pg. 12.223		Pg. 12.291

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12

ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON

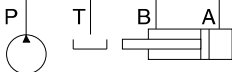


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Function	p	t	b	a	ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 with X and Y	ISO 07 / NFPA DO7	ISO 08 / NFPA DO8					
Check Valves – use CX*A check valves (Continued)														
					Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
On B Free Flow Into Valve					T-13A CXDA-XCN-GDA 1.75" CXDA-XCN-GDA/S 1.75" Pg. 12.068		T-5A CXFA-XCN-DBK 1.99" CXFA-XCN-DBK/S 1.99" Pg. 12.144		T-5A CXFA-XCN-DJK 2.49" CXFA-XCN-DJK/S 2.49" Pg. 12.220		T-16A CXHA-XCN-DBK 2.74" CXHA-XCN-DBK/S 2.74" Pg. 12.292		T-16A CXHA-XCN-IBB 3.44" CXHA-XCN-IBB/S 3.44" Pg. 12.355	
On B Free Flow Into Valve (High Capacity)					T-5A CXFA-XCN-GDD 1.75" CXFA-XCN-GDD/S 1.75" Pg. 12.068			T-16A CXHA-XCN-DJF 2.49" CXHA-XCN-DJF/S 2.49" Pg. 12.223		T-18A CXJA-XCN-DKF 3.49" CXJA-XCN-DKF/S 3.49" Pg. 12.292		T-18A CXJA-XCN-IBF 3.44" CXJA-XCN-IBF/S 3.44" Pg. 12.355		
T to B					T-13A CXDA-XAN-GDW 1.75" CXDA-XAN-GDW/S 1.75" Pg. 12.069									
T to B (High Capacity)					T-5A CXFA-XAN-GDE 1.75" CXFA-XAN-GDE/S 1.75" Pg. 12.069		T-16A CXHA-XAN-DBM 2.99" CXHA-XAN-DBM/S 2.99" NOT CATALOGED		T-16A CXHA-XAN-DJM 2.99" CXHA-XAN-DJM/S 2.99" NOT CATALOGED		T-18A CXJA-XAN-DKN 3.52" CXJA-XAN-DKN/S 3.52" NOT CATALOGED		T-18A CXJA-XAN-IBN 3.44" CXJA-XAN-IBN/S 3.44" NOT CATALOGED	
B to A					T-13A CXDA-XAN-GBS 1.75" CXDA-XAN-GBS/S 1.75" Pg. 12.070		T-13A CXDA-XAN-DBS 1.24" CXDA-XAN-DBS/S 1.24" Pg. 12.146		T-13A CXDA-XAN-DJS 1.24" CXDA-XAN-DJS/S 1.24" Pg. 12.222					
B to P (For Regenerative Circuits)					T-13A YDCK-XCN-AA 2.70" YDCK-XCN-AA/S 2.70" Pg. 12.070									
On A and B Free Flow Out of Valve					T-13A CXDA-XCN-GDY 1.75" CXDA-XCN-GDY/S 1.75" Pg. 12.071		T-5A CXFA-XCN-DBL 1.99" CXFA-XCN-DBL/S 1.99" Pg. 12.147		T-5A CXFA-XCN-DJL 2.49" CXFA-XCN-DJL/S 2.49" Pg. 12.224		T-16A CXHA-XCN-DKZ 2.74" CXHA-XCN-DKZ/S 2.74" Pg. 12.293		T-16A CXHA-XCN-IBX 3.44" CXHA-XCN-IBX/S 3.44" Pg. 12.356	
On A and B Free Flow Out of Valve (High Capacity)					T-5A CXFA-XCN-GDZ 1.75" CXFA-XCN-GDZ/S 1.75" Pg. 12.071			T-16A CXHA-XCN-DJZ 2.99" CXHA-XCN-DJZ/S 2.99" Pg. 12.224		T-18A CXJA-XCN-DKU 3.52" CXJA-XCN-DKU/S 3.52" Pg. 12.293		T-18A CXJA-XCN-IBZ 3.44" CXJA-XCN-IBZ/S 3.44" Pg. 12.356		
On A and B Free Flow Into Valve					T-13A CXDA-XCN-GDY 1.75" CXDA-XCN-GDY/S 1.75" Pg. 12.071		T-5A CXFA-XCN-DBL 1.99" CXFA-XCN-DBL/S 1.99" Pg. 12.147		T-5A CXFA-XCN-DJL 2.49" CXFA-XCN-DJL/S 2.49" Pg. 12.224		T-16A CXHA-XCN-DKY 2.74" CXHA-XCN-DKY/S 2.74" Pg. 12.294		T-16A CXHA-XCN-IBW 3.44" CXHA-XCN-IBW/S 3.44" Pg. 12.357	
On A and B Free Flow Into Valve (High Capacity)					T-5A CXFA-XCN-GDZ 1.75" CXFA-XCN-GDZ/S 1.75" Pg. 12.071			T-16A CXHA-XCN-DJZ 2.99" CXHA-XCN-DJZ/S 2.99" Pg. 12.224		T-18A CXJA-XCN-DKW 3.52" CXJA-XCN-DKW/S 3.52" Pg. 12.294		T-18A CXJA-XCN-IBY 3.44" CXJA-XCN-IBY/S 3.44" Pg. 12.357		
T to A and B					T-13A CXDA-XAN-GDX 1.75" CXDA-XAN-GDX/S 1.75" Pg. 12.072		T-5A CXFA-XAN-DBW 2.49" CXFA-XAN-DBW/S 2.49" Pg. 12.148		T-5A CXFA-XAN-DJW 2.49" CXFA-XAN-DJW/S 2.49" Pg. 12.225		T-5A CXFA-XAN-DKX 1.96" CXFA-XAN-DKX/S 1.96" NOT CATALOGED		T-5A CXFA-XAN-CDX 1.94" CXFA-XAN-CDX/S 1.94" Pg. 12.358	
T to A and B (High Capacity)					T-5A CXFA-XAN-GDF 1.75" CXFA-XAN-GDF/S 1.75" Pg. 12.072		T-16A CXHA-XAN-DBR 2.99" CXHA-XAN-DBR/S 2.99" NOT CATALOGED		T-16A CXHA-XAN-DJR 2.99" CXHA-XAN-DJR/S 2.99" NOT CATALOGED		T-18A CXJA-XAN-DKR 3.52" CXJA-XAN-DKR/S 3.52" NOT CATALOGED		T-16A CXHA-XAN-CDV 3.44" CXHA-XAN-CDV/S 3.44" Pg. 12.358	
On T					T-13A CXDA-XCN-GDP 1.75" CXDA-XCN-GDP/S 1.75" Pg. 12.066		T-5A CXFA-XCN-DBT 1.94" CXFA-XCN-DBT/S 1.94" Pg. 12.149		T-5A CXFA-XCN-DJT 2.49" CXFA-XCN-DJT/S 2.49" Pg. 12.226		T-16A CXHA-XCN-DKT 2.74" CXHA-XCN-DKT/S 2.74" Pg. 12.295		T-16A CXHA-XCN-IBT 3.44" CXHA-XCN-IBT/S 3.44" Pg. 12.359	
On T (High Capacity)					T-5A CXFA-XCN-GDO 1.75" CXFA-XCN-GDO/S 1.75" Pg. 12.066							T-18A CXJA-XCN-IBV 3.44" CXJA-XCN-IBV/S 3.44" Pg. 12.359		

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ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON

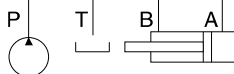


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	 ISO 03 / NFPA D03	 ISO 05 / NFPA D05	 ISO 05 / NFPA D05 with X and Y	 ISO 07 / NFPA D07	 ISO 08 / NFPA D08
Function	ISO 03 / NFPA D03	ISO 05 / NFPA D05	ISO 05 / NFPA D05 with X and Y	ISO 07 / NFPA D07	ISO 08 / NFPA D08
Circuit Savers					
Air-Bleed and Start-Up	† NQEB-XAN-FBO 1.75" NQEB-XAN-FBO/S 1.75" NOT CATALOGED	† NQEB-XAN-CBP 1.94" NQEB-XAN-CBP/S 1.94" Pg. 12.150	† NQEB-XAN-CJP 1.99" NQEB-XAN-CJP/S 1.99" Pg. 12.228	† NQEB-XAN-CKP 1.96" NQEB-XAN-CKP/S 1.96" Pg. 12.296	† NQEB-XAN-CDP 1.94" NQEB-XAN-CDP/S 1.94" Pg. 12.360
Pilot Choke	† YNAA-LDN-AA 1.75" YNAA-LDN-AA/S 1.75" Pg. 12.073	† YNAB-LDN-BA 1.11" YNAB-LDN-BA/S 1.11" Pg. 12.151			
Shuttle A and B Output External	† T-13A CSAA-EXN-GBS 1.24" CSAA-EXN-GBS/S 1.24" Pg. 12.074	† T-13A CSAA-EXN-DBS 1.24" CSAA-EXN-DBS/S 1.24" Pg. 12.152	† T-13A CSAA-EXN-DJS 1.24" CSAA-EXN-DJS/S 1.24" Pg. 12.229	† T-13A CSAA-EXN-DKS 1.18" CSAA-EXN-DKS/S 1.18" Pg. 12.297	† T-13A CSAA-EXN-HBS 1.44" CSAA-EXN-HBS/S 1.44" Pg. 12.361
Checks from A and B Output to Y Port			† T-11A CDAB-XBN-BJS 1.18" CDAB-XBN-BJS/S 1.18" Pg. 12.229	† T-11A CDAB-XBN-BKS 1.18" CDAB-XBN-BKS/S 1.18" Pg. 12.297	† T-11A CDAB-XBN-HBS 1.44" CDAB-XBN-HBS/S 1.44" Pg. 12.361
Checks from A and B-Adapter to ISO 05 W/Y Port	† T-11A CDAB-XBN-EBS 1.44" CDAB-XBN-EBS/S 1.44" Pg. 12.074	† T-11A CDAB-XBN-BJS 1.19" CDAB-XBN-BJS/S 1.19" Pg. 12.152			
Pressure Compensator (Restrictive)	† YFCG-XHN-AA 1.75" YFCG-XHN-AA/S 1.75" Pg. 12.075	† YFEJ-XHN-BA 2.49" YFEJ-XHN-BA/S 2.49" Pg. 12.153	† YFEK-XHN-BB 2.49" YFEK-XHN-BB/S 2.49" Pg. 12.230	† YFFE-XHN-AB 2.74" YFFE-XHN-AB/S 2.74" Pg. 12.298	† YFIA-XHN-CA 3.44" YFIA-XHN-CA/S 3.44" Pg. 12.362
Pressure Compensator (Restrictive) W/LS Port	† YFCJ-XHN-AA 2.55" YFCJ-XHN-AA/S 2.55" Pg. 12.075	† YFEP-XHN-BB 2.49" YFEP-XHN-BB/S 2.49" Pg. 12.153	† YFEQ-XHN-BB 2.49" YFEQ-XHN-BB/S 2.49" Pg. 12.230	† YFFF-XHN-AB 2.74" YFFF-XHN-AB/S 2.74" Pg. 12.298	† YFIB-XHN-CA 3.44" YFIB-XHN-CA/S 3.44" Pg. 12.362
Pressure Compensator (Bypass)	† YFCK-XHN-AA 2.55" YFCK-XHN-AA/S 2.55" Pg. 12.075	† YFEV-XHN-BA 2.49" YFEV-XHN-BA/S 2.49" Pg. 12.153	† YFEW-XHN-BB 2.49" YFEW-XHN-BB/S 2.49" Pg. 12.230	† YFFG-XHN-AB 2.66" YFFG-XHN-AB/S 2.66" Pg. 12.298	† YFIC-XHN-CA 3.44" YFIC-XHN-CA/S 3.44" Pg. 12.362
Flow Divider and/or Combiner on A	† T-31A FSCA-XAN-MBJ 2.49" FSCA-XAN-MBJ/S 2.49" Pg. 12.076				
Flow Divider and/or Combiner on B	† T-31A FSCA-XAN-MBJ 2.49" FSCA-XAN-MBJ/S 2.49" Pg. 12.076				
B to A Regenerative	† YDCA-LHN-AA 1.75" YDCA-LHN-AA/S 1.75" Pg. 12.077	† YDES-LHN-BA 2.49" YDES-LHN-BA/S 2.49" Pg. 12.154	† YDEL-LAN-BB 2.49" YDEL-LAN-BB/S 2.49" Pg. 12.231	† YDFG-LHN-AB 2.74" YDFG-LHN-AB/S 2.74" Pg. 12.299	† YDFF-LHN-CA 3.44" YDFF-LHN-CA/S 3.44" Pg. 12.363
B to A Regenerative (High Capacity)					† YDGF-LHN-CA 3.44" YDGF-LHN-CA/S 3.44" Pg. 12.363
B to A Regenerative (Full Time)	† YDCF-XCN-AA 1.81" YDCF-XCN-AA/S 1.81" Pg. 12.078	† YDET-XCN-BA 2.49" YDET-XCN-BA/S 2.49" Pg. 12.155		† YDFH-XCN-AB 2.74" YDFH-XCN-AB/S 2.74" Pg. 12.300	† YDGH-XCN-CA 3.44" YDGH-XCN-CA/S 3.44" Pg. 12.364

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ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON

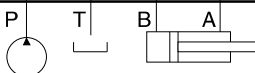


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Function	p	t	b	a	ISO 03 / NFPA D03	ISO 05 / NFPA D05	ISO 05 / NFPA D05 with X and Y	ISO 07 / NFPA D07	ISO 08 / NFPA D08
Circuit Savers (Continued)									
A to B Regenerative					Cartridge Body: YDCA-LHN-AA Stack Hgt.: 1.75" Pg. 12.077	Cartridge Body: YDER-LHN-BA Stack Hgt.: 2.49" Pg. 12.156		Cartridge Body: YDFE-LAN-AB Stack Hgt.: 2.74" Pg. 12.301	Cartridge Body: YDFJ-LHN-CA Stack Hgt.: 3.44" Pg. 12.365
A to B Regenerative (High Capacity)									Cartridge Body: YDGE-LHN-CA Stack Hgt.: 3.44" Pg. 12.365
A to B Regenerative (Full Time)					Cartridge Body: YDCF-XCN-AA/S Stack Hgt.: 1.81" Pg. 12.078	Cartridge Body: YDEV-XCN-BA Stack Hgt.: 2.49" Pg. 12.155		Cartridge Body: YDFI-XCN-AB Stack Hgt.: 2.74" Pg. 12.300	Cartridge Body: YDGI-XCN-CA Stack Hgt.: 3.44" Pg. 12.364
P and A Tap in Manifold					Cartridge Body: ZPT Stack Hgt.: .99" Pg. 12.079	Cartridge Body: ZPS Stack Hgt.: .99" Pg. 12.157	Cartridge Body: WCA Stack Hgt.: 1.49" NOT CATALOGED		
P and B Tap in Manifold					Cartridge Body: ZPT Stack Hgt.: .99" Pg. 12.079	Cartridge Body: ZPS Stack Hgt.: .99" Pg. 12.157	Cartridge Body: WCA Stack Hgt.: 1.49" NOT CATALOGED		
P, T, A and B Tap in Manifold						Cartridge Body: ZKL Stack Hgt.: .99" Pg. 12.157	Cartridge Body: ZCA Stack Hgt.: 1.49" NOT CATALOGED		Cartridge Body: WKE Stack Hgt.: 1.49" NOT CATALOGED
A and B Tap in Manifold					Cartridge Body: ZUO Stack Hgt.: .99" Pg. 12.079	Cartridge Body: ZPR Stack Hgt.: .94" Pg. 12.158	Cartridge Body: WGA Stack Hgt.: 1.49" NOT CATALOGED		
Swap Block Swaps A and B					Cartridge Body: ZKX Stack Hgt.: .99" Pg. 12.079	Cartridge Body: ZTB Stack Hgt.: 1.44" Pg. 12.158			
Adapter to Next Smaller Valve Pattern						Cartridge Body: ZWU Stack Hgt.: 1.44" Pg. 12.159			
ISO 05 to ISO 05 with Dual Tank Ports						Cartridge Body: ZXC Stack Hgt.: .94" Pg. 12.159			
ISO 05 to ISO 05 with X and Y Access to X and Y (amer)						Cartridge Body: ZSV Stack Hgt.: .94" Pg. 12.160			
ISO 05 to ISO 05 with X and Y Access to X and Y (Euro)						Cartridge Body: ZST Stack Hgt.: .94" Pg. 12.160			
ISO 05 with X and Y Amer to Euro							Cartridge Body: ZSX Stack Hgt.: .99" Pg. 12.232		
ISO 05 with X and Y Euro to Amer							Cartridge Body: ZSW Stack Hgt.: .99" Pg. 12.232		
Bosch L Port to ISO 05 X Port (European)							Cartridge Body: ZJA Stack Hgt.: .95" Pg. 12.233		

Continued on next page.



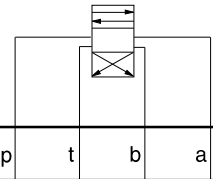

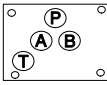
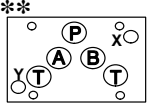
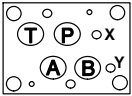
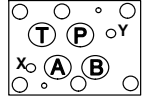
****Seal plate must be ordered separately. U.S. and European X and Y available.**
All bodies on this page do not have a gauge port.

ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON

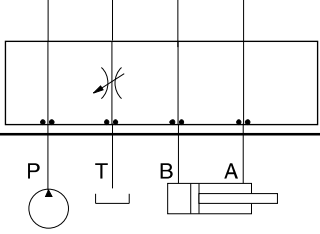
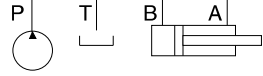


All pages listed below refer to SUN's Sandwich Body Catalog.

Full model codes are shown with typical cartridges. Other types of cartridges with identical cavity configuration can be used in place of typical cartridges shown. If a * is present in the sixth position of the full model code, the customer must specify the pressure range.

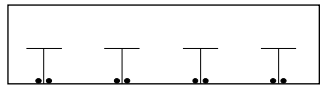
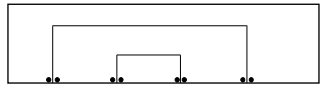
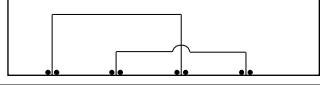
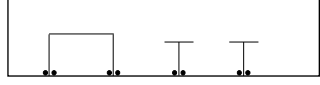
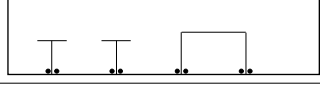
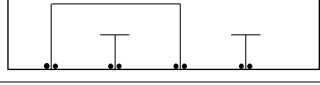
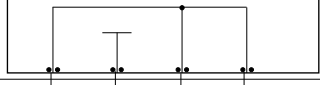
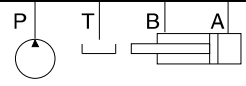
						
<i>Function</i>	p t b a	ISO 03 / NFPA D03	ISO 05 / NFPA D05	ISO 05 / NFPA D05 with X and Y	ISO 07 / NFPA D07	ISO 08 / NFPA D08

Circuit Savers (Continued)

	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
ISO 05 X Port (European) to Bosch L Port 					ZJB ZJB/S <i>Pg. 12.233</i>	.95" .95"				
										

Cover Plates

Counterbored for socket head cap screws. Clamp height and engagement in subplate determines cap screw length.

	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.	Cartridge Body	Stack Hgt.
All Ports Blocked 	ZJR ZJR/S <i>Pg. 12.090</i>	.50" .50"			ZJP ZJP/S <i>Pg. 12.241</i>	.38" .38"				
P to A and B to T 	ZJS ZJS/S <i>Pg. 12.090</i>	.50" .50"			ZJM ZJM/S <i>Pg. 12.241</i>	.38" .38"				
P to B and A to T 	ZJT ZJT/S <i>Pg. 12.090</i>	.50" .50"			ZJJ ZJJ/S <i>Pg. 12.241</i>	.38" .38"				
P to T A and B blocked 	ZJV ZJV/S <i>Pg. 12.091</i>	.50" .50"			ZJN ZJN/S <i>Pg. 12.242</i>	.38" .38"				
A to B P and T blocked 	ZJW ZJW/S <i>Pg. 12.091</i>	.50" .50"			ZJL ZJL/S <i>Pg. 12.242</i>	.38" .38"				
P to B A and T blocked 	ZWE ZWE/S <i>Pg. 12.091</i>	.50" .50"			ZJK ZJK/S <i>Pg. 12.242</i>	.38" .38"				
P to A and B T blocked 	WJG WJG/S <i>Pg. 12.092</i>	.50" .50"								
										

**Seal plate must be ordered separately. U.S. and European X and Y available.

ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON



All pages listed below refer to SUN's Sandwich Body Catalog.

Full model codes are shown with typical cartridges. Other types of cartridges with identical cavity configuration can be used in place of typical cartridges shown. If a * is present in the sixth position of the full model code, the customer must specify the pressure range.

			** 		
Function	ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 with X and Y	ISO 07 / NFPA DO7	ISO 08 / NFPA DO8
Side Ported Subplates					
	Cartridge Body Overall Hgt.	Cartridge Body Overall Hgt.	Cartridge Body Overall Hgt.	Cartridge Body Overall Hgt.	Cartridge Body Overall Hgt.
Relief P to T 	T-10A RPEC-L*N-FSJ 2.00" RPEC-L*N-FSJS 2.00" Pg. 12.080	† T-10A RPEC-L*N-FSK 1.94" RPEC-L*N-FSK/S 1.94" Pg. 12.161	† T-10A RPEC-L*N-ZHL 2.44" RPEC-L*N-ZHL/S 2.44" Pg. 12.234	† T-3A RPGC-L*N-ZLX 1.94" RPGC-L*N-ZLX/S 1.94" Pg. 12.302	† T-3A RPGC-L*N-CSM 1.94" RPGC-L*N-CSM/S 1.94" Pg. 12.366
Relief P to T Check on P 	† T-10A YRCC-L*N-BJ 2.00" YRCC-L*N-BJS 2.00" Pg. 12.081	† T-10A YREJ-L*N-BK 1.94" YREJ-L*N-BK/S 1.94" Pg. 12.162			
Air-Bleed and Start-Up 		† T-3A NQEB-XAN-CSK 1.94" NQEB-XAN-CSK/S 1.94" Pg. 12.163		† T-3A NQEB-XAN-ZLX 1.94" NQEB-XAN-ZLX/S 1.94" Pg. 12.302	† T-3A NQEB-XAN-CSM 1.94" NQEB-XAN-CSM/S 1.94" Pg. 12.366
Reducing on P 	T-11A PBDB-L*N-ESJ 2.00" PBDB-L*N-ESJS 2.00" Pg. 12.083	T-2A PFBF-L*N-BSK 1.94" PFBF-L*N-BSK/S 1.94" Pg. 12.164			T-17A PBHB-L*N-HSM 3.44" PBHB-L*N-HSM/S 3.44" Pg. 12.367
Reducing/ Relieving on P 	T-11A PPDB-L*N-ESJ 2.00" PPDB-L*N-ESJS 2.00" Pg. 12.083	T-2A PFBF-L*N-BSK 1.94" PFBF-L*N-BSK/S 1.94" Pg. 12.164			T-17A PPHB-L*N-HSM 3.44" PPHB-L*N-HSM/S 3.44" Pg. 12.367
Bypass Compensator for Proportional Valves 	† T-11A YFCL-XHN-BJ 2.00" YFCL-XHN-BJS 2.00" Pg. 12.084	† T-2A YFES-XHN-BK 2.00" YFES-XHN-BK/S 2.00" Pg. 12.165			
Relief P to T and Bypass Flow Regulator 	† T-11A YFCS-L*N-BJ 2.00" YFCS-L*N-BJS 2.00" Pg. 12.085	† T-2A YFED-L*N-BK 1.94" YFED-L*N-BK/S 1.94" Pg. 12.166			
Relief P to T Regenerative B to A 	† T-11A YDCG-LAN-BK 2.50" YDCG-LAN-BK/S 2.50" Pg. 12.086	† T-2A YDEM-LAN-BL 2.94" YDEM-LAN-BL/S 2.94" Pg. 12.167			
Rear Ported Subplates					
	Cartridge Body Overall Hgt.	Cartridge Body Overall Hgt.	Cartridge Body Overall Hgt.	Cartridge Body Overall Hgt.	Cartridge Body Overall Hgt.
Relief P to T 	† T-10A RPEC-L*N-FRJ 2.00" RPEC-L*N-FRJS 2.00" Pg. 12.080	† T-10A RPEC-L*N-FRK 2.12" RPEC-L*N-FRK/S 2.12" Pg. 12.161			T-3A RPGC-L*N-CRM 1.94" RPGC-L*N-CRM/S 1.94" Pg. 12.366
Relief P to T Check on P 	† T-10A YRCB-LAN-BJ 2.00" YRCB-LAN-BJS 2.00" Pg. 12.081	† T-10A YREQ-LAN-BK 1.94" YREQ-LAN-BK/S 1.94" Pg. 12.162			

Continued on next page.

**** Seal plate must be ordered separately. U.S. and European X and Y available.**

* Incomplete model number. Cartridges included. Consult your SUN distributor for order information.

† These bodies do not have a gage port.

ISO/NFPA SANDWICH BODY LOCATOR ALUMINUM AND DUCTILE IRON



All pages listed below refer to SUN's Sandwich Body Catalog.

Full model codes are shown with typical cartridges. Other types of cartridges with identical cavity configuration can be used in place of typical cartridges shown. If a * is present in the sixth position of the full model code, the customer must specify the pressure range.

			** 			
<i>Function</i>	ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 with X and Y	ISO 07 / NFPA DO7	ISO 08 / NFPA DO8	
Rear Ported Subplates (Continued)						
	<i>Cartridge Body</i>	<i>Overall Hgt.</i>	<i>Cartridge Body</i>	<i>Overall Hgt.</i>	<i>Cartridge Body</i>	<i>Overall Hgt.</i>
Air-Bleed and Start-Up 			T-3A NQEB-XAN-CRK 1.94" NQEB-XAN-CRK/S 1.94" Pg. 12.163			† T-3A NQEB-XAN-CRM 1.94" NQEB-XAN-CRM/S 1.94" Pg. 12.366
Reducing on P 	T-11A PBDB-L*N-ERJ 2.00" PBDB-L*N-ERJ/S 2.00" Pg. 12.083		T-2A PBFB-L*N-BRK 1.94" PBFB-L*N-BRK/S 1.94" Pg. 12.164		T-17A PBHB-L*N-HRM 3.44" PBHB-L*N-HRM/S 3.44" Pg. 12.367	
Reducing/Relieving on P 	T-11A PPDB-L*N-ERJ 2.00" PPDB-L*N-ERJ/S 2.00" Pg. 12.083		T-2A PPFB-L*N-BRK 1.94" PPFB-L*N-BRK/S 1.94" Pg. 12.164		T-17A PPHB-L*N-HRM 3.44" PPHB-L*N-HRM/S 3.44" Pg. 12.367	
Side Ported Subplates with Gasket Mount Tank Port						
	<i>Cartridge Body</i>	<i>Overall Hgt.</i>	<i>Cartridge Body</i>	<i>Overall Hgt.</i>	<i>Cartridge Body</i>	<i>Overall Hgt.</i>
Relief P to T 	† T-10A RPEC-L*N-FTJ 2.00" RPEC-L*N-FTJ/S 2.00" Pg. 12.080		† T-10A RPEC-L*N-FTK 1.94" RPEC-L*N-FTK/S 1.94" Pg. 12.161		† T-3A RPGC-L*N-VTF 2.44" RPGC-L*N-VTF/S 2.44" NOT CATALOGED	† T-3A RPGC-L*N-CTM 1.94" RPGC-L*N-CTM/S 1.94" Pg. 12.366
Air-Bleed and Start-Up 	T-3A NQEB-XAN-CTJ 2.00" NQEB-XAN-CTJ/S 2.00" Pg. 12.082		† T-3A NQEB-XAN-CTK 1.94" NQEB-XAN-CTK/S 1.94" Pg. 12.163		† T-3A NQEB-XAN-VTF 2.44" NQEB-XAN-VTF/S 2.44" NOT CATALOGED	† T-3A NQEB-XAN-CTM 1.94" NQEB-XAN-CTM/S 1.94" Pg. 12.366
Reducing on P 	T-11A PBDB-L*N-ETJ 2.00" PBDB-L*N-ETJ/S 2.00" Pg. 12.083		T-2A PBFB-L*N-BTK 1.94" PBFB-L*N-BTK/S 1.94" Pg. 12.164		T-17A PBHB-L*N-HTM 3.44" PBHB-L*N-HTM/S 3.44" Pg. 12.367	
Reducing/Relieving on P 	T-11A PPDB-L*N-ETJ 2.00" PPDB-L*N-ETJ/S 2.00" Pg. 12.083		T-2A PPFB-L*N-BTK 1.94" PPFB-L*N-BTK/S 1.94" Pg. 12.164		T-17A PPHB-L*N-HTM 3.44" PPHB-L*N-HTM/S 3.44" Pg. 12.367	

** Seal plate must be ordered separately. U.S. and European X and Y available.

* Incomplete model number. Cartridges included. Consult your SUN distributor for order information.

† These bodies do not have a gage port.

ISO/NFPA SANDWICH BODY LOCATOR

ALUMINUM AND DUCTILE IRON

All pages listed below refer to SUN's Sandwich Body Catalog



Function	p t b a	ISO 03 / NFPA DO3	ISO 05 / NFPA DO5	ISO 05 / NFPA DO5 with Y Port	ISO 07 / NFPA DO7 with Y Port	ISO 08 / NFPA DO8 with Y Port

Bar Manifolds

	Model	Price	Model	Price	Model	Price	Model	Price	Model	Price	Model	Price		
One Station 	VSL VSL/S		VPT VPT/S		VNN VNN/S	00.000 00.000	VMJ VMJ/S		VRL VRL/S		VLE VLE/S		VLV VLV/S	
	Pg. 12.087		Pg. 12.168		Pg. 12.168		Pg. 12.235		Pg. 12.235		Pg. 12.303		Pg. 12.368	
Two Station 	VSM VSM/S		VPV VPV/S		VNP VNP/S		VMK VMK/S		VRM VRM/S		VLF VLF/S		VLV VLV/S	
	Pg. 12.088		Pg. 12.169		Pg. 12.169		Pg. 12.236		Pg. 12.236		Pg. 12.304		Pg. 12.369	
Three Station 	VSN VSN/S		VPW VPW/S		VNR VNR/S		VML VML/S		VRN VRN/S		VLG VLG/S		VLW VLW/S	
	Pg. 12.088		Pg. 12.170		Pg. 12.170		Pg. 12.237		Pg. 12.237		Pg. 12.304		Pg. 12.369	
Four Station 	VSP VSP/S		VPX VPX/S		VNS VNS/S		VMM VMM/S		VRP VRP/S					
	Pg. 12.089		Pg. 12.171		Pg. 12.171		Pg. 12.238		Pg. 12.238					
Five Station 	VSR VSR/S		VPY VPY/S		VNT VNT/S		VMN VMN/S		VRR VRR/S					
	Pg. 12.089		Pg. 12.172		Pg. 12.172		Pg. 12.239		Pg. 12.239					

12



NOTES



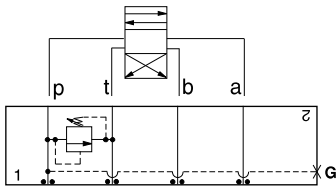




ISO 03 SANDWICH BODIES



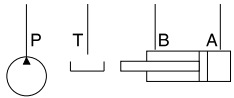
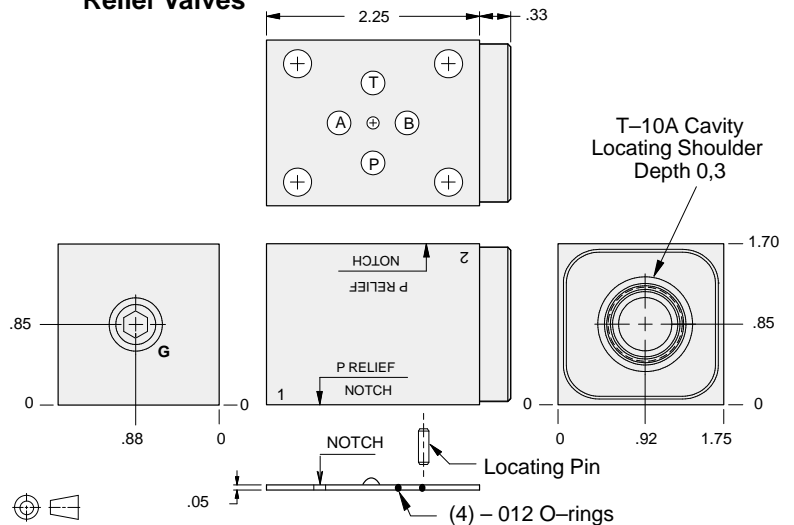
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

P to T
(High Capacity)

Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	FBP		FBP/S	
.25 BSPP	FBP/M		FBP/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

Cartridge Diagram	Valve Type	Page Reference
	Pilot Operated Relief Valve	RPEC Page 1.06
	Pilot Operated, Rapid Response Relief Valve	RPEE Page 1.08
	Direct Acting Relief Valve	RDDA Page 1.10
OTHER VALVES:		

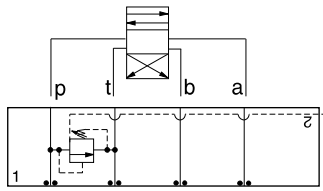


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

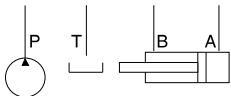
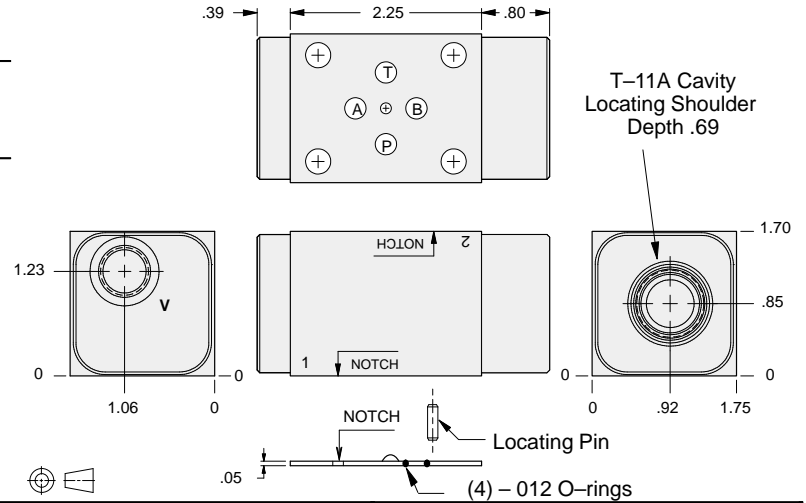
03 RELIEF



FUNCTION

P to T
Externally Vented

Relief Valves



Vent Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	EBC		EBC/S	
.25 BSPP	EBC/M		EBC/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

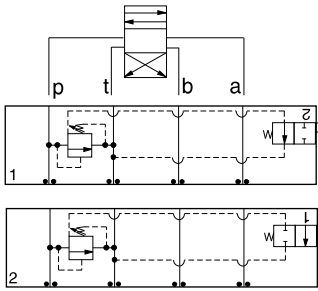
	Pilot Operated Vented Relief Valve		
	RVCA Page 1.18		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

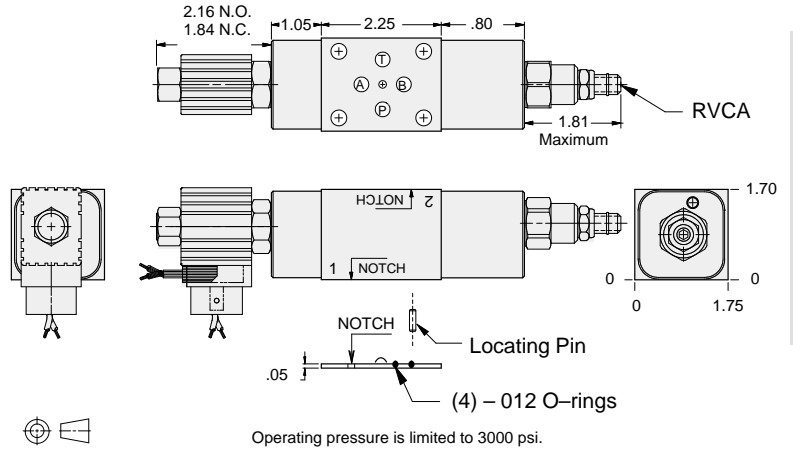


FUNCTION

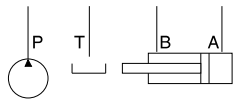
P to T
N.O. Solenoid
Vented *

P to T
N.C. Solenoid
Vented *

Relief Valves



03 RELIEF



Solenoid Type	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
N.O.	YRCO-LAN-*A		YRCO-LAN-*A/S	
N.C.	YRCP-LAN-*A		YRCP-LAN-*A/S	

* Select solenoid connection/voltage option from page 14.16 and add option price to List Price.

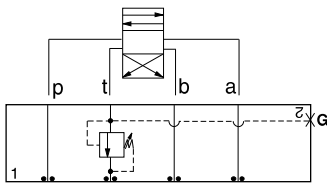


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

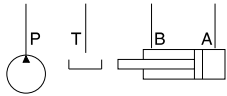
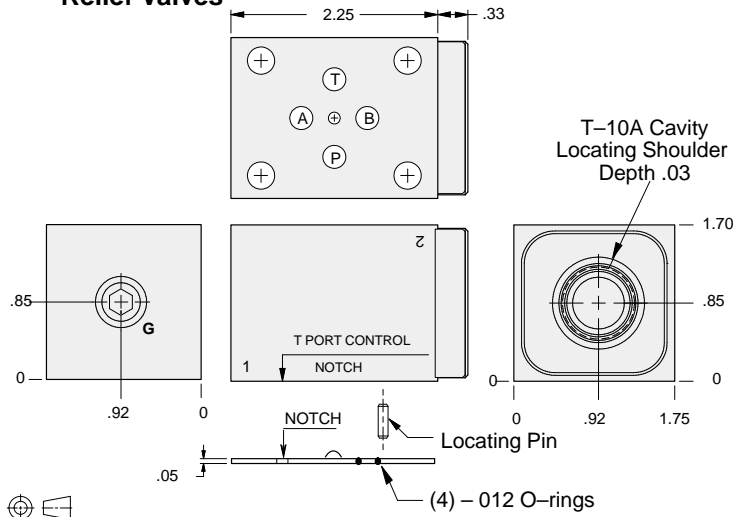
03 RELIEF



FUNCTION

Out of T
(High Capacity)

Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	FBT		FBT/S	
.25 BSPP	FBT/M		FBT/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

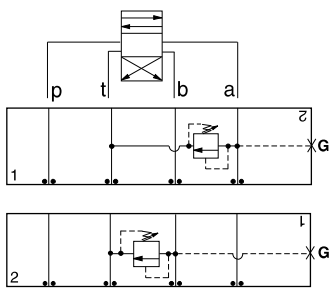
	<i>Pilot Operated Relief Valve</i> RPEC Page 1.06		<i>Pilot Operated "Kick-Down" Relief Valve</i> RQEB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i> RPEE Page 1.08		
	<i>Direct Acting Relief Valve</i> RDDA Page 1.10		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

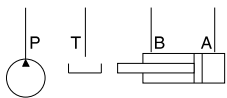
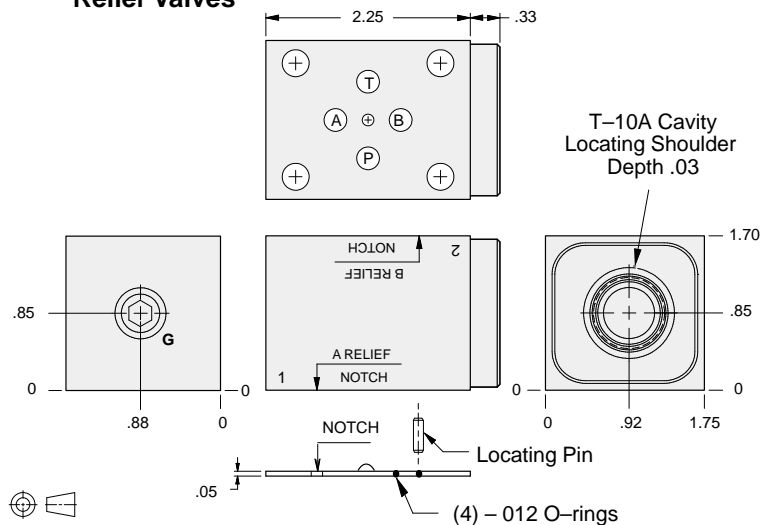


FUNCTION

A to T
(High Capacity)

B to T
(High Capacity)

Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	FBA		FBA/S	
.25 BSPP	FBA/M		FBA/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Relief Valve</i>		<i>Pilot Operated "Kick-Down" Relief Valve</i>
	RPEC Page 1.06		RQEB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i>		
	RPEE Page 1.08		
	<i>Direct Acting Relief Valve</i>		
	RDDA Page 1.10		
OTHER VALVES:			

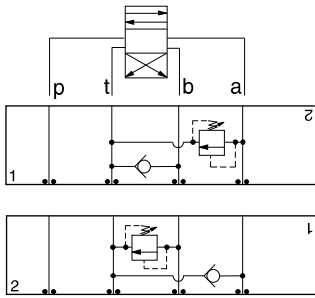


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

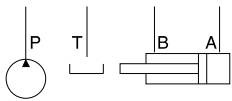
03 RELIEF



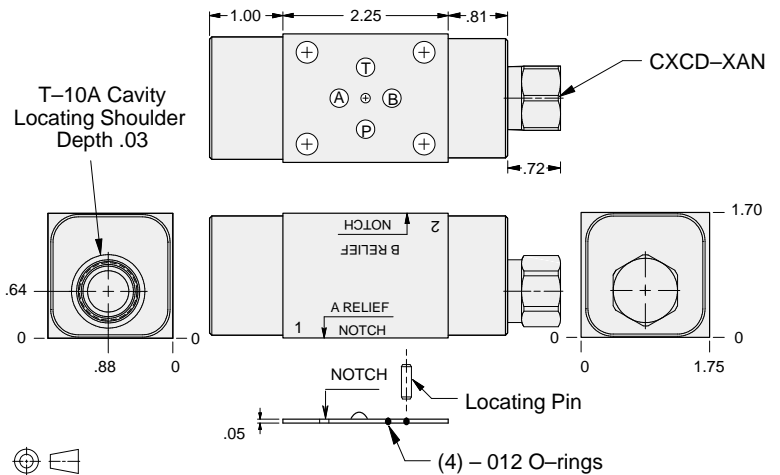
FUNCTION

A to T
FF Check T to B

B to T
FF Check T to A



Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
FB2		FB2/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

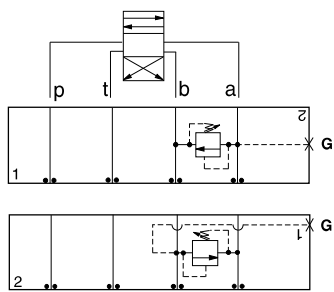
	<i>Pilot Operated Relief Valve</i>		<i>Pilot Operated "Kick-Down" Relief Valve</i>
	RPEC Page 1.06		RQEB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i>		
	RPEE Page 1.08		
	<i>Direct Acting Relief Valve</i>		
	RDDA Page 1.10		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

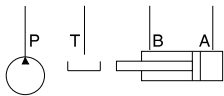
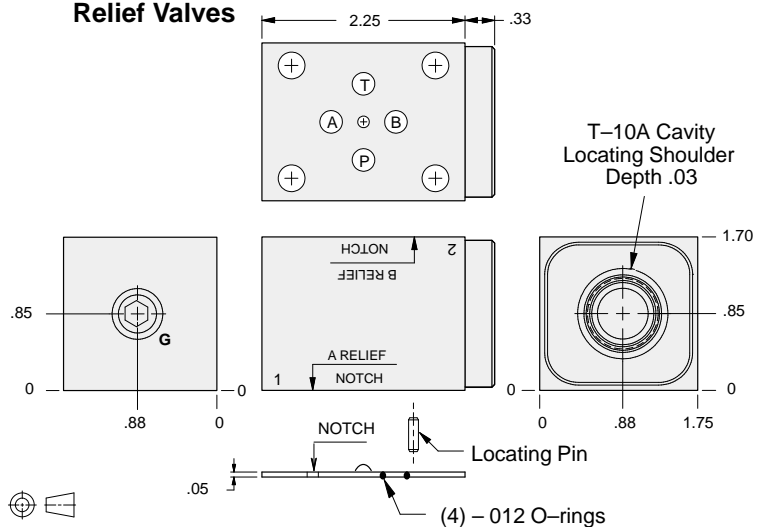


FUNCTION

A to B
(High Capacity)

B to A
(High Capacity)

Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	FBC		FBC/S	
.25 BSPP	FBC/M		FBC/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve RPEC Page 1.06		Pilot Operated "Kick-Down" Relief Valve RQEB Page 1.12
	Pilot Operated, Rapid Response Relief Valve RPEE Page 1.08		
	Direct Acting Relief Valve RDDA Page 1.10		
OTHER VALVES:			

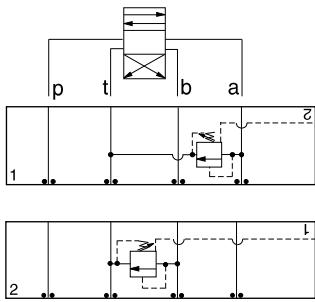


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 RELIEF

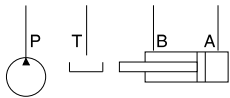
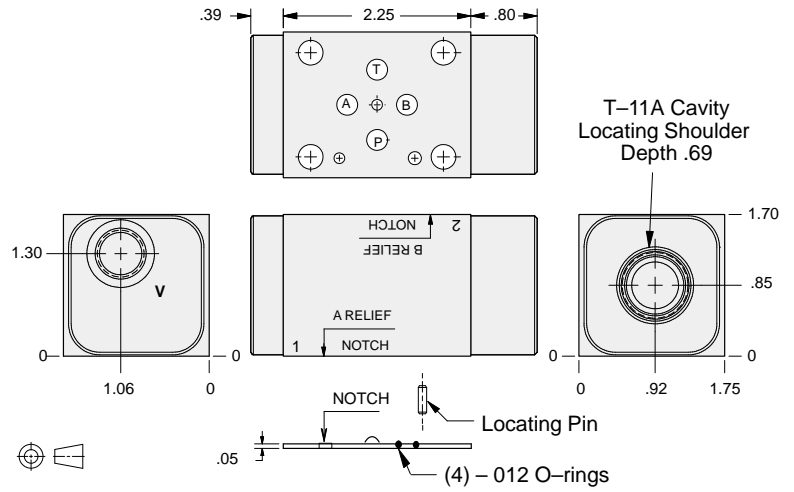


FUNCTION

A to T
Externally Vented

B to T
Externally Vented

Relief Valves



Vent Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	EBI		EBI/S	
.25 BSPP	EBI/M		EBI/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

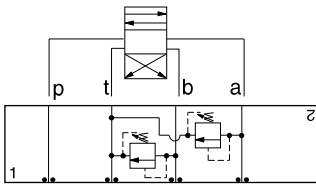
	Pilot Operated Vented Relief Valve		
	RVCA Page 1.18		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



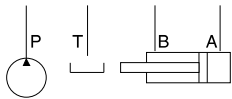
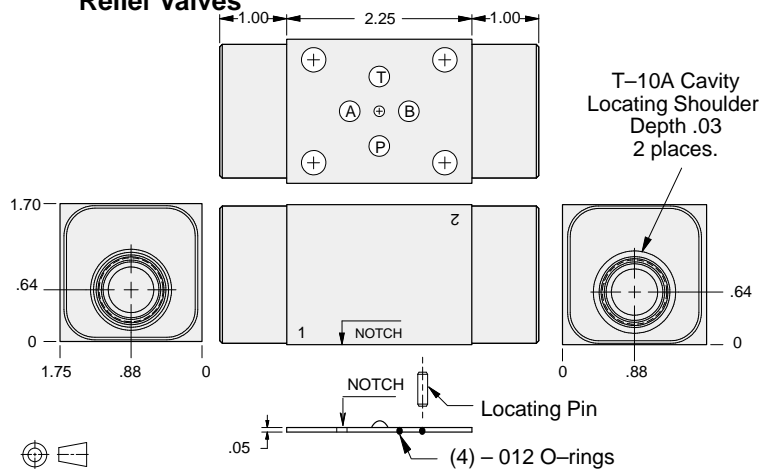
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

A and B to T
(High Capacity)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
FBX		FBX/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Relief Valve</i>		<i>Pilot Operated "Kick-Down" Relief Valve</i>
	RPEC Page 1.06		RQEB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i>		
	RPEE Page 1.08		
	<i>Direct Acting Relief Valve</i>		
	RDDA Page 1.10		
OTHER VALVES:			

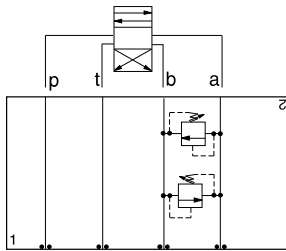


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

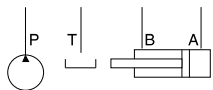
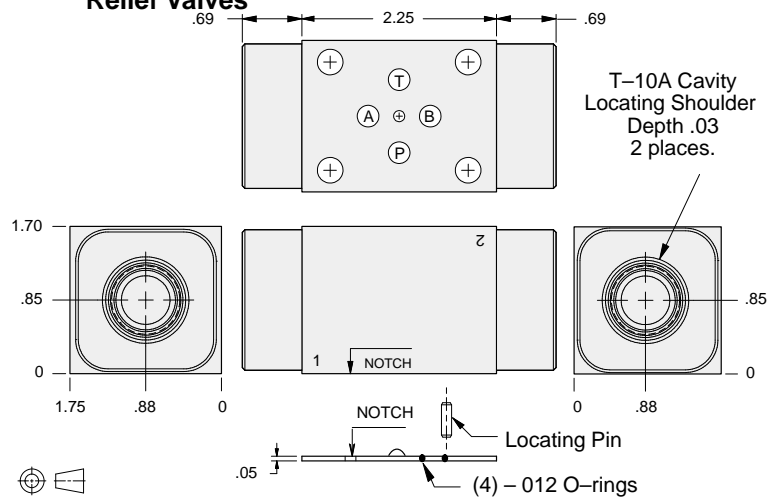
03 RELIEF



FUNCTION

A to B and B to A
(High Capacity)
(Cross-Port)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
FBY		FBY/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

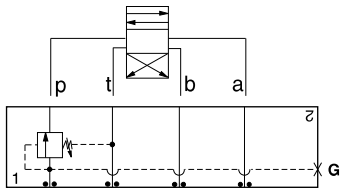
	<i>Pilot Operated Relief Valve</i>		<i>Pilot Operated "Kick-Down" Relief Valve</i>
	RPEC Page 1.06		RQEB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i>		
	RPEE Page 1.08		
	<i>Direct Acting Relief Valve</i>		
	RDDA Page 1.10		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



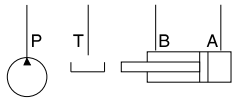
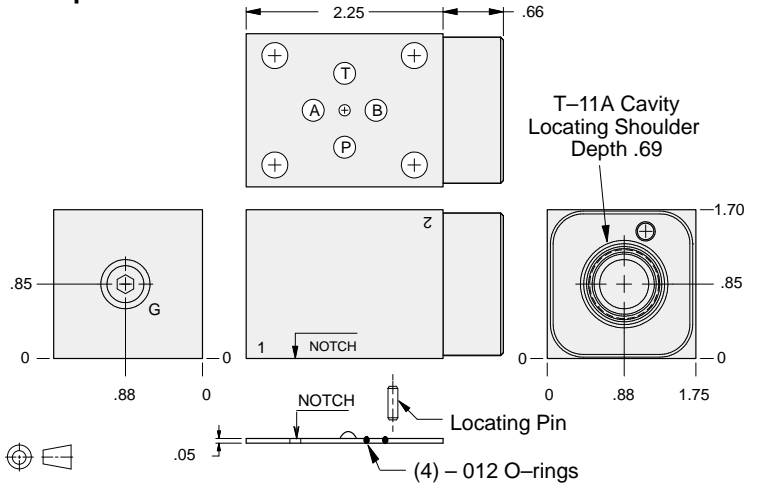
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

In to P

Sequence Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	EBW		EBW/S	
.25 BSPP	EBW/M		EBW/T	

03 SEQUENCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Sequence Valve</i>		
	RSDC Page 2.06		
	<i>Pilot Operated "Kick-Down" Sequence Valve</i>		
	SQDB Page 2.08		
	<i>Direct Acting Sequence Valve with Reverse Free Flow Check</i>		
	SCCA Page 2.12		
OTHER VALVES:			

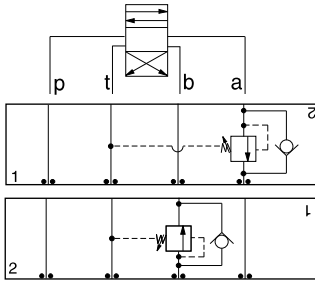


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

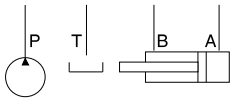
03 SEQUENCE



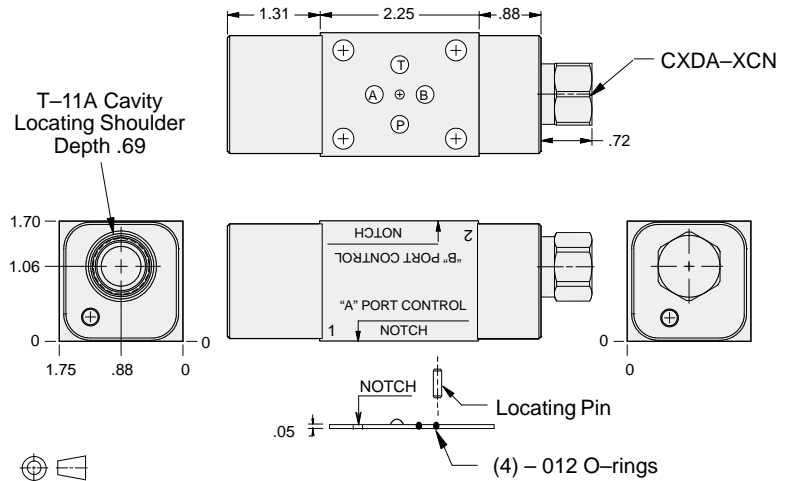
FUNCTION

In to A
Reverse FF Check

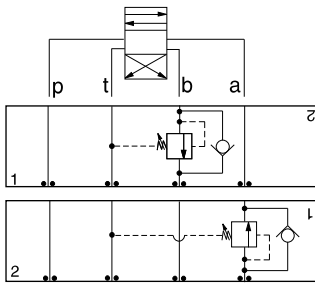
Out of B
Reverse FF Check



Sequence Valves



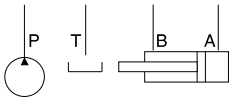
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EB4		EB4/S	



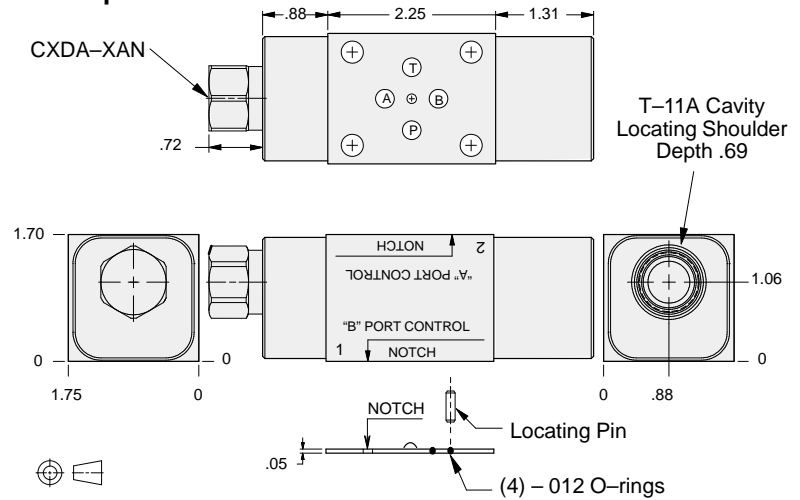
FUNCTION

In to B
Reverse FF Check

Out of A
Reverse FF Check



Sequence Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EB5		EB5/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

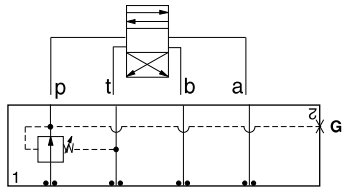
	Pilot Operated Sequence Valve		
	RSDC Page 2.06		
	Pilot Operated "Kick-Down" Sequence Valve		
	SQDB Page 2.08		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



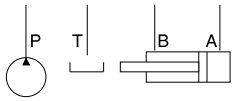
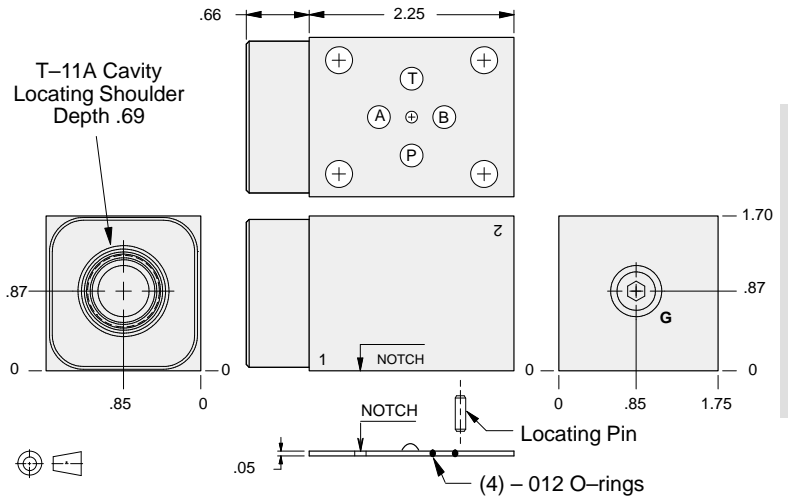
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On P
Drained to T

Reducing Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	EBP		EBP/S	
.25 BSPP	EBP/M		EBP/T	

03 REDUCING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing Valve		
	PBDB Page 3.06		
OTHER VALVES:			

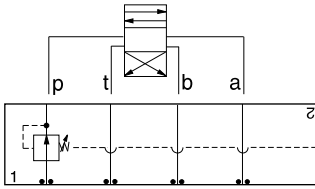


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

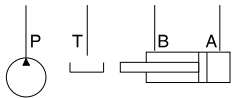
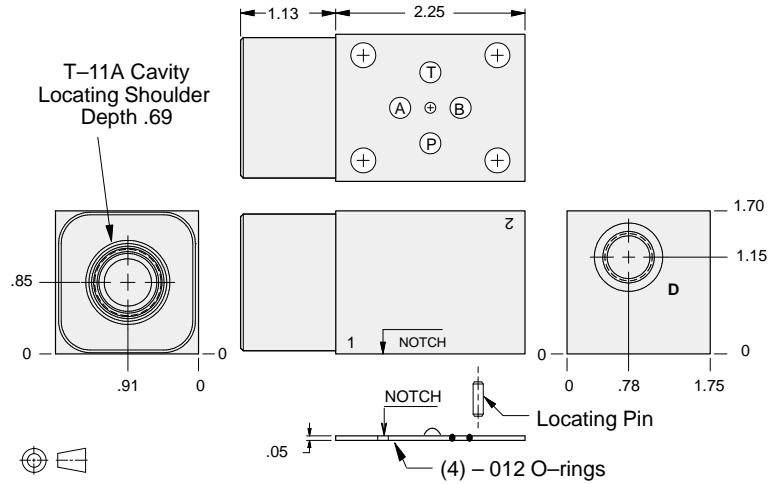
03 REDUCING



FUNCTION

On P
Drained Externally

Reducing Valves



Drain Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	EBQ		EBQ/S	
.25 BSPP	EBQ/M		EBQ/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

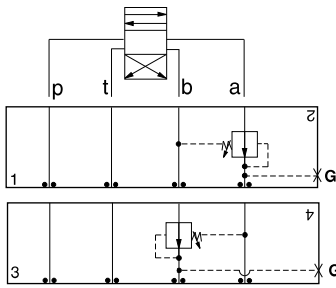
	Pilot Operated Reducing Valve		
	PBDB Page 3.06		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

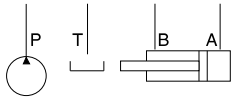
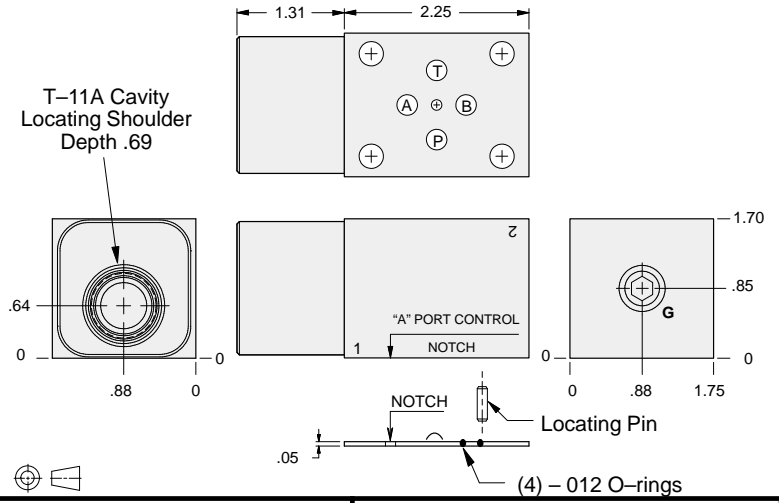


FUNCTION

On A
Drained to B

On B
Drained to A

Reducing Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	EBA		EBA/S	
.25 BSPP	EBA/M		EBA/T	

03 REDUCING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing Valve		
	PBDB Page 3.06		
OTHER VALVES:			

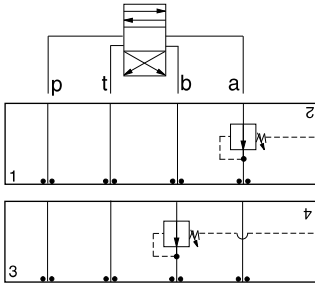


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 REDUCING

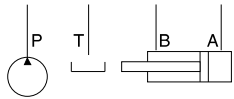
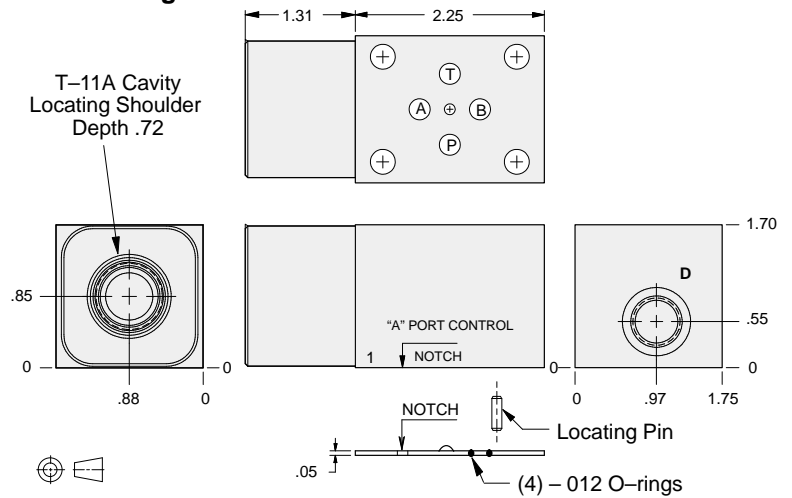


FUNCTION

On A
Drained Externally

On B
Drained Externally

Reducing Valves



Drain Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	EBD		EBD/S	
.25 BSPP	EBD/M		EBD/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing Valve		
	PBDB Page 3.06		
OTHER VALVES:			

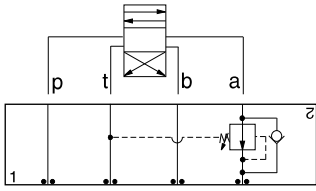


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

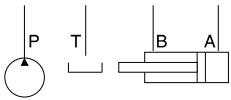
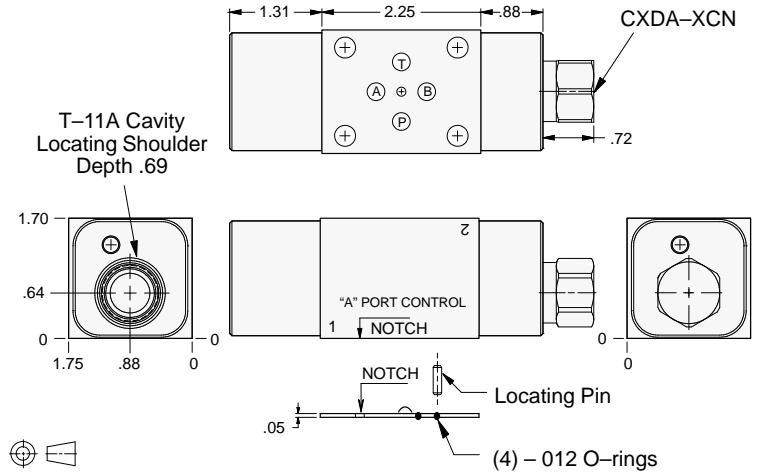
03 REDUCING



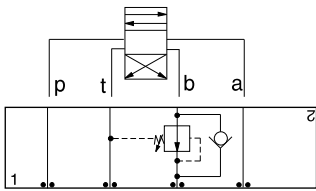
FUNCTION

On A Drain to T
Reverse FF Check

Reducing Valves



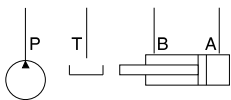
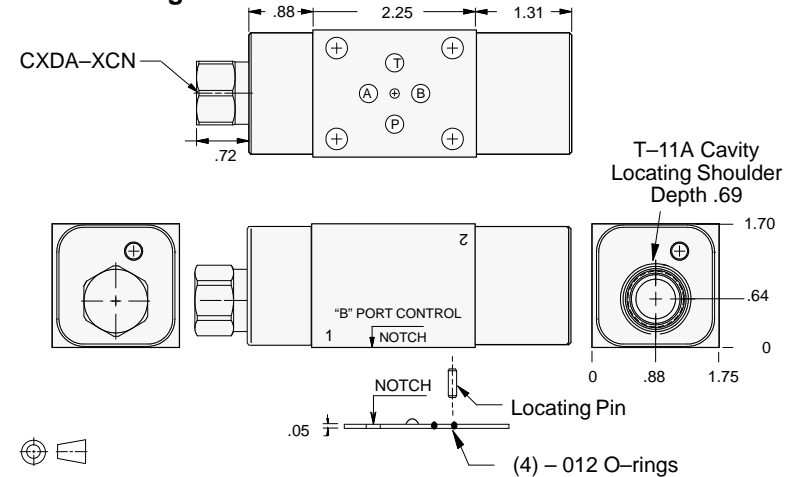
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EB2		EB2/S	



FUNCTION

On B Drain to T
Reverse FF Check

Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EB3		EB3/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing Valve		
	PBDB Page 3.06		
OTHER VALVES:			

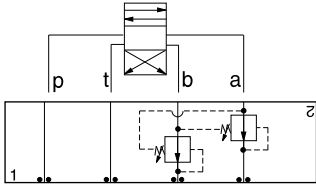


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

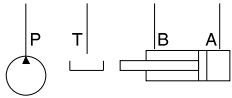
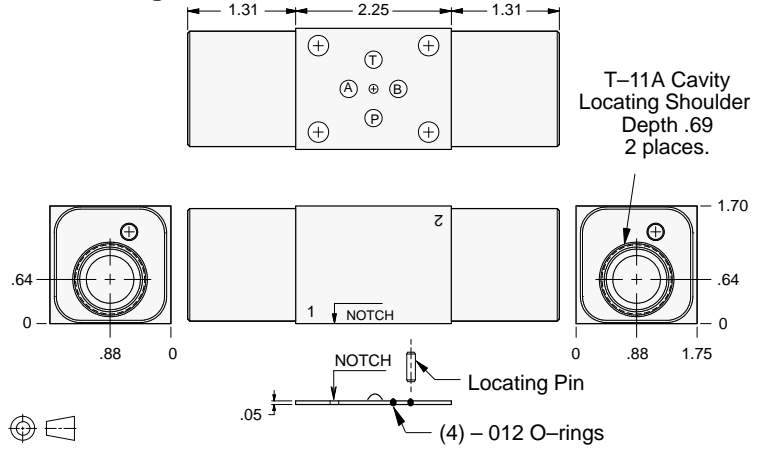
03 REDUCING



FUNCTION

On **A** and **B**
Drains to Opposite Port

Reducing Valves



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
EBY		EBY/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

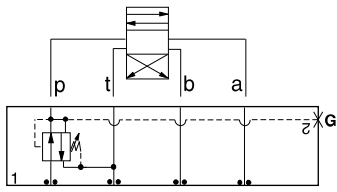
	<i>Pilot Operated Reducing Valve</i>		
	PBDB Page 3.06		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



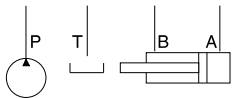
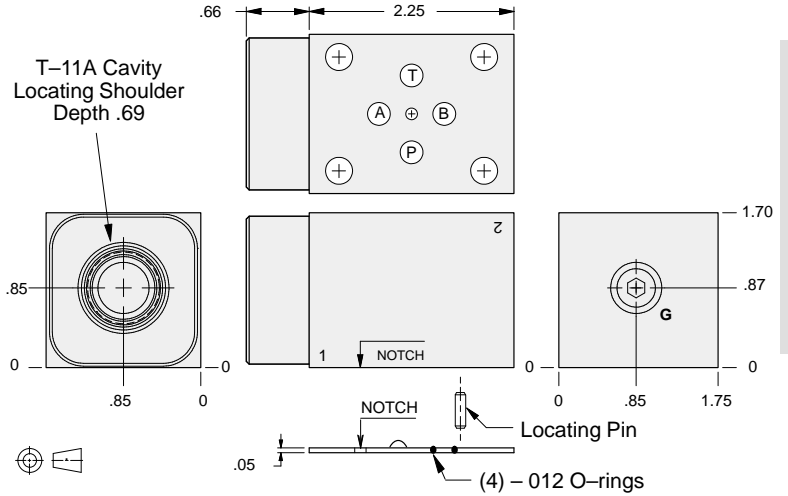
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On P Tank to T
Drained to T

Reducing/Relieving Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	EBP		EBP/S	
.25 BSPP	EBP/M		EBP/T	

03 REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing/Relieving Valve		
	PPDB Page 3.10		
OTHER VALVES:			

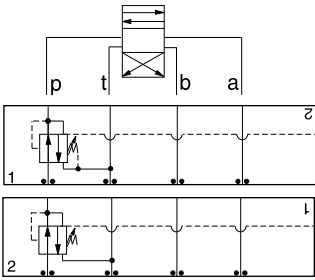


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 REDUCING/RELIEVING

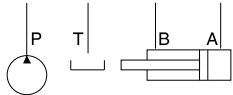
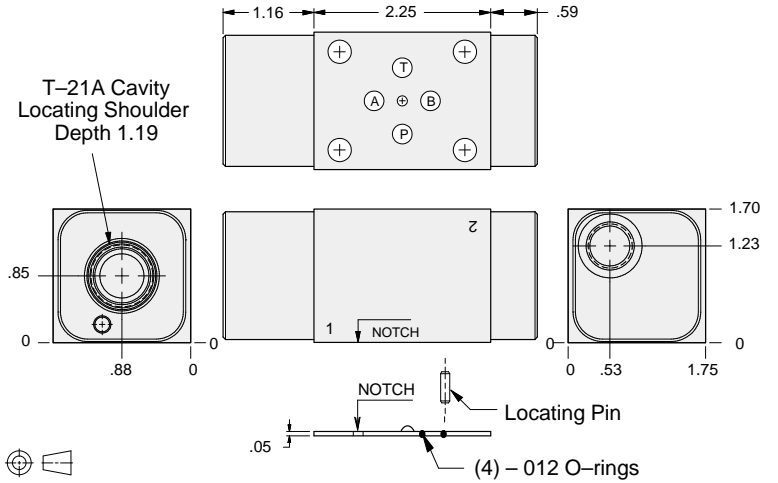


FUNCTION

On P Tank to T
Vented Externally

On P Tank to T
Drained Externally

Reducing/Relieving Valves



External Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	MBP		MBP/S	
.25 BSPP	MBP/M		MBP/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

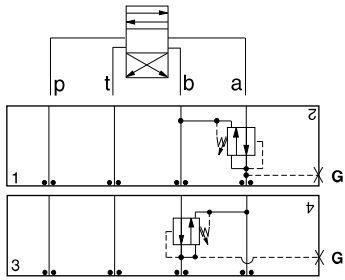
	Pilot Operated Reducing/Relieving Valve with Drain Port		
	PVDA Page 3.14		
	Pilot Operated Reducing/Relieving Valve with Vent Port		
	PVDB Page 3.16		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

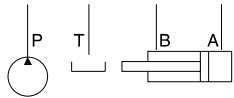
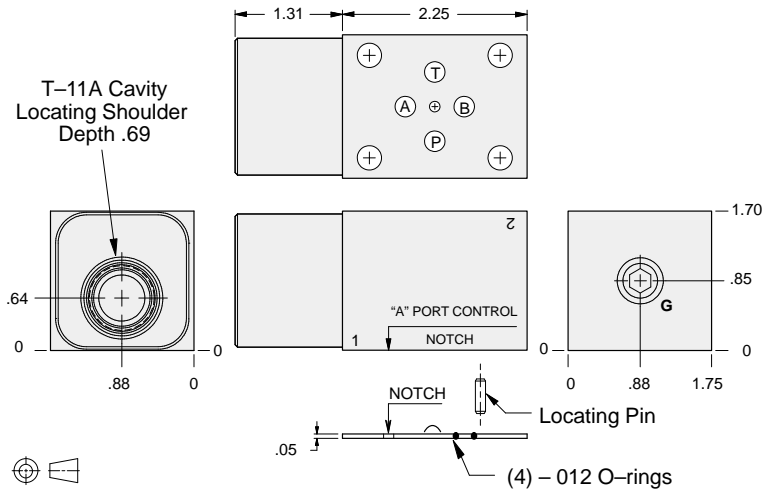


FUNCTION

On A Tank to B
Drained to B

On B Tank to A
Drained to A

Reducing/Relieving Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	EBA		EBA/S	
.25 BSPP	EBA/M		EBA/T	

03 REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing/Relieving Valve		
	PPDD Page 3.10		
OTHER VALVES:			

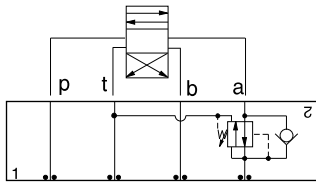


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

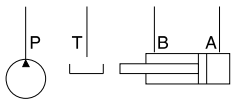
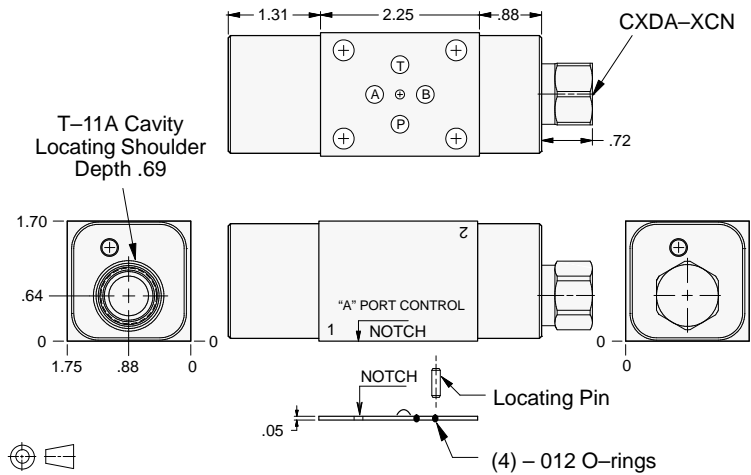
03 REDUCING/RELIEVING



FUNCTION

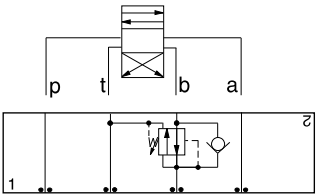
On A Tank to T
Drained to T
Reverse FF Check

Reducing/Relieving Valves



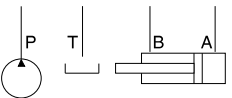
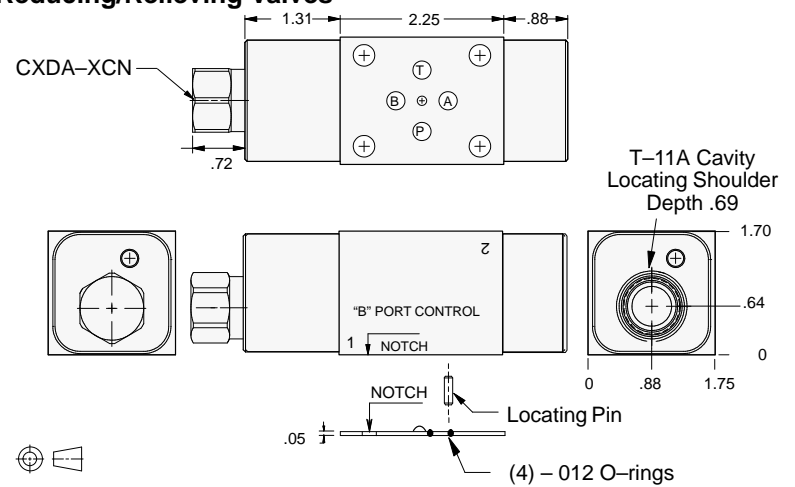
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EB2		EB2/S	

Reducing/Relieving Valves



FUNCTION

On B Tank to T
Drained to T
Reverse FF Check



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EB3		EB3/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

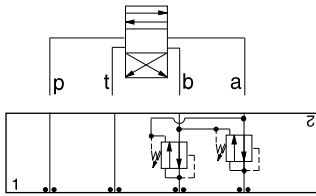
	Pilot Operated Reducing/Relieving Valve		
	PPDB Page 3.10		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



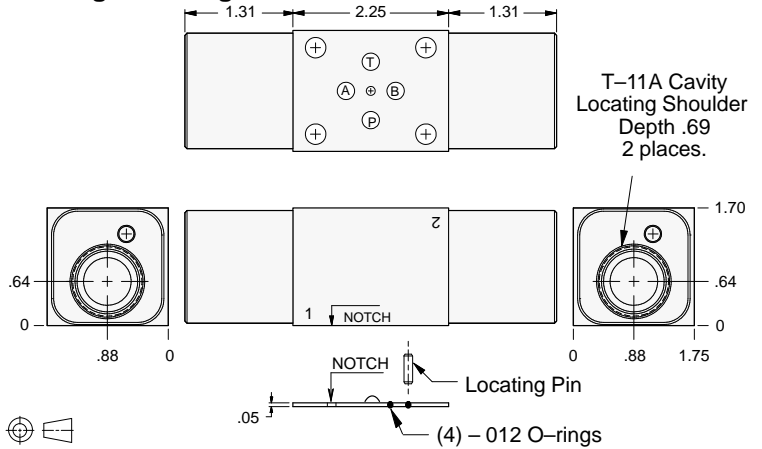
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



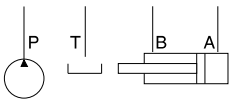
FUNCTION

On **A** and **B**
Tanks and Drains to
Opposite Port

Reducing/Relieving Valves



03 REDUCING/RELIEVING



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EBY		EBY/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing/Relieving Valve		
	PPDB Page 3.10		
OTHER VALVES:			

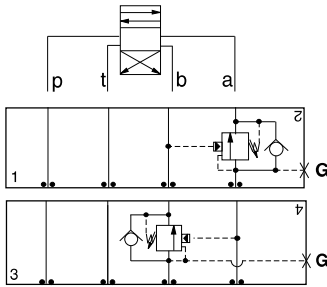


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 COUNTERBALANCE

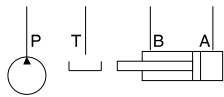
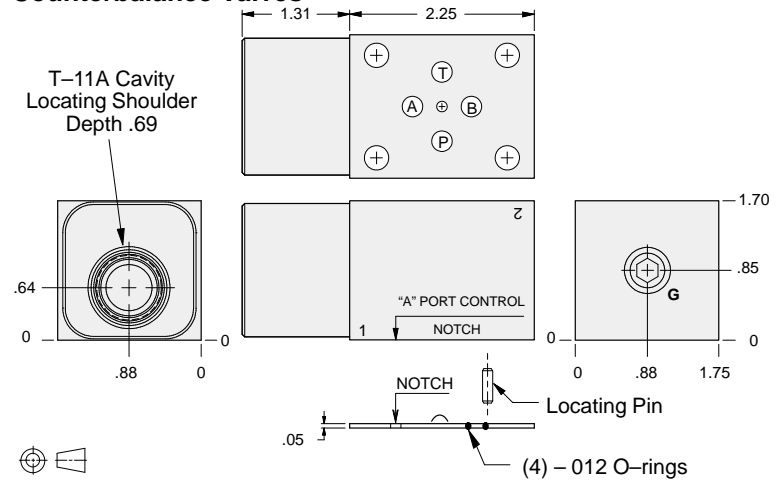


FUNCTION

On A
Pilot from B

On B
Pilot from A

Counterbalance Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	EBA		EBA/S	
.25 BSPP	EBA/M		EBA/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBCA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBCG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBCH Page 4.14		
OTHER VALVES:			

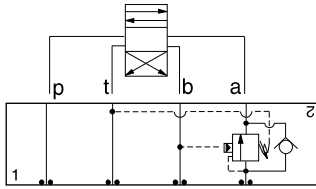


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

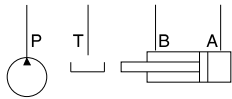
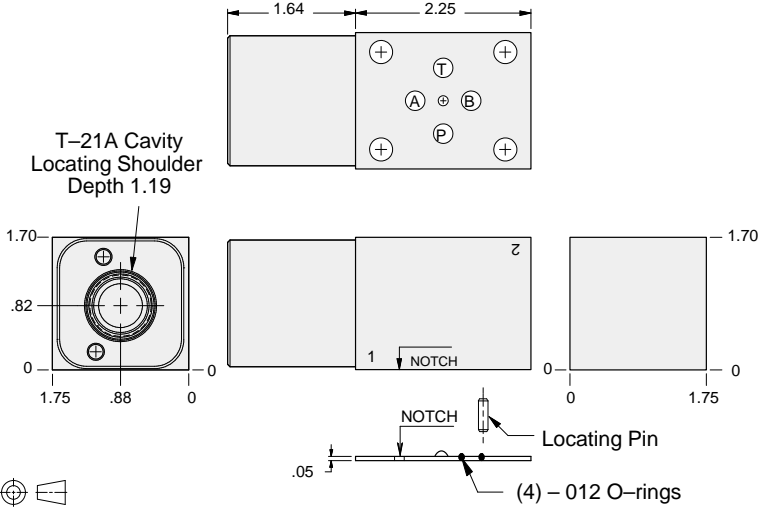
03 COUNTERBALANCE



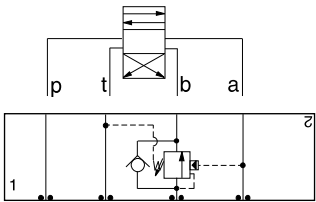
FUNCTION

On A Pilot
from B
Vent to T

Counterbalance Valves



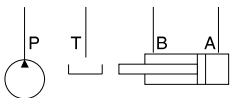
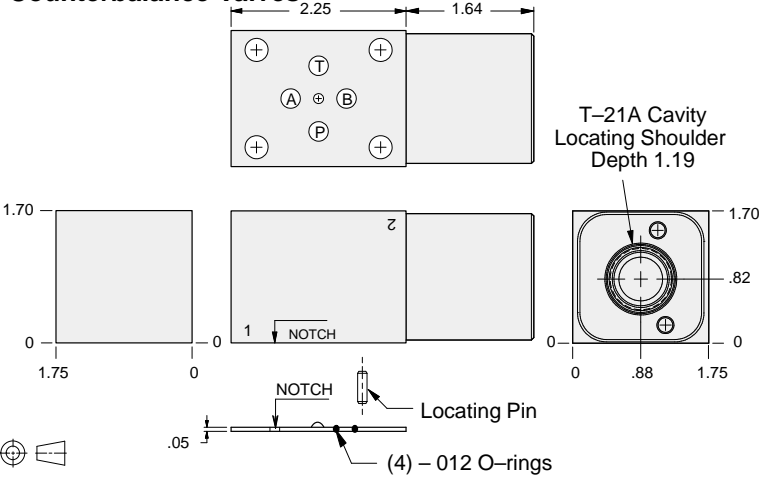
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
MBA		MBA/S	



FUNCTION

On B Pilot from A
Vent to T

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
MBB		MBB/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWCA Page 4.18		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWCG Page 4.20		
OTHER VALVES:			

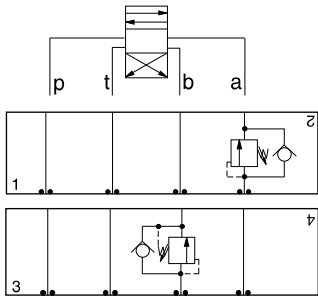


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 COUNTERBALANCE

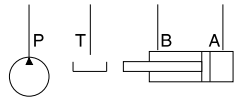
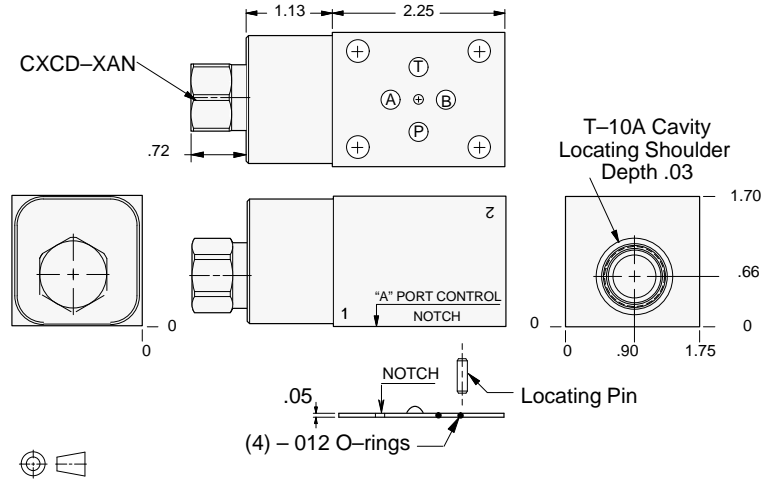


FUNCTION

On A
No pilot assist

On B
No pilot assist

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
FB4		FB4/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

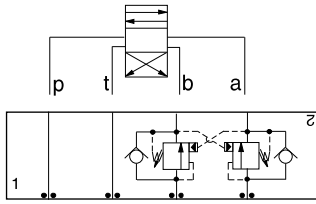
	Direct Acting Relief Valve		
	RDDA Page 1.10		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



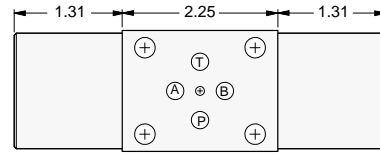
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



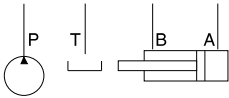
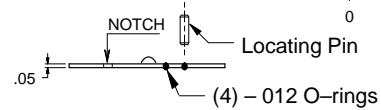
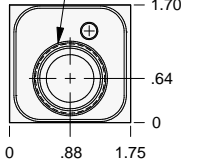
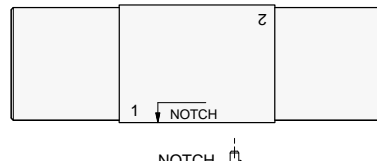
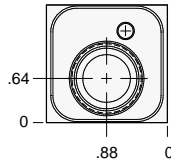
FUNCTION

On A and B
Cross-Piloted

Counterbalance Valves



T-11A Cavity
Locating Shoulder
Depth .69
2 places.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EBY		EBY/S	

03 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBCA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBCG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBCH Page 4.14		
OTHER VALVES:			

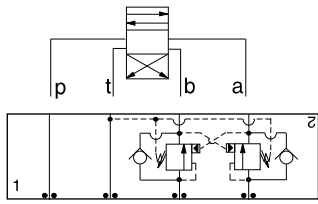


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

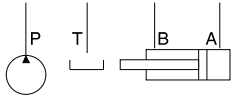
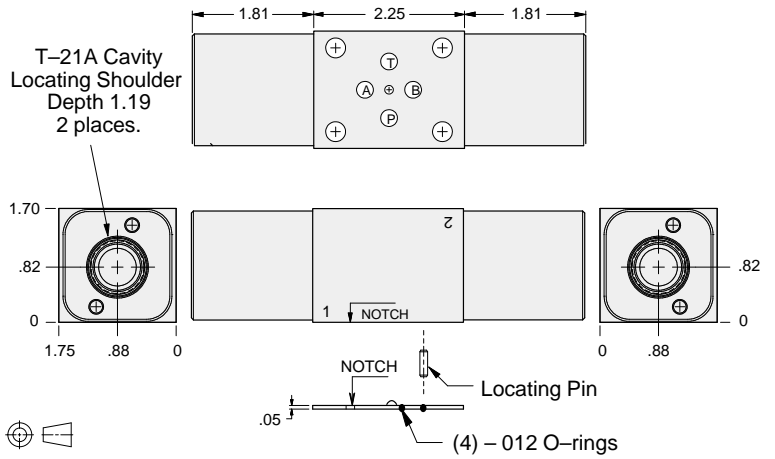
03 COUNTERBALANCE



FUNCTION

On **A** and **B**
 Cross-Piloted
 Vents to **T**

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
MBY		MBY/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

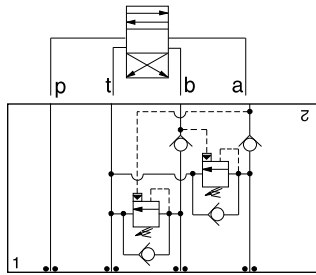
	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWCA Page 4.18		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWCG Page 4.20		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



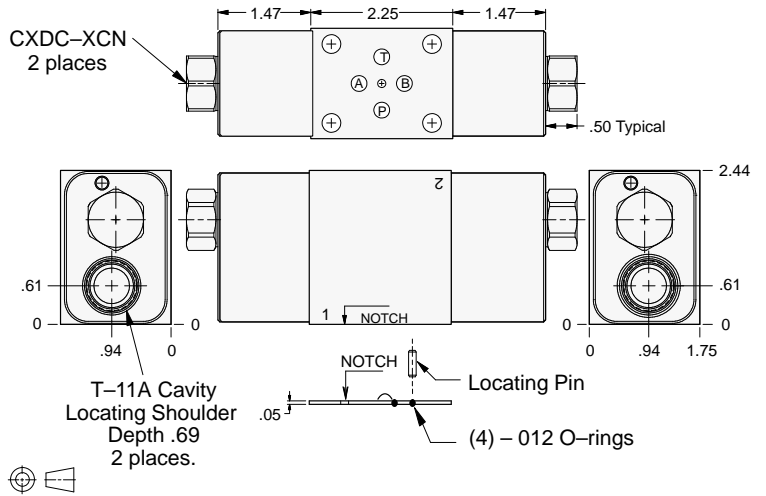
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



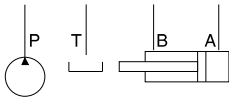
FUNCTION

Cushion Lock
Circuit
On **A** and **B**

Counterbalance Valves



03 COUNTERBALANCE



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EB8		EB8/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBCA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBCG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBCH Page 4.14		
OTHER VALVES:			

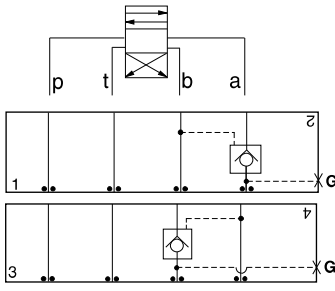


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 P.O. CHECK

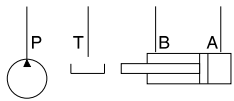
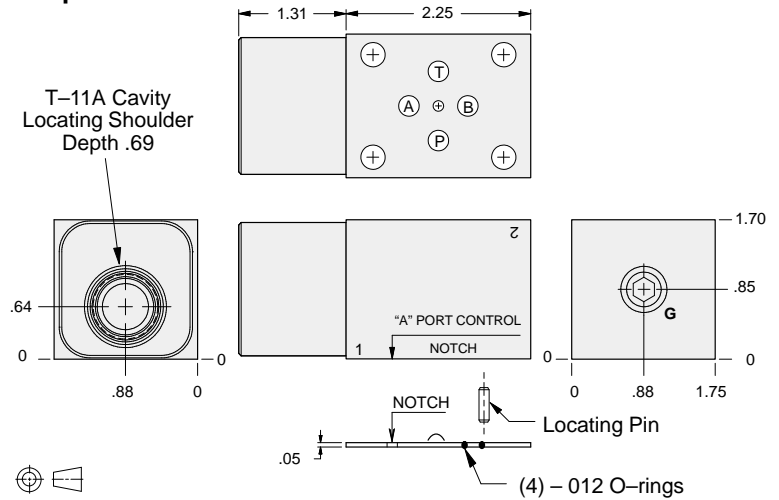


FUNCTION

On A
Pilot from B

On B
Pilot from A

Pilot Operated Check Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	EBA		EBA/S	
.25 BSPP	EBA/M		EBA/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CKCB Page 4.16		
OTHER VALVES:			

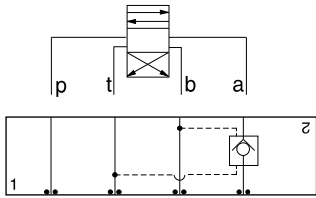


ISO 03 SANDWICH BODIES



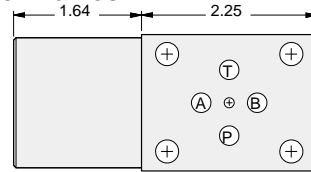
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves

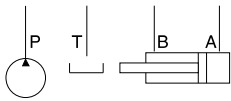
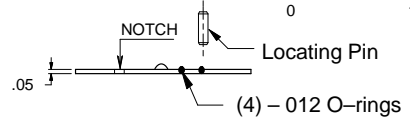
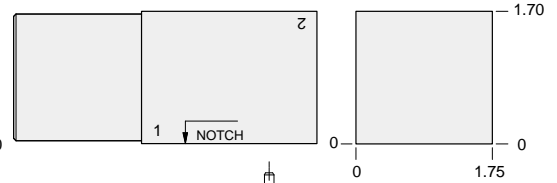
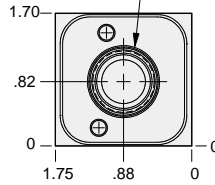


FUNCTION

On **A**
Pilot from **B**
Vent to **T**

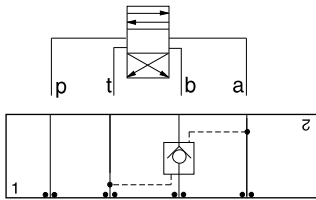


T-21A Cavity
Locating Shoulder
Depth 1.19



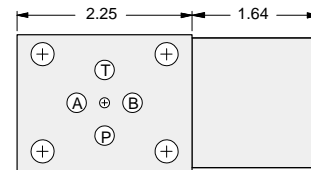
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
MBA		MBA/S	

Pilot Operated Check Valves

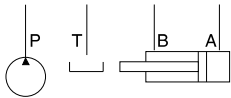
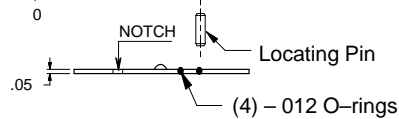
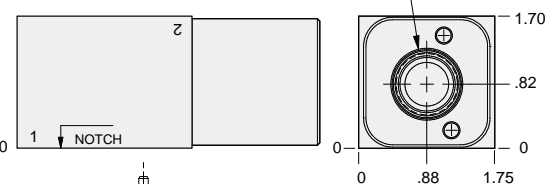
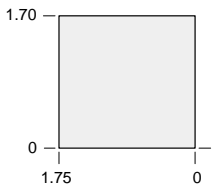


FUNCTION

On **B**
Pilot from **A**
Vent to **T**



T-21A Cavity
Locating Shoulder
Depth 1.19



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
MBB		MBB/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVCV Page 4.22		
OTHER VALVES:			

03 P.O. CHECK



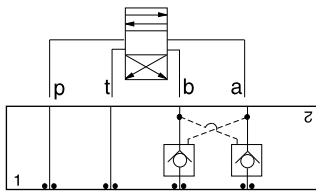
ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

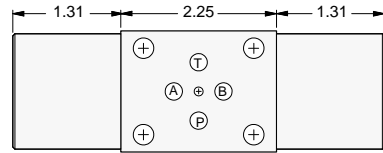
03 P.O. CHECK

Pilot Operated Check Valves

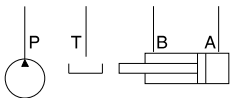
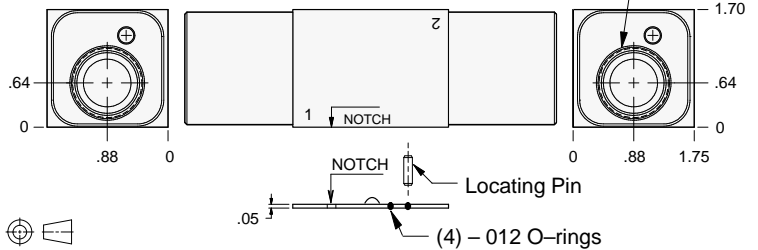


FUNCTION

On A and B
Cross-Piloted



T-11A Cavity
Locating Shoulder
Depth .69
2 places.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EBY		EBY/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

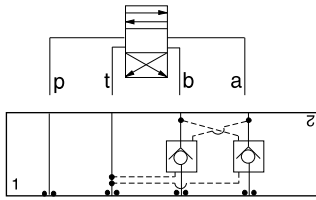
	<i>Pilot-to-Open Check Valve, 3:1 Pilot Ratio</i>		
	CKCB Page 4.16		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



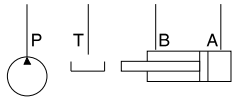
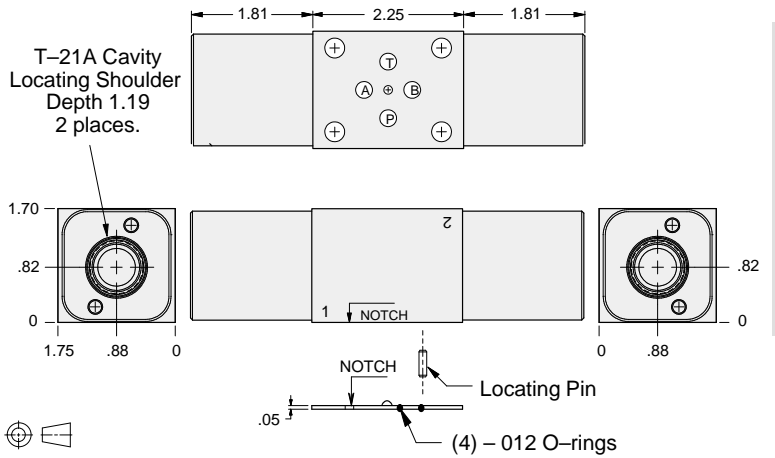
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **A** and **B**
Cross-Piloted
Vents to **T**

Pilot Operated Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
MBY		MBY/S	

03 P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVCV Page 4.22		
OTHER VALVES:			

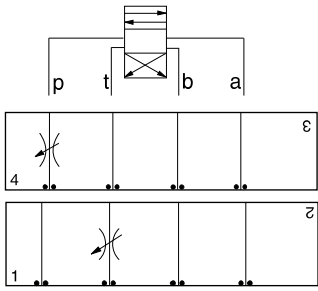


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 FLOW CONTROL

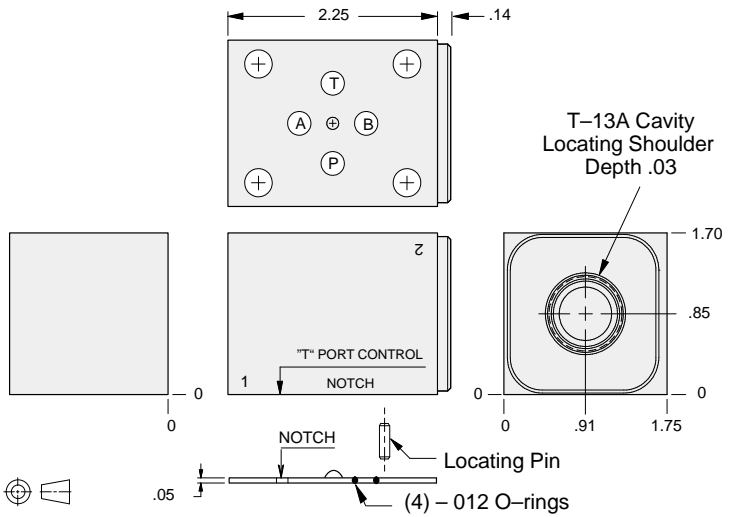


FUNCTION

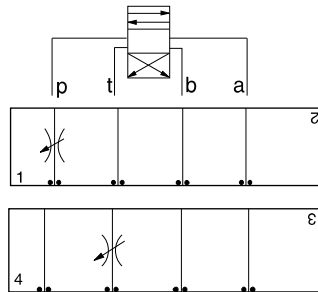
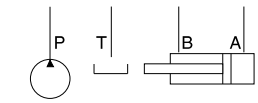
Meter-In P

Meter-Out T

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBP		GBP/S	

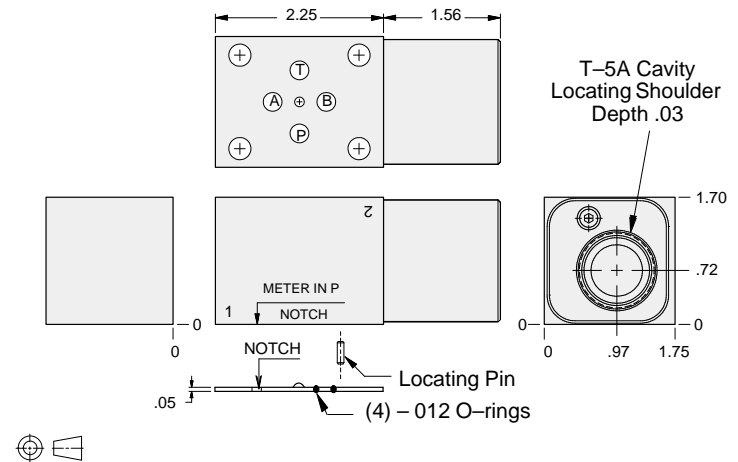


FUNCTION

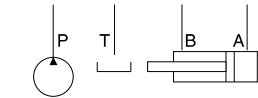
Meter-In P
(High Capacity)

Meter-Out T
(High Capacity)

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBO		GBO/S	



TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

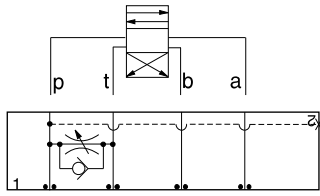
	Fully Adjustable Needle Valve		
	NF*C Page 5.12		
	Fixed Orifice, Pressure-Compensated Flow Control		
	FX*A Page 5.20		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



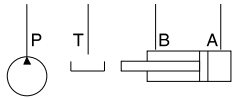
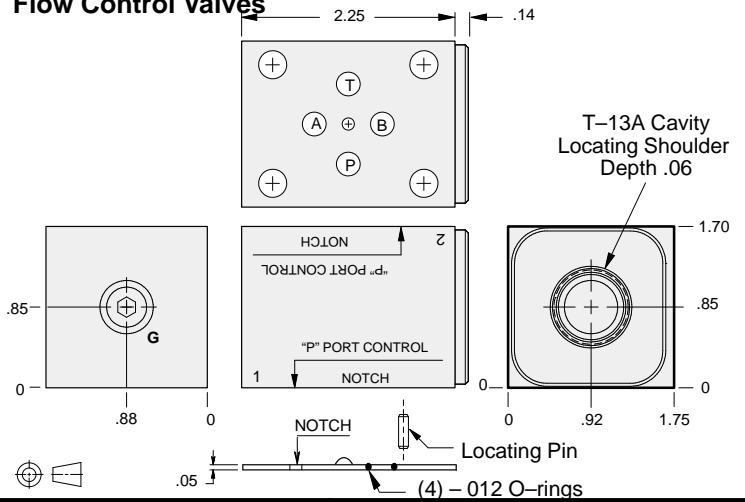
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Bleed-Off
P to T

Flow Control Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	GBQ		GBQ/S	
.25 BSPP	GBQ/M		GBQ/T	

03 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NFCC Page 5.12		FXCA Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCCB Page 5.16		FCCB Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCCC Page 5.18		FDBA Page 5.24
OTHER VALVES:	CNCC		

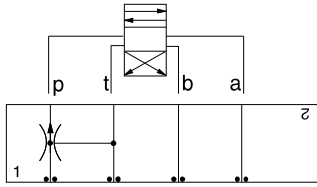


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

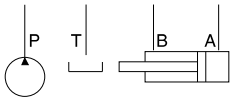
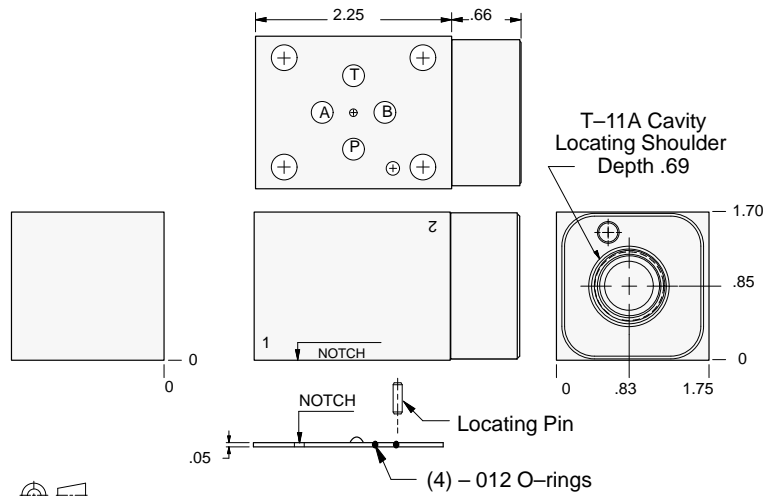
03 FLOW CONTROL



FUNCTION

Priority Flow on P

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
WBN		WBN/S	

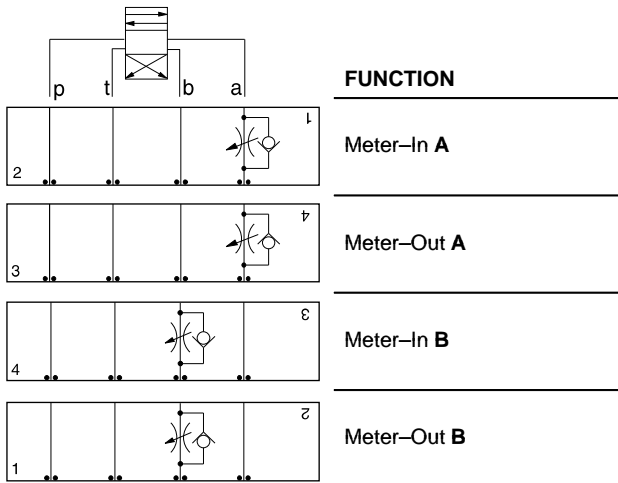
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Priority Flow Control, Bypass/Restrictive, Fixed Orifice		
	FRCA Page 6.02		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



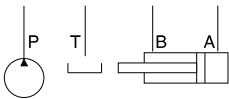
FUNCTION

Meter-In A

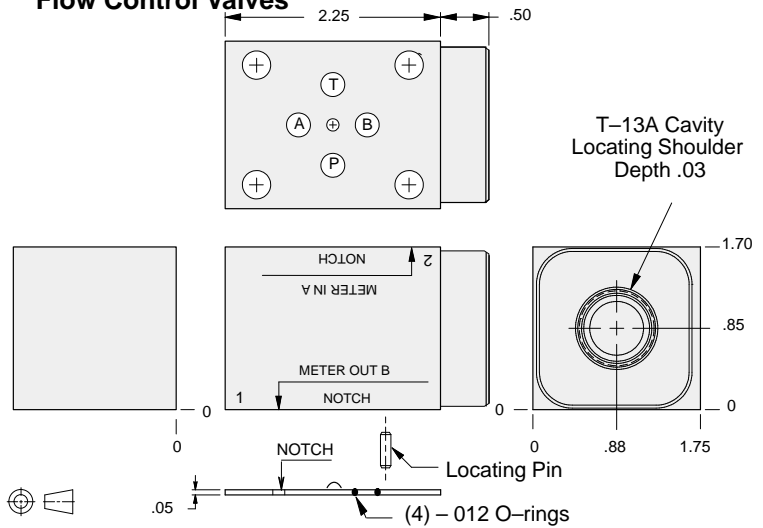
Meter-Out A

Meter-In B

Meter-Out B

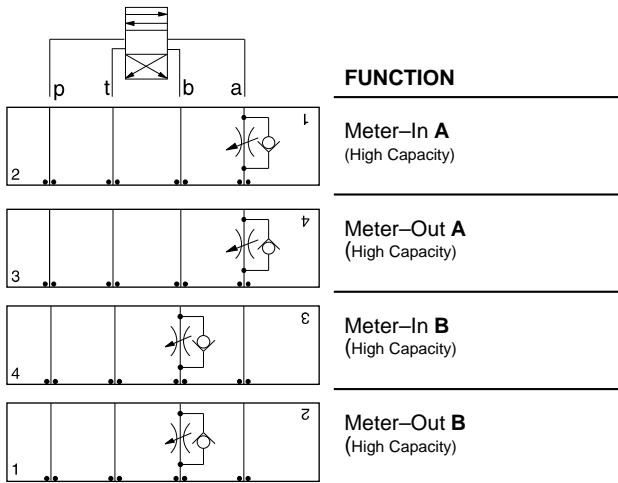


Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBA		GBA/S	

03 FLOW CONTROL



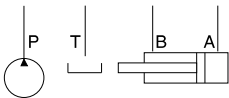
FUNCTION

Meter-In A
(High Capacity)

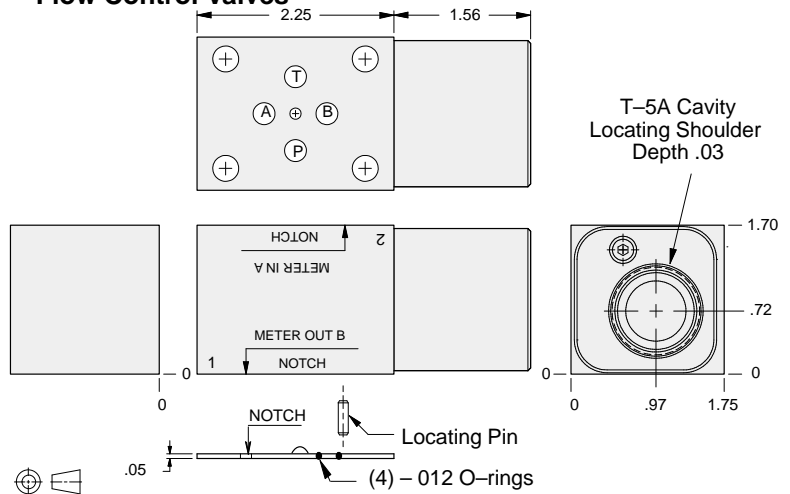
Meter-Out A
(High Capacity)

Meter-In B
(High Capacity)

Meter-Out B
(High Capacity)



Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBD		GBD/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.12		FX*A Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.16		FC*B Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.18		FDBA, FDCB Page 5.24
OTHER VALVES:	CN*C		

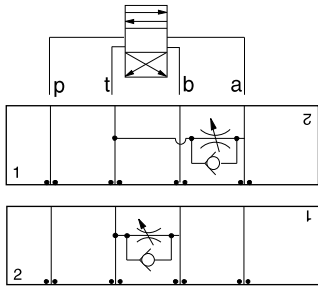


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

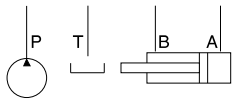
03 FLOW CONTROL



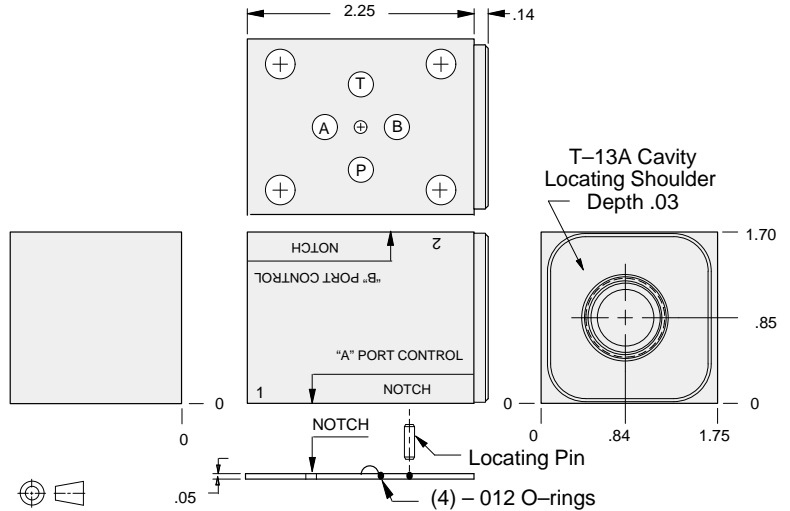
FUNCTION

Bleed-Off
A to T

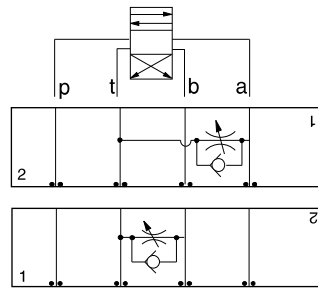
Bleed-Off
B to T



Flow Control Valves



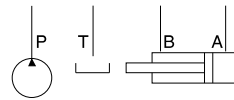
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBW		GBW/S	



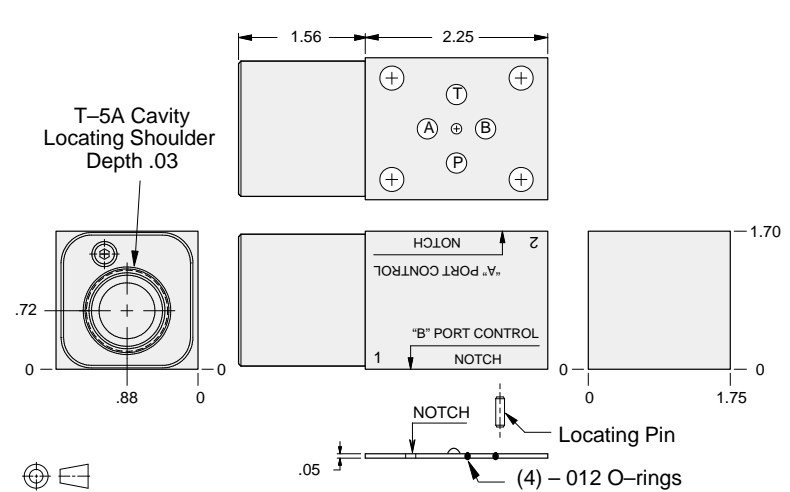
FUNCTION

Bleed-Off
A to T
(High Capacity)

Bleed-Off
B to T
(High Capacity)



Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBE		GBE/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.12		FX*A Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.16		FC*B Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.18		FDBA, FDCB Page 5.24
OTHER VALVES:	CNCC, CNEC		

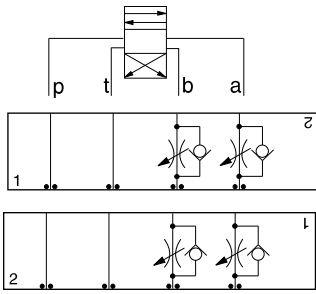


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

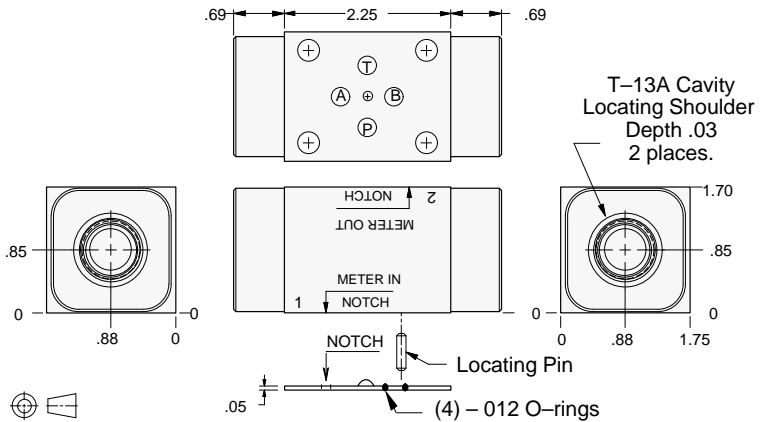
Flow Control Valves



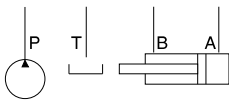
FUNCTION

Meter-In
A and B

Meter-Out
A and B

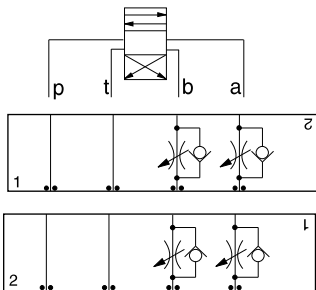


03 FLOW CONTROL



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBY		GBY/S	

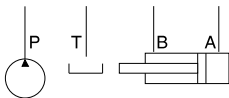
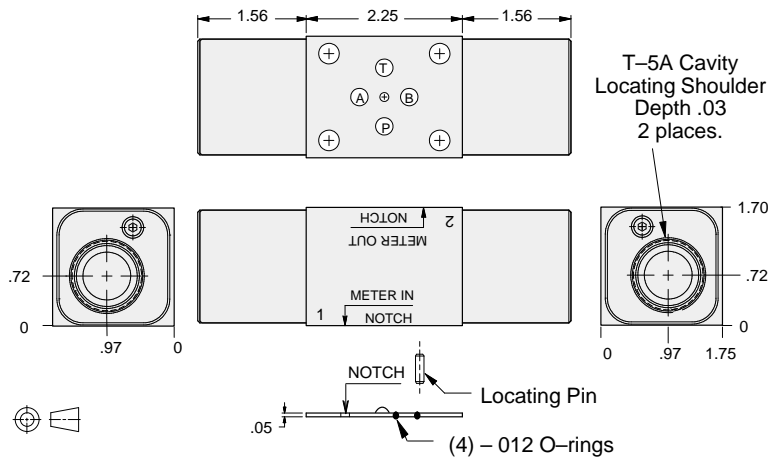
Flow Control Valves



FUNCTION

Meter-In
A and B
(High Capacity)

Meter-Out
A and B
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBZ		GBZ/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.12		FX*A Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.16		FC*B Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.18		FDBA, FDCB Page 5.24
OTHER VALVES:	CNCC, CNEC		

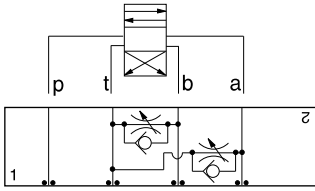


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

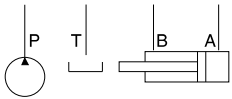
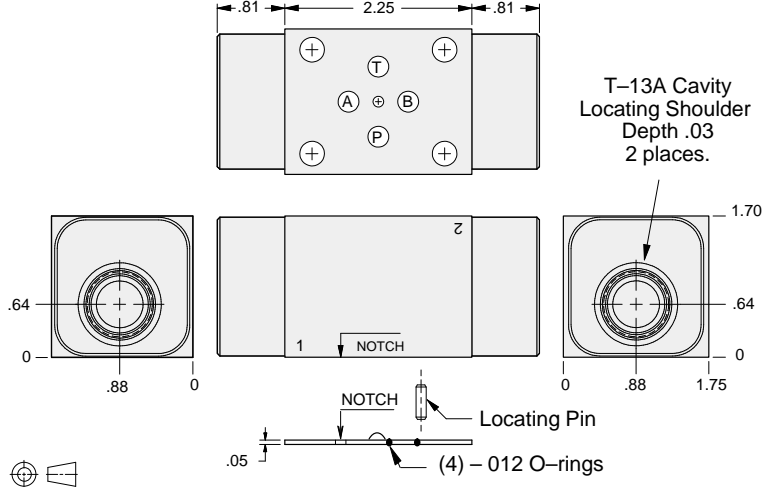
03 FLOW CONTROL



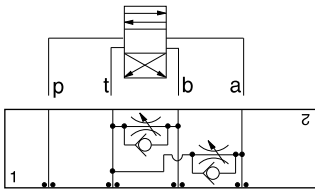
FUNCTION

Bleed-Off
A and B to T

Flow Control Valves



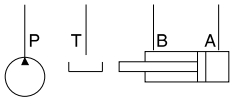
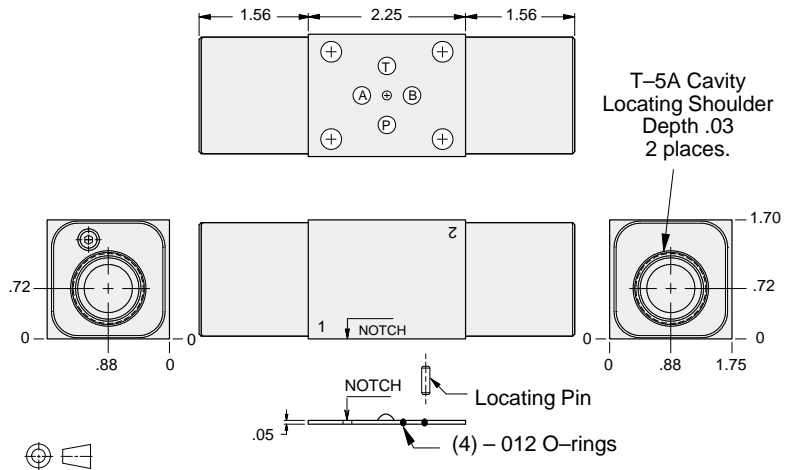
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBX		GBX/S	



FUNCTION

Bleed-Off
A and B to T
(High Capacity)

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBF		GBF/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

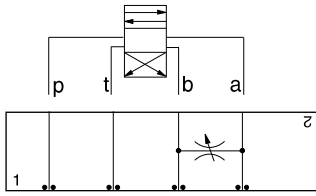
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.12		FX*A Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.15		FC*B Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.18		FDBA, FDCB Page 5.24
OTHER VALVES:	CNCC, CNEC		



ISO 03 SANDWICH BODIES



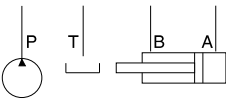
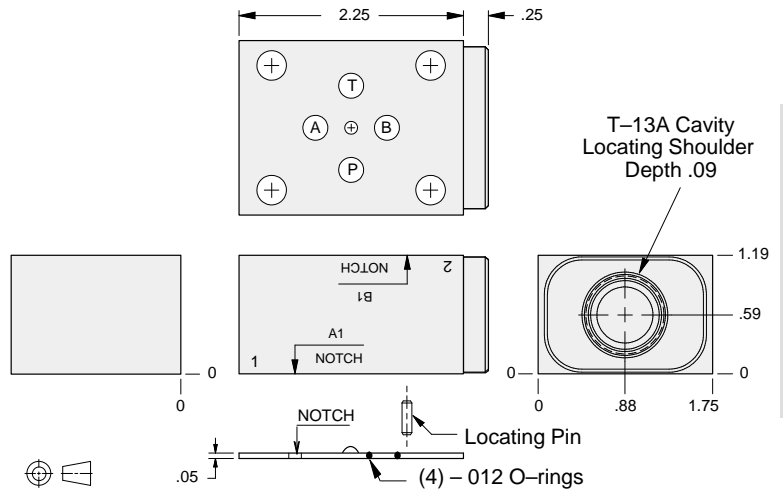
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Bleed-Off
A to B and
B to A

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBS		GBS/S	

03 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve		
	NFCC Page 5.12		
	Fixed Orifice, Pressure-Compensated Flow Control		
	FXCA Page 5.20		
OTHER VALVES:			

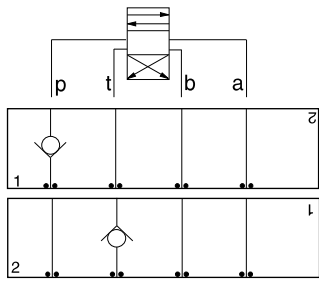


ISO 03 SANDWICH BODIES



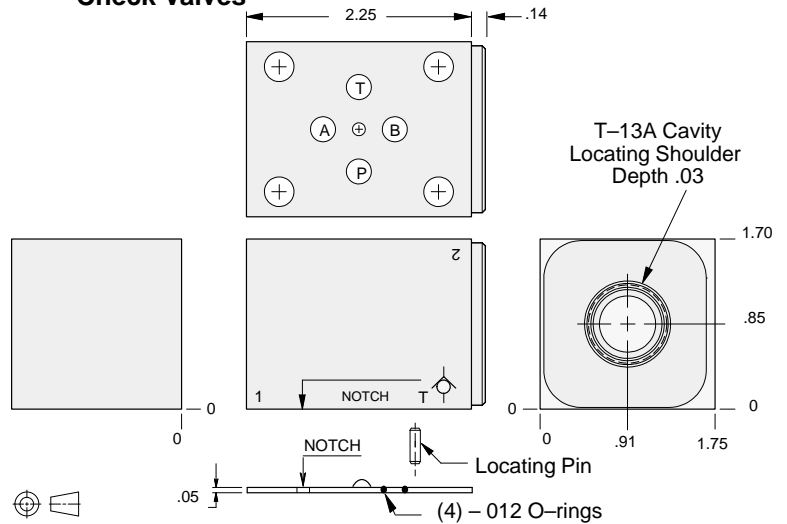
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 CHECK

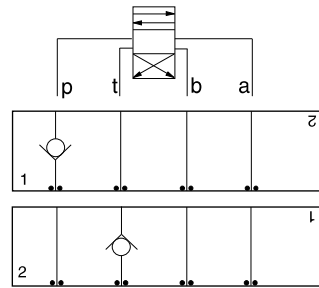
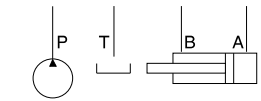


FUNCTION	
On P	
On T	

Check Valves

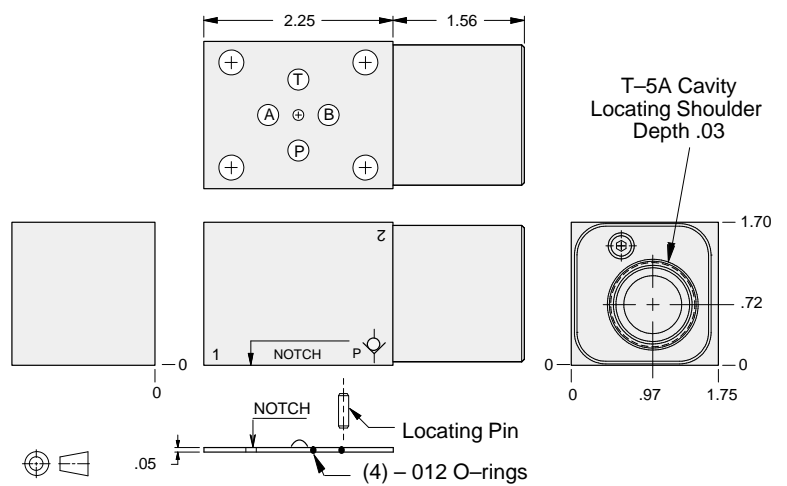


ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDP		GDP/S	

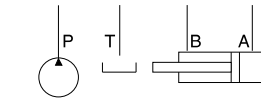


FUNCTION	
On P (High Capacity)	
On T (High Capacity)	

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDO		GDO/S	



TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

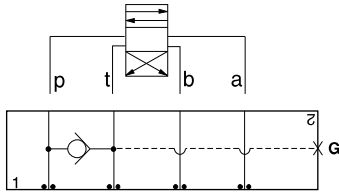
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXDA Page 5.08 (use with GDP)		
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08 (use with GDO)		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



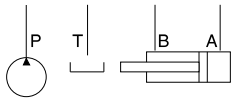
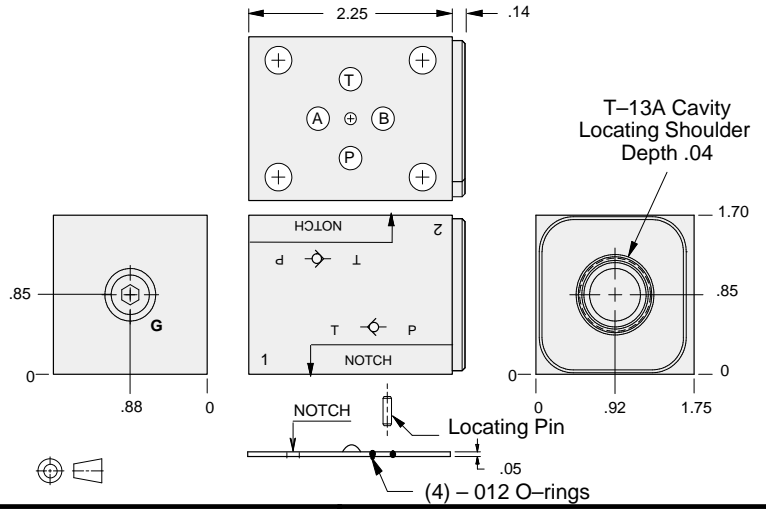
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

T to P

Check Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	GDQ		GDQ/S	
.25 BSPP	GDQ/M		GDQ/T	

03 CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXDA Page 5.08		
OTHER VALVES:			

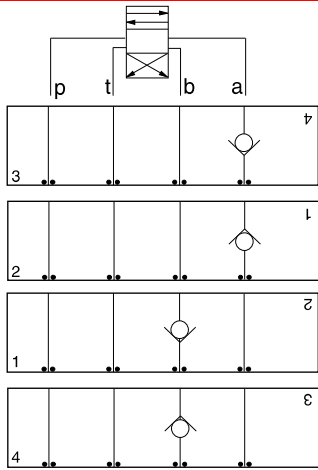


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 CHECK



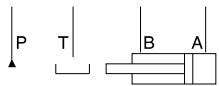
FUNCTION

On A
Free Flow Into Valve

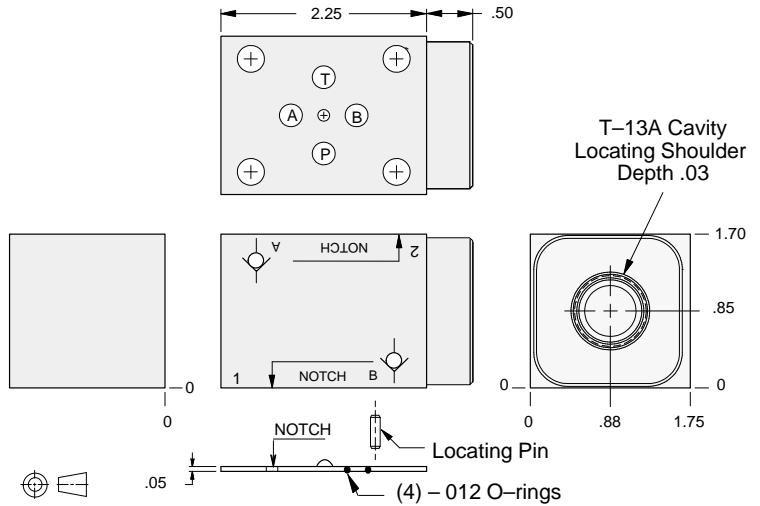
On A
Free Flow Out of Valve

On B
Free Flow Into Valve

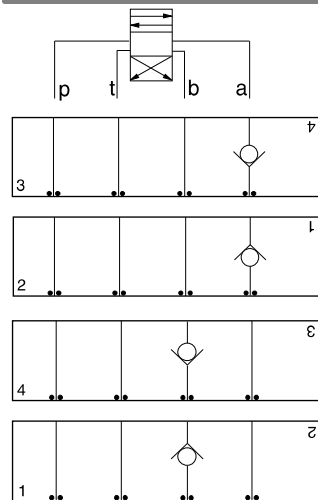
On B
Free Flow Out of Valve



Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDA		GDA/S	



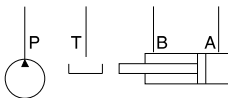
FUNCTION

On A
Free Flow Into Valve
(High Capacity)

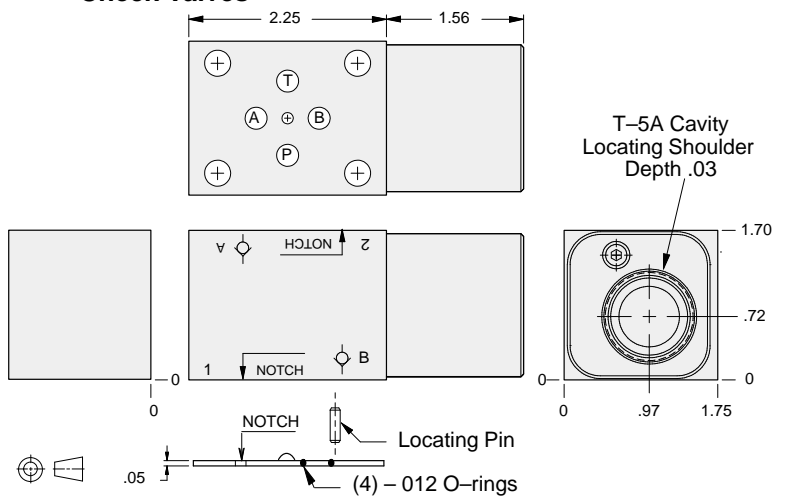
On A
Free Flow Out of Valve
(High Capacity)

On B
Free Flow Into Valve
(High Capacity)

On B
Free Flow Out of Valve
(High Capacity)



Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDD		GDD/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

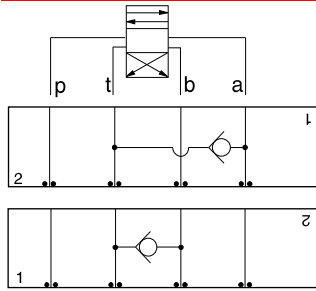
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXDA Page 5.08 (use with GDA)		
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08 (use with GDD)		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

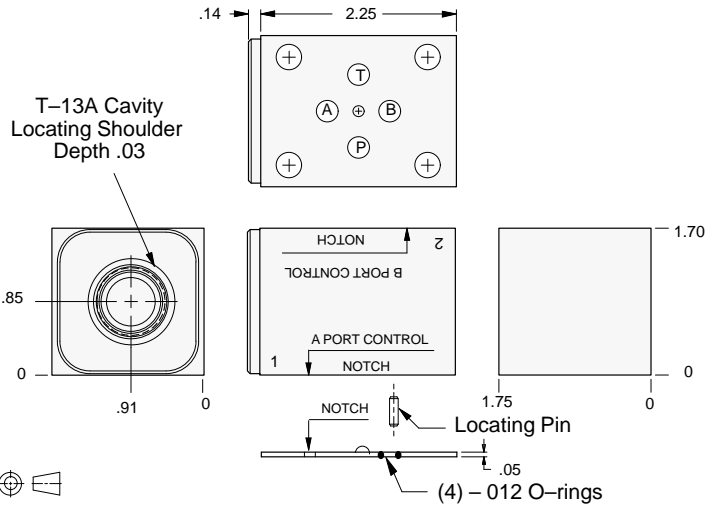


FUNCTION

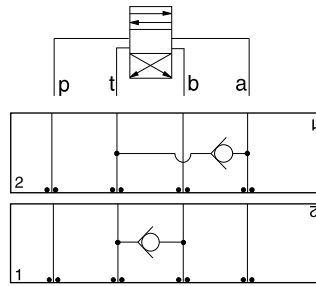
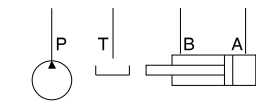
T to A

T to B

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDW		GDW/S	

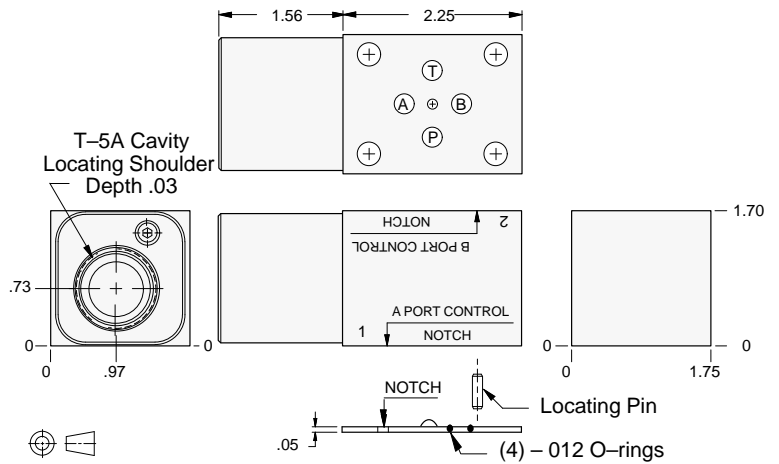


FUNCTION

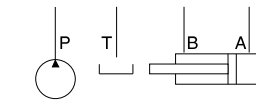
T to A
(High Capacity)

T to B
(High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDE		GDE/S	



TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXDA Page 5.08 (use with GDW)		
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08 (use with GDE)		
OTHER VALVES:			

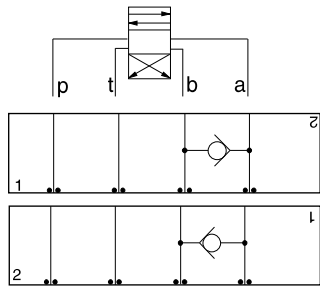


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 CHECK

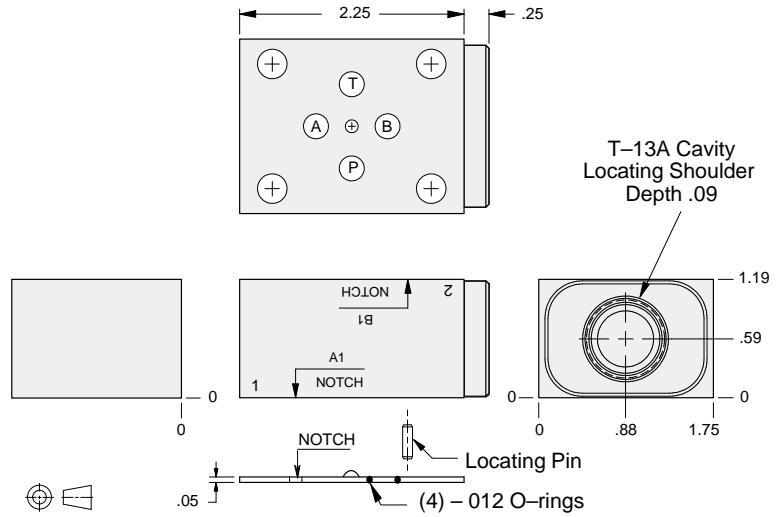


FUNCTION

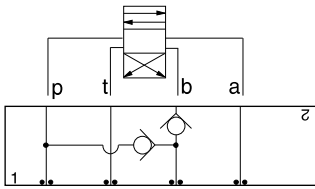
A to B

B to A

Check Valves



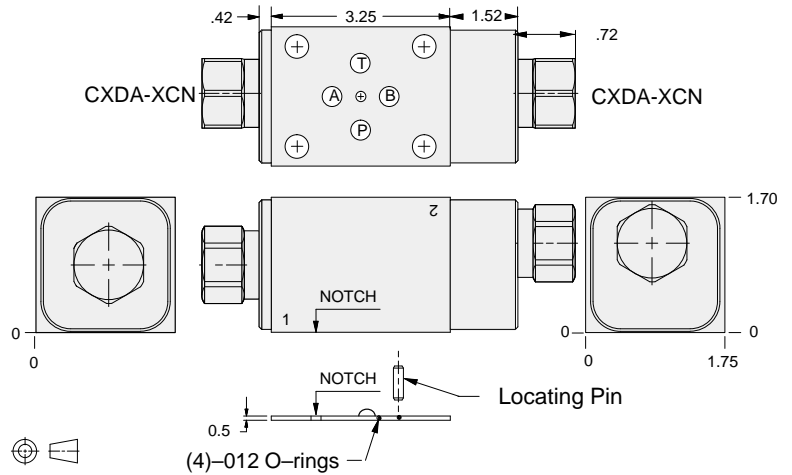
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBS		GBS/S	



FUNCTION

B to P
(For Regenerative Circuits)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDCK-XCN-AA		YDCK-XCN-AA/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

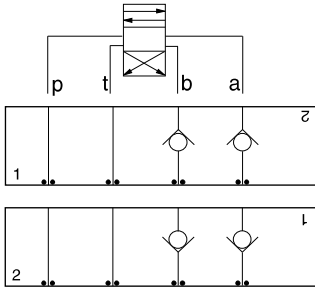
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXDA Page 5.08		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



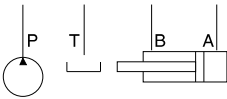
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



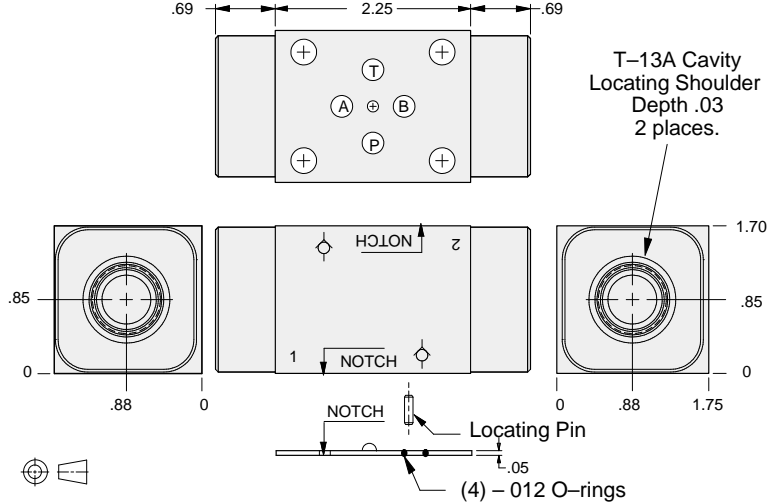
FUNCTION

On A and B
Free Flow **Out** of Valve

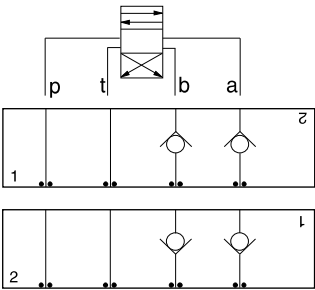
On A and B
Free Flow **Into** Valve



Check Valves



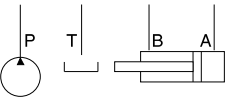
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDY		GDY/S	



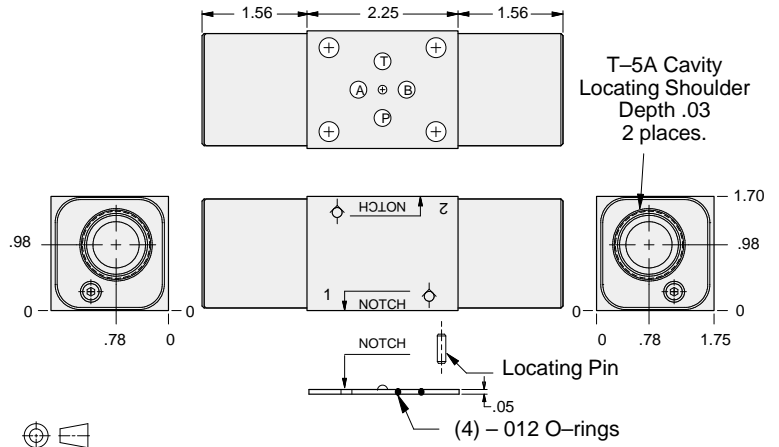
FUNCTION

On A and B
Free Flow **Out**
of Valve (High Capacity)

On A and B
Free Flow **Into** Valve
(High Capacity)



Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDZ		GDZ/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXDA Page 5.08 (use with GDY)		
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08 (use with GDZ)		
OTHER VALVES:			

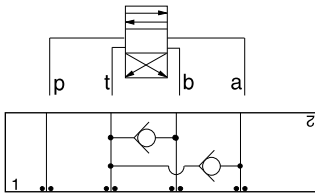


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

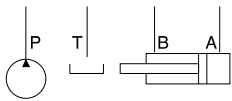
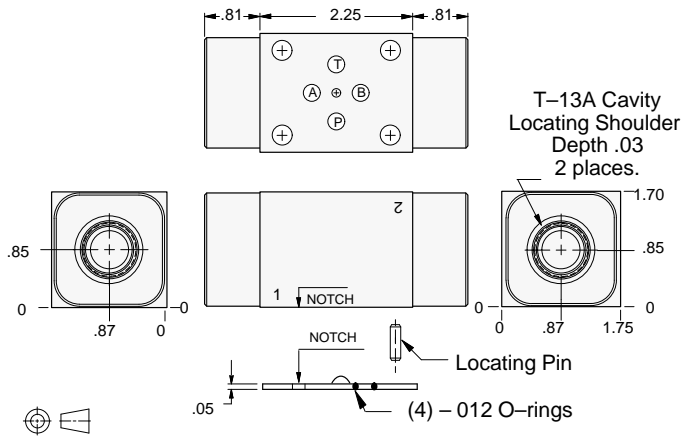
03 CHECK



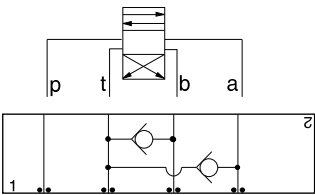
FUNCTION

T to A and B

Check Valves



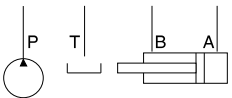
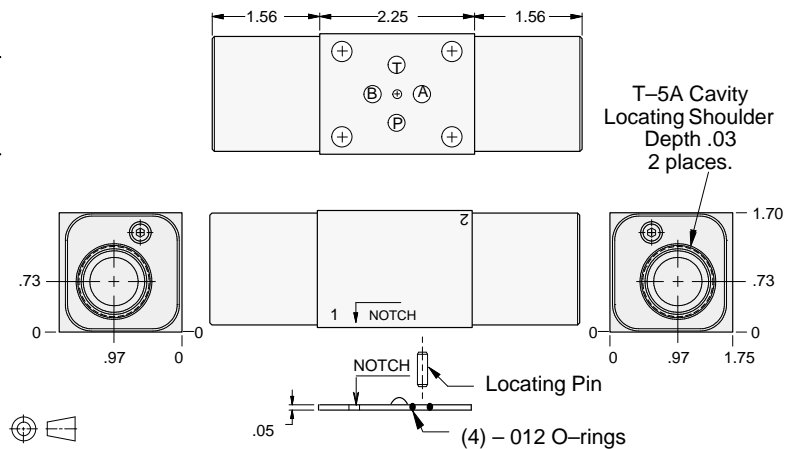
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDX		GDX/S	



FUNCTION

T to A and B
(High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GDF		GDF/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

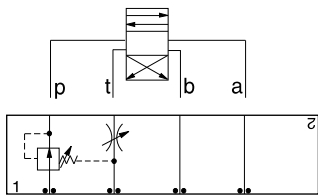
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXDA Page 5.08 (use with GDX)		
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08 (use with GDF)		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



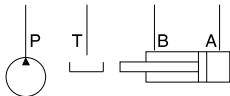
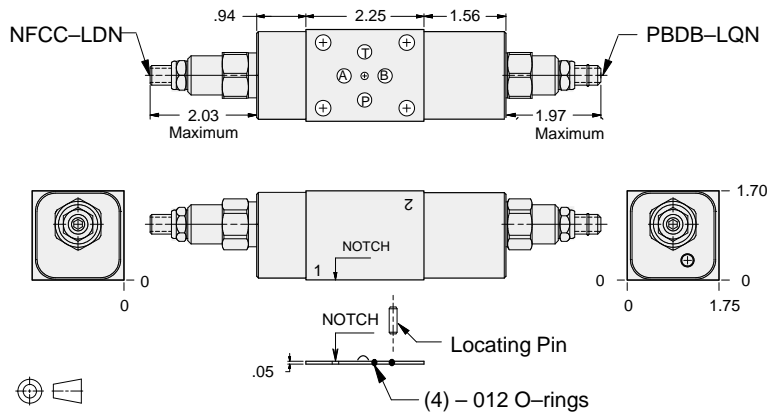
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Pilot Choke

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YNAA-LDN-AA		YNAA-LDN-AA/S	

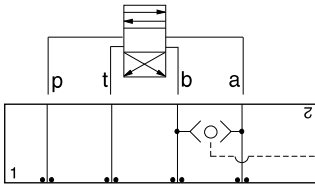


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

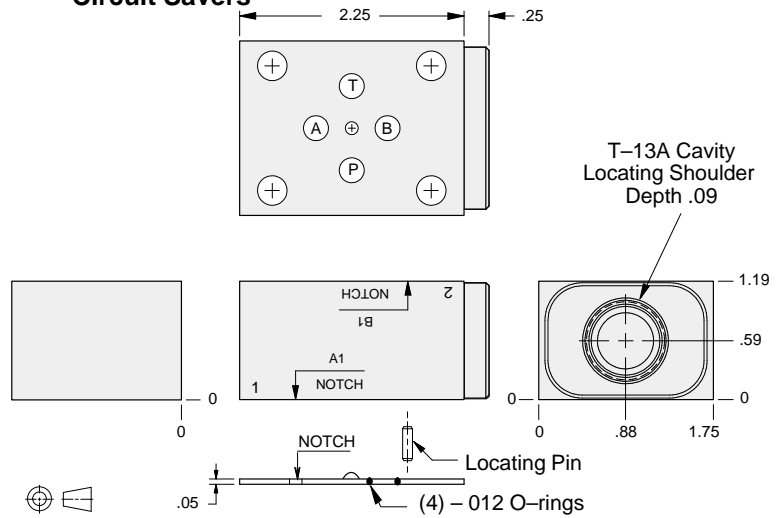
03 CIRCUIT SAVER



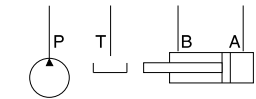
FUNCTION

Shuttle
A and B
Output External

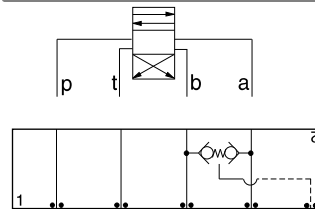
Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
GBS		GBS/S	

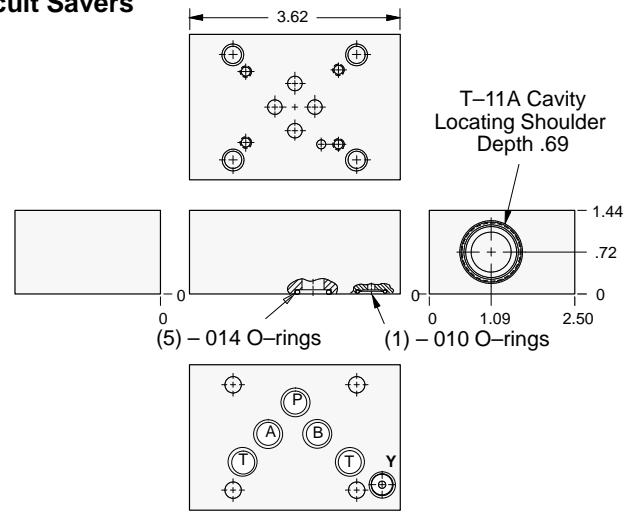


Circuit Savers

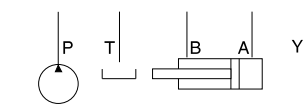


FUNCTION

Checks from
A and B—Adapter
to ISO 05 w/Y Port



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
EBS		EBS/S	



TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

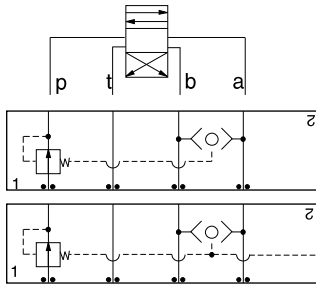
<p>1—2 Ext.</p>	2 Port Shuttle Valve, Signal External		
	CSAA Page 10.09 (use with GBS)		
<p>1—2 3</p>	3 Port Back-to-Back Check Valve, Signal at Port 3		
	CDAB Page 10.10 (use with EBS)		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

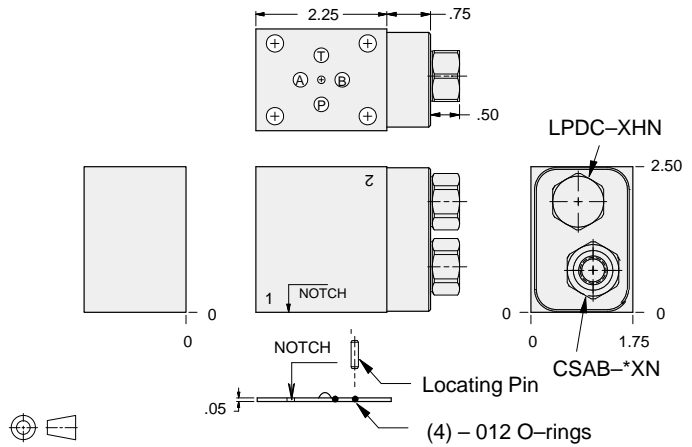


FUNCTION

Pressure Compensator (Restrictive)

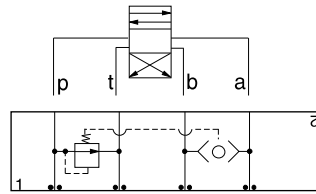
Pressure Compensator (Restrictive) w/Load-Sensing Port

Circuit Savers



Shuttle Cartridge	External Shuttle Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
CSAB-XXN	None	YFCG-XHN-AA		YFCG-XHN-AA/S	
CSAB-AXN	SAE-4	YFCJ-XHN-AA		YFCJ-XHN-AA/S	
CSAB-BXN	.250 BSPP	YFCJ-XHN-AA/M		YFCJ-XHN-AA/T	

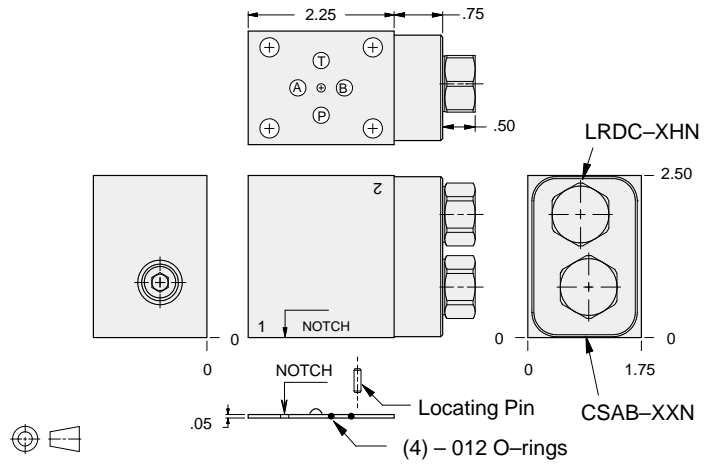
03 CIRCUIT SAVER



FUNCTION

Pressure Compensator (Bypass)

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YFCK-XHN-AA		YFCK-XHN-AA/S	

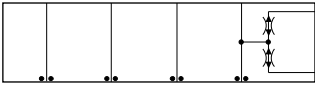
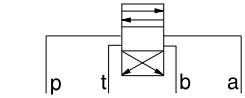


ISO 03 SANDWICH BODIES



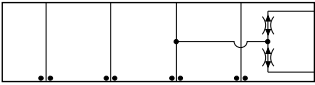
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 CIRCUIT SAVER

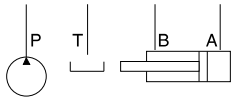


FUNCTION

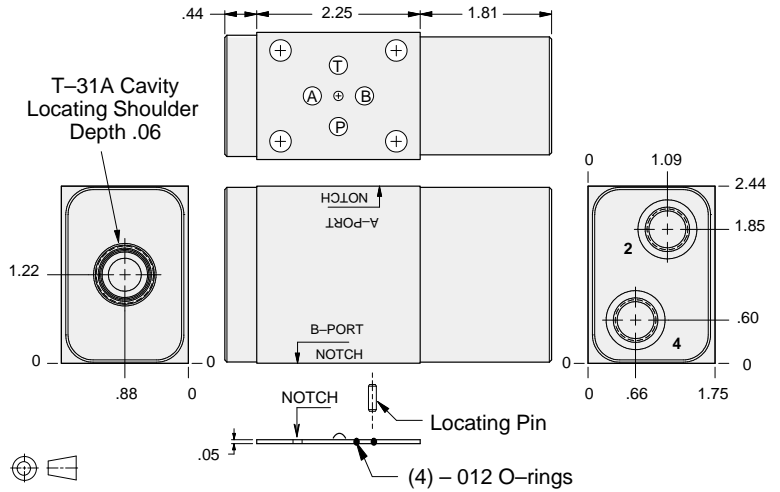
Flow Divider and/or Combiner on **A**



Flow Divider and/or Combiner on **B**



Circuit Savers



Ports 2,4	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	MBJ		MBJ/S	
.25 BSPP	MBJ/M		MBJ/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

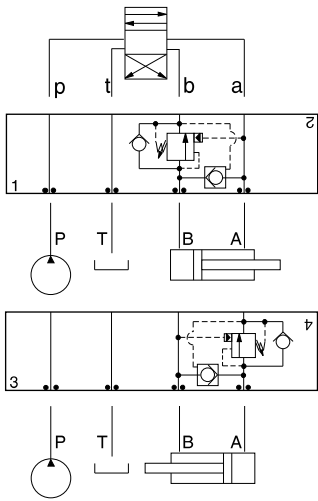
	Flow Divider		High Capacity Flow Divider/Combiner
	FSBD, FSCD Page 7.08		FSCH Page 7.14
	Flow Divider/Combiner		
	FSBA, FSCA Page 7.10		
	Synchronizing Flow Divider/Combiner		
	FSBS, FSCS Page 7.12		
OTHER VALVES:			



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

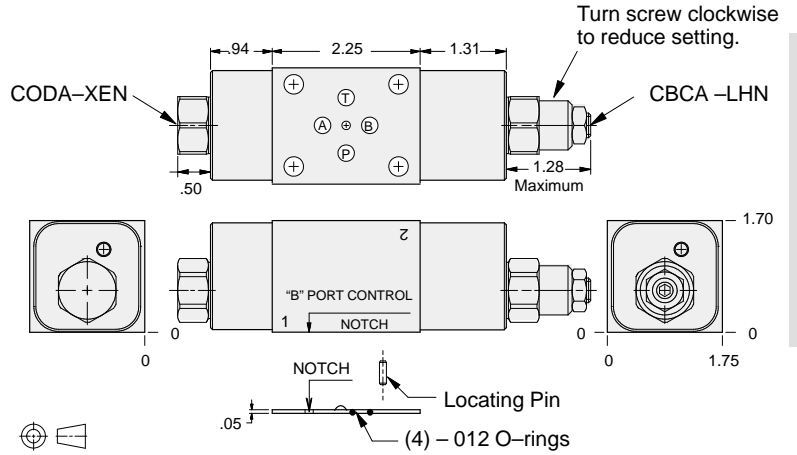


FUNCTION

B to A
Regenerative

A to B
Regenerative

Circuit Savers



03 CIRCUIT SAVER

ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDCA-LHN-AA		YDCA-LHN-AA/S	

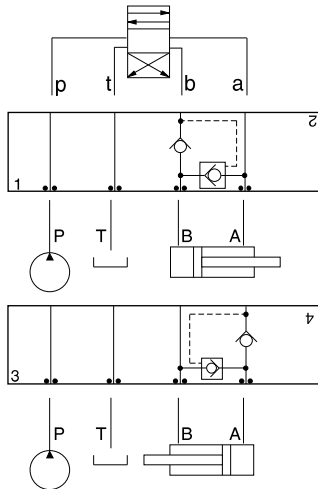


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 CIRCUIT SAVER

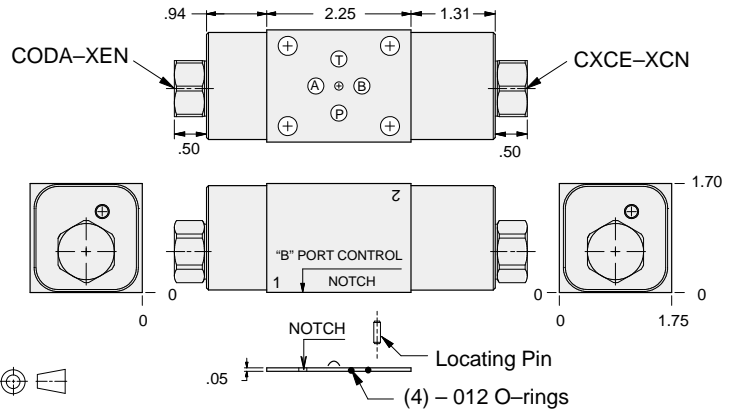


FUNCTION

B to A Regenerative
(Full Time)

A to B Regenerative
(Full Time)

Circuit Savers



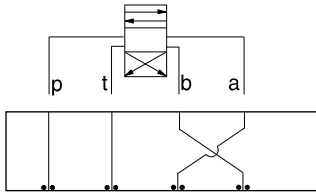
ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
YDCF-XCN-AA		YDCF-XCN-AA/S	



ISO 03 SANDWICH BODIES

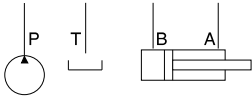


- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

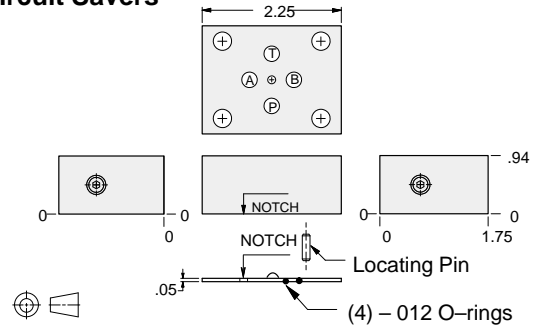


FUNCTION

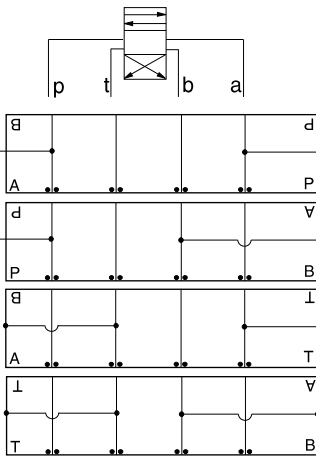
Swap Block
Swaps A and B



Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZKX		ZKX/S	



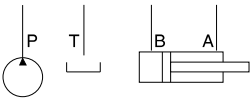
FUNCTION

P and A
Tap in Manifold

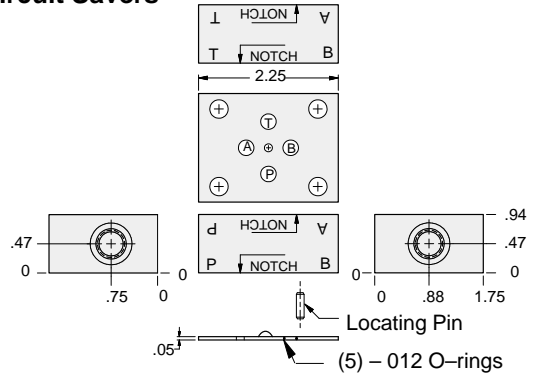
P and B
Tap in Manifold

A and T
Tap in Manifold

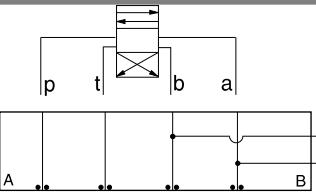
B and T
Tap in Manifold



Circuit Savers

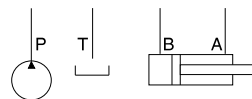


External Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	ZWW		ZWW/S	
SAE-4	ZPT		ZPT/S	
.25 BSPP	ZVC		ZVC/S	

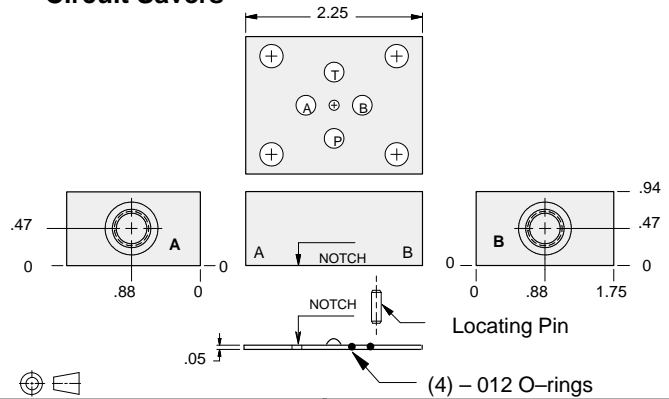


FUNCTION

A and B
Tap in Manifold



Circuit Savers



Ports A, B	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	ZWV		ZWV/S	
SAE-4	ZUO		ZUO/S	
.25 BSPP	ZVB		ZVB/S	

03 CIRCUIT SAVER



ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

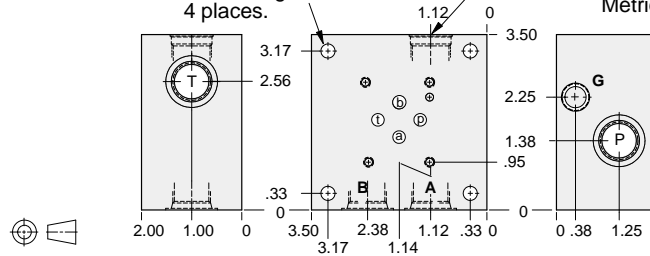
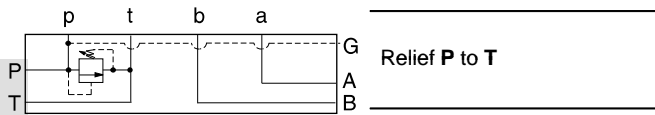
03 SUBPLATE

Side Ported Subplates

Mounting Holes:
.28 diameter through hole.
4 places.

T-10A Cavity
Locating Shoulder
Depth .03

4 Interface Bolt Holes
x .38 deep
Inch: 10-24 UNC
Metric: M5 x 0.8



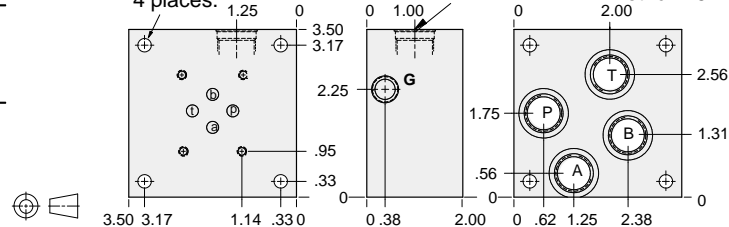
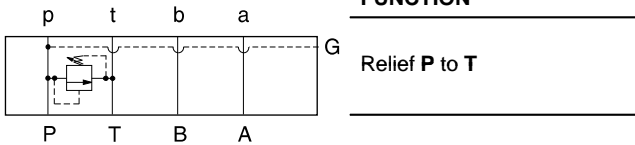
Bolt Hole Interface	Gage Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.375 NPTF	FSB		FSB/S	
Inch	.25 NPTF	SAE-8	FSJ		FSJ/S	
Metric	.25 BSPP	.375 BSPP	FSU		FSU/S	

Rear Ported Subplates

Mounting Holes:
.28 diameter through hole.
4 places.

T-10A Cavity
Locating Shoulder
Depth .03

4 Interface Bolt Holes
x .38 deep
Inch: 10-24 UNC
Metric: M5 x 0.8



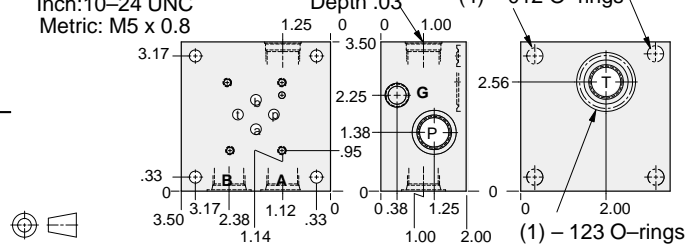
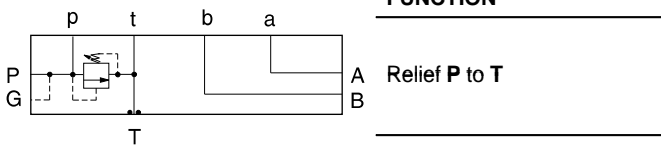
Bolt Hole Interface	Gage Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.375 NPTF	FRB		FRB/S	
Inch	.25 NPTF	SAE-8	FRJ		FRJ/S	
Metric	.25 BSPP	.375 BSPP	FRU		FRU/S	

Side Ported Subplates with Gasket Mount Tank Port

4 Interface Bolt Holes
x .38 deep
Inch: 10-24 UNC
Metric: M5 x 0.8

T-10A Cavity
Locating Shoulder
Depth .03

Mounting Holes (Sealed):
.28 diameter through hole.
4 places.



Bolt Hole Interface	Gage Port	Ports A,B,P	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.375 NPTF	FTB		FTB/S	
Inch	.25 NPTF	SAE-8	FTJ		FTJ/S	
Metric	.25 BSPP	.375 BSPP	FTU		FTU/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RPEC Page 1.06		RQEB Page 1.12
	Pilot Operated, Rapid Response Relief Valve		Direct Acting Relief Valve
	RPEE Page 1.08		RDDA Page 1.10

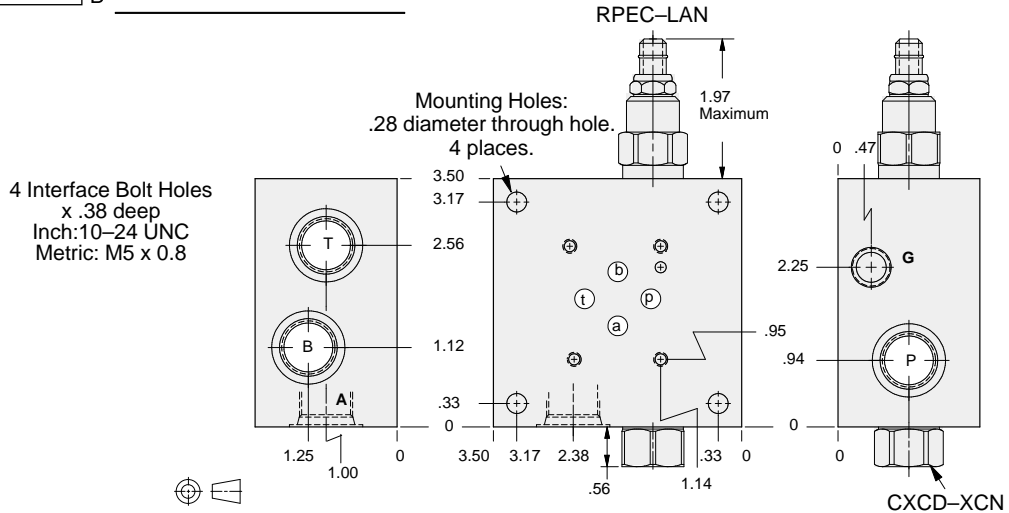
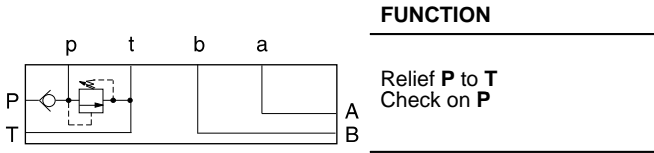


ISO 03 SANDWICH BODIES



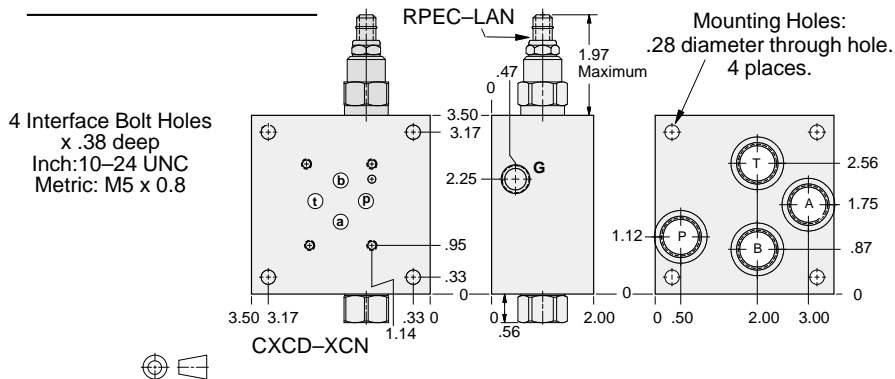
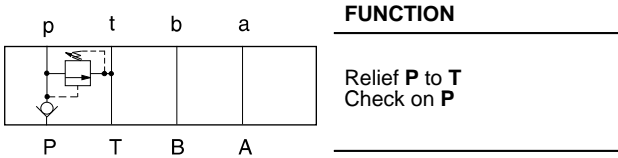
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Side Ported Subplates



Bolt Hole Interface	Gage Port	Port A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.375 NPTF	YRCC-LAN-BB		YRCC-LAN-BB/S	
Inch	.25 NPTF	SAE-8	YRCC-LAN-BJ		YRCC-LAN-BJ/S	
Metric	.25 BSPP	.375 BSPP	YRCC-LAN-BU		YRCC-LAN-BU/S	

Rear Ported Subplates



Bolt Hole Interface	Gage Port	Port A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.375 NPTF	YRCB-LAN-BB		YRCB-LAN-BB/S	
Inch	.25 NPTF	SAE-8	YRCB-LAN-BJ		YRCB-LAN-BJ/S	
Metric	.25 BSPP	.375 BSPP	YRCB-LAN-BU		YRCB-LAN-BU/S	

03 SUBPLATE

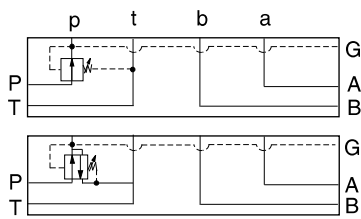


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

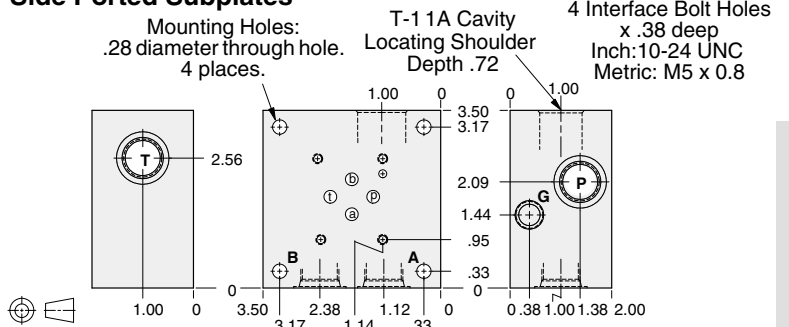
Side Ported Subplates



FUNCTION

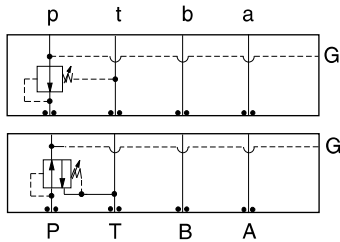
Reducing on P

Reducing/Relieving on P



Bolt Hole Interface	Gage Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.375 NPTF	ESB		ESB/S	
Inch	.25 NPTF	SAE-8	ESJ		ESJ/S	
Metric	.25 BSPP	.375 BSPP	ESU		ESU/S	

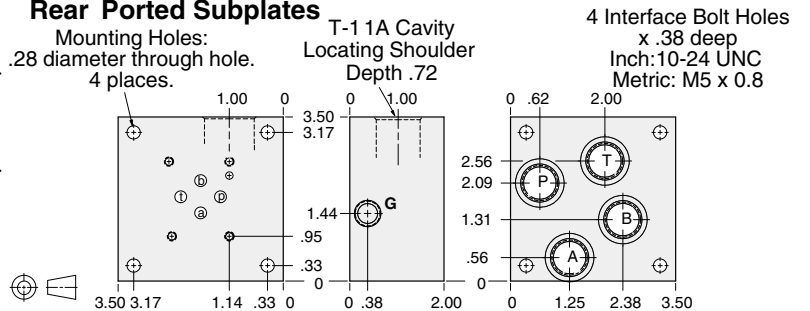
Rear Ported Subplates



FUNCTION

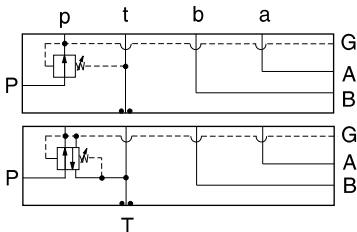
Reducing on P

Reducing/Relieving on P



Bolt Hole Interface	Gage Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.375 NPTF	ERB		ERB/S	
Inch	.25 NPTF	SAE-8	ERJ		ERJ/S	
Metric	.25 BSPP	.375 BSPP	ERU		ERU/S	

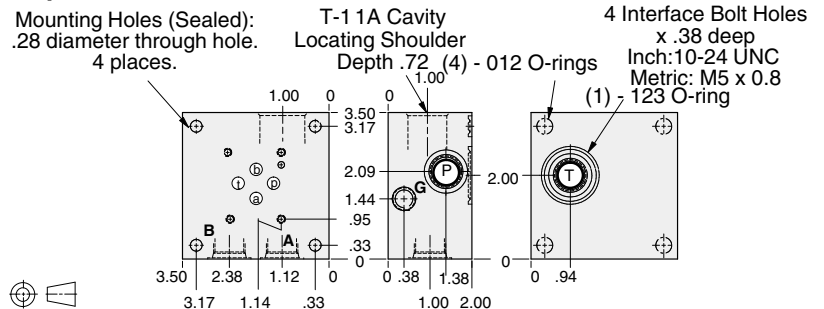
Side Ported Subplates with Gasket Mount Tank Port



FUNCTION

Reducing on P

Reducing/Relieving on P



Bolt Hole Interface	Gage Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.375 NPTF	ETB		ETB/S	
Inch	.25 NPTF	SAE-8	ETJ		ETJ/S	
Metric	.25 BSPP	.375 BSPP	ETU		ETU/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing Valve PPDB Page 3.06		Pilot Operated Relief Valve PPDB Page 3.10
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03 SUBPLATE



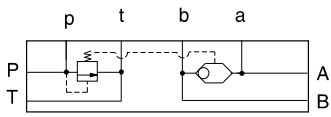
ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 SUBPLATE

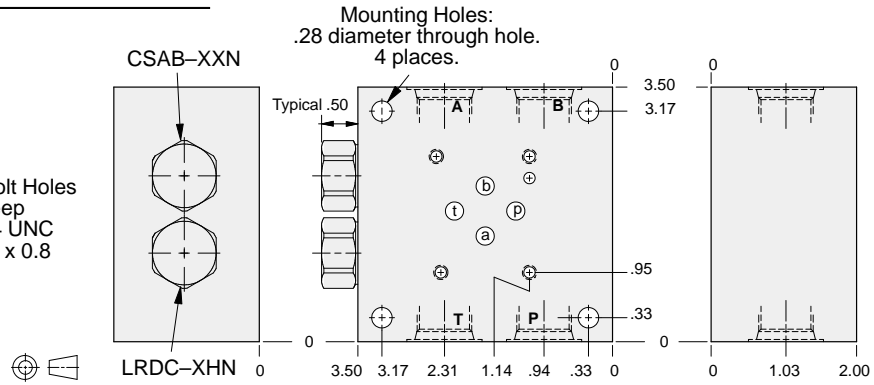
Side Ported Subplates



FUNCTION

Bypass
Compensator
for Proportional
Valves

4 Interface Bolt Holes
x .38 deep
Inch: 10-24 UNC
Metric: M5 x 0.8



Bolt Hole Interface	Port A,B,P,T	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	YFCL-XHN-BB		YFCL-XHN-BB/S	
Inch	SAE-8	YFCL-XHN-BJ		YFCL-XHN-BJ/S	
Metric	.375 BSPP	YFCL-XHN-BU		YFCL-XHN-BU/S	



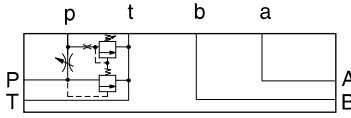
ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

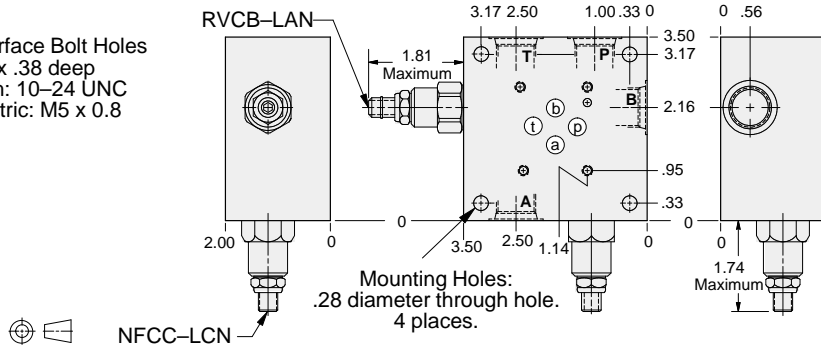
Side Ported Subplates

FUNCTION



Relief P to T
and Bypass
Flow Regulator

4 Interface Bolt Holes
x .38 deep
Inch: 10-24 UNC
Metric: M5 x 0.8



Bolt Hole Interface	Port A,B,P,T	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
Inch	.375 NPTF	YFCS-LCN-BB		YFCS-LCN-BB/S	
Inch	SAE-8	YFCS-LCN-BJ		YFCS-LCN-BJ/S	
Metric	.375 BSPP	YFCS-LCN-BU/M		YFCS-LCN-BU/T	

03 SUBPLATE



ISO 03 SANDWICH BODIES

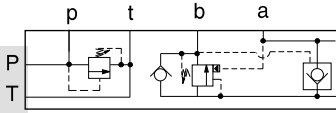


- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Side Ported Subplates

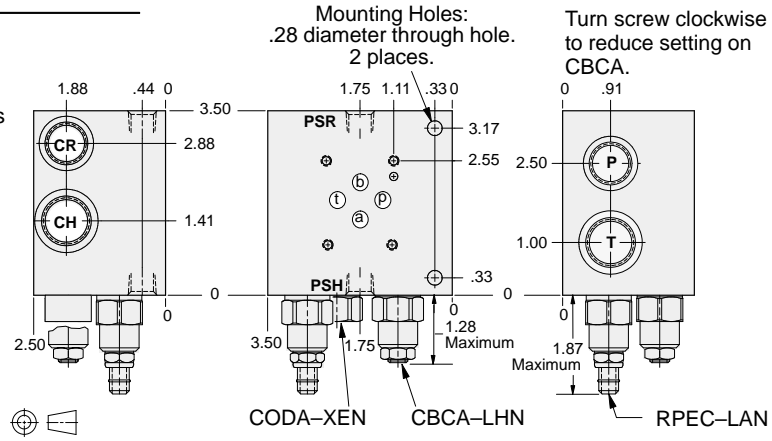
03 SUBPLATE

FUNCTION



A Relief P to T
Regenerative
B to A

4 Interface Bolt Holes
x .38 deep
Inch: 10-24 UNC
Metric: M5 x 0.8



Bolt Holes Interface	Ports T, CH	Ports P, CR	Ports PSH, PSR	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	.375 NPTF	.25 NPTF	YDCG-LHN-BC		YDCG-LHN-BC/S	
Inch	SAE-10	SAE-8	.25 NPTF	YDCG-LHN-BK		YDCG-LHN-BK/S	
Metric	.50 BSPP	.375 BSPP	.25 BSPP	YDCG-LHN-BV		YDCG-LHN-BV/S	

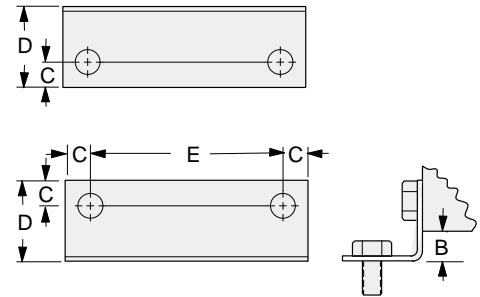


BAR MANIFOLDS



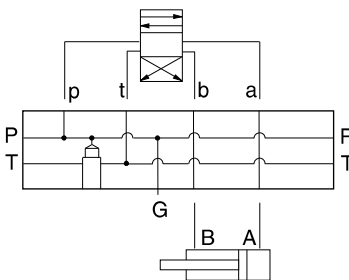
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Some of the bar manifolds offered in this catalogue are manufactured by Daman Products Company, Inc. All bar manifolds are parallel circuit type and contain a cavity for a Sun relief valve, pressure to tank, as well as a gauge port. Mounting kits for all bar manifolds must be ordered separately and contain brackets, bolts and washers. Metric mounting kits are also available.



Manifold Interface	Thread Size	Mounting Bracket Dimensions				Bracket	Bolts	Washer	Model Code
		B	C	D	E				
ISO 03	.312-18UNC x .62 lg.	.37	.31	1.0	2.38	700-020	300-005-001	Washer Head	991-021-001
ISO 03	M8 x 1.25 x 16,0 mm lg.	.37	.31	1.0	2.38	700-020	300-006-001	450-002-001	991-021-002
ISO 05	.312-18UNC x .62 lg.	.37	.31	1.0	2.38	700-020	300-005-001	Washer Head	991-021-003
ISO 05	M8 x 1.25 x 16,0 mm lg.	.37	.31	1.0	2.38	700-020	300-006-001	450-002-001	991-021-004
ISO 05 y	.375-16UNC x .75 lg.	.60	.44	1.38	4.13	700-021	300-005-002	450-001-002	991-021-005
ISO 05 y	M10 x 1.5 x 20,0 mm lg.	.60	.44	1.38	4.13	700-021	300-006-002	450-002-002	991-021-006
ISO 07	.375-16UNC x .75 lg.	.60	.44	1.38	4.13	700-021	300-005-002	450-001-002	991-021-007
ISO 07	M10 x 1.5 x 20,0 mm lg.	.60	.44	1.38	4.13	700-021	300-006-002	450-002-002	991-021-008
ISO 08	.500-13UNC x 1.0 lg.	.60	.44	1.63	4.13	700-022	300-005-003	450-001-003	991-021-009
ISO 08	M12 x 1.75 x 25,0 mm lg.	.60	.44	1.63	4.13	700-022	300-006-003	450-002-003	991-021-010

BAR MANIFOLD

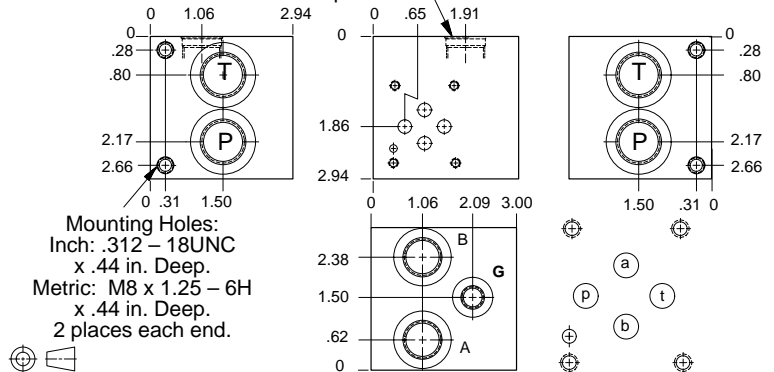


FUNCTION

One Station

ISO 03 Parallel Circuit with Relief Cavity

T-10A Cavity
Locating Shoulder
Depth .03



Mounting Holes	Ports P, T	Ports A, B	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
inch	.50 NPTF	.375 NPTF	.25 NPTF	VSA		VSA/S	
inch	SAE-10	SAE-8	SAE-4	VSL		VSL/S	
metric	.50 BSPP	.375 BSPP	.25 BSPP	VPA		VPAS	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPEC Page 1.06		RDDA Page 1.10
OTHER VALVES:			



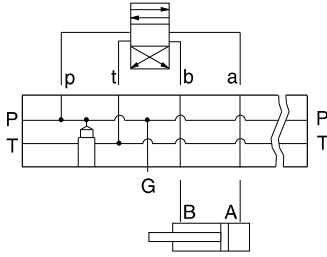
BAR MANIFOLDS



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

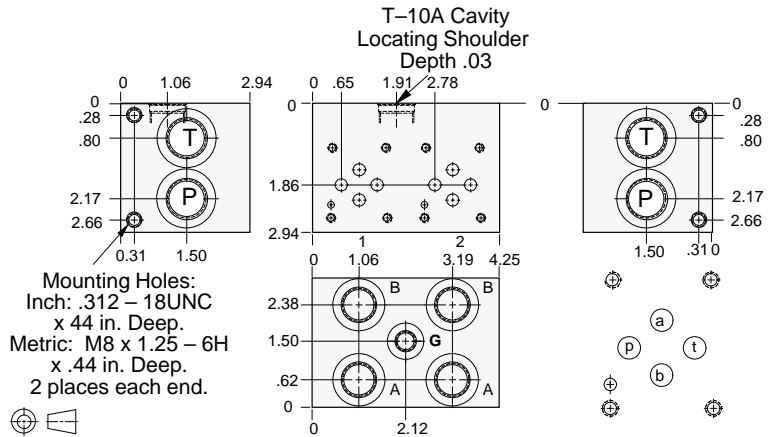
BAR MANIFOLD

ISO 03 Parallel Circuit with Relief Cavity



FUNCTION

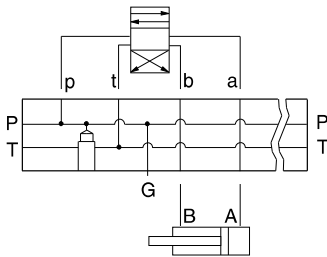
Two Station



Mounting Holes	Ports P, T	Ports A, B	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
inch	.50 NPTF	.375 NPTF	.25 NPTF	VSB		VSB/S	
inch	SAE-10	SAE-8	SAE-4	VSM		VSM/S	
metric	.50 BSPP	.375 BSPP	.25 BSPP	VPB		VPB/S	

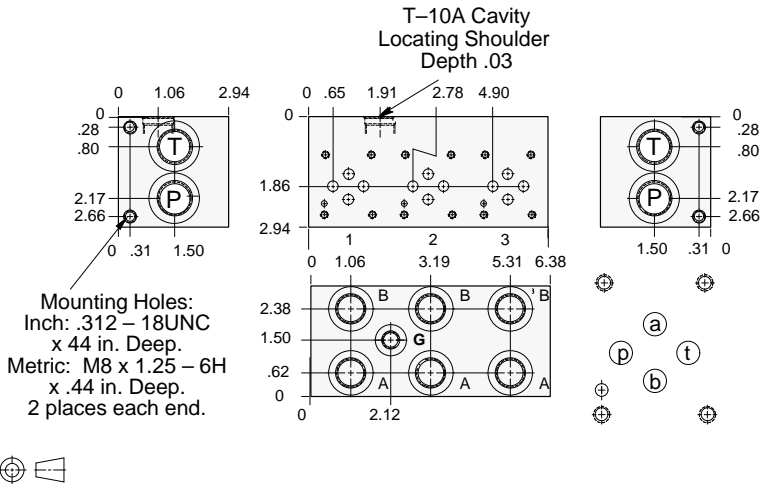
Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

ISO 03 Parallel Circuit with Relief Cavity



FUNCTION

Three Station



Mounting Holes	Ports P, T	Ports A, B	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
inch	.50 NPTF	.375 NPTF	.25 NPTF	VSC		VSC/S	
inch	SAE-10	SAE-8	SAE-4	VSN		VSN/S	
metric	.50 BSPP	.375 BSPP	.25 BSPP	VPC		VPC/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Relief Valve</i>		<i>Direct Acting Relief Valve</i>
	RPEC Page 1.06		RDDA Page 1.10
OTHER VALVES:			



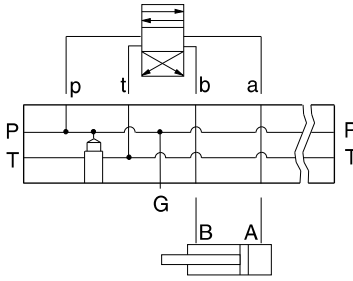
BAR MANIFOLDS



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

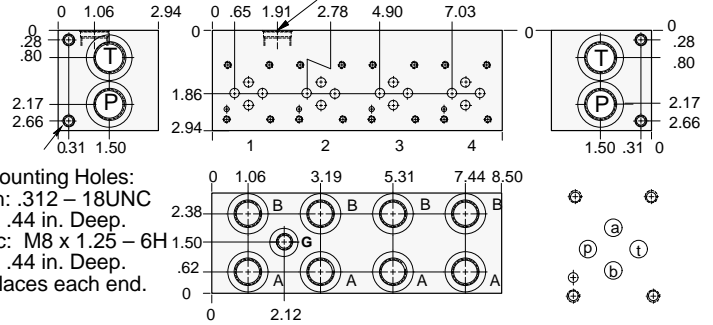
ISO 03 Parallel Circuit with Relief Cavity

T-10A Cavity
Locating Shoulder
Depth .03



FUNCTION

Four Station



Mounting Holes:
Inch: .312 – 18UNC
x .44 in. Deep.
Metric: M8 x 1.25 – 6H
x .44 in. Deep.
2 places each end.

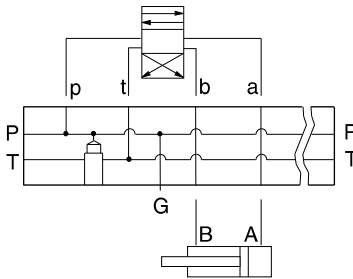


Mounting Holes	Ports P, T	Ports A, B	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
inch	.50 NPTF	.375 NPTF	.25 NPTF	VSD		VSD/S	
inch	SAE-10	SAE-8	SAE-4	VSP		VSP/S	
metric	.50 BSPP	.375 BSPP	.25 BSPP	VPD		VPD/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

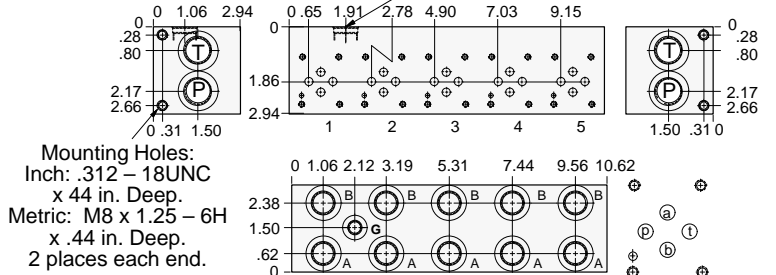
ISO 03 Parallel Circuit with Relief Cavity

T-10A Cavity
Locating Shoulder
Depth .03



FUNCTION

Five Station



Mounting Holes:
Inch: .312 – 18UNC
x .44 in. Deep.
Metric: M8 x 1.25 – 6H
x .44 in. Deep.
2 places each end.



Mounting Holes	Ports P, T	Ports A, B	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
inch	.50 NPTF	.375 NPTF	.25 NPTF	VSE		VSE/S	
inch	SAE-10	SAE-8	SAE-4	VSR		VSR/S	
metric	.50 BSPP	.375 BSPP	.25 BSPP	VPE		VPE/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPEC Page 1.06		RDDA Page 1.10
OTHER VALVES:			

BAR MANIFOLD

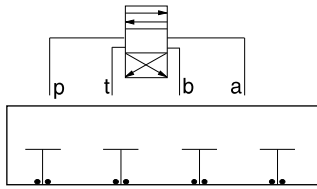


ISO 03 SANDWICH BODIES



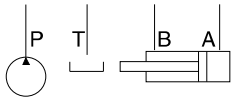
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 COVER PLATE



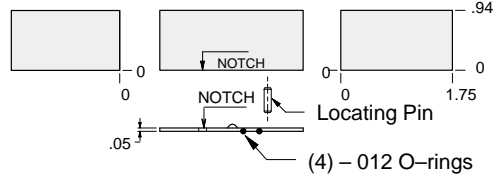
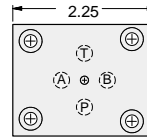
FUNCTION

All Ports Blocked

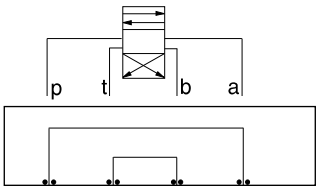


Cover Plates

Mounting Holes:
 .20 diameter through hole.
 Counterbore .36 diameter
 x .50 deep.
 4 places.

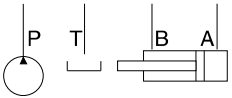


ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZJR		ZJR/S	



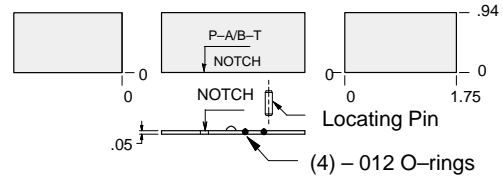
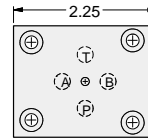
FUNCTION

P to A and B to T

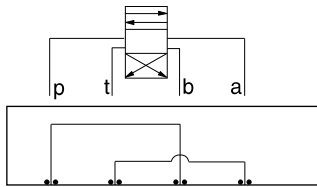


Cover Plates

Mounting Holes:
 .20 diameter through hole.
 Counterbore .36 diameter
 x .50 deep.
 4 places.

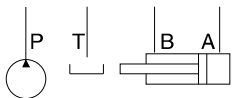


ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZJS		ZJS/S	



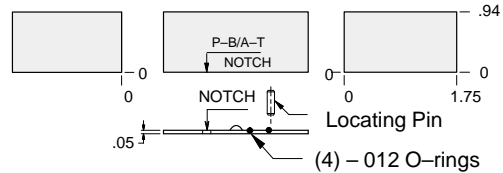
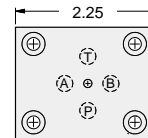
FUNCTION

P to B and A to T



Cover Plates

Mounting Holes:
 .20 diameter through hole.
 Counterbore .36 diameter
 x .50 deep.
 4 places.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZJT		ZJT/S	

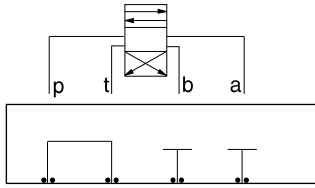


ISO 03 SANDWICH BODIES



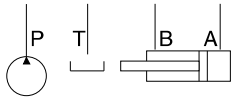
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 COVER PLATE



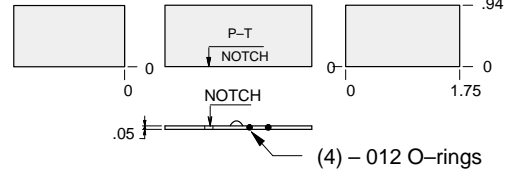
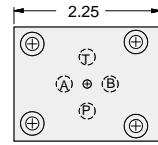
FUNCTION

P to T
A and B blocked

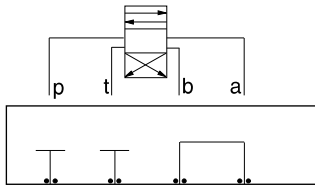


Cover Plates

Mounting Holes:
.20 diameter through hole.
Counterbore .36 diameter
x .50 deep.
4 places.

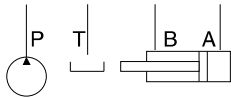


ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZJV		ZJVS	



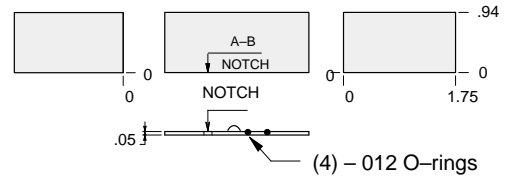
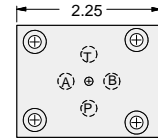
FUNCTION

A to B
P and T blocked

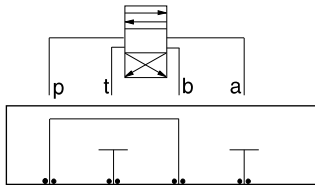


Cover Plates

Mounting Holes:
.20 diameter through hole.
Counterbore .36 diameter
x .50 deep.
4 places.

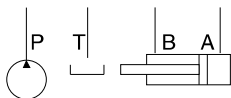


ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZJW		ZJWS	



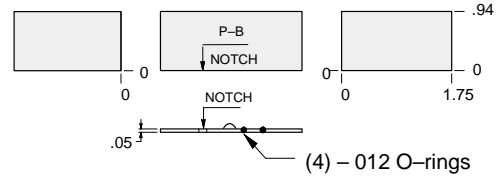
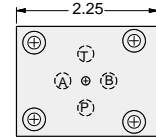
FUNCTION

P to B
A and T blocked



Cover Plates

Mounting Holes:
.20 diameter through hole.
Counterbore .36 diameter
x .50 deep
4 places



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZWE		ZWE/S	

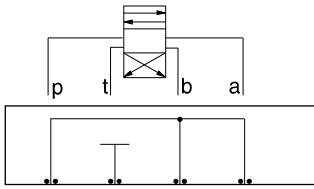


ISO 03 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

03 COVER PLATE

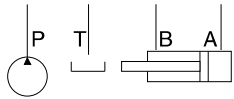
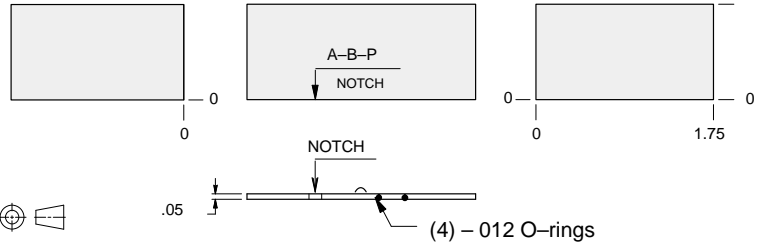
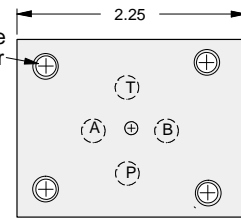


FUNCTION

P to A and B
T blocked

Cover Plates

Mounting Holes:
.20 Diameter through hole
Counterbore .36 diameter
x .50 deep
4 places.



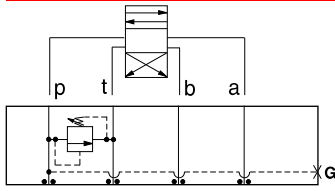
ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
WJG		WJG/S	



ISO 05 SANDWICH BODIES



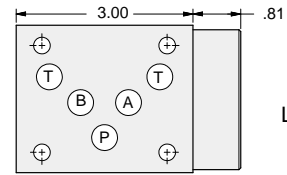
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



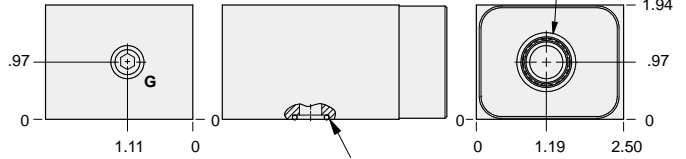
FUNCTION

P to T

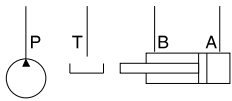
Relief Valves



T-10A Cavity Locating Shoulder Depth .03

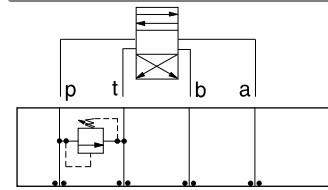


(5) - 014 O-rings



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CBE		CBE/S	
.25 BSPP	CBE/M		CBE/T	

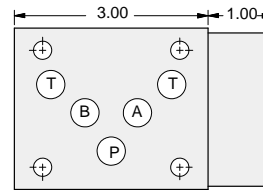
05 RELIEF



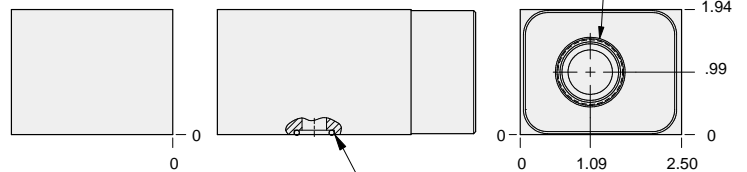
FUNCTION

P to T
(High Capacity)

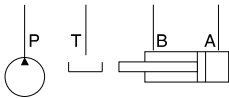
Relief Valves



T-3A Cavity Locating Shoulder Depth .03



(5) - 014 O-rings



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBP		CBP/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

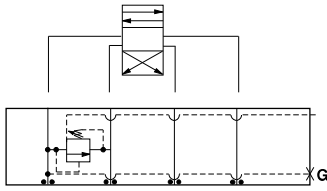
	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RP*C Page 1.06		RQ*B Page 1.12
	Pilot Operated, Rapid Response Relief Valve		Air Controlled, Pilot Operated Relief Valve
	RP*E Page 1.08		RPGD Page 1.14 (use with CBP)
	Direct Acting Relief Valve		
	RD*A Page 1.10		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



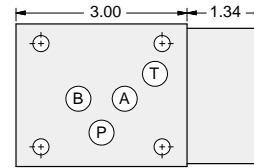
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



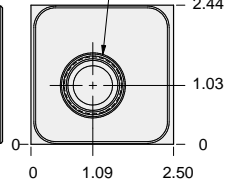
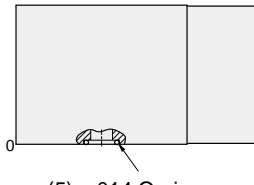
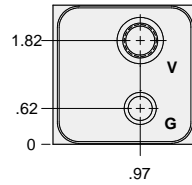
FUNCTION

P to T
Externally Vented

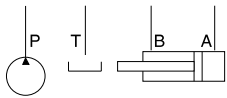
Relief Valves



T-2A Cavity
Locating Shoulder
Depth .72



(5) - 014 O-rings



Gage Port (Plugged)	Vent Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	SAE-6	BBC		BBC/S	
.25 BSPP	.25 BSPP	BBC/M		BBC/T	

05 RELIEF

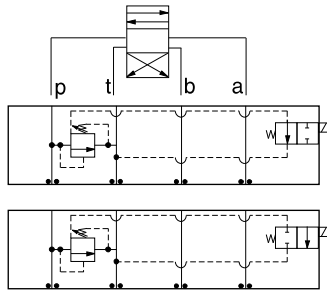
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Vented Relief Valve		
	RVEA Page 1.18		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

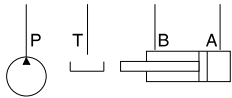
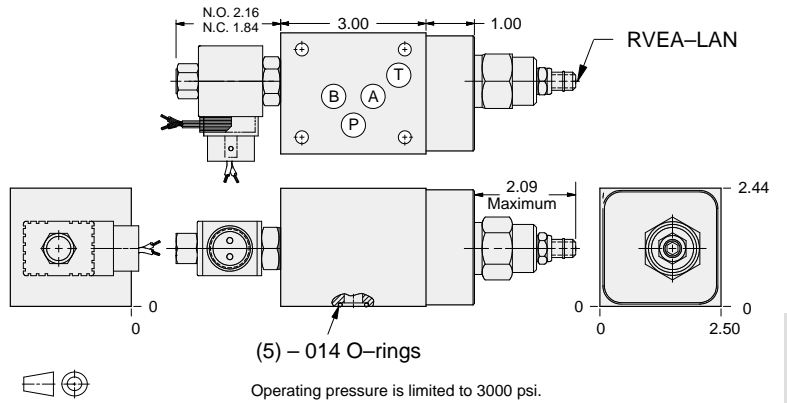


FUNCTION

P to T
N.O. Solenoid
Vented *

P to T
N.C. Solenoid
Vented *

Relief Valves



Solenoid Type	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
N.O.	YREO-LAN-*A		YREO-LAN-*A/S	
N.C.	YREP-LAN-*A		YREP-LAN-*A/S	

* Select solenoid connection/voltage option from page 14.16 and add option price to List Price.

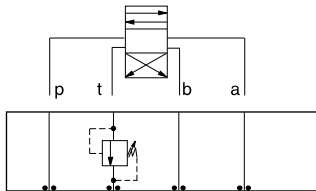


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

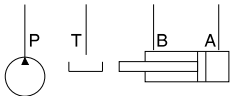
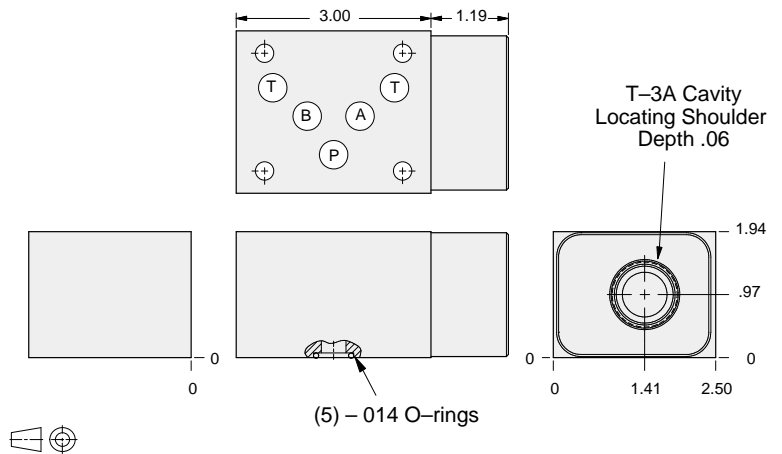
05 RELIEF



FUNCTION

Out of T
(High Capacity)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBT		CBT/S	

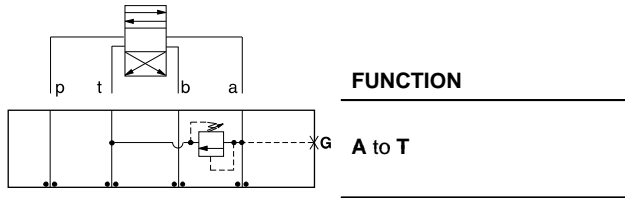
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RPGC Page 1.06		RQGB Page 1.12
	Pilot Operated, Rapid Response Relief Valve		Air Controlled, Pilot Operated Relief Valve
	RPGE Page 1.08		RPGD Page 1.14
	Direct Acting Relief Valve		
	RDFA Page 1.10		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



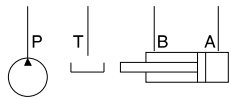
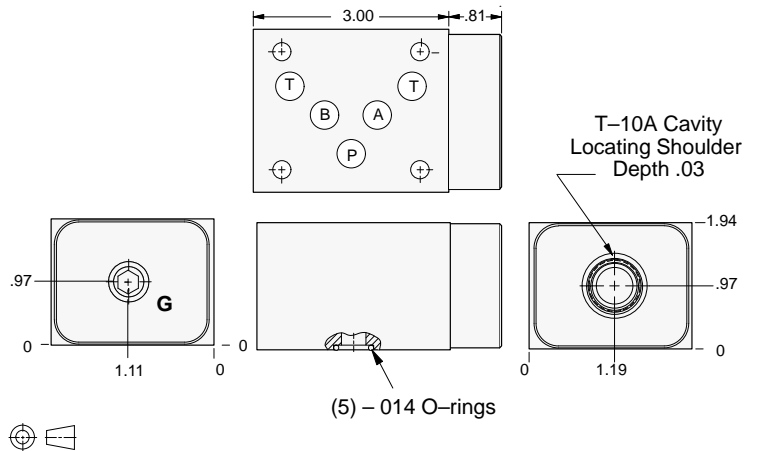
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

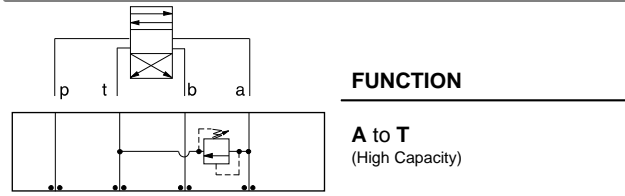
A to T

Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CBF		CBF/S	
.25 BSPP	CBF/M		CBF/T	

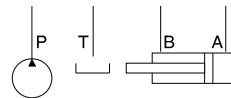
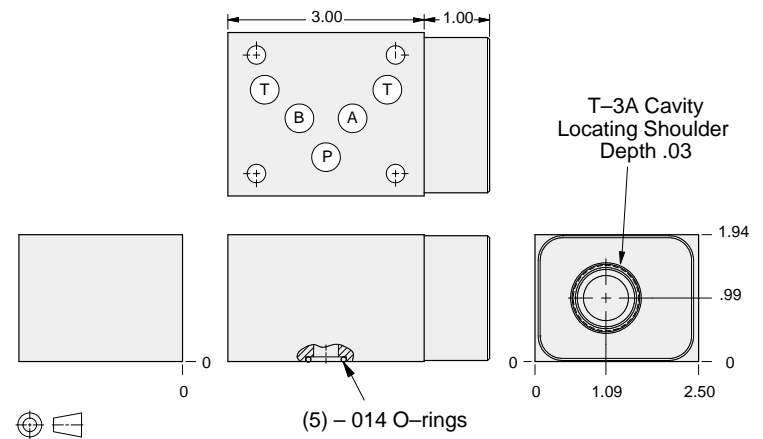
05 RELIEF



FUNCTION

A to T
(High Capacity)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBA		CBA/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

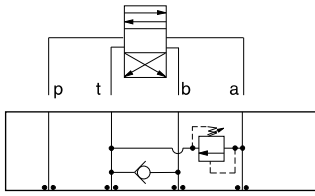
	Pilot Operated Relief Valve RP*C Page 1.06		Pilot Operated "Kick-Down" Relief Valve RQ*B Page 1.12
	Pilot Operated, Rapid Response Relief Valve RP*E Page 1.08		Air Controlled, Pilot Operated Relief Valve RPGD Page 1.14 (use with CBA)
	Direct Acting Relief Valve RD*A Page 1.10		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



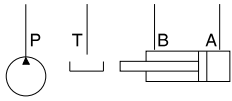
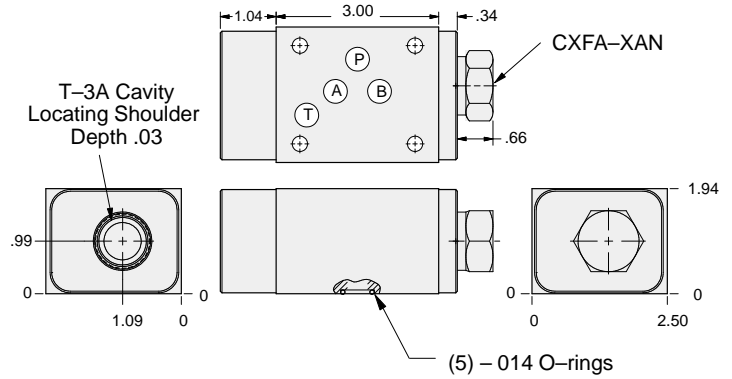
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

A to T
FF Check T to B

Relief Valves



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
CB2		CB2/S	

05 RELIEF

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

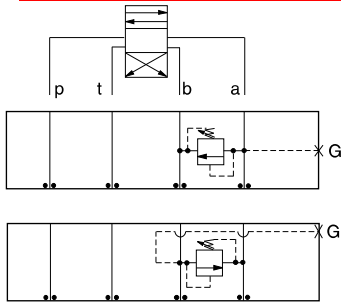
	<i>Pilot Operated Relief Valve</i> RPGC Page 1.06		<i>Pilot Operated "Kick-Down" Relief Valve</i> RQGB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i> RPGE Page 1.08		<i>Air Controlled, Pilot Operated Relief Valve</i> RPGD Page 1.14
	<i>Direct Acting Relief Valve</i> RDFA Page 1.10		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

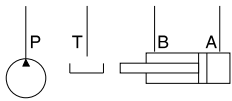
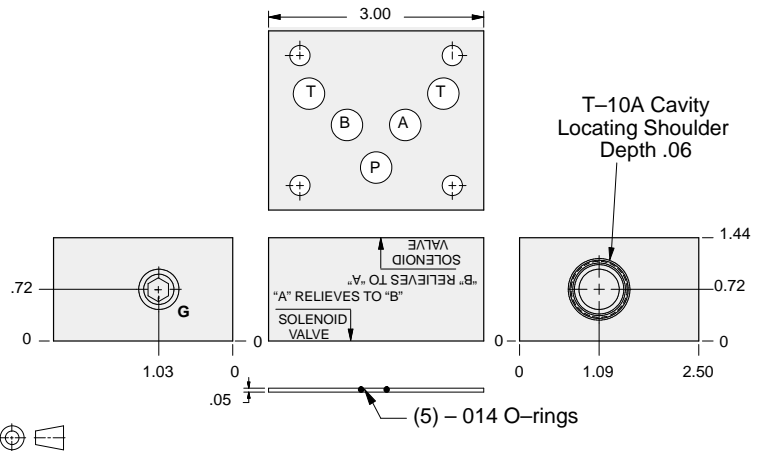


FUNCTION

A to B

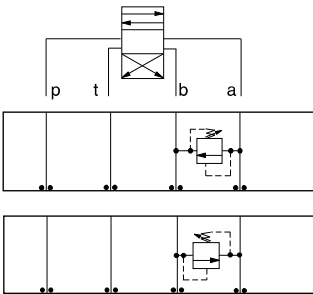
B to A

Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CBH		CBH/S	
.25 BSPP	CBH/M		CBH/T	

05 RELIEF

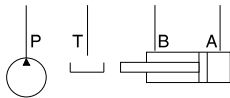
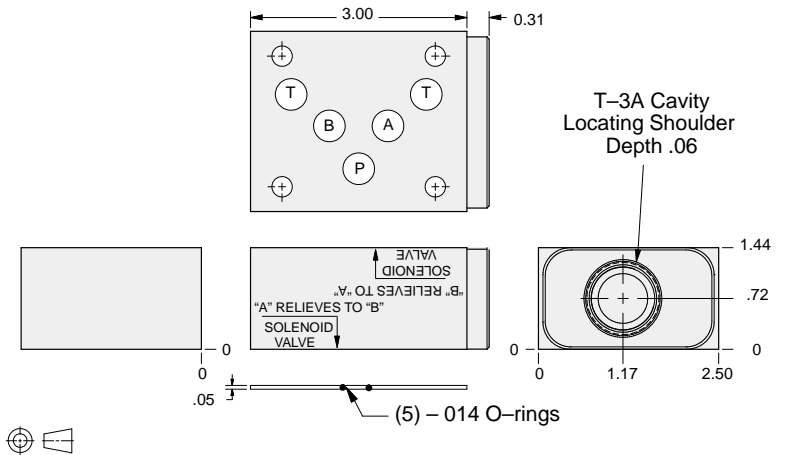


FUNCTION

A to B
(High Capacity)

B to A
(High Capacity)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBC		CBC/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

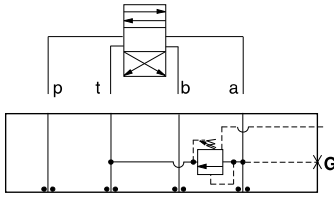
	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RP*C Page 1.06		RQ*B Page 1.12
	Pilot Operated, Rapid Response Relief Valve		Air Controlled, Pilot Operated Relief Valve
	RP*E Page 1.08		RPGD Page 1.14 (use with CBC)
	Direct Acting Relief Valve		
	RD*A Page 1.10		



ISO 05 SANDWICH BODIES



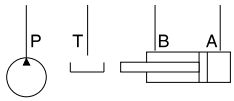
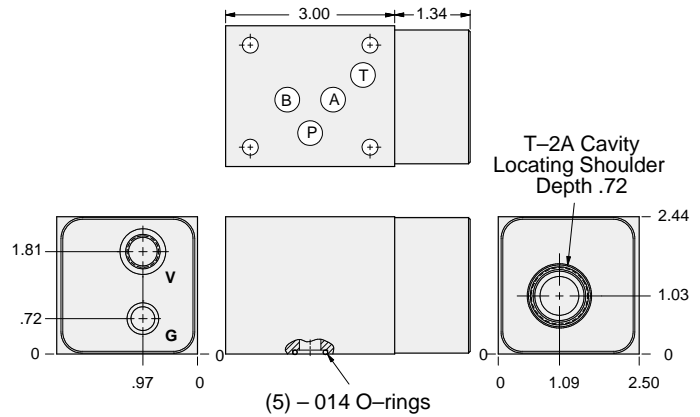
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



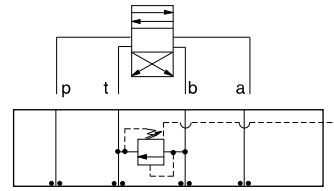
FUNCTION

A to T
Externally Vented

Relief Valves



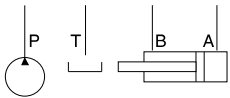
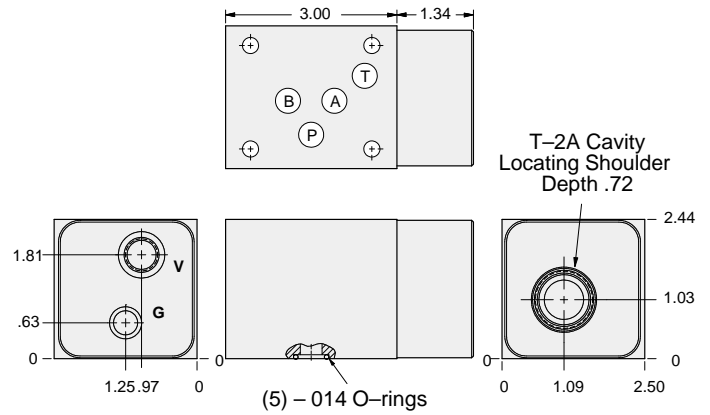
Gage Port (Plugged)	Vent Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	SAE-6	BBD		BBD/S	
.25 BSPP	.25 BSPP	BBD/M		BBD/T	



FUNCTION

B to T
Externally Vented

Relief Valves



Gage Port (Plugged)	Vent Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Part Number	List Price
.25 NPTF	SAE-6	BBE		BBE/S	
.25 BSPP	.25 BSPP	BBE/M		BBE/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Vented Relief Valve		
	RVEA Page 1.18		
OTHER VALVES:			

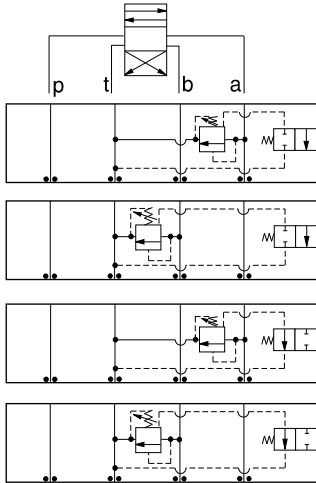


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Relief Valves



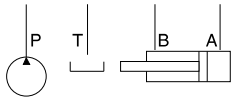
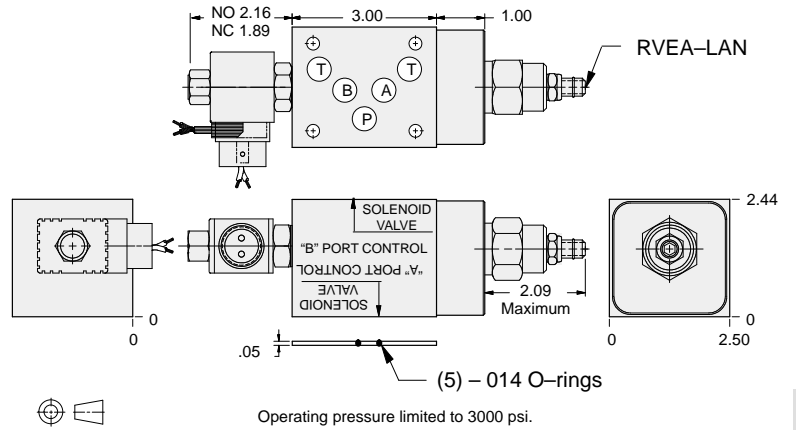
FUNCTION

A to T
N.C. Solenoid
Vented

B to T
N.C. Solenoid Vented

A to T
N.O. Solenoid
Vented

B to T
N.O. Solenoid Vented



Solenoid Type	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
N.C.	YRET-LAN-*A		YRET-LAN-*A/S	
N.O.	YREU-LAN-*A		YREU-LAN-*A/S	

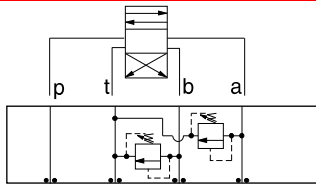
* Select solenoid connection/voltage option from page 14.16 and add option price to List Price.



ISO 05 SANDWICH BODIES



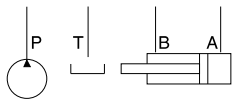
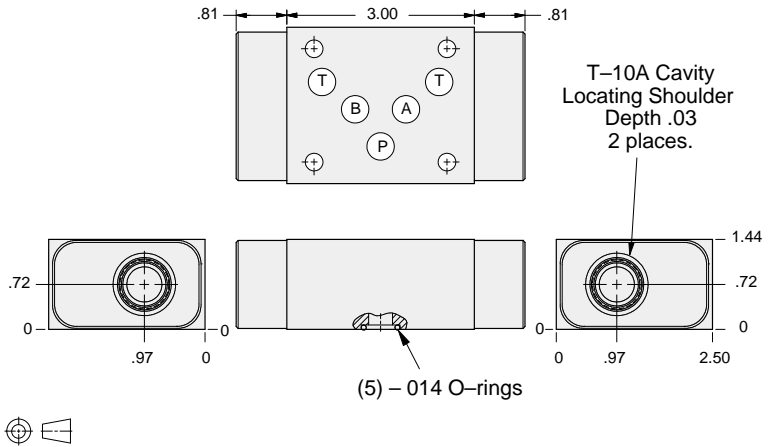
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

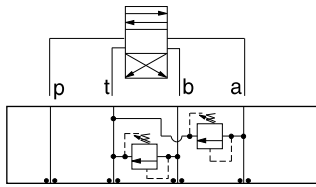
A and B to T

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBD		CBD/S	

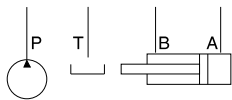
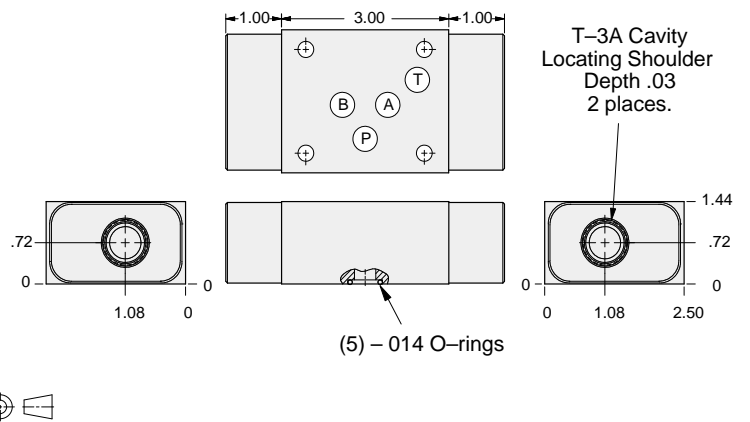
05 RELIEF



FUNCTION

A and B to T
(High Capacity)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBX		CBX/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Relief Valve</i>		<i>Pilot Operated "Kick-Down" Relief Valve</i>
	RP*C Page 1.06		RQ*B Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i>		<i>Air Controlled, Pilot Operated Relief Valve</i>
	RP*E Page 1.08		RPGD Page 1.14 (use with CBX)
	<i>Direct Acting Relief Valve</i>		
	RD*A Page 1.10		

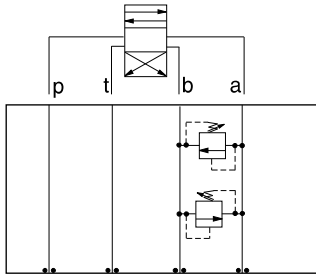


ISO 05 SANDWICH BODIES



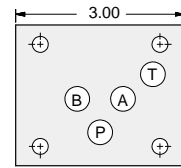
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Relief Valves

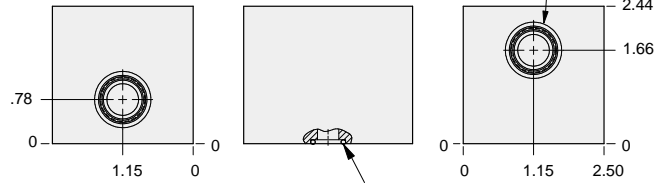


FUNCTION

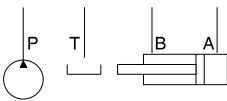
**A to B and
B to A**
(Cross-Port)



T-10A Cavity
Locating Shoulder
Depth .06
2 places.

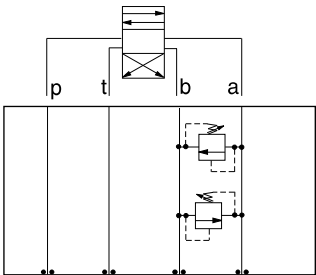


(5) - O14 O-rings



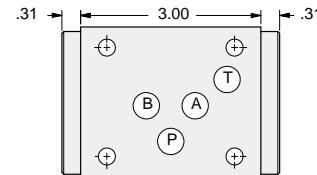
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBI		CBIS	

Relief Valves

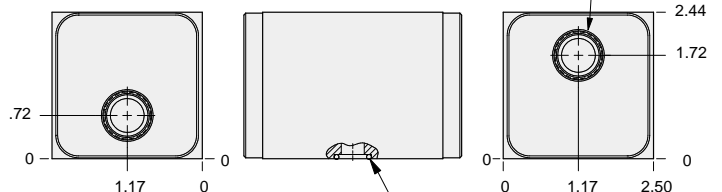


FUNCTION

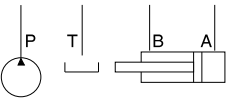
**A to B and
B to A**
(High Capacity)
(Cross-Port)



T-3A Cavity
Locating Shoulder
Depth .06
2 places.



(5) - O14 O-rings



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBY		CBYS	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RP*C Page 1.06		RQ*B Page 1.12
	Pilot Operated, Rapid Response Relief Valve		Air Controlled, Pilot Operated Relief Valve
	RP*E Page 1.08		RPGD Page 1.14 (use with CBY)
	Direct Acting Relief Valve		
	RD*A Page 1.10		

05 RELIEF

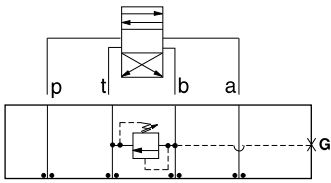


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

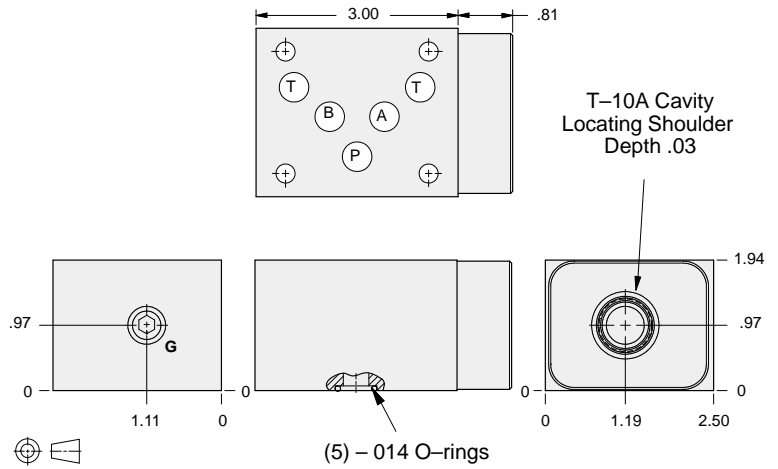
05 RELIEF



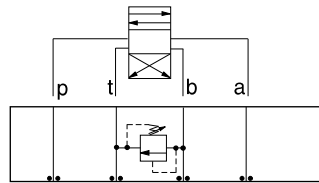
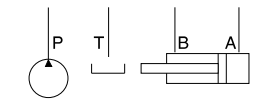
FUNCTION

B to T

Relief Valves



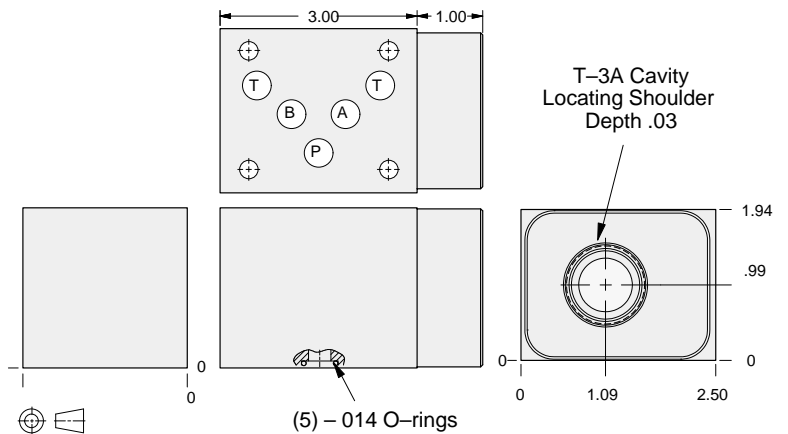
Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CBG		CBG/S	
.25 BSPP	CBG/M		CBG/T	



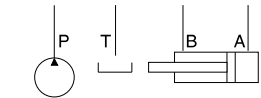
FUNCTION

B to T
(High Capacity)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBB		CBB/S	



TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RP*C Page 1.06		RQ*B Page 1.12
	Pilot Operated, Rapid Response Relief Valve		Air Controlled, Pilot Operated Relief Valve
	RP*E Page 1.08		RP*D Page 1.14 (use with CBB)
	Direct Acting Relief Valve		
	RD*A Page 1.10		

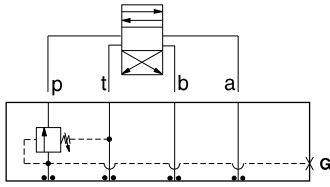


ISO 05 SANDWICH BODIES



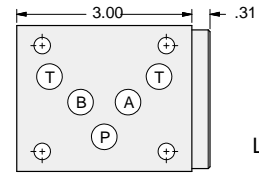
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Sequence Valves

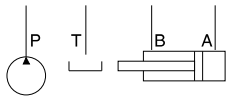
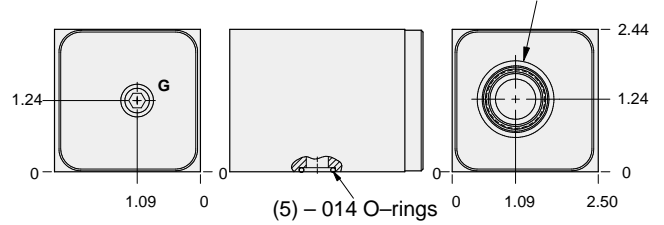


FUNCTION

In to P



T-2A Cavity
Locating Shoulder
Depth .75



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBW		BBW/S	
.25 BSPP	BBW/M		BBW/T	

05 SEQUENCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Sequence Valve</i>		
	RSFC Page 2.06		
	<i>Pilot Operated "Kick-Down" Sequence Valve</i>		
	SQFB Page 2.08		
	<i>Air Controlled, Pilot Operated Sequence Valve</i>		
	RSFE Page 2.10		
OTHER VALVES:	SCEA		

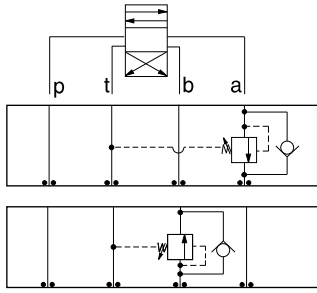


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

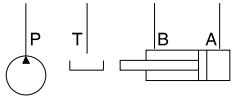
05 SEQUENCE



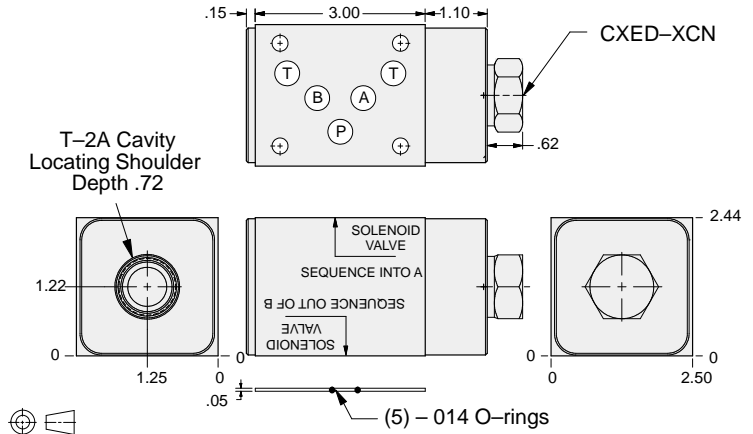
FUNCTION

In to A
Reverse FF Check

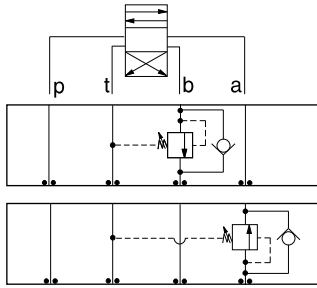
Out of B
Reverse FF Check



Sequence Valves



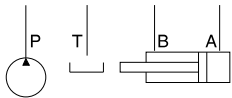
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BB4		BB4/S	



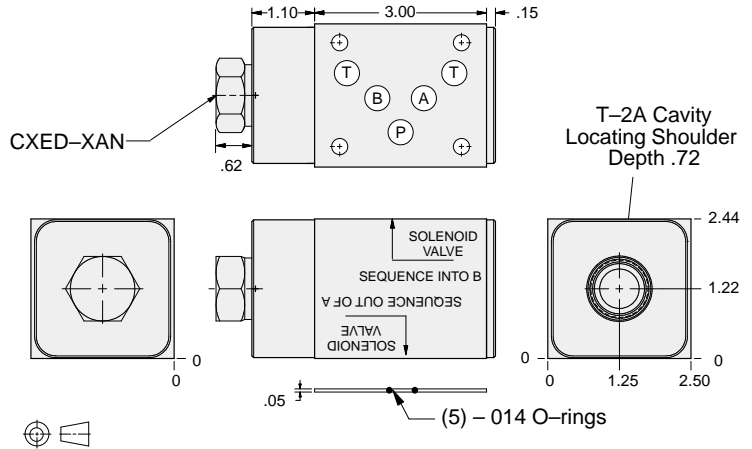
FUNCTION

In to B
Reverse FF Check

Out of A
Reverse FF Check



Sequence Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BB5		BB5/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

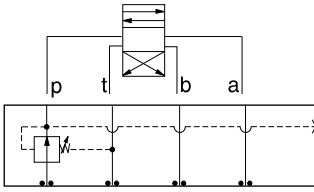
	<i>Pilot Operated Sequence Valve</i>		
	RSFC Page 2.06		
	<i>Pilot Operated "Kick-Down" Sequence Valve</i>		
	SQFB Page 2.08		
	<i>Air Controlled, Pilot Operated Sequence Valve</i>		
	RSFE Page 2.10		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



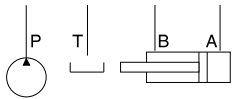
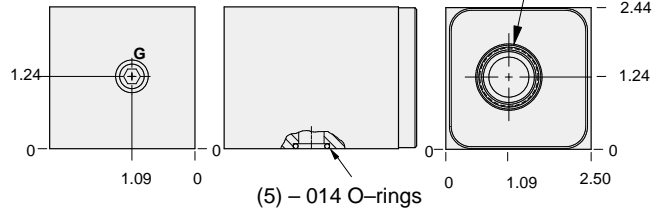
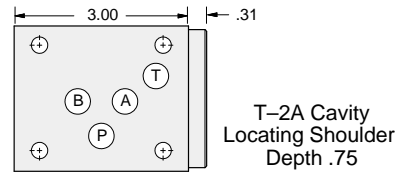
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

G On P
Drained to T

Reducing Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBP		BBP/S	
.25 BSPP	BBP/M		BBP/T	

05 REDUCING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

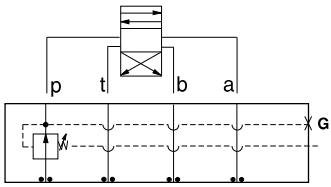
	<i>Pilot Operated Reducing Valve</i>		
	PBFB Page 3.06		
	<i>Air Controlled, Pilot Operated Reducing Valve</i>		
	PBFC Page 3.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



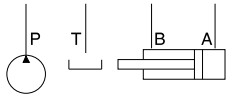
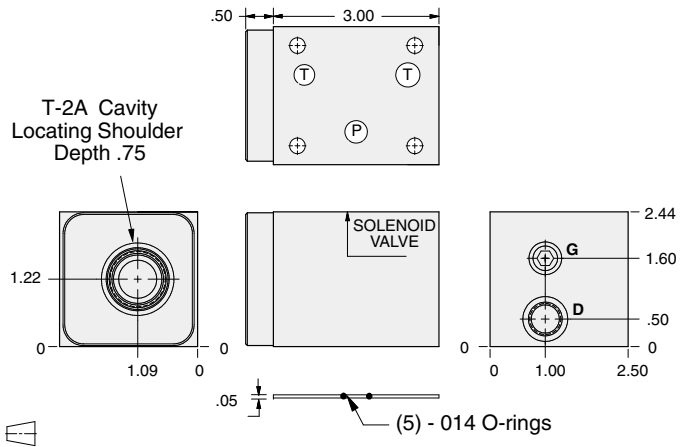
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On P
Drained Externally

Reducing Valves



Gage Port (Plugged)	Drain Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	SAE-6	BBQ		BBQ/S	
.25 BSPP	.25 BSPP	BBQ/M		BBQ/T	

05 REDUCING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

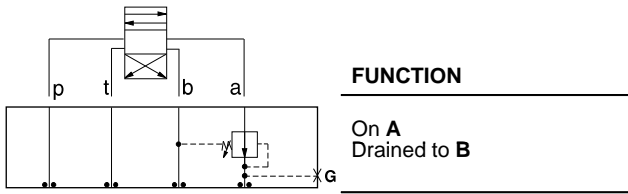
	Pilot Operated Reducing Valve		
	PBFB Page 3.06		
	Air Controlled, Pilot Operated Reducing Valve		
	PBFC Page 3.08		
OTHER VALVES:			



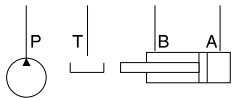
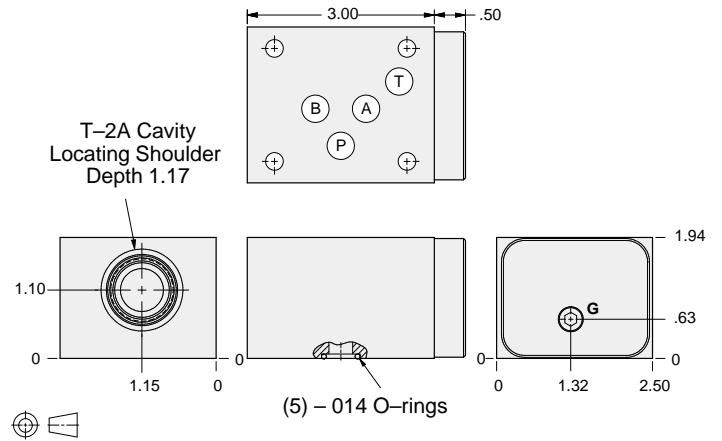
ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



Reducing Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBA		BBA/S	
.25 BSPP	BBA/M		BBA/T	

05 REDUCING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

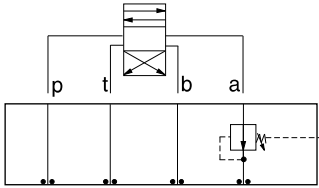
	<i>Pilot Operated Reducing Valve</i>		
	PBFB Page 3.06		
	<i>Air Controlled, Pilot Operated Reducing Valve</i>		
	PBFC Page 3.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



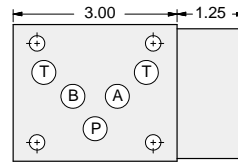
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



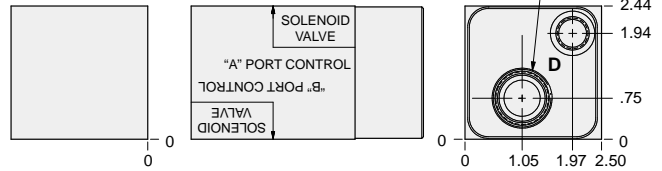
FUNCTION

On A
Drained Externally

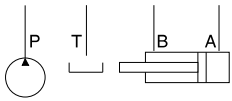
Reducing Valves



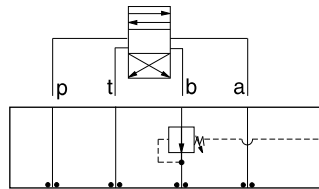
T-2A Cavity
Locating Shoulder
Depth .72



.05 ± (5) - 014 O-rings



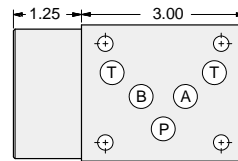
Drain Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	BBF		BBF/S	
.25 BSPP	BBF/M		BBF/T	



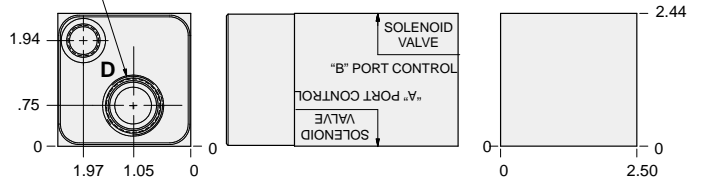
FUNCTION

On B
Drained Externally

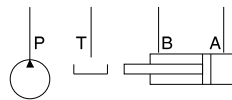
Reducing Valves



T-2A Cavity
Locating Shoulder
Depth .72



.05 ± (5) - 014 O-rings



Drain Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	BBG		BBG/S	
.25 BSPP	BBG/M		BBG/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

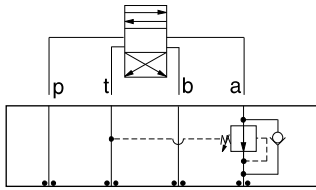
	<i>Pilot Operated Reducing Valve</i>		
	PBFB Page 3.06		
	<i>Air Controlled, Pilot Operated Reducing Valve</i>		
	PBFC Page 3.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



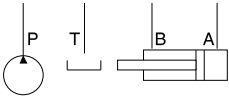
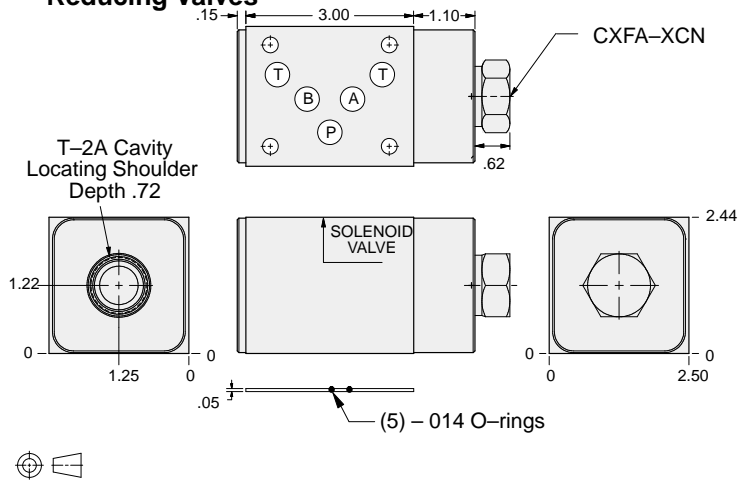
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

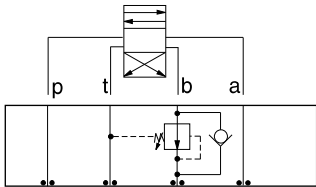
On A Drain to T
Reverse FF Check

Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BB2		BB2/S	

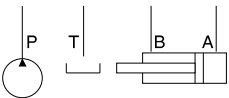
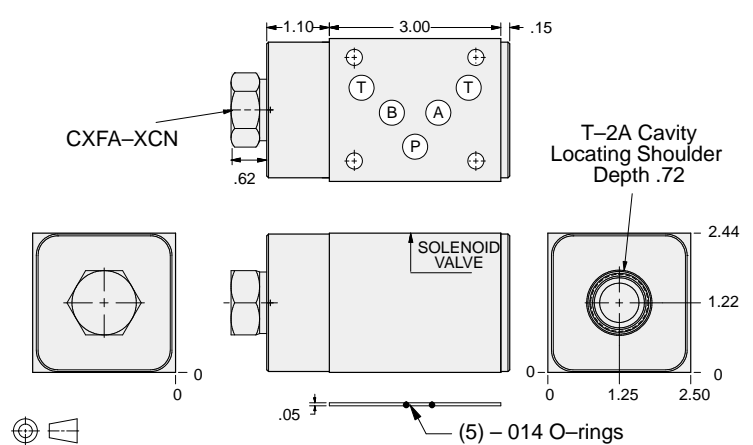
05 REDUCING



FUNCTION

On B Drain to T
Reverse FF Check

Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Part Number	List Price
BB3		BB3/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

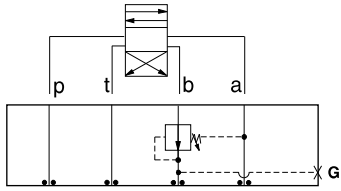
	Pilot Operated Reducing Valve		
	PBFB Page 3.06		
	Air Controlled, Pilot Operated Reducing Valve		
	PBFC Page 3.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



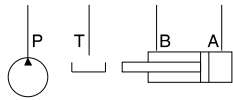
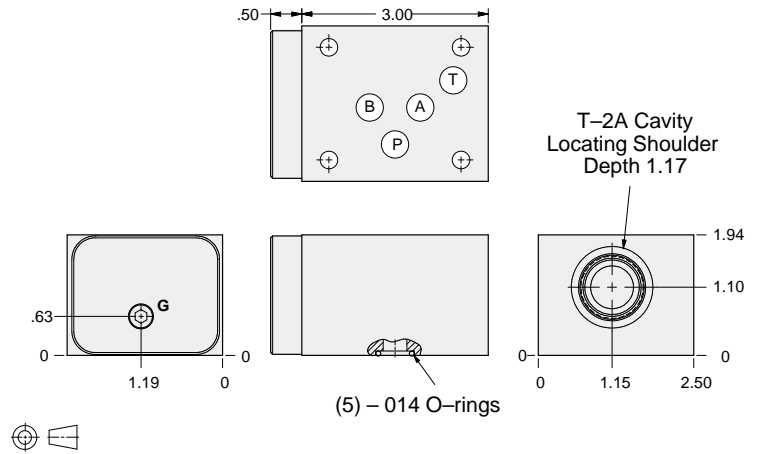
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **B**
Drained to **A**

Reducing Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBB		BBB/S	
.25 BSPP	BBB/M		BBB/T	

05 REDUCING

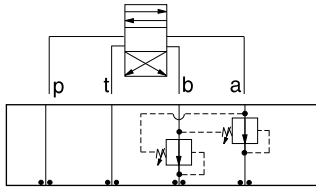
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing Valve		
	PBFB Page 3.06		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



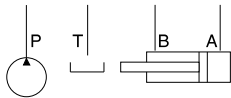
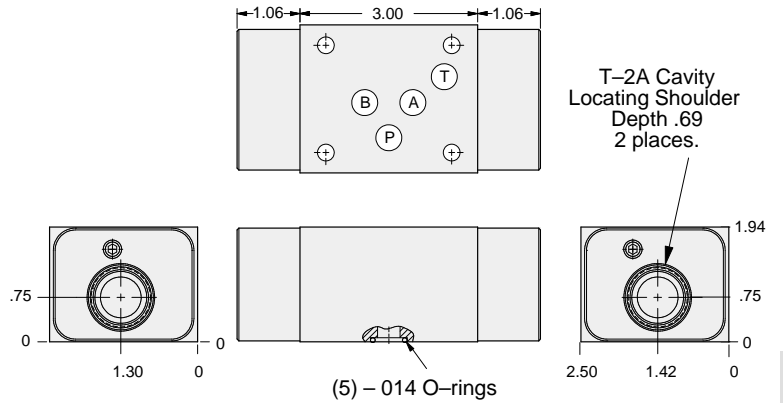
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On A and B
Drains to Opposite Port

Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BBY		BBY/S	

05 REDUCING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing Valve		
	PBFB Page 3.06		
OTHER VALVES:			

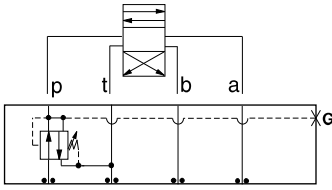


ISO 05 SANDWICH BODIES



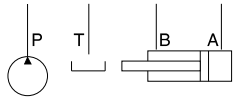
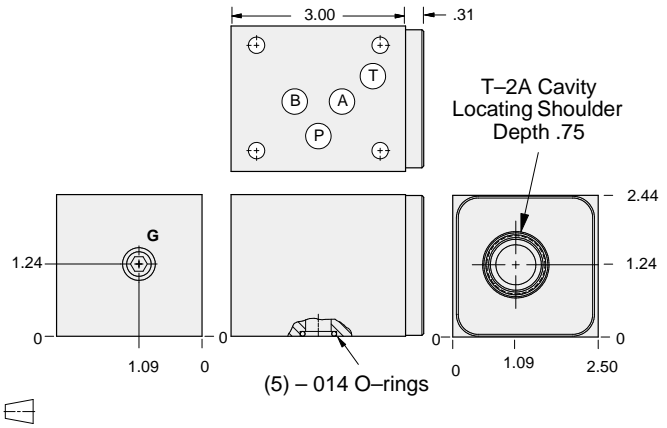
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves



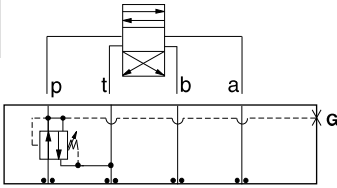
FUNCTION

On P Tank to T
Drained to T



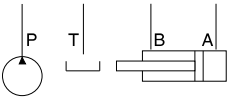
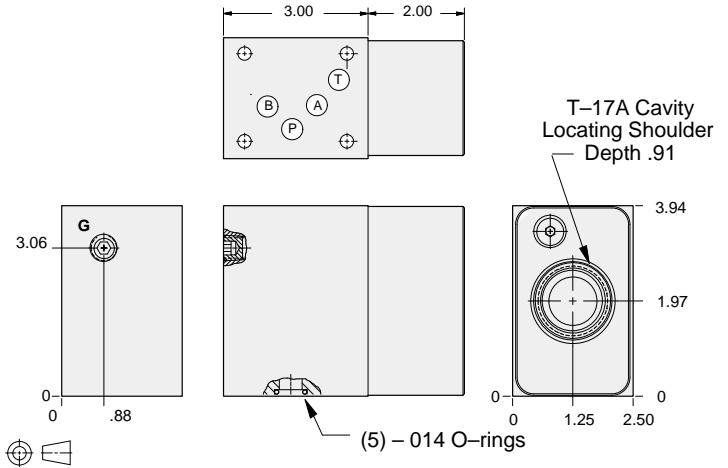
Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBP		BBP/S	
.25 BSPP	BBP/M		BBP/T	

Reducing/Relieving Valves



FUNCTION

On P Tank to T
Drained to T
(High Capacity)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	WCC		WCC/S	
.25 BSPP	WCC/M		WCC/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Reducing/Relieving Valve</i>		
	PP*B Page 3.10, 3.11		
	<i>Air Controlled, Pilot Operated Reducing/Relieving Valve</i>		
	PP*C Page 3.12, 3.13		
OTHER VALVES:			

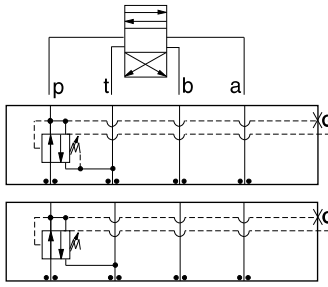


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

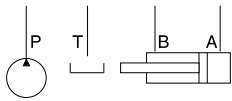
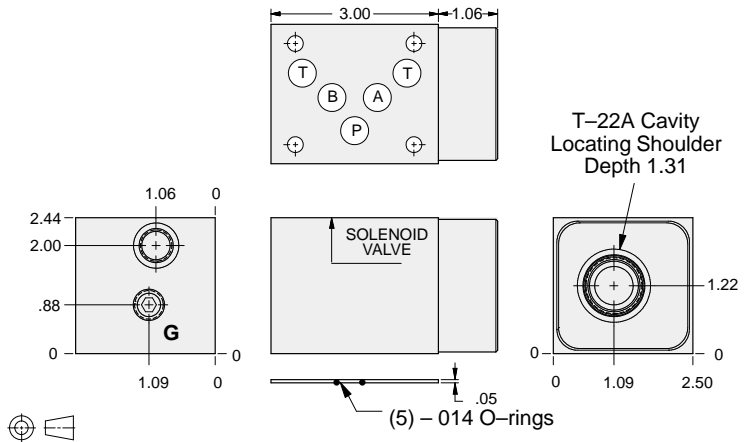
Reducing/Relieving Valves



FUNCTION

On P Tank to T
Vented Externally

On P Tank to T
Drained Externally



Gage Port (Plugged)	External Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	SAE-6	NBP		NBP/S	
.25 BSPP	.25 BSPP	NBP/M		NBP/T	

05 REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

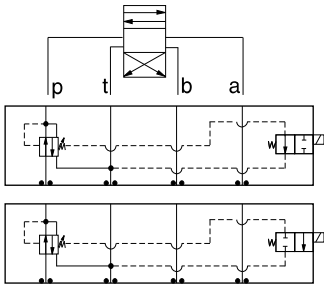
	<i>Pilot Operated Reducing/Relieving Valve with Drain Port</i>		
	PVFA Page 3.14		
	<i>Pilot Operated Reducing/Relieving Valve with Vent Port</i>		
	PVFB Page 3.16		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

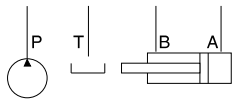
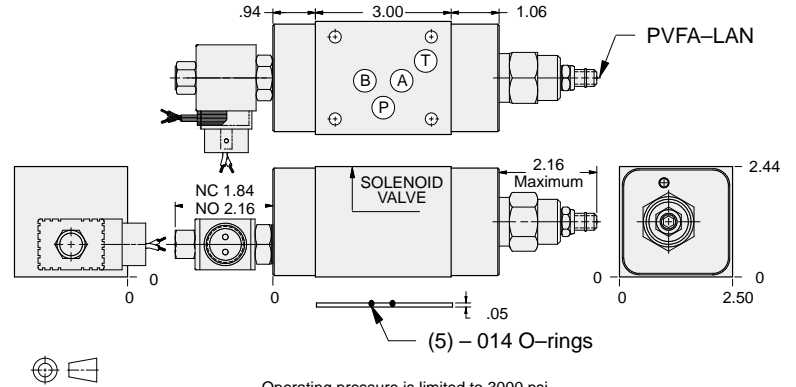


FUNCTION

On P Tank to T
N.O. Solenoid
on Drain *

On P Tank to T
N.C. Solenoid
on Drain *

Reducing/Relieving Valves



Solenoid Type	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
N.O.	YPDG-LAN-*A		YPDG-LAN-*A/S	
N.C.	YPDH-LAN-*A		YPDH-LAN-*A/S	

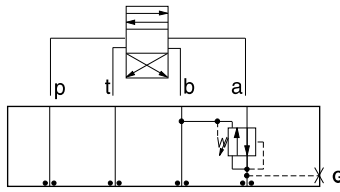
* Select solenoid connection/voltage option from page 14.16 and add option price to List Price.



ISO 05 SANDWICH BODIES



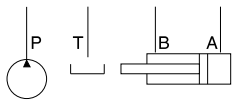
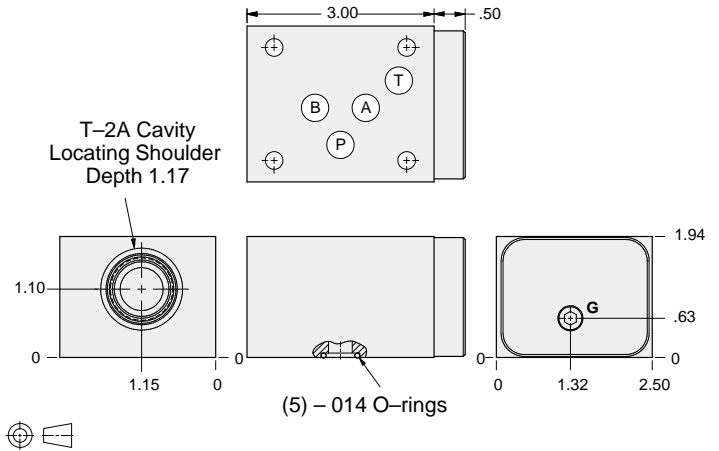
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On A Tank to B
Drained to B

Reducing/Relieving Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBA		BBA/S	
.25 BSPP	BBA/M		BBA/T	

05 REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Reducing/Relieving Valve</i>		
	PPFB Page 3.10		
OTHER VALVES:			

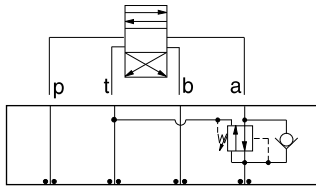


ISO 05 SANDWICH BODIES



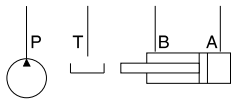
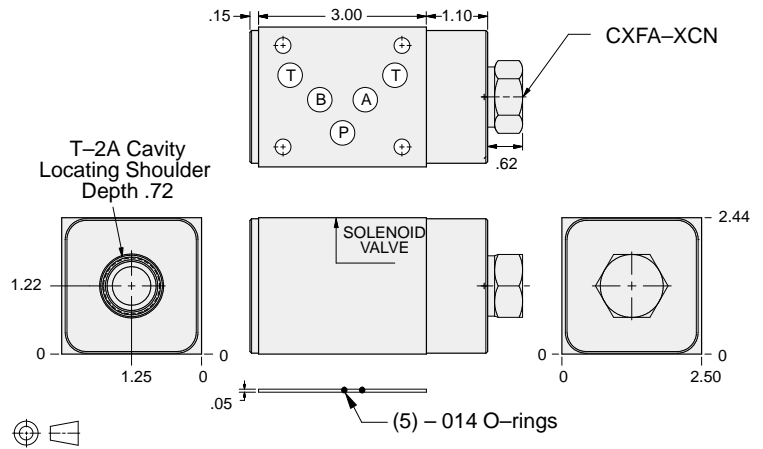
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves



FUNCTION

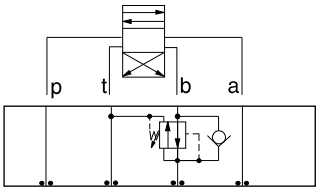
On A Tank to T
Drained to T
Reverse FF Check



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BB2		BB2/S	

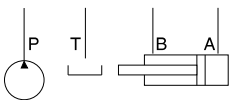
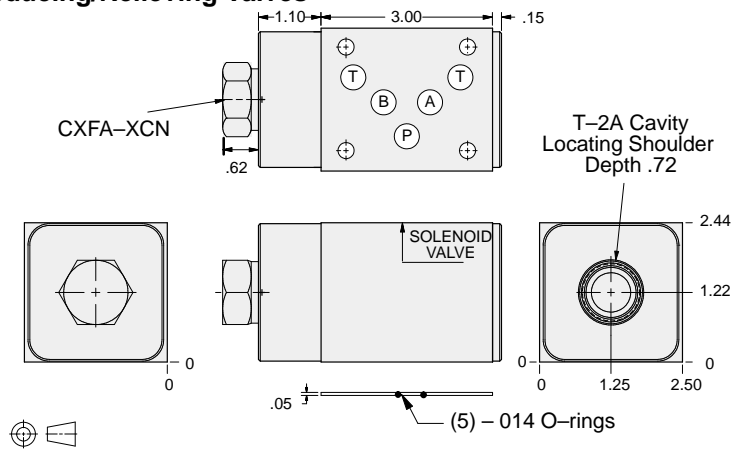
05 REDUCING/RELIEVING

Reducing/Relieving Valves



FUNCTION

On B Tank to T
Drained to T
Reverse FF Check



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BB3		BB3/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing/Relieving Valve		
	PPFB Page 3.10		
	Air Controlled, Pilot Operated Reducing/Relieving Valve		
	PPFC Page 3.12		
OTHER VALVES:			

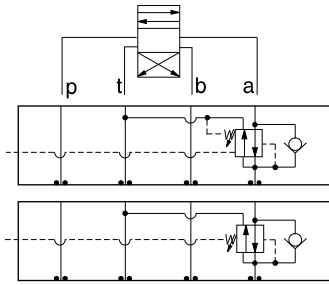


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

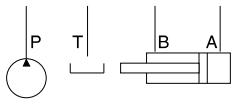
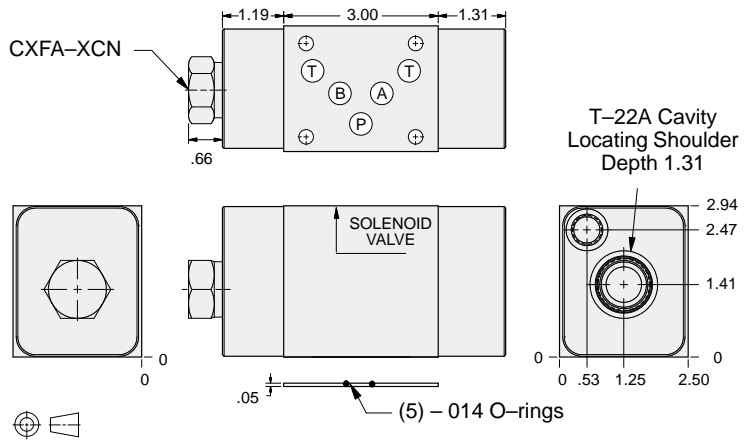
Reducing/Relieving Valves



FUNCTION

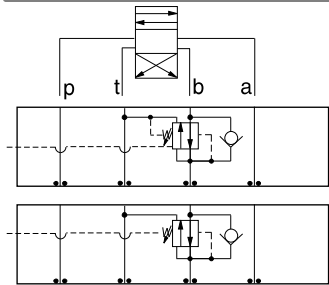
On A tank to T
Vented Externally
Reverse FF Check

On A tank to T
Drained Externally
Reverse FF Check



External Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	NB2		NB2/S	
.25 BSPP	NB2/M		NB2/T	

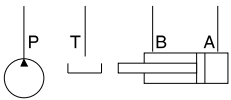
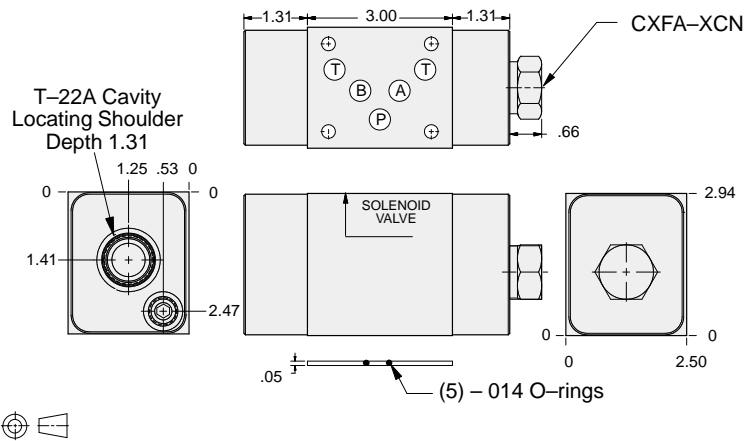
Reducing/Relieving Valves



FUNCTION

On B Tank to T
Vented Externally
Reverse FF Check

On B Tank to T
Drained Externally
Reverse FF Check



External Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	NB3		NB3/S	
.25 BSPP	NB3/M		NB3/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing/Relieving Valve with Drain Port		
	PVFA Page 3.14		
	Pilot Operated Reducing/Relieving Valve with Vent Port		
	PVFB Page 3.16		
OTHER VALVES:			

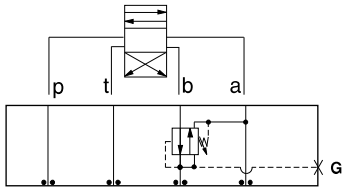
05 REDUCING/RELIEVING



ISO 05 SANDWICH BODIES



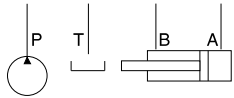
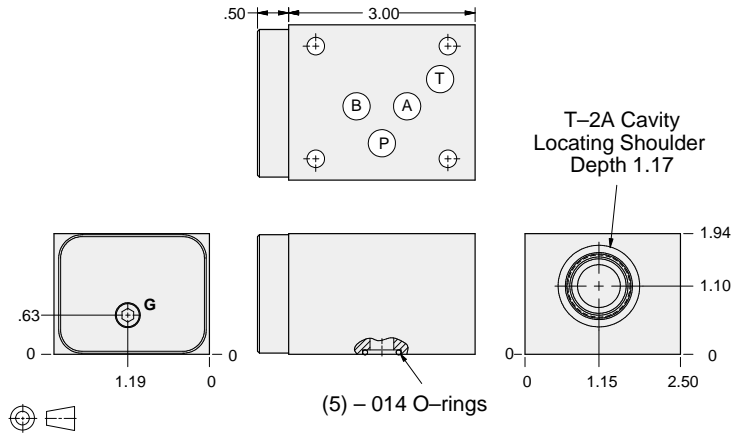
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **B** Tank to **A**
Drained to **A**

Reducing/Relieving Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBB		BBB/S	
.25 BSPP	BBB/M		BBB/T	

05 REDUCING/RELIEVING

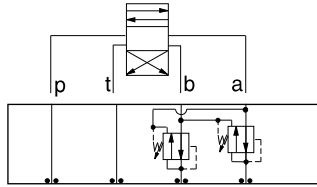
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing/Relieving Valve		
	PPFB Page 3.10		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



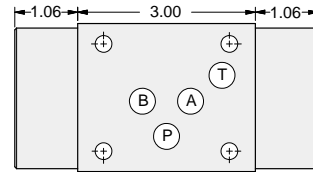
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



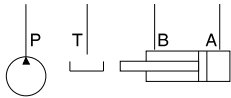
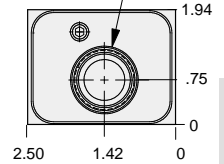
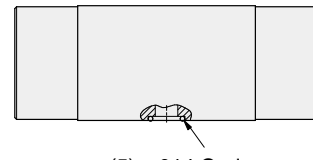
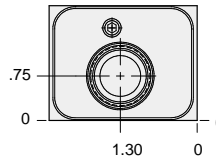
FUNCTION

On **A** and **B**
Tanks and Drains to
Opposite Port

Reducing/Relieving Valves



T-2A Cavity
Locating Shoulder
Depth .69
2 places.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BBY		BBY/S	

05 REDUCING/RELIEVING

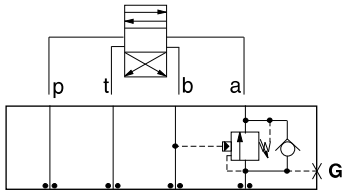
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Reducing/Relieving Valve</i>		
	PPFB Page 3.10		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



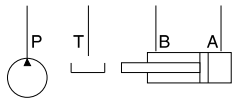
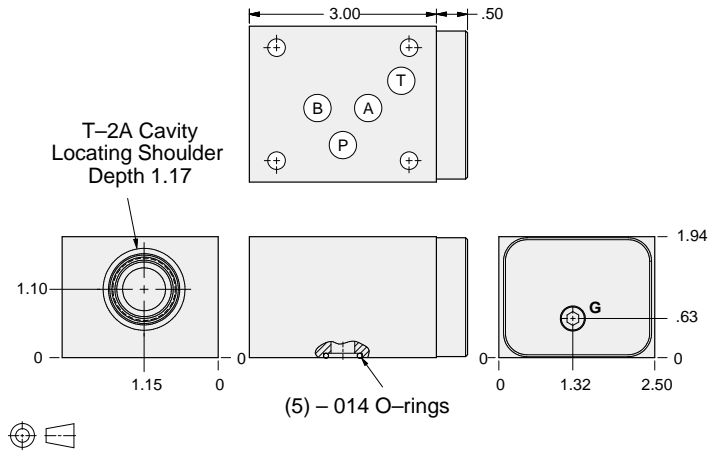
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On A Pilot
from B

Counterbalance Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBA		BBA/S	
.25 BSPP	BBA/M		BBA/T	

05 COUNTERBALANCE

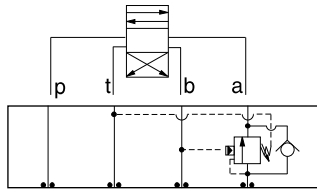
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBEA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBEG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBEH Page 4.14		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



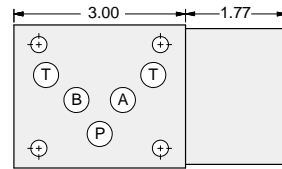
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



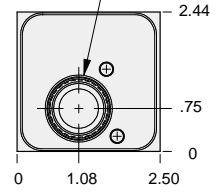
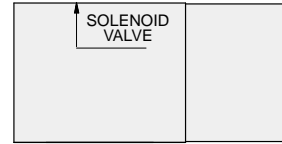
FUNCTION

On A Pilot from B
Vent to T

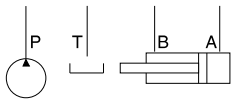
Counterbalance Valves



T-22A Cavity
Locating Shoulder
Depth 1.31

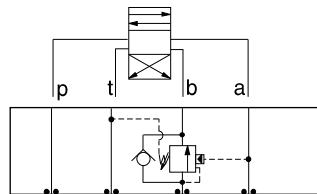


(5) - .014 O-rings



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NBA		NBA/S	

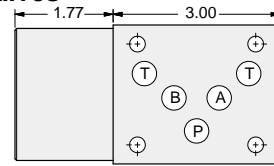
05 COUNTERBALANCE



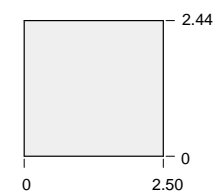
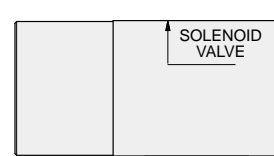
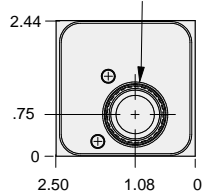
FUNCTION

On B Pilot from A
Vent to T

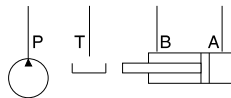
Counterbalance Valves



T-22A Cavity
Locating Shoulder
Depth 1.31



(5) - .014 O-rings



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Part Number	List Price
NBB		NBB/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWEA Page 4.18		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWEG Page 4.20		
OTHER VALVES:			

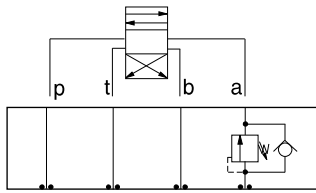


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

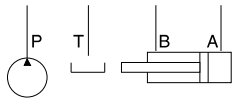
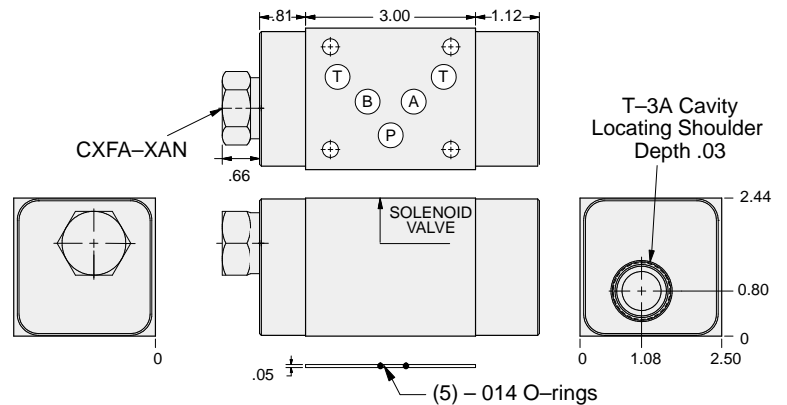
05 COUNTERBALANCE



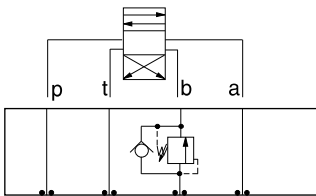
FUNCTION

On A
No Pilot Assist

Counterbalance Valves



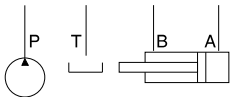
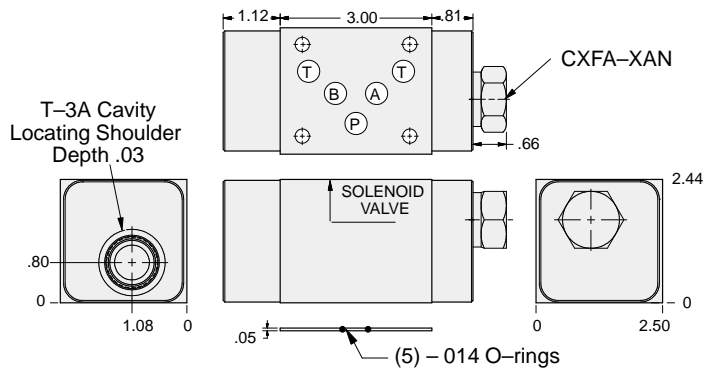
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CB4		CB4/S	



FUNCTION

On B
No Pilot Assist

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CB5		CB5/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

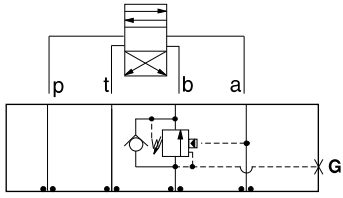
	Direct Acting Relief Valve		
	RDFA Page 1.10		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



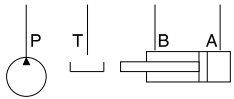
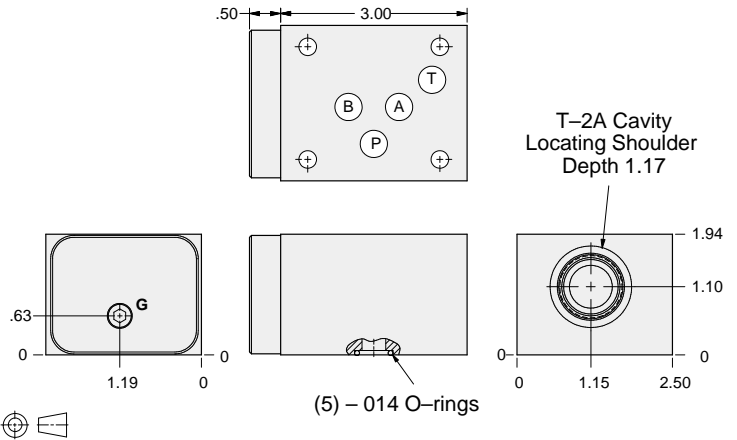
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **B**
Pilot from **A**

Counterbalance Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBB		BBB/S	
.25 BSPP	BBB/M		BBB/T	

05 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

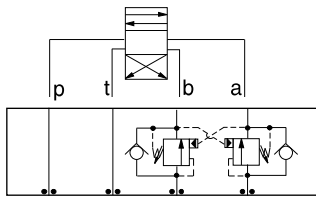
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBEA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBEG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBEH Page 4.14		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



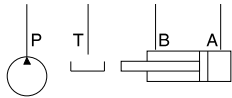
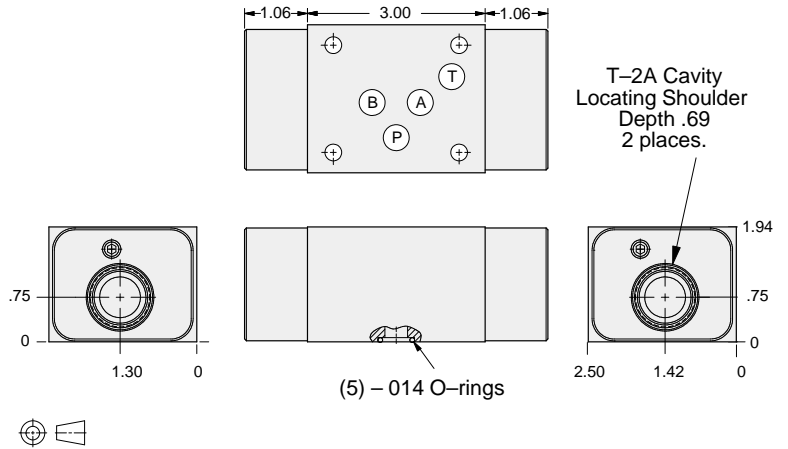
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **A** and **B**
Cross-Piloted

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
BBY		BBY/S	

05 COUNTERBALANCE

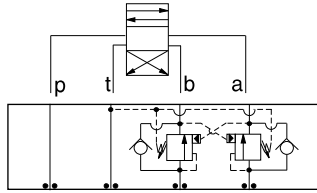
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBEA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBEG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBEH Page 4.14		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



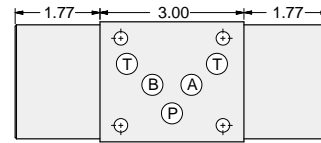
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



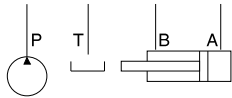
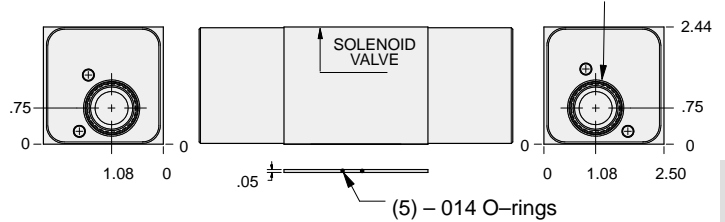
FUNCTION

On **A** and **B**
Cross-Piloted
Vents to **T**

Counterbalance Valves



T-22A Cavity
Locating Shoulder
Depth 1.31
2 places.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NBY		NBY/S	

05 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

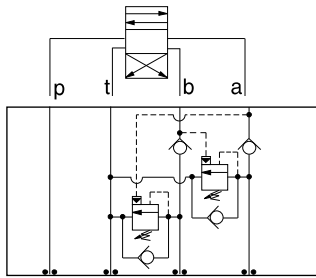
	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWEA Page 4.18		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWEG Page 4.20		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



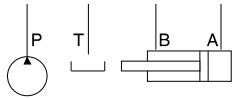
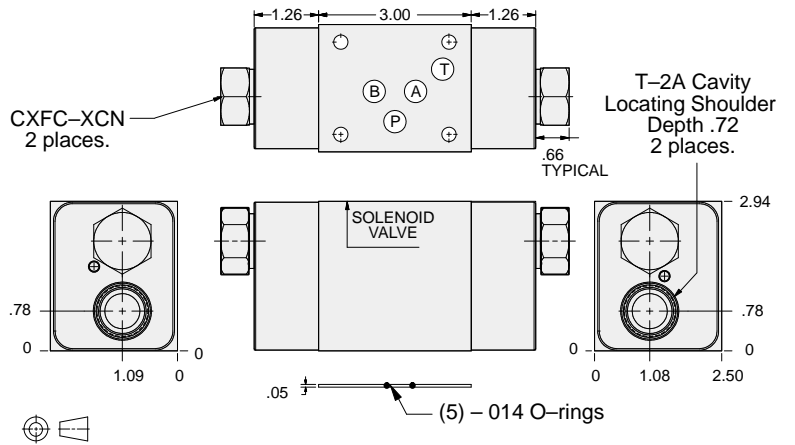
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Cushion Lock
Circuit
On A and B

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BB8		BB8/S	

05 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

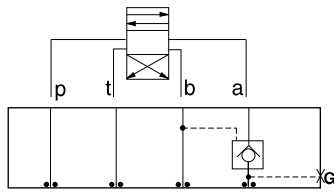
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBEA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBEG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBEH Page 4.14		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



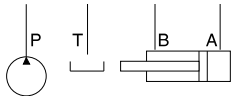
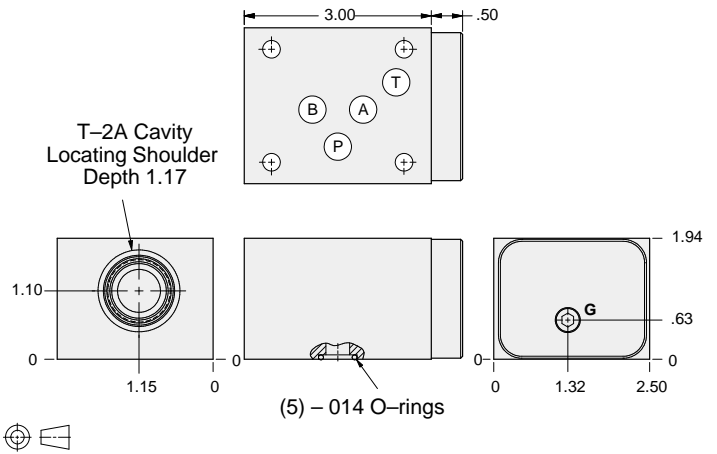
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On A
Pilot from B

Pilot Operated Check Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBA		BBA/S	
.25 BSPP	BBA/M		BBA/T	

05 P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot-to-Open Check Valve, 3:1 Pilot Ratio</i>		
	CKEB Page 4.16		
OTHER VALVES:			

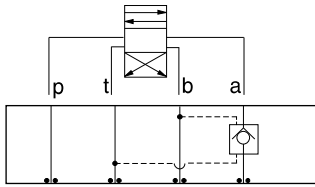


ISO 05 SANDWICH BODIES



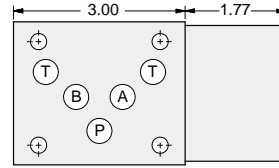
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves

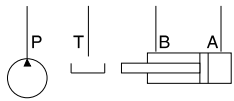
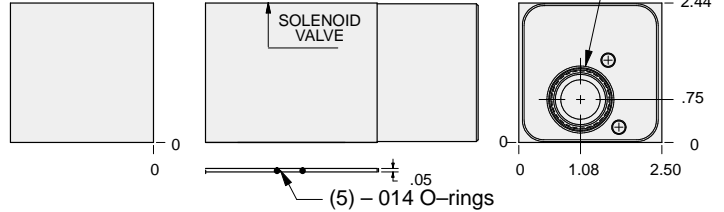


FUNCTION

On **A**
Pilot from **B**
Vent to **T**

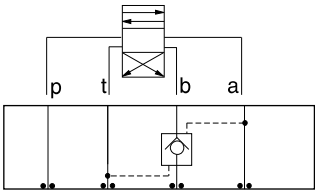


T-22A Cavity
Locating Shoulder
Depth 1.31



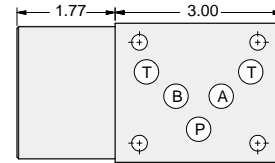
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NBA		NBA/S	

Pilot Operated Check Valves

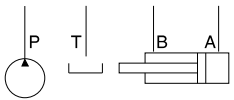
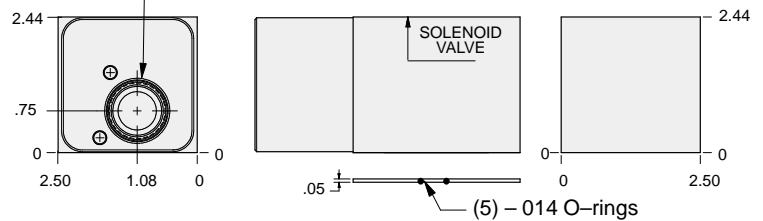


FUNCTION

On **B**
Pilot from **A**
Vent to **T**



T-22A Cavity
Locating Shoulder
Depth 1.31



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NBB		NBB/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVEV Page 4.22		
OTHER VALVES:			

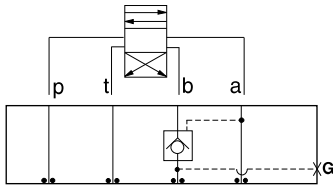


ISO 05 SANDWICH BODIES



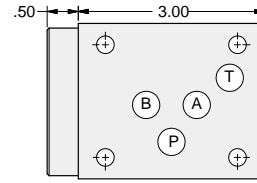
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves

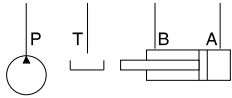
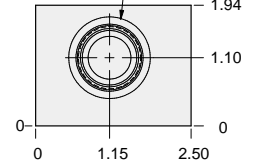
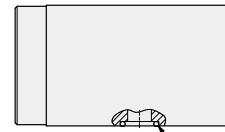
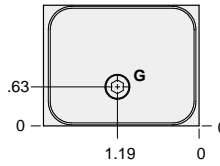


FUNCTION

On B
Pilot from A



T-2A Cavity
Locating Shoulder
Depth 1.17



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BBB		BBB/S	
.25 BSPP	BBB/M		BBB/T	

05 P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot-to-Open Check Valve, 3:1 Pilot Ratio</i>		
	CKEB Page 4.16		
OTHER VALVES:			

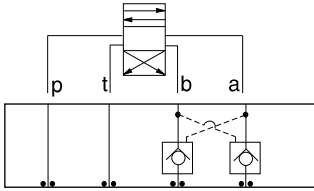


ISO 05 SANDWICH BODIES



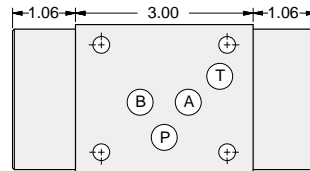
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves

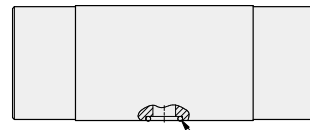
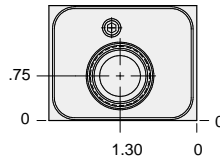


FUNCTION

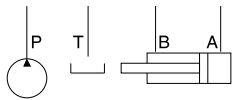
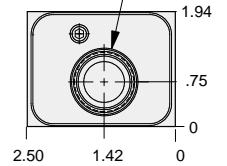
On A and B
Cross-Piloted



T-2A Cavity
Locating Shoulder
Depth .69
2 places.



(5) - 014 O-rings



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BBY		BBY/S	

05 P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot-to-Open Check Valve, 3:1 Pilot Ratio</i>		
	CKEB Page 4.16		
OTHER VALVES:			

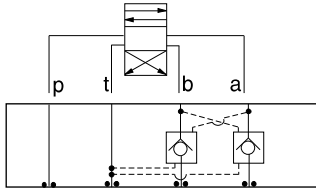


ISO 05 SANDWICH BODIES



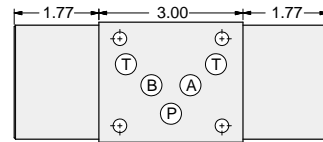
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves

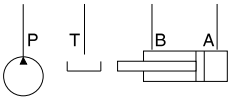
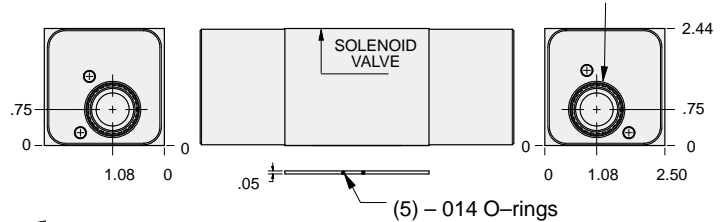


FUNCTION

On **A** and **B**
Cross-Piloted
Vents to **T**



T-22A Cavity
Locating Shoulder
Depth 1.31
2 places.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NBY		NBY/S	

05 P.O. CHECK

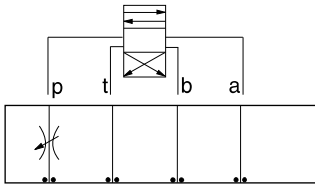
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVEV Page 4.22		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



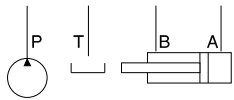
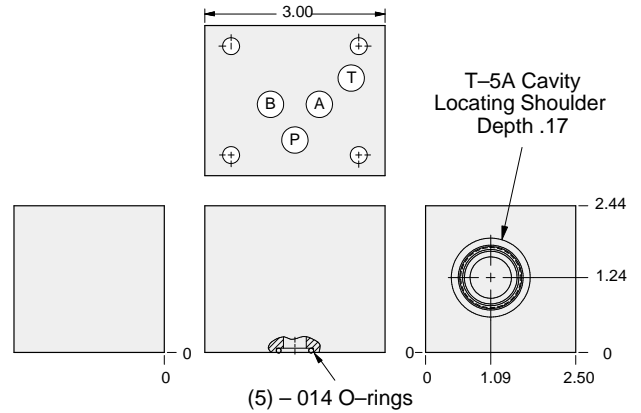
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Meter-In P

Flow Control Valves



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
DBP		DBP/S	

05 FLOW CONTROL

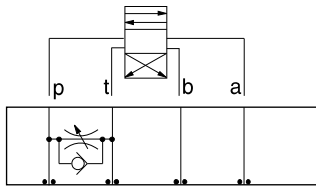
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Fully Adjustable Needle Valve</i>		
	NFDC Page 5.12		
	<i>Fixed Orifice, Pressure-Compensated Flow Control</i>		
	FXDA Page 5.20		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



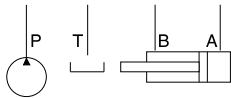
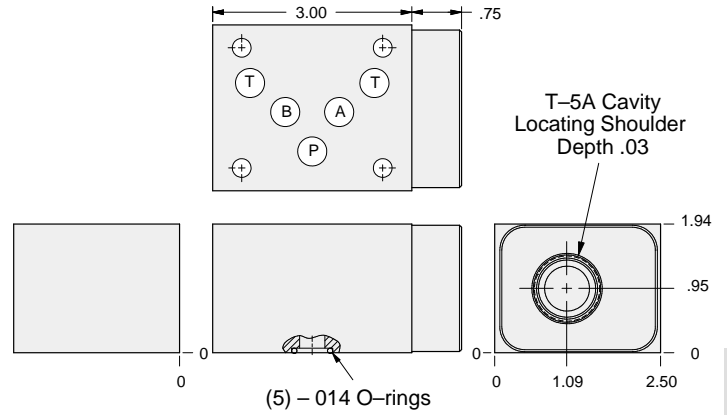
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Bleed-Off
P to T

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBQ		DBQ/S	

05 FLOW CONTROL

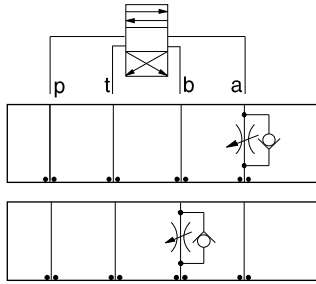
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NFDC Page 5.12		Fixed Orifice, Pressure-Compensated Flow Control FXDA Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check NCEB Page 5.16		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FCDB Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NCEC Page 5.18		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDCB Page 5.24
OTHER VALVES:	CNEC		



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

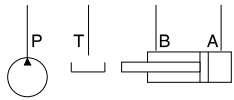
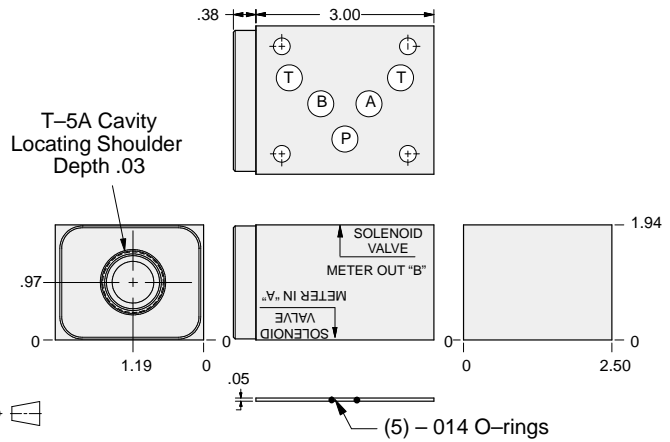


FUNCTION

Meter-In A

Meter-Out B

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBB		DBB/S	

05 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

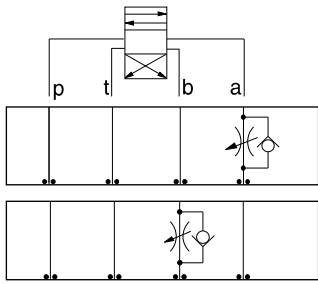
	Fully Adjustable Needle Valve with Reverse Free Flow Check NCEB Page 5.16		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDCB Page 5.24
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NCEC Page 5.18		
	Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FCDB Page 5.22		
OTHER VALVES:	CNEC		



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

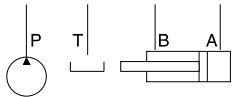
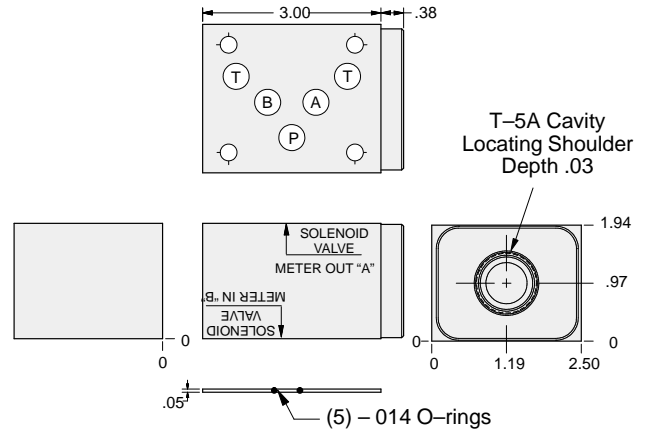


FUNCTION

Meter-Out A

Meter-In B

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBA		DBA/S	

05 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

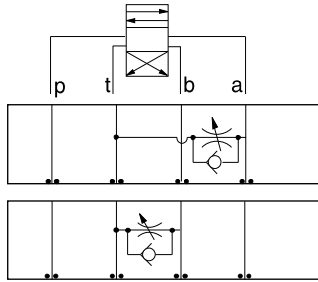
	Fully Adjustable Needle Valve with Reverse Free Flow Check NCEB Page 5.16		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDCB Page 5.24
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NCEC Page 5.18		
	Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FCDB Page 5.22		
OTHER VALVES:	CNEC		



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

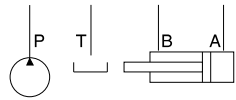
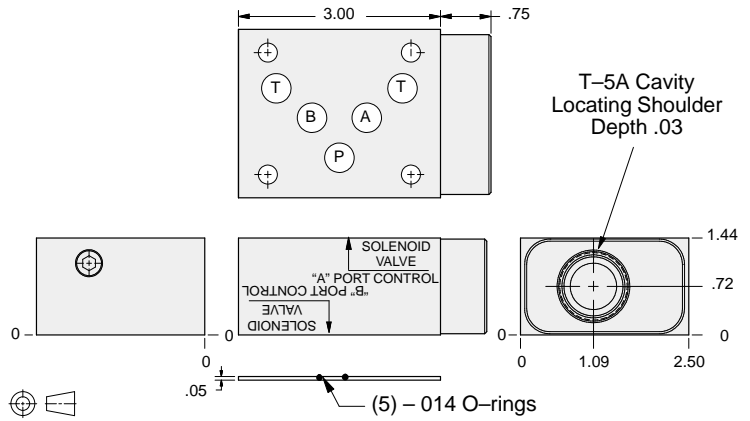


FUNCTION

Bleed-Off
A to T

Bleed-Off
B to T

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBC		DBC/S	

05 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

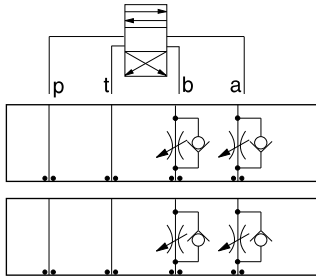
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NFDC Page 5.12		FXDA Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCEB Page 5.16		FCDB Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCEC Page 5.18		FDCB Page 5.24
OTHER VALVES:	CNEC		



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

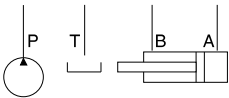
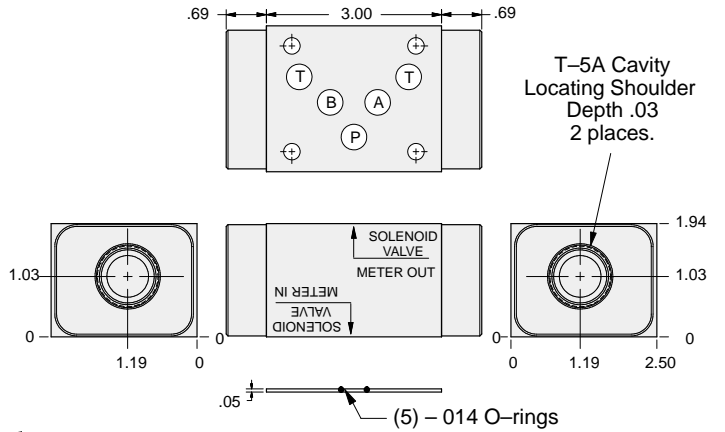


FUNCTION

Meter-In
A and B

Meter-Out
A and B

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBY		DBY/S	

05 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

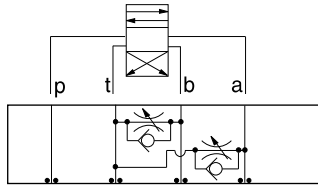
	Fully Adjustable Needle Valve with Reverse Free Flow Check NCEB Page 5.16		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDCB Page 5.24
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NCEC Page 5.18		
	Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FCDB Page 5.22		
OTHER VALVES:	CNEC		



ISO 05 SANDWICH BODIES



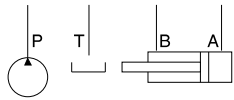
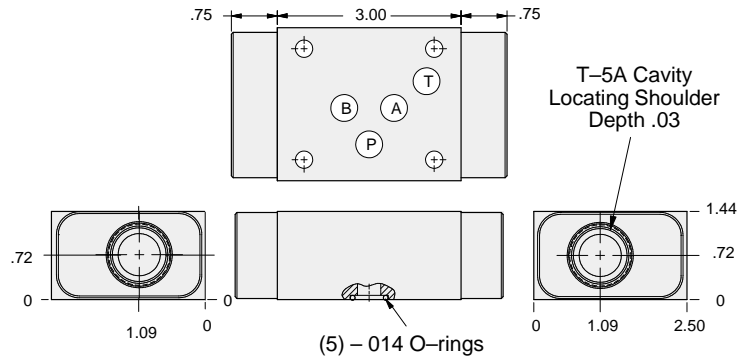
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Bleed-Off
A and B to T

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBX		DBX/S	

05 FLOW CONTROL

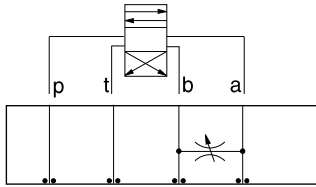
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NFDC Page 5.12		Fixed Orifice, Pressure-Compensated Flow Control FXDA Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check NCEB Page 5.16		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FCDB Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NCEC Page 5.18		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDCB Page 5.24
OTHER VALVES:	CNEC		



ISO 05 SANDWICH BODIES



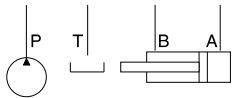
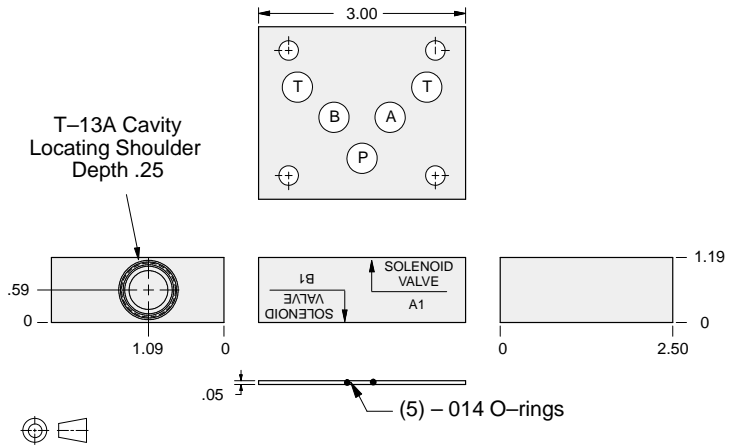
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Bleed-Off
A to B and
B to A

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBS		DBS/S	

05 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

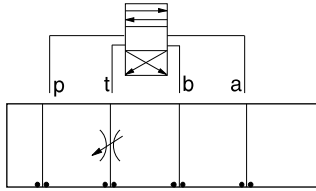
	Fully Adjustable Needle Valve		
	NFDC Page 5.12		
OTHER VALVES:	CNEC		



ISO 05 SANDWICH BODIES



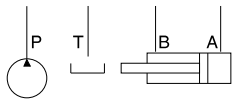
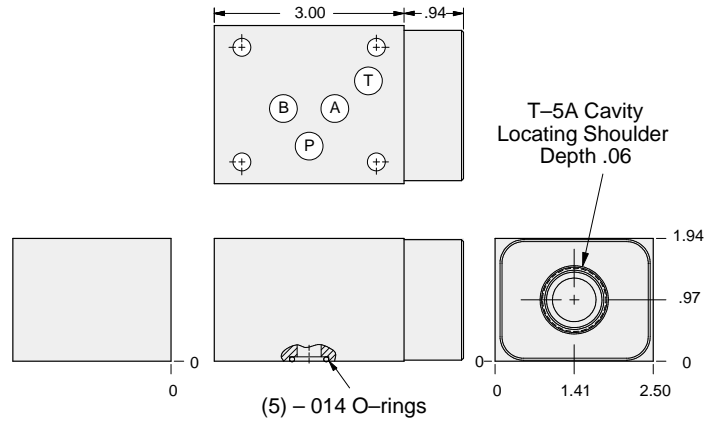
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Meter-Out T

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBT		DBT/S	

05 FLOW CONTROL

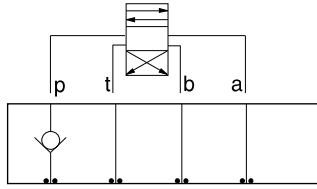
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NFDC Page 5.12		FXDA Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCEB Page 5.16		FCDB Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCEC Page 5.18		FDCB Page 5.24
OTHER VALVES:	CNEC		



ISO 05 SANDWICH BODIES



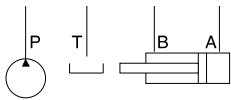
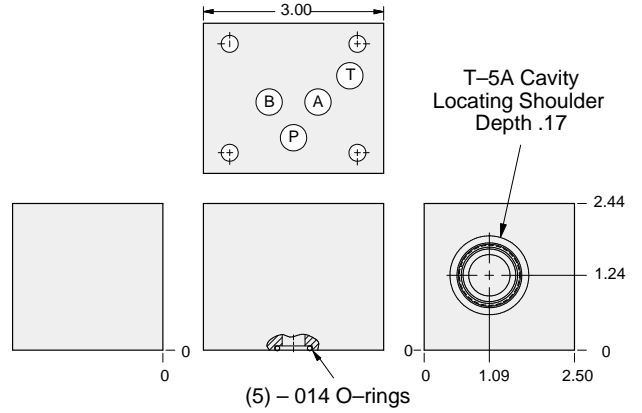
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On P

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBP		DBP/S	

05 CHECK

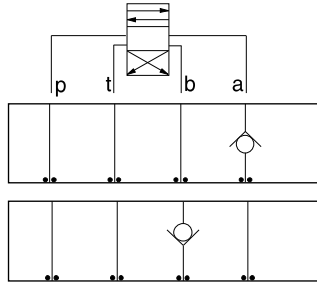
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

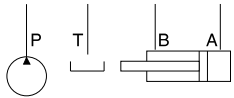
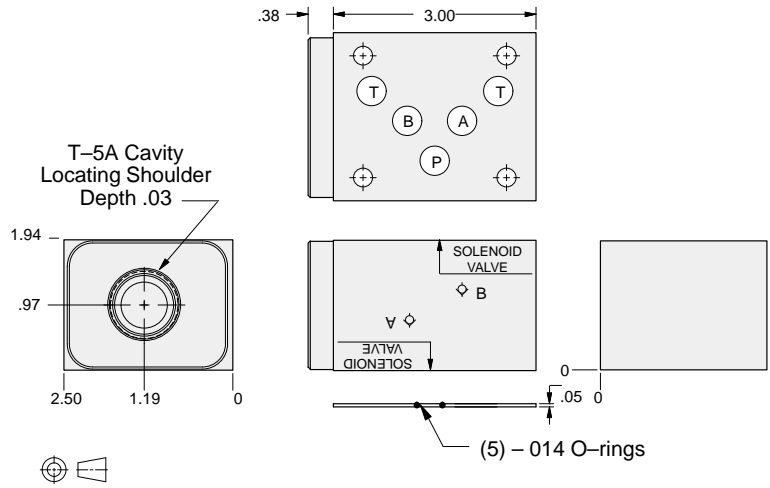


FUNCTION

On A
Free Flow Out
of Valve

On B
Free Flow Into
Valve

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBK		DBK/S	

05 CHECK

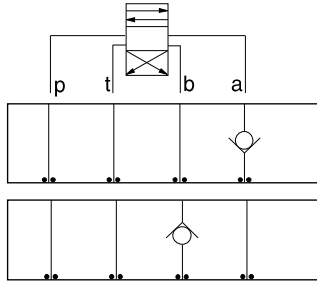
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



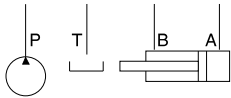
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



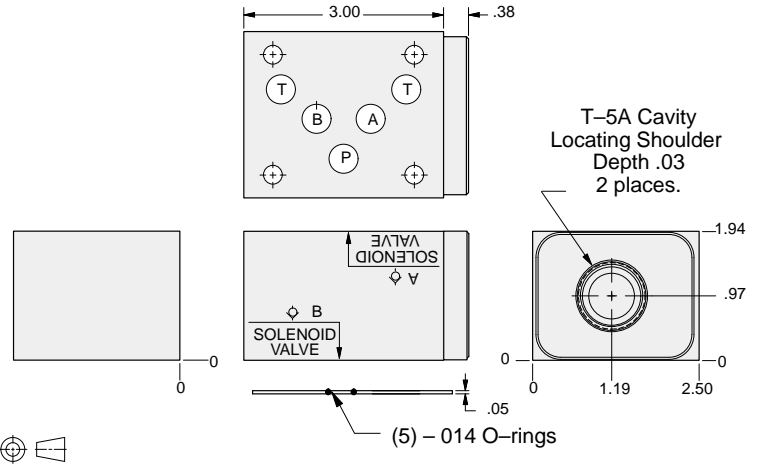
FUNCTION

On A
Free Flow Into
Valve

On B
Free Flow Out
of Valve



Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBJ		DBJ/S	

05 CHECK

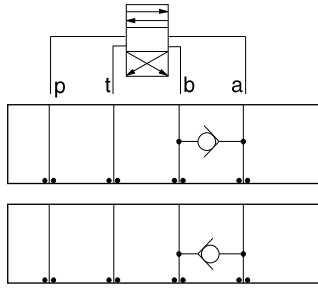
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

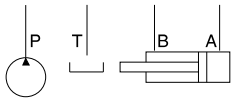
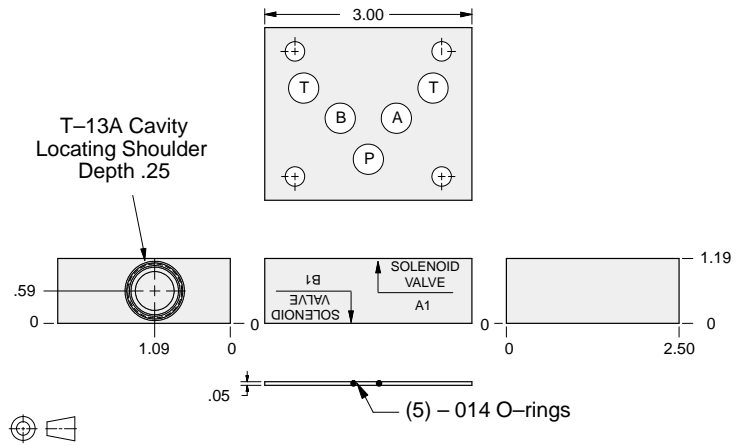


FUNCTION

A to B

B to A

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBS		DBS/S	

05 CHECK

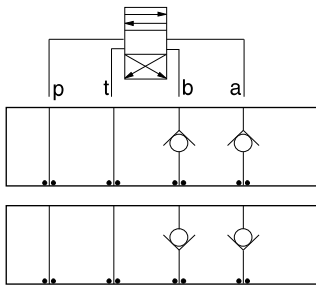
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXDA Page 5.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

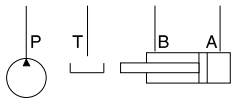
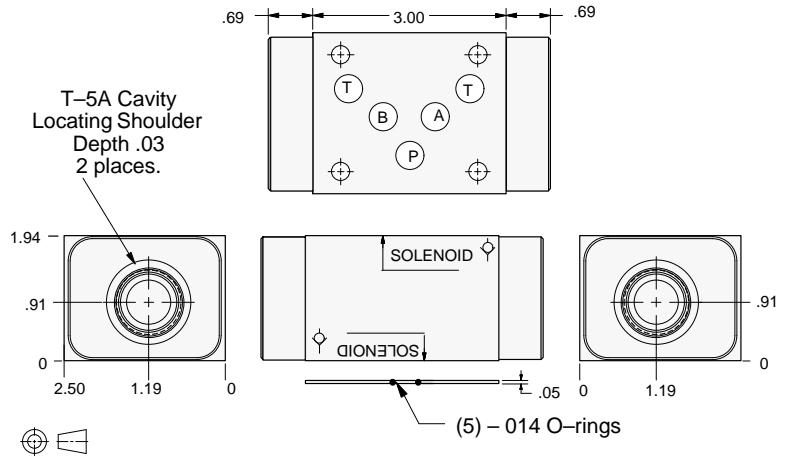


FUNCTION

On **A** and **B**
Free Flow Out
of Valve

On **A** and **B**
Free Flow Into Valve

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBL		DBL/S	

05 CHECK

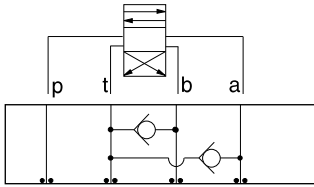
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



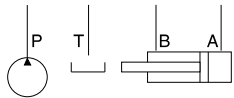
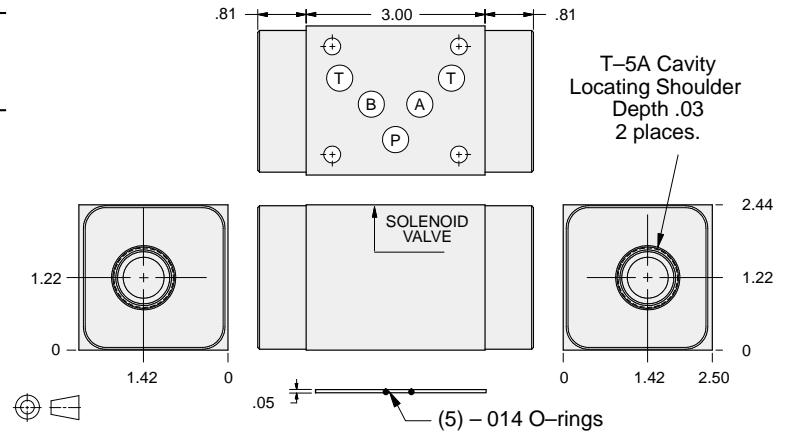
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

T to A and B

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBW		DBW/S	

05 CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

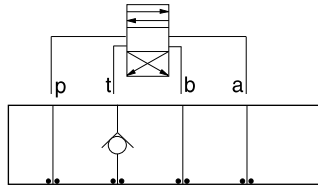
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



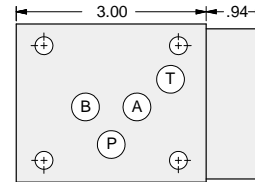
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



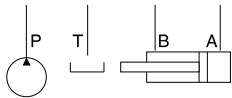
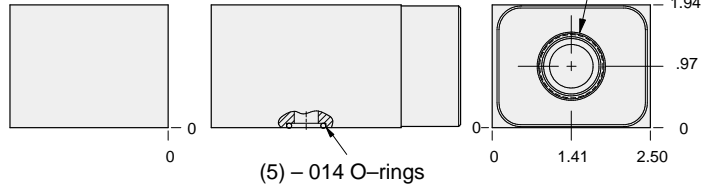
FUNCTION

 On T

Check Valves



T-5A Cavity
 Locating Shoulder
 Depth .06



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBT		DBT/S	

05 CHECK

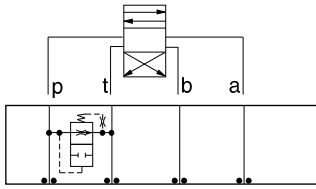
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



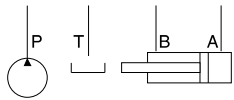
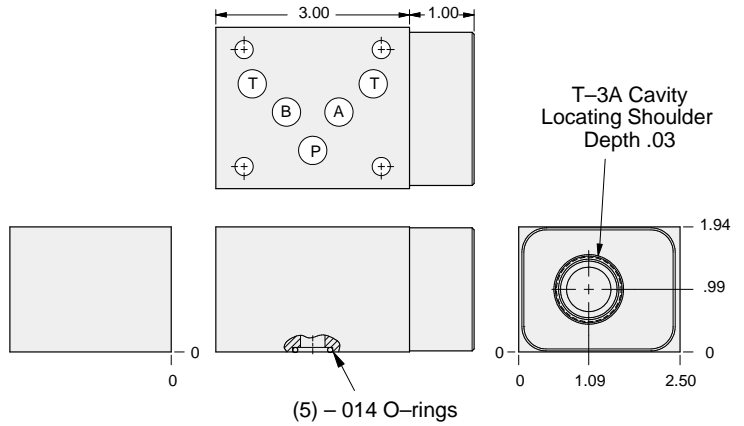
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Air-Bleed and Start-Up

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CBP		CBP/S	

05 CIRCUIT SAVER

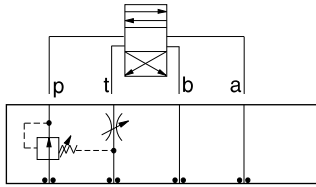
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Air Bleed and Start-up Valve		
	NQEB Page 10.16		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



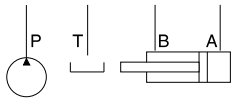
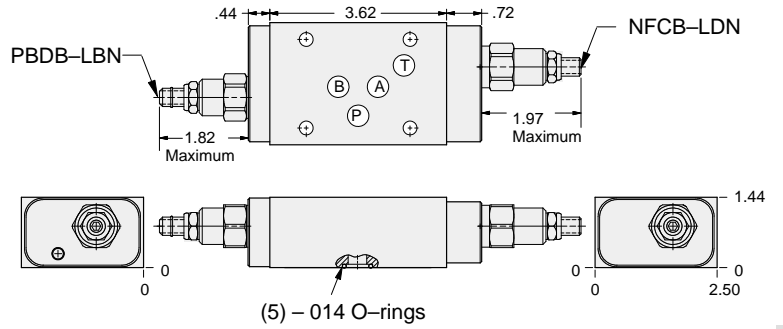
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Pilot Choke

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YNAB-LDN-BA		YNAB-LDN-BA/S	

05 CIRCUIT SAVER

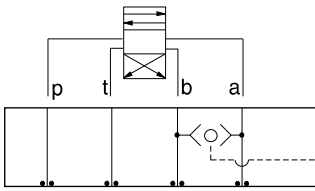


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

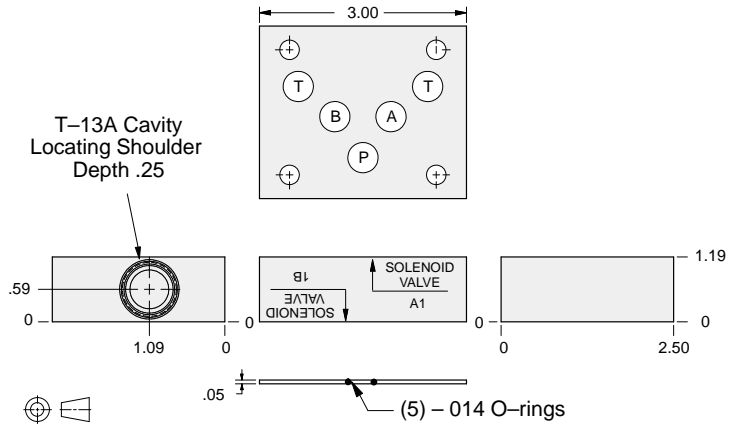
05 CIRCUIT SAVER



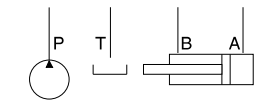
FUNCTION

Shuttle
A and B
Output External

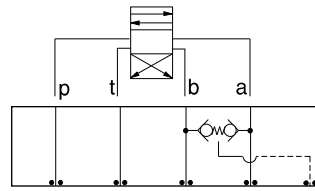
Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DBS		DBS/S	

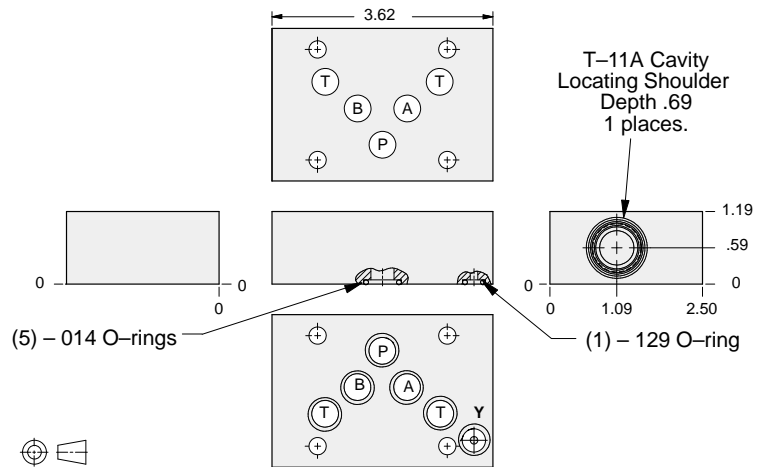


Circuit Savers

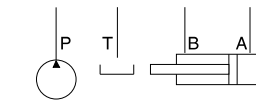


FUNCTION

Checks from
A and B—Adapter
to ISO 05 w/Y Port



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJS		BJS/S	



TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

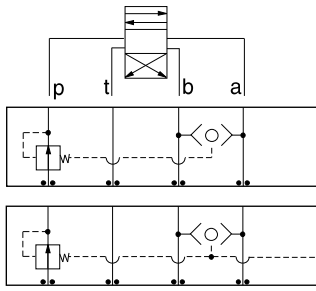
 Ext.	2 Port Shuttle Valve, Signal External		
	CSAA Page 10.09 (use with DBS)		
 3	3 Port Shuttle Valve, Signal at Port 3		
	CDAB Page 10.10 (use with BJS)		
OTHER VALVES:			



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

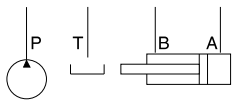
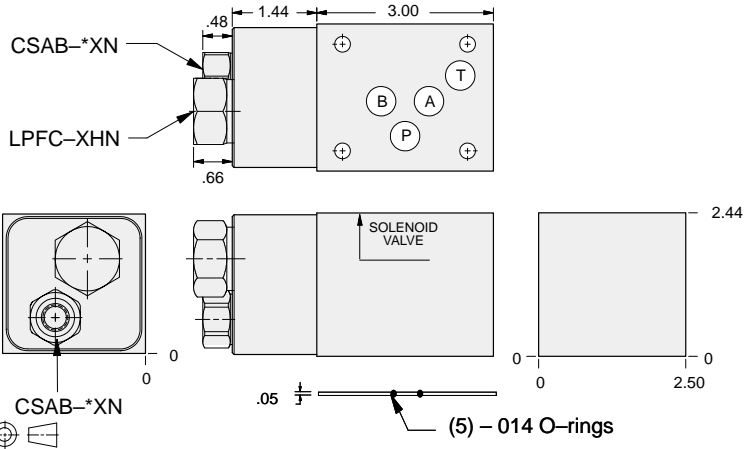


FUNCTION

Pressure Compensator (Restrictive)

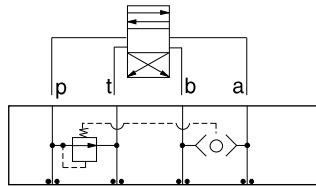
Pressure Compensator (Restrictive) w/Load-Sensing Port

Circuit Savers



Shuttle Cartridge	External Shuttle Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
CSAB-XXN	None	YFEJ-XHN-BA		YFEJ-XHN-BA/S	
CSAB-AXN	SAE-4	YFEP-XHN-BA		YFEP-XHN-BA/S	
CSAB-BXN	.25 BSPP	YFEP-XHN-BA/M		YFEP-XHN-BA/T	

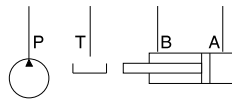
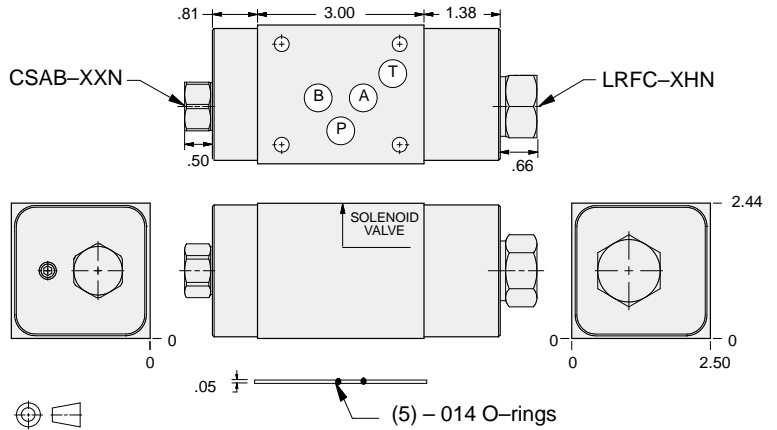
05 CIRCUIT SAVER



FUNCTION

Pressure Compensator (Bypass)

Circuit Savers



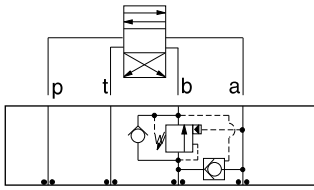
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YFEV-XHN-BA		YFEV-XHN-BA/S	



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

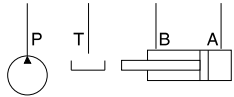
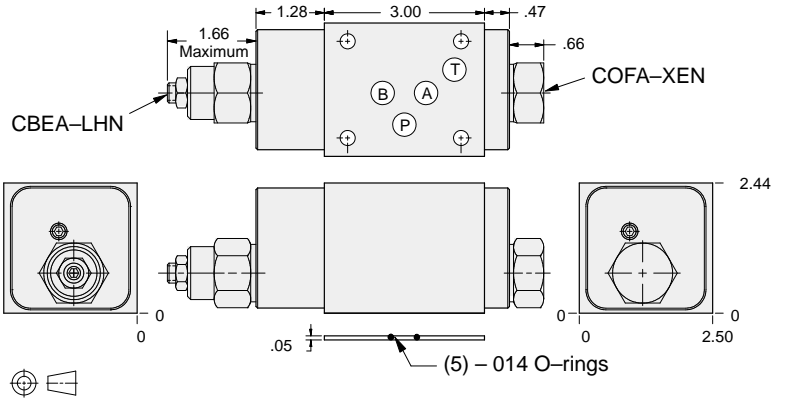


FUNCTION

B to A
Regenerative

Circuit Savers

Turn screw clockwise to reduce setting on CBEA.



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
YDES-LHN-BA		YDES-LHN-BA/S	

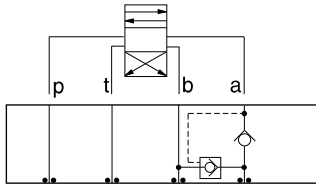
05 CIRCUIT SAVER



ISO 05 SANDWICH BODIES



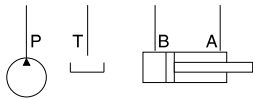
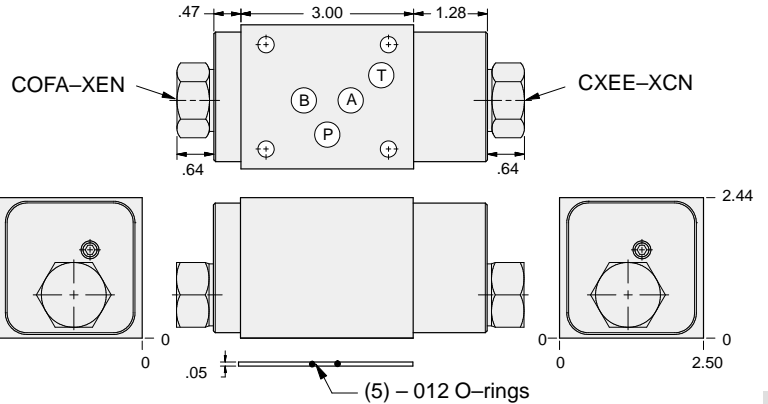
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

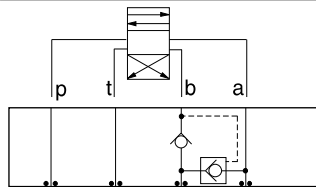
**A to B
Regenerative
(Full Time)**

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDEV-XCN-BA		YDEV-XCN-BA/S	

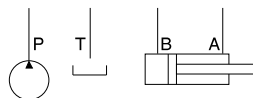
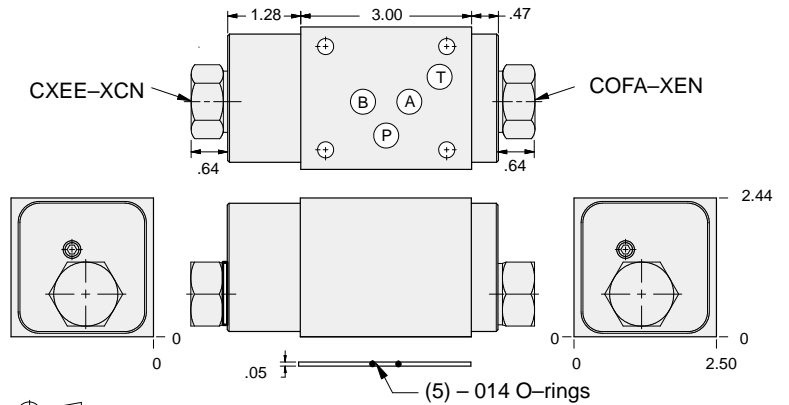
05 CIRCUIT SAVER



FUNCTION

**B to A
Regenerative
(Full Time)**

Circuit Savers



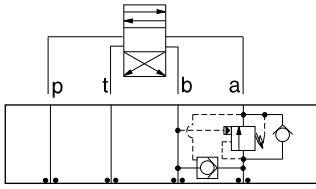
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDET-XCN-BA		YDET-XCN-BA/S	



ISO 05 SANDWICH BODIES



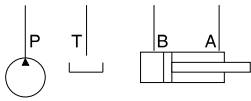
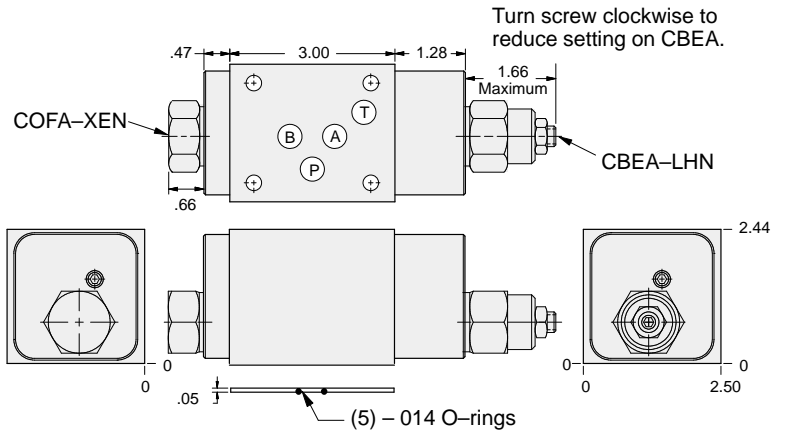
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

A to B
Regenerative

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDER-LHN-BA		YDER-LHN-BA/S	

05 CIRCUIT SAVER

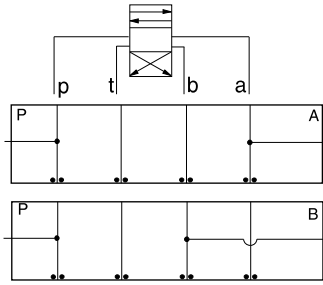


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

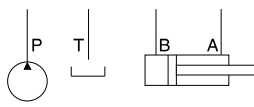
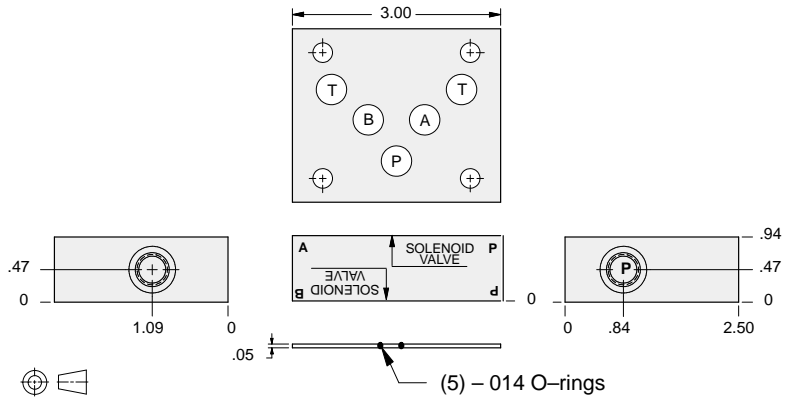
Circuit Savers



FUNCTION

P and A
Tap in Manifold

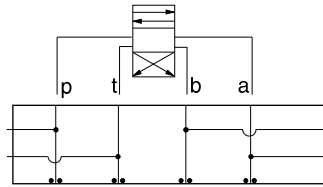
P and B
Tap in Manifold



External Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	ZXE		ZXE/S	
SAE-4	ZPS		ZPS/S	
.250 BSPP	ZVE		ZVE/S	

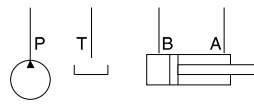
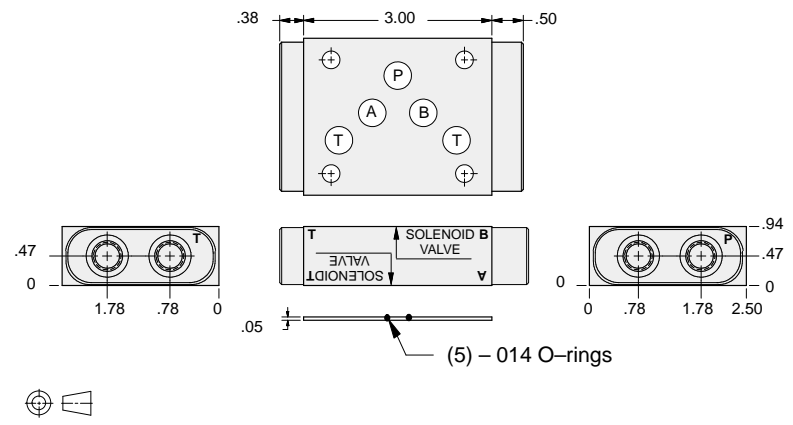
05 CIRCUIT SAVER

Circuit Savers



FUNCTION

P, T, A and B
Tap in Manifold



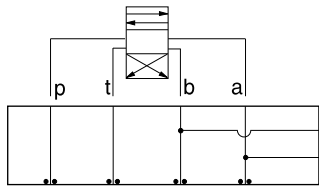
External Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	ZKL		ZKL/S	
.250 BSPP	ZKM		ZKM/S	
.250 BSPP	ZKK		ZKK/S	



ISO 05 SANDWICH BODIES



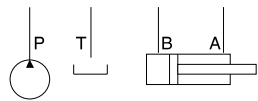
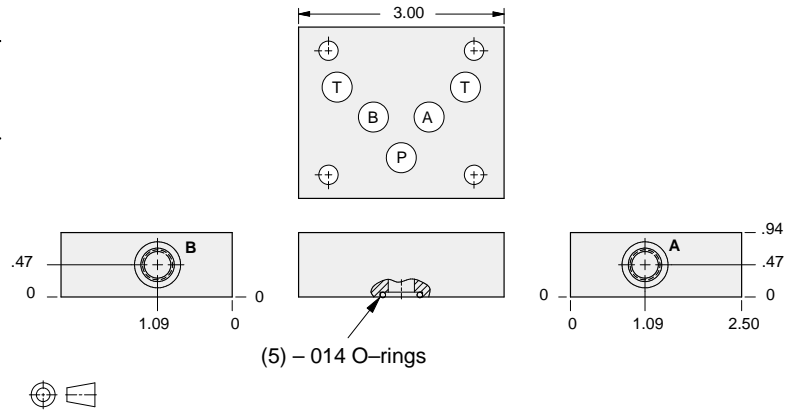
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

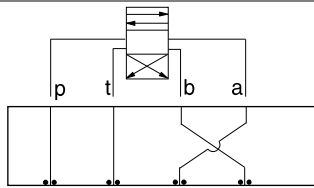
A and B
Tap in Manifold

Circuit Savers



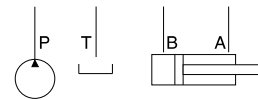
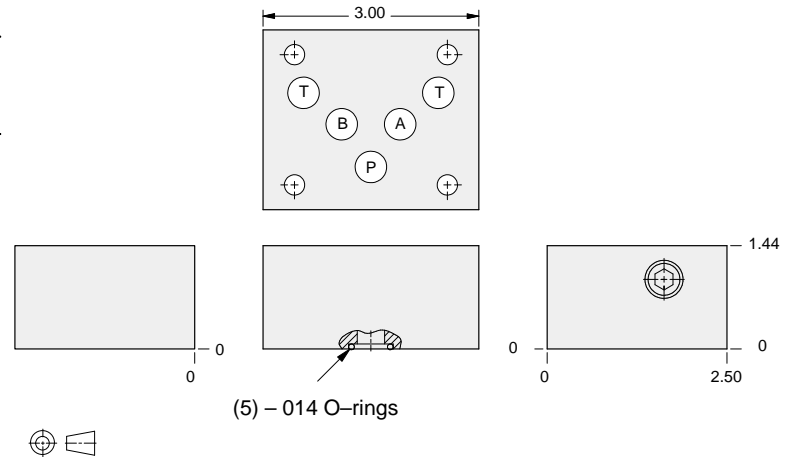
External Ports	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	ZXD		ZXD/S	
SAE-4	ZPR		ZPR/S	
.25 BSPP	ZVD		ZVD/S	

Circuit Savers



FUNCTION

Swap Block
Swaps **A** and **B**



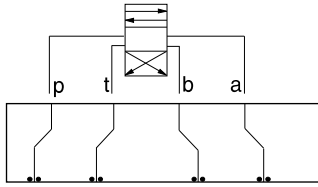
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZTB		ZTB/S	



ISO 05 SANDWICH BODIES



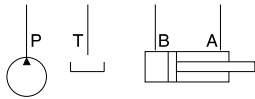
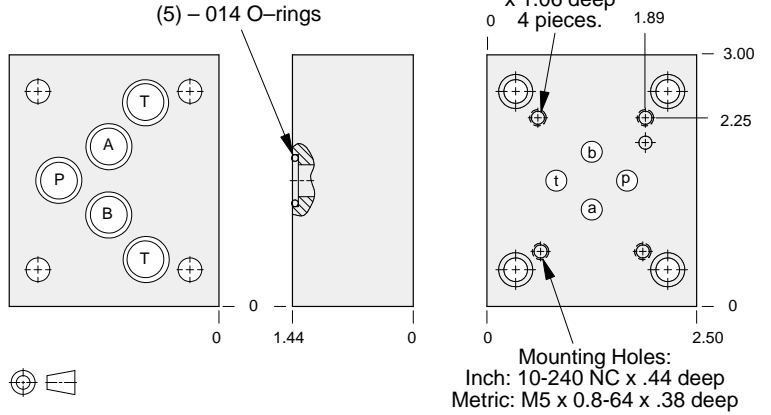
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

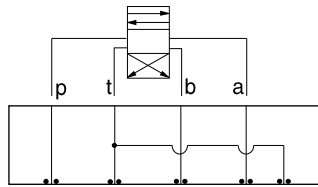
Adapter to Next Smaller Valve Pattern

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZWU		ZWU/S	
ZWT		ZWT/S	

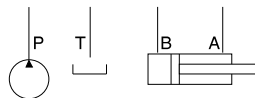
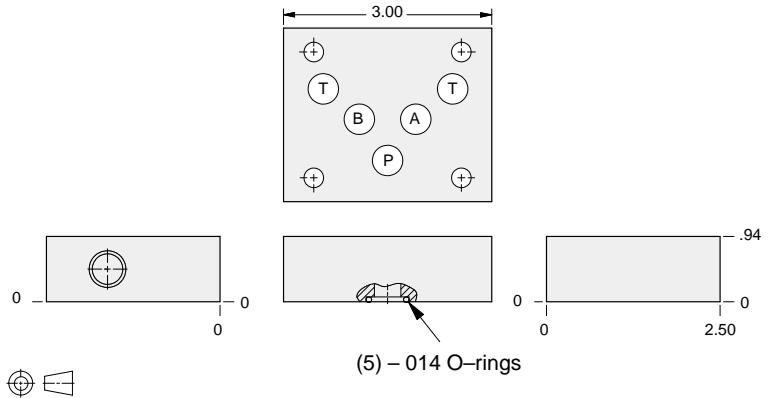
05 CIRCUIT SAVER



FUNCTION

ISO 05 to ISO 05 with Dual Tank Ports

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZXC		ZXC/S	

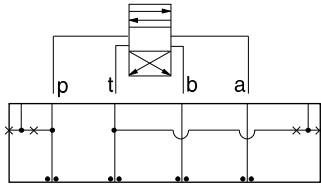


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

05 CIRCUIT SAVER

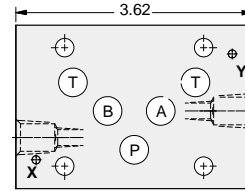


FUNCTION

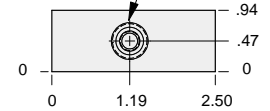
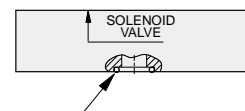
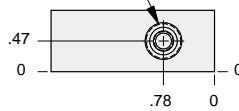
ISO 05 to ISO 05
with **X** and **Y**
Access to **X** and **Y** (Amer)

Circuit Savers

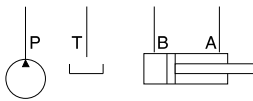
Internal Pilot:
Use .250 NPTF Plug
External Pilot:
Use .062 NPTF Plug



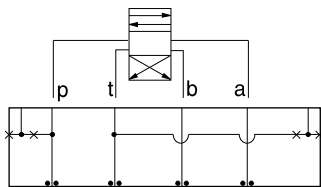
Internal Drain:
Use .250 NPTF Plug
External Drain:
Use .062 NPTF Plug



(5) – 014 O-rings
(1) 990-999-006 Installation Kit
(includes plugs)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZSV		ZSV/S	

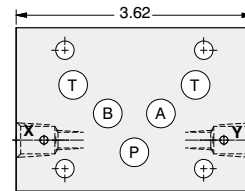


FUNCTION

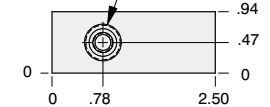
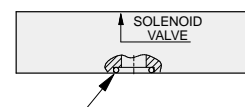
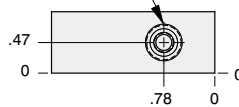
ISO 05 to ISO 05
with **X** and **Y**
Access to **X** and **Y** (Euro)

Circuit Savers

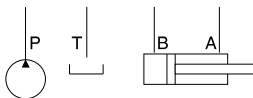
Internal Pilot:
Use .250 NPTF Plug
External Pilot:
Use .062 NPTF Plug



Internal Drain:
Use .250 NPTF Plug
External Drain:
Use .062 NPTF Plug



(5) – 014 O-rings
(1) 990-999-006 Installation Kit
(includes plugs)



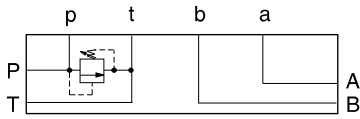
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZST		ZST/S	



ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

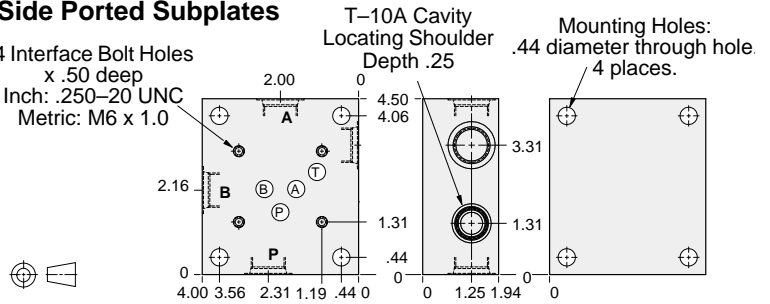


FUNCTION

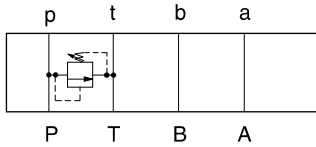
Relief P to T

Side Ported Subplates

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0



Bolt Hole Interface	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	FSC		FSC/S	
Inch	SAE-10	FSK		FSK/S	
Metric	.50 BSPP	FSV		FSV/S	

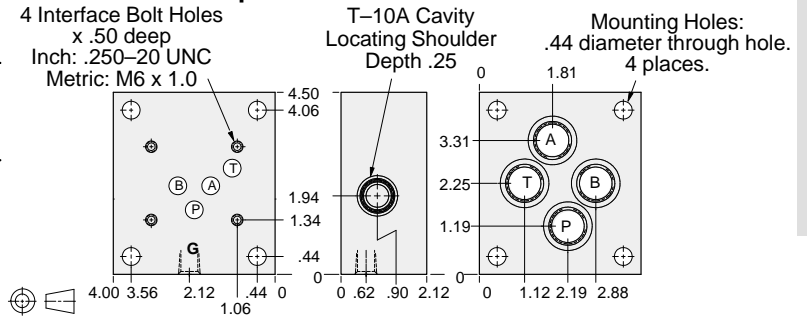


FUNCTION

Relief P to T

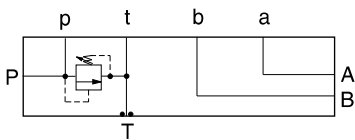
Rear Ported Subplates

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0



Bolt Hole Interface	Gauge Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.50 NPTF	FRC		FRC/S	
Inch	.25 NPTF	SAE-10	FRK		FRK/S	
Metric	.25 BSPP	.50 BSPP	FRV		FRV/S	

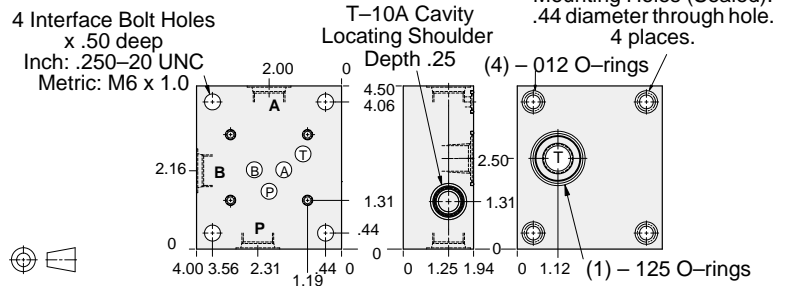
Side Ported Subplates with Gasket Mount Tank Port



FUNCTION

Relief P to T

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0



Bolt Hole Interface	Ports A,B,P	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	FTC		FTC/S	
Inch	SAE-10	FTK		FTK/S	
Metric	.50 BSPP	FTV		FTV/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve RPEC Page 1.06		Pilot Operated "Kick-Down" Relief Valve RQEB Page 1.12
	Pilot Operated, Rapid Response Relief Valve RPEE Page 1.08		Direct Acting Relief Valve RDDA Page 1.10

05 SUBPLATE



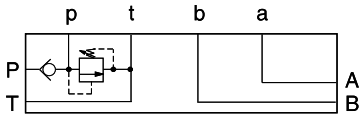
ISO 05 SANDWICH BODIES



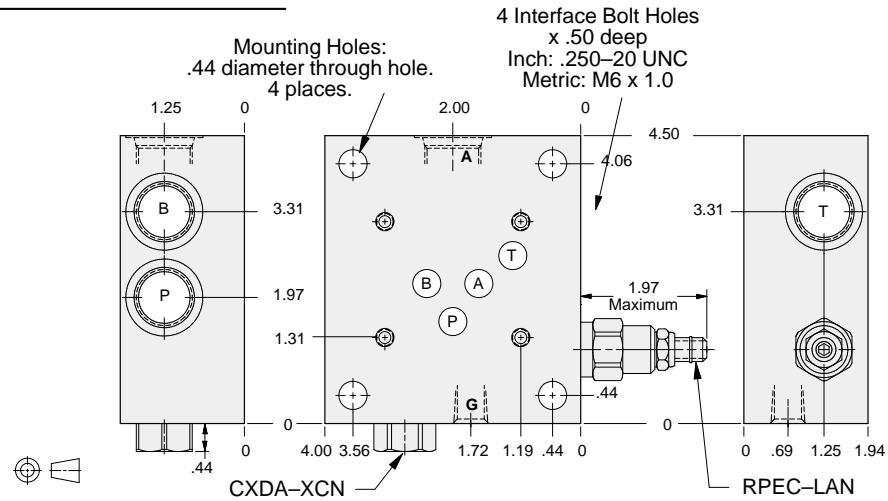
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Side Ported Subplates

FUNCTION



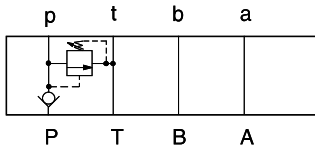
Relief P to T
Check on P



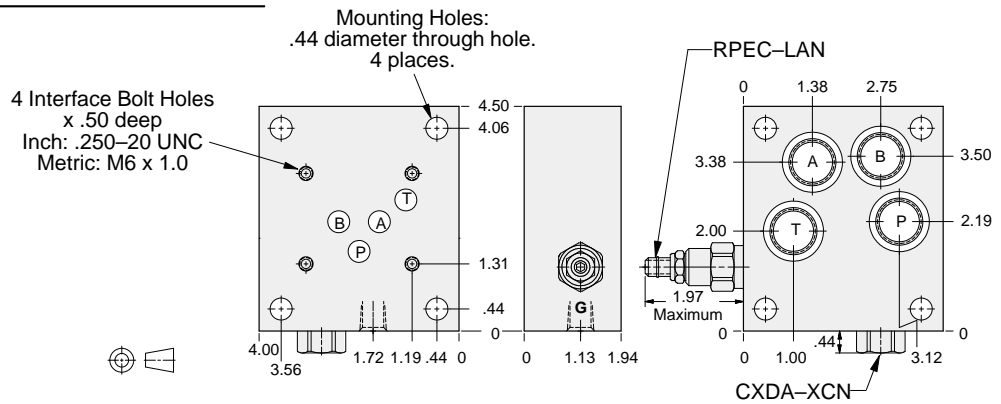
Bolt Hole Interface	Gage Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.50 NPTF	YREJ-LAN-BC		YREJ-LAN-BC/S	
Inch	.25 NPTF	SAE-10	YREJ-LAN-BK		YREJ-LAN-BK/S	
Metric	.25 BSPP	.50 BSPP	YREJ-LAN-BV		YREJ-LAN-BV/S	

Rear Ported Subplates

FUNCTION



Relief P to T
Check on P



Bolt Hole Interface	Gage Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.50 NPTF	YREQ-LAN-BC		YREQ-LAN-BC/S	
Inch	.25 NPTF	SAE-10	YREQ-LAN-BK		YREQ-LAN-BK/S	
Metric	.25 BSPP	.50 BSPP	YREQ-LAN-BV		YREQ-LAN-BV/S	

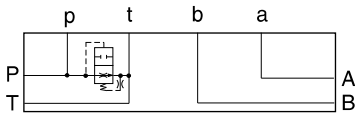


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

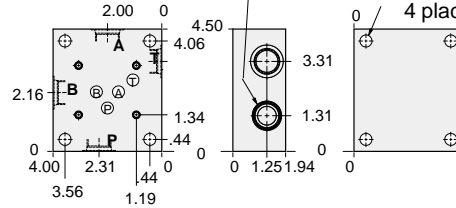
Side Ported Subplates



FUNCTION

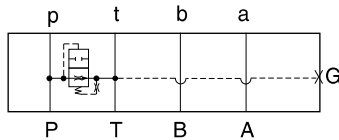
Air-Bleed and Start-Up

T-3A Cavity
Locating Shoulder
Depth .03
Mounting Holes:
.44 diameter through hole.
4 places.



Bolt Hole Interface	Ports A,B,P,T	ALUMINIUM		SG IRON	
		Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	CSC		CSC/S	
Inch	SAE-10	CSK		CSK/S	
Metric	.50 BSPP	CSV		CSV/S	

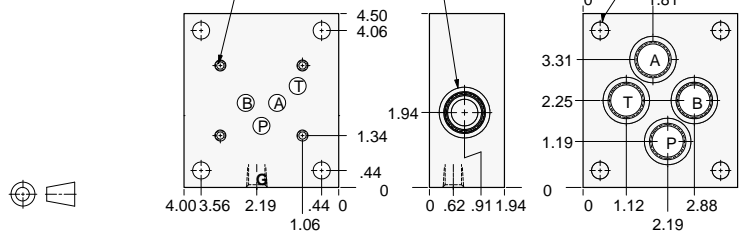
Rear Ported Subplates



FUNCTION

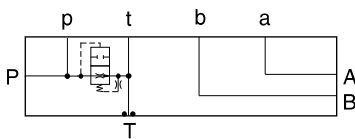
Air-Bleed and Start-Up

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0
T-3A Cavity
Locating Shoulder
Depth .03
Mounting Holes:
.44 diameter through hole.
4 places.



Bolt Hole Interface	Gage Port	Ports A,B,P,T	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.50 NPTF	CRC		CRC/S	
Inch	.25 NPTF	SAE-10	CRK		CRK/S	
Metric	.25 BSPP	.50 BSPP	CRV		CRV/S	

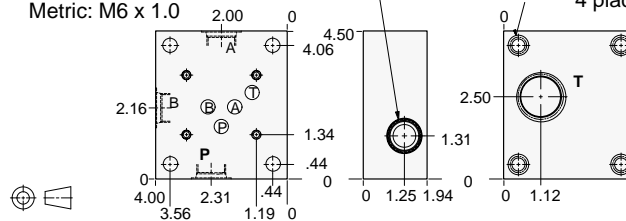
Side Ported Subplates with Gasket Mount Tank Port



FUNCTION

Air-Bleed and Start-Up

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0
T-3A Cavity
Locating Shoulder
Depth .03
Mounting Holes:
.44 diameter through hole.
4 places.



Bolt Hole Interface	Ports P, A, B	Port T	ALUMINIUM		SG IRON	
			Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	.50 NPTF	CTC		CTC/S	
Inch	SAE-10	.50 NPTF	CTK		CTK/S	
Metric	.50 BSPP	.50 BSPP	CTV		CTV/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Air Bleed and Start-up Valve		
	NQEB Page 10.16		

05 SUBPLATE



ISO 05 SANDWICH BODIES



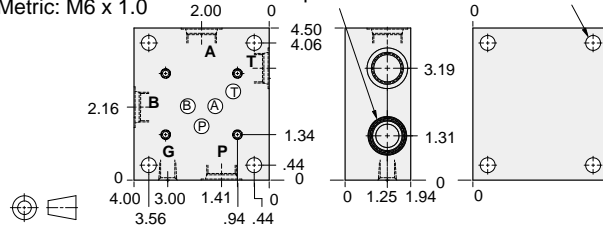
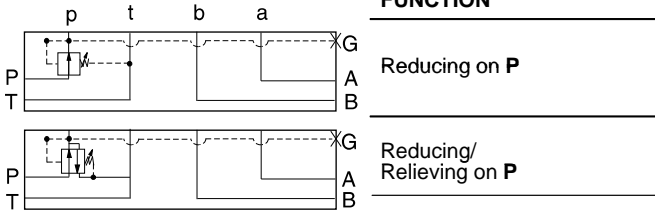
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Side Ported Subplates

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0

T-2A Cavity
Locating Shoulder
Depth .72

Mounting Holes:
.44 diameter through hole.
4 places.



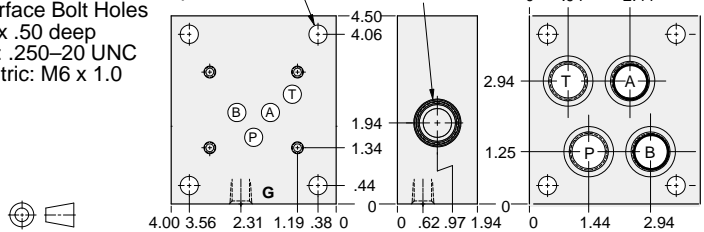
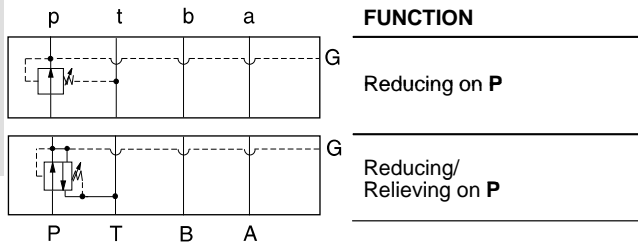
Gage Port (Plugged)	Gage Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.50 NPTF	BSC		BSC/S	
Inch	.25 NPTF	SAE-10	BSK		BSK/S	
Metric	.25 BSPP	.50 BSPP	BSV		BSV/S	

Rear Ported Subplates

Mounting Holes:
.44 diameter through hole.
4 places.

T-2A Cavity
Locating Shoulder
Depth .72

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0



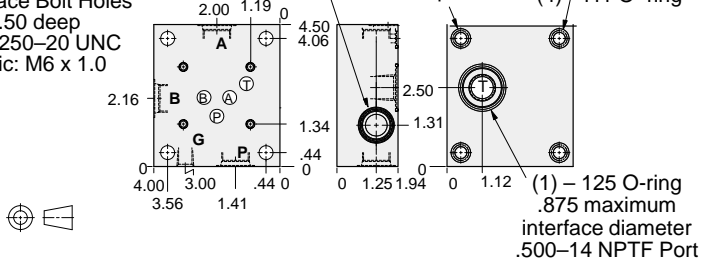
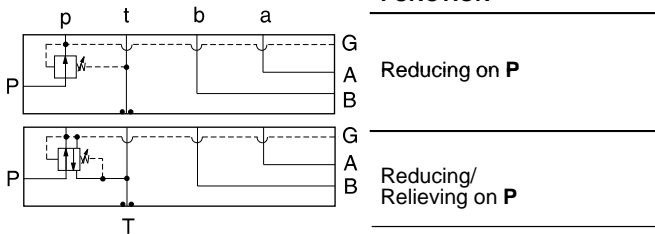
Gage Port (Plugged)	Gage Port	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.50 NPTF	BRC		BRC/S	
Inch	.25 NPTF	SAE-10	BRK		BRK/S	
Metric	.25 BSPP	.50 BSPP	BRV		BRV/S	

Side Ported Subplates with Gasket Mount Tank Port

T-2A Cavity
Locating Shoulder
Depth .72

Mounting Holes (Sealed):
.44 diameter through hole.
4 places. (4) -111 O-ring

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0



Gage Port (Plugged)	Gage Port	Ports A,B,P	ALUMINUM		DUCTILE IRON	
			Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.50 NPTF	BTC		BTC/S	
Inch	.25 NPTF	SAE-10	BTK		BTK/S	
Metric	.25 BSPP	.50 BSPP	BTV		BTV/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing Valve PBFB Page 3.06		Pilot Operated Reducing/Relieving Valve PPFB Page 3.10
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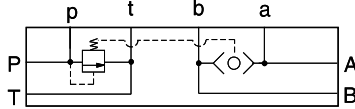
ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

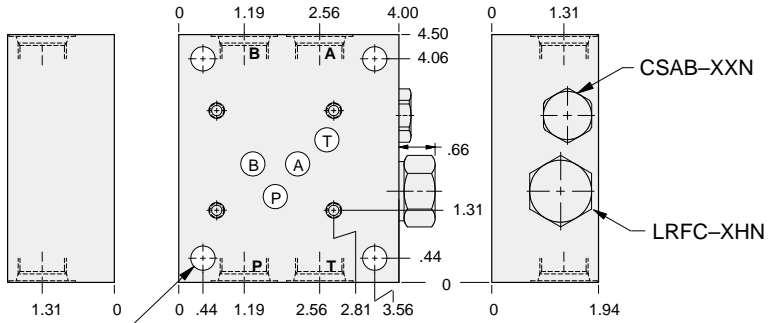
Side Ported Subplates

FUNCTION



Bypass
Compensator
for Proportional
Valves

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0



Mounting Holes:
.44 diameter through hole.
4 places.

Bolt Hole Interface	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	YFES-XHN-BC		YFES-XHN-BC/S	
Inch	SAE-10	YFES-XHN-BK		YFES-XHN-BK/S	
Metric	.50 BSPP	YFES-XHN-BV		YFES-XHN-BV/S	

05 SUBPLATE



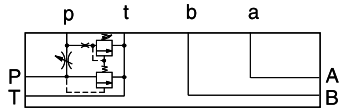
ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

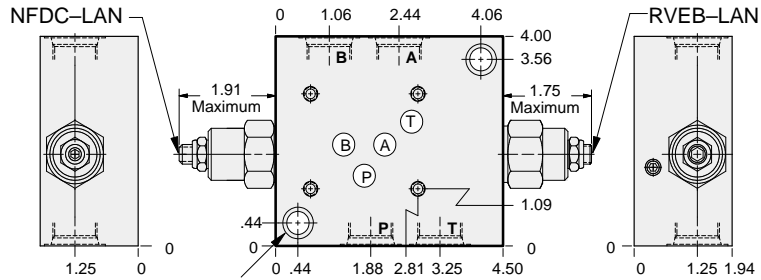
Side Ported Subplates

FUNCTION



Relief P to T
and Bypass
Flow Regulator

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0



Mounting Holes:
.47 diameter through hole.
Counterbore .69 diameter x .44 in. deep.
2 places.



Bolt Hole Interface	Ports A,B,P,T	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	YFED-LAN-BC		YFED-LAN-BC/S	
Inch	SAE-10	YFED-LAN-BK		YFED-LAN-BK/S	
Metric	.50 BSPP	YFED-LAN-BV		YFED-LAN-BV/S	

05 SUBPLATE



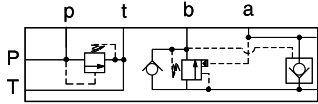
ISO 05 SANDWICH BODIES



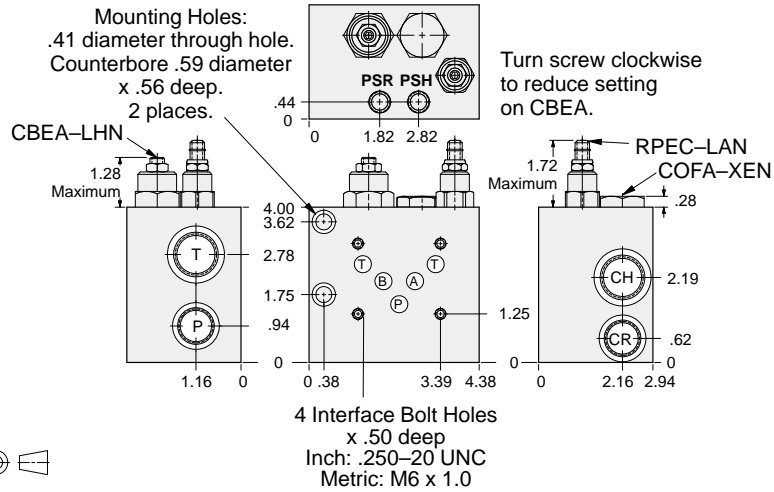
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Side Ported Subplates

FUNCTION



A Relief P to T
 Regenerative
 B to A



Bolt Hole Interface	Ports			ALUMINUM		DUCTILE IRON	
	P,CR	T,CH	PSH,PSR	Model Code	List Price	Model Code	List Price
Inch	.50 NPTF	.75 NPTF	.25 NPTF	YDEM-LHN-BD		YDEM-LHN-BD/S	
Inch	SAE-10	SAE-12	.25 NPTF	YDEM-LHN-BL		YDEM-LHN-BL/S	
Metric	.50 BSPP	.75 BSPP	.25 BSPP	YDEM-LHN-BW		YDEM-LHN-BW/S	

05 SUBPLATE

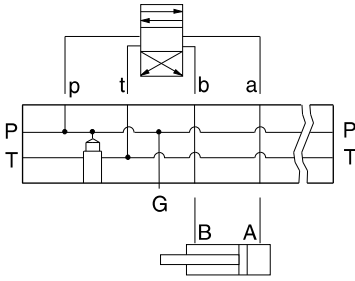


BAR MANIFOLDS



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

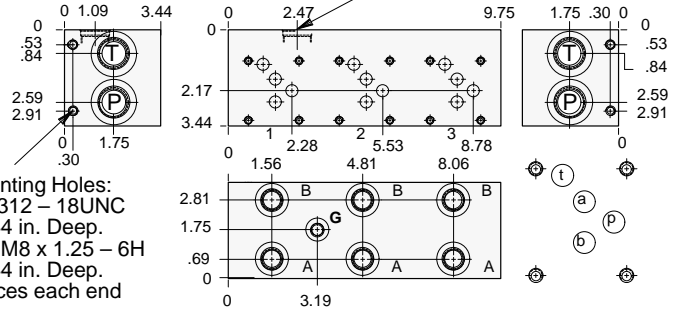
ISO 05 Parallel Circuit with Relief Cavity



FUNCTION

Three Station

T-3A Cavity
Locating Shoulder
Depth .03



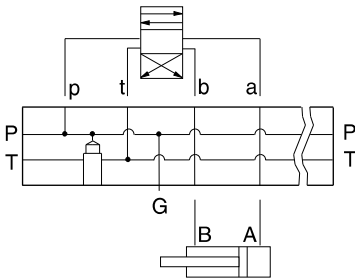
Mounting Holes:
Inch: 312 - 18UNC
x .44 in. Deep.
Metric: M8 x 1.25 - 6H
x .44 in. Deep.
2 places each end



Mounting Holes	Ports P, T	Ports A, B	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
inch	.75 NPTF	.50 NPTF	.25 NPTF	VPN		VPN/S	
inch	SAE-12	SAE-8	SAE-4	VPW		VPW/S	
metric	.75 BSPP	.50 BSPP	.25 BSPP	VNC		VNC/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

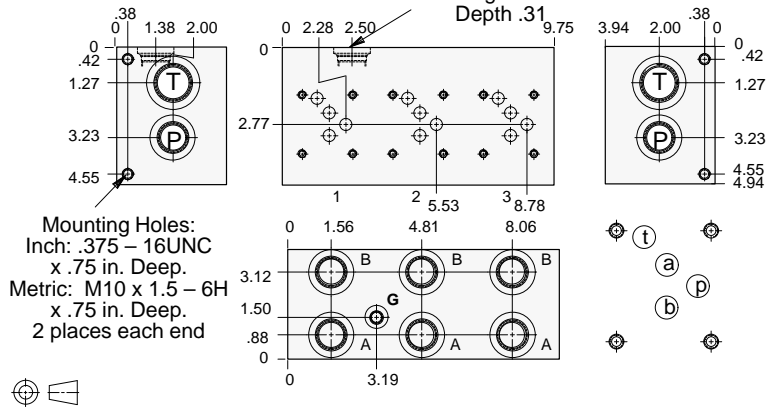
ISO 05 Parallel Circuit with Relief Cavity



FUNCTION

Three Station
(High Capacity)

T-3A Cavity
Locating Shoulder
Depth .31



Mounting Holes:
Inch: .375 - 16UNC
x .75 in. Deep.
Metric: M10 x 1.5 - 6H
x .75 in. Deep.
2 places each end



Mounting Holes	Port T	Ports A, B, P	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	VNJ		VNJ/S	
inch	SAE-16	SAE-12	SAE-4	VNR		VNR/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	VNY		VNY/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			

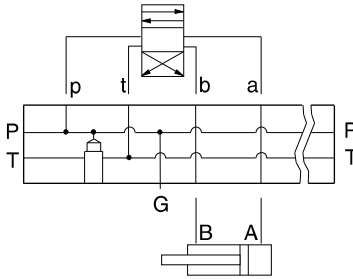


BAR MANIFOLDS



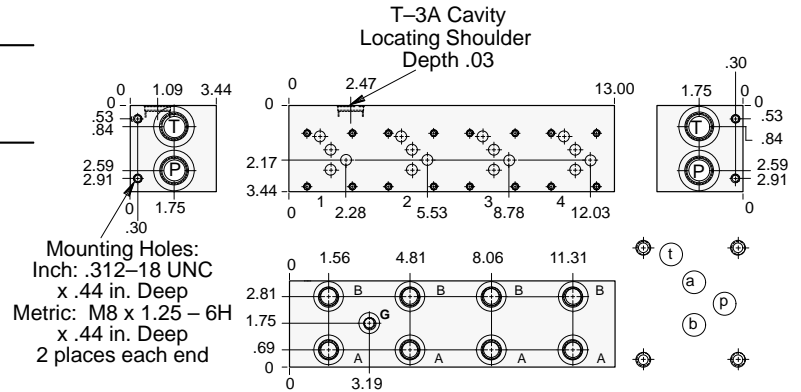
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

ISO 05 Parallel Circuit with Relief Cavity



FUNCTION

Four Station

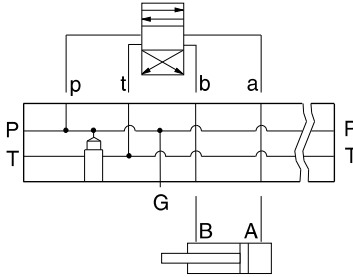


Mounting Holes	Ports P, T	Ports A, B	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
inch	.75 NPTF	.50 NPTF	.25 NPTF	VPP		VPP/S	
inch	SAE-12	SAE-8	SAE-4	VPX		VPX/S	
metric	.75 BSPP	.50 BSPP	.25 BSPP	VND		VND/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

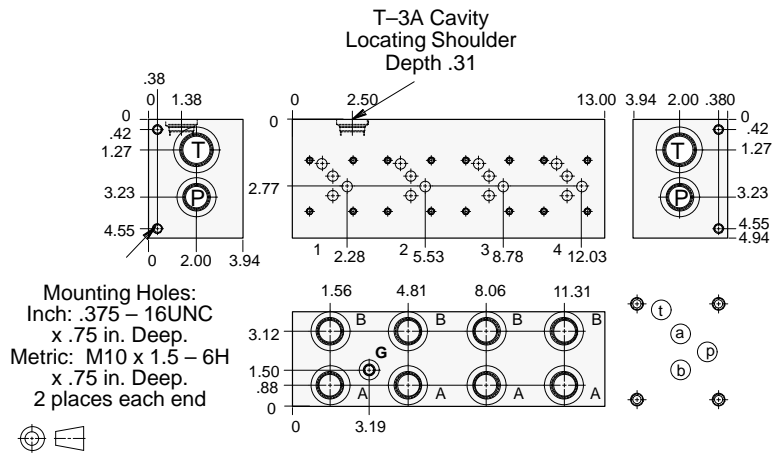
BARMANIFOLD

ISO 05 Parallel Circuit with Relief Cavity



FUNCTION

Four Station
(High Capacity)



Mounting Holes	Port T	Ports A, B, P	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	VNK		VNK/S	
inch	SAE-16	SAE-12	SAE-4	VNS		VNS/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	VNZ		VNZ/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

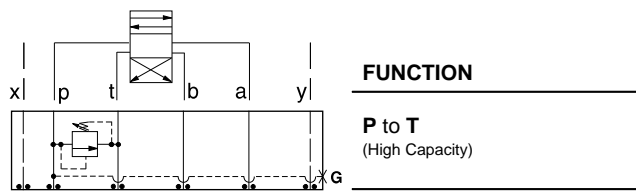
	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			



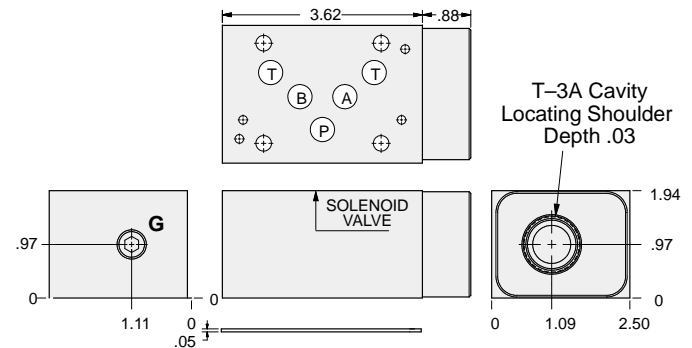
ISO 05 X,Y SANDWICH BODIES



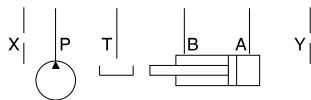
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



Relief Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CJP		CJP/S	
.25 BSPP	CJP/M		CJP/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RPGC Page 1.06		RQGB Page 1.12
	Pilot Operated, Rapid Response Relief Valve		Air Controlled, Pilot Operated Relief Valve
	RPGE Page 1.08		RPGD Page 1.14
	Direct Acting Relief Valve		
	RDFA Page 1.10		
OTHER VALVES:			

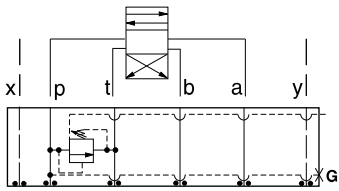
05xy RELIEF



ISO 05 X,Y SANDWICH BODIES



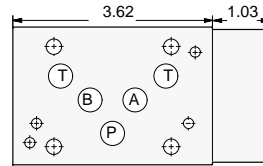
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



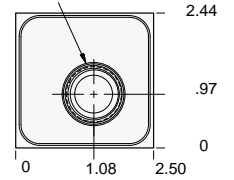
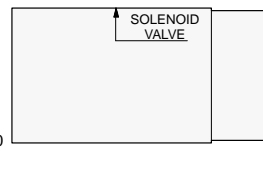
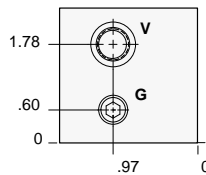
FUNCTION

P to T
Externally Vented

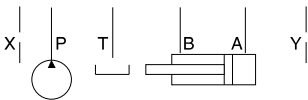
Relief Valves



T-2A Cavity
Locating Shoulder
Depth .72



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	SAE-6	BJC		BJC/S	
.25 BSPP	.25 BSPP	BJC/M		BJC/T	

05xy RELIEF

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

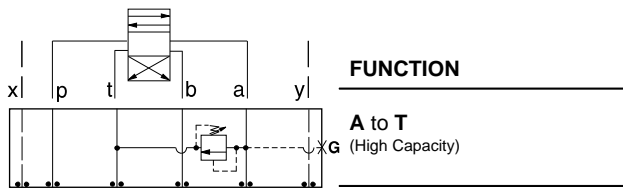
	<i>Pilot Operated Vented Relief Valve</i>		
	RVEA Page 1.18		
OTHER VALVES:			



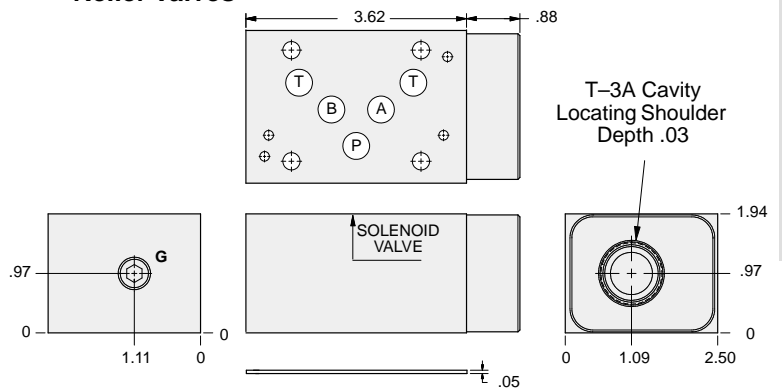
ISO 05 X,Y SANDWICH BODIES



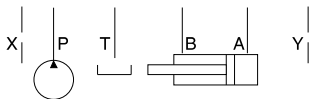
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



Relief Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Part Number	List Price
.25 NPTF	CJA		CJA/S	
.25 BSPP	CJA/M		CJA/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve RPGC Page 1.06		Pilot Operated "Kick-Down" Relief Valve RQGB Page 1.12
	Pilot Operated, Rapid Response Relief Valve RPGE Page 1.08		Air Controlled, Pilot Operated Relief Valve RPGD Page 1.14
	Direct Acting Relief Valve RDFA Page 1.10		
OTHER VALVES:			

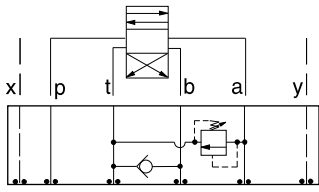
05xy RELIEF



ISO 05 X,Y SANDWICH BODIES



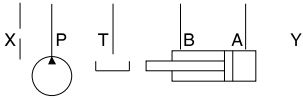
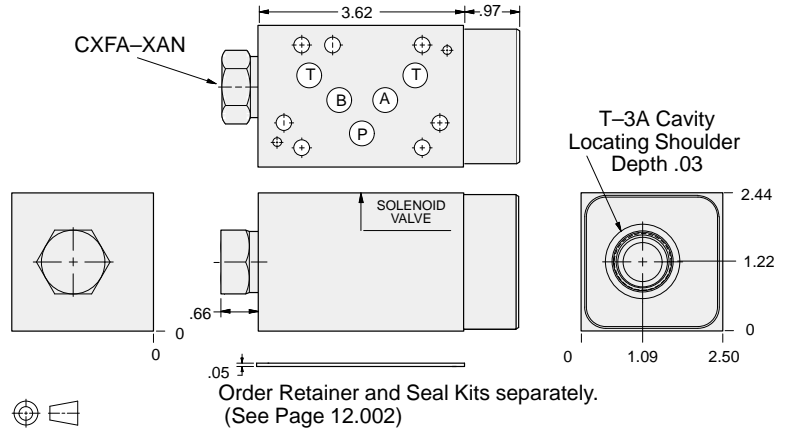
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

A to T
FF Check T to B

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CJ2		CJ2/S	

05xy RELIEF

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

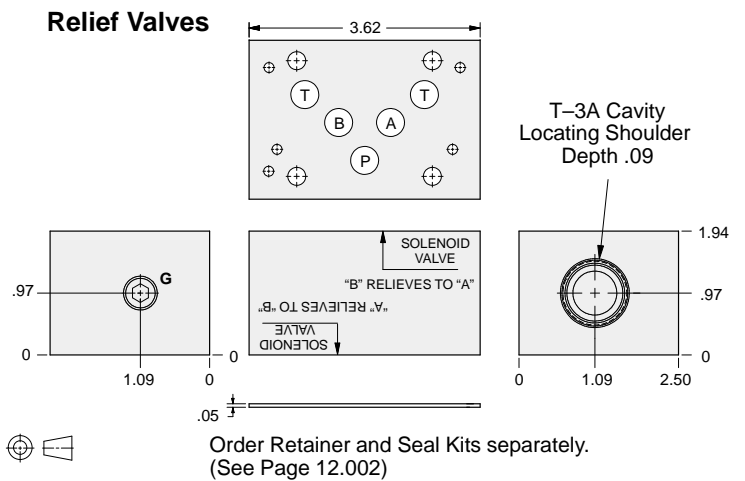
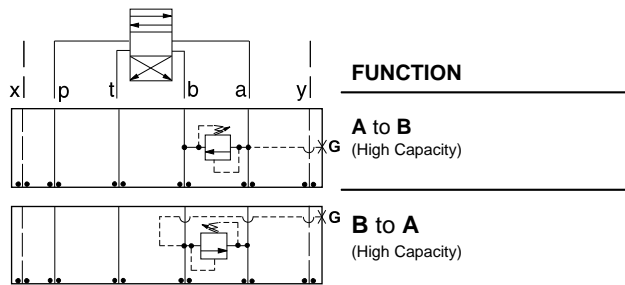
	<i>Pilot Operated Relief Valve</i>		<i>Pilot Operated "Kick-Down" Relief Valve</i>
	RPGC Page 1.06		RQGB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i>		<i>Air Controlled, Pilot Operated Relief Valve</i>
	RPGE Page 1.08		RPGD Page 1.14
	<i>Direct Acting Relief Valve</i>		
	RDFA Page 1.10		
OTHER VALVES:			



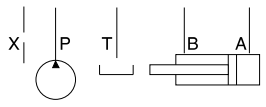
ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



05xy RELIEF



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CJC		CJC/S	
.25 BSPP	CJC/M		CJC/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve RPGC Page 1.06		Pilot Operated "Kick-Down" Relief Valve RQGB Page 1.12
	Pilot Operated, Rapid Response Relief Valve RPGE Page 1.08		Air Controlled, Pilot Operated Relief Valve RPGD Page 1.14
	Direct Acting Relief Valve RDFA Page 1.10		
OTHER VALVES:			

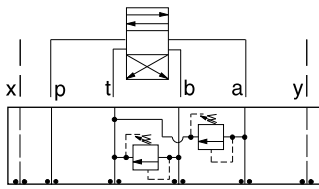


ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

05xy RELIEF

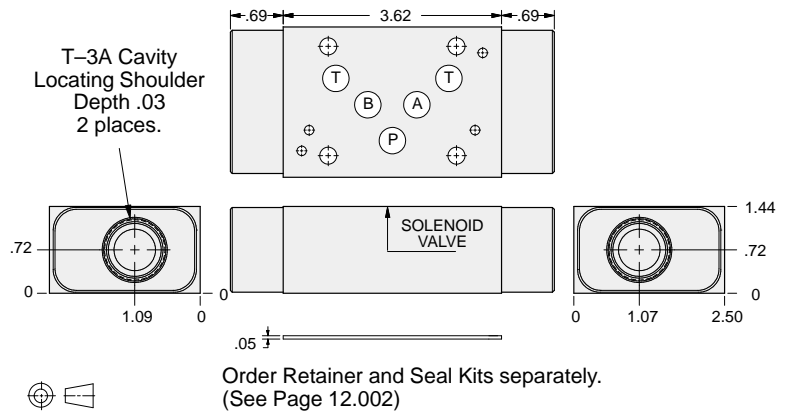


FUNCTION

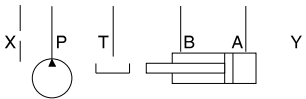
A and B to T
(High Capacity)

Relief Valves

T-3A Cavity
Locating Shoulder
Depth .03
2 places.



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CJX		CJX/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

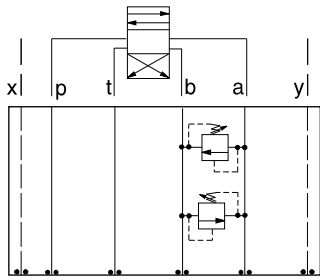
	<i>Pilot Operated Relief Valve</i> RPGC Page 1.06		<i>Pilot Operated "Kick-Down" Relief Valve</i> RQGB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i> RPGE Page 1.08		<i>Air Controlled, Pilot Operated Relief Valve</i> RPGD Page 1.14
	<i>Direct Acting Relief Valve</i> RDFA Page 1.10		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

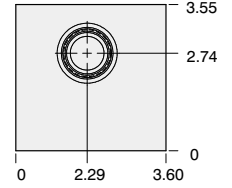
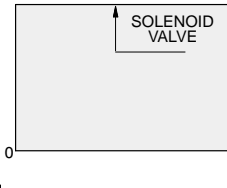
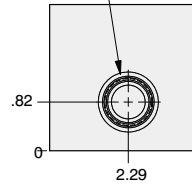
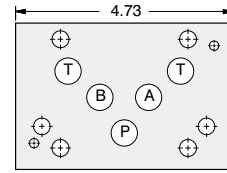


FUNCTION

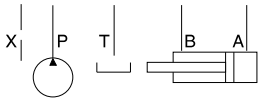
A to B and B to A
(Cross-Port)

Relief Valves

T-10A Cavity
Locating Shoulder
Depth .38
2 places.



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CJY		CJY/S	

05xy RELIEF

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Relief Valve</i>		<i>Pilot Operated "Kick-Down" Relief Valve</i>
	RPEC Page 1.06		RQEB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i>		
	RPEE Page 1.08		
	<i>Direct Acting Relief Valve</i>		
	RDDA Page 1.10		
OTHER VALVES:			

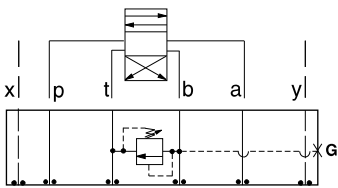


ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

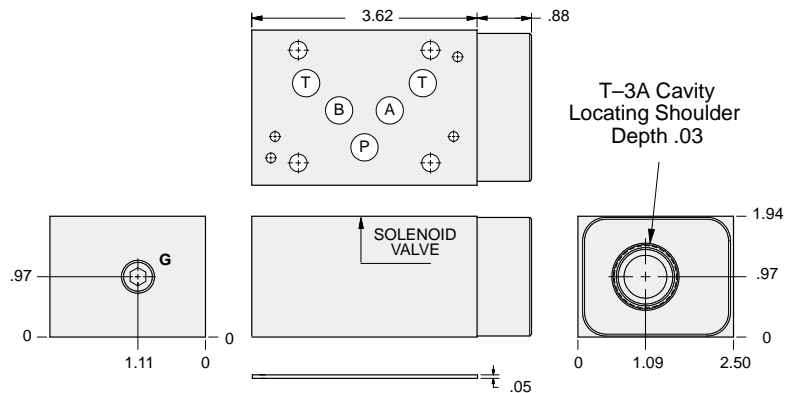
05xy RELIEF



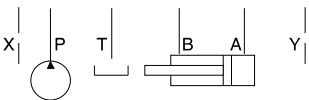
FUNCTION

B to T
(High Capacity)

Relief Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CJB		CJB/S	
.25 BSPP	CJB/M		CJB/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Relief Valve</i> RPGC Page 1.06		<i>Pilot Operated "Kick-Down" Relief Valve</i> RQGB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i> RPGE Page 1.08		<i>Air Controlled, Pilot Operated Relief Valve</i> RPGD Page 1.14
	<i>Direct Acting Relief Valve</i> RDFA Page 1.10		
OTHER VALVES:			

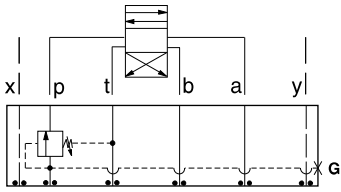




ISO 05 X,Y SANDWICH BODIES



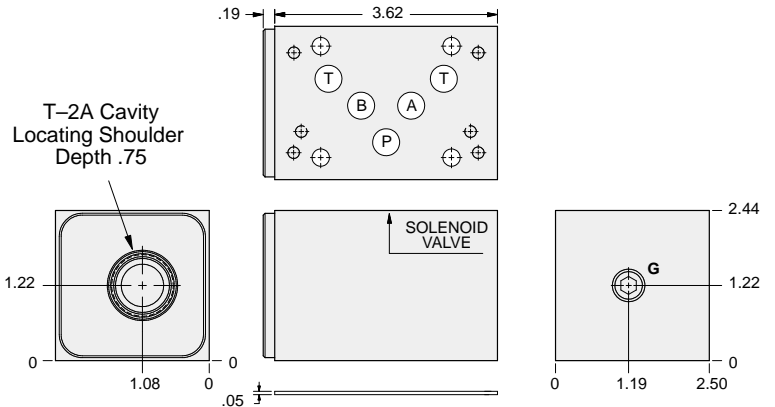
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



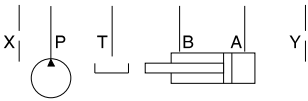
FUNCTION

In to P

Sequence Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJW		BJW/S	
.25 BSPP	BJW/M		BJW/T	

05_{xy} SEQUENCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Sequence Valve</i>		<i>Direct Acting Sequence Valve with Reverse Free Flow Check</i>
	RSFC Page 2.06		SCEA Page 2.12
	<i>Pilot Operated "Kick-Down" Sequence Valve</i>		
	SQFB Page 2.08		
	<i>Air Controlled, Pilot Operated Sequence Valve</i>		
	RSFE Page 2.10		
OTHER VALVES:			

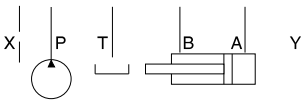
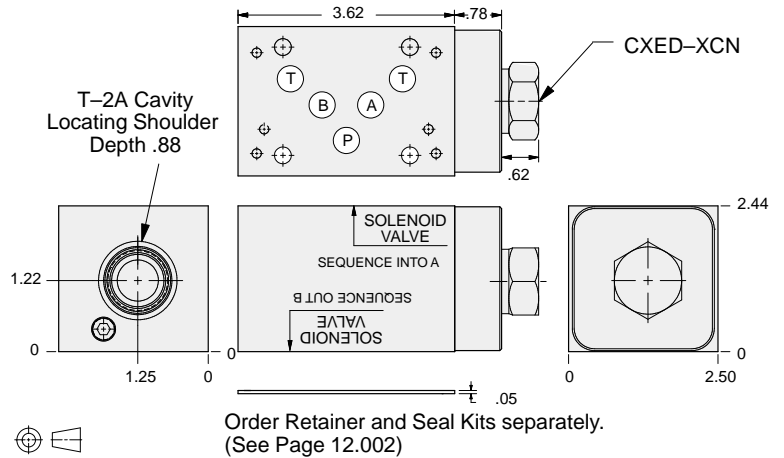
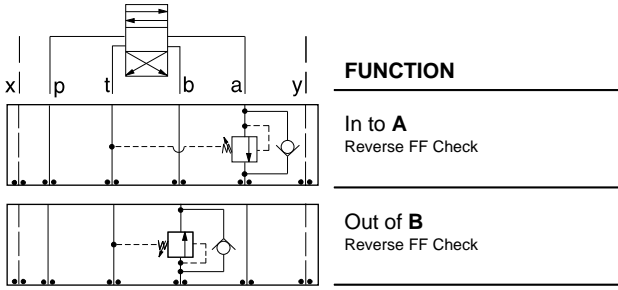


ISO 05 X,Y SANDWICH BODIES



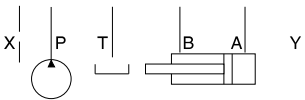
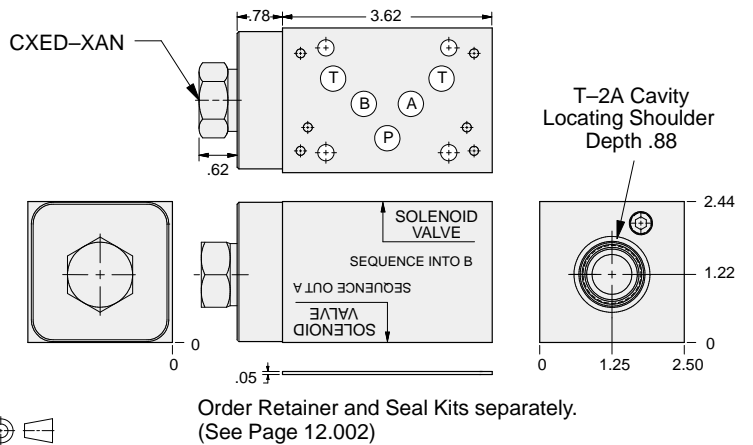
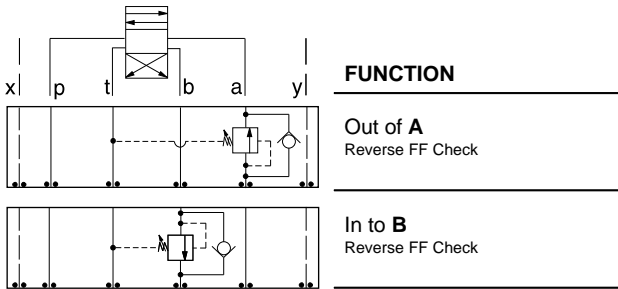
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Sequence Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJ4		BJ4/S	

Sequence Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJ5		BJ5/S	

05xy SEQUENCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Sequence Valve		
	RSFC Page 2.06		
	Pilot Operated "Kick-Down" Sequence Valve		
	SQFB Page 2.08		
	Air Controlled, Pilot Operated Sequence Valve		
	RSFE Page 2.10		
OTHER VALVES:			

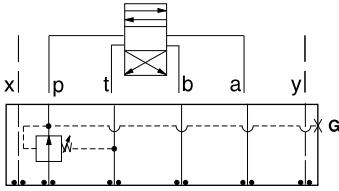


ISO 05 X,Y SANDWICH BODIES



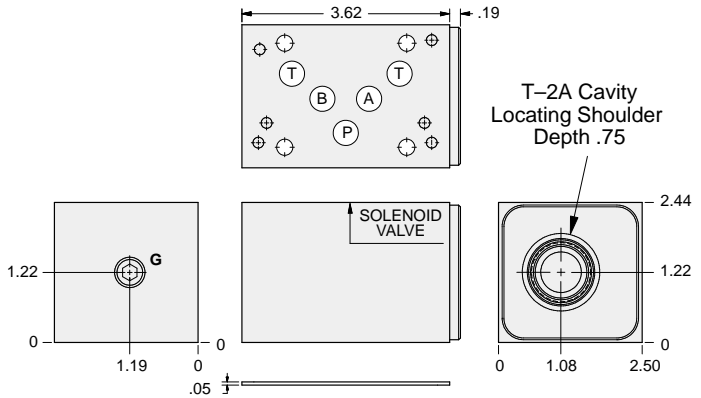
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing Valves

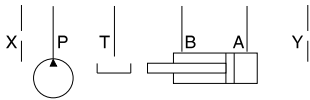


FUNCTION

On P
Drained to T



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJP		BJP/S	
.25 BSPP	BJP/M		BJP/T	

05_{xy} REDUCING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

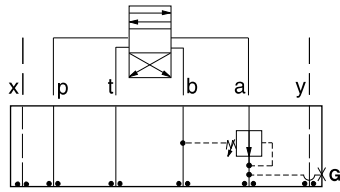
	<i>Pilot Operated Reducing Valve</i>		
	PBFB Page 3.06		
	<i>Air Controlled, Pilot Operated Reducing Valve</i>		
	PBFC Page 3.08		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



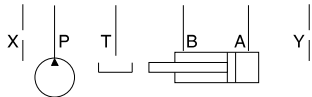
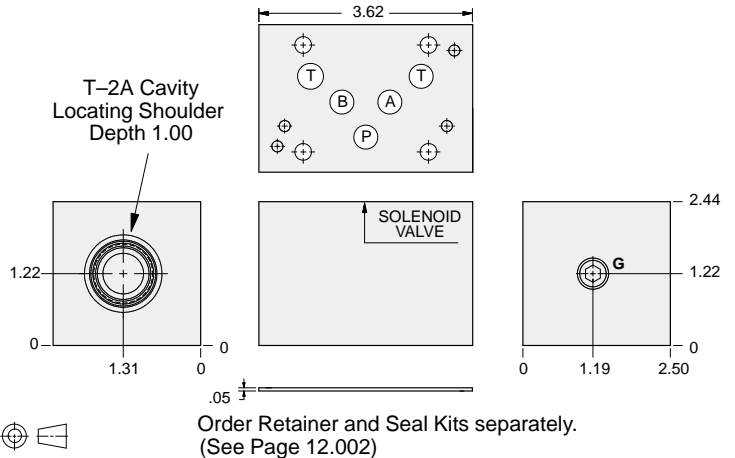
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On A
Drained to B

Reducing Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJA		BJA/S	
.25 BSPP	BJA/M		BJA/T	

05xy REDUCING

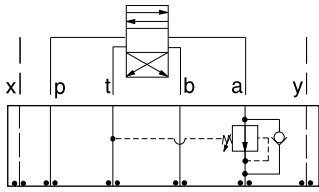
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing Valve		
	PBFB Page 3.06		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



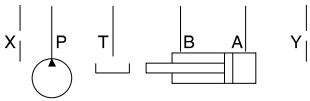
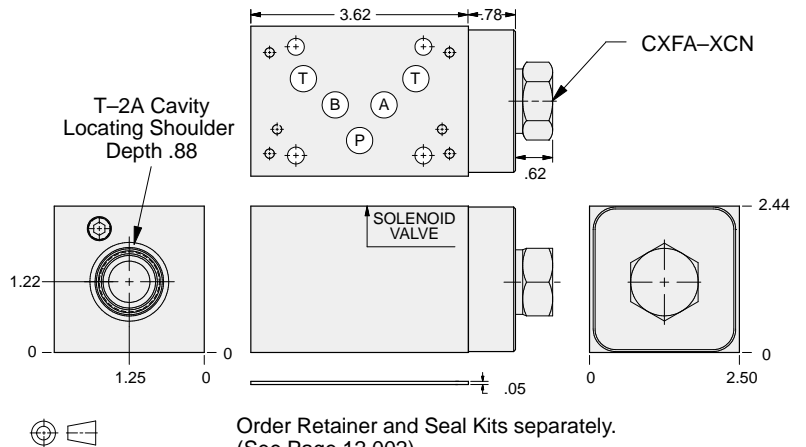
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



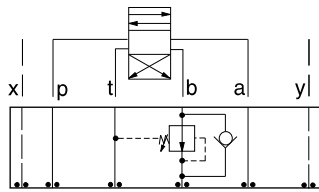
FUNCTION

On A Drain to T
Reverse FF Check

Reducing Valves



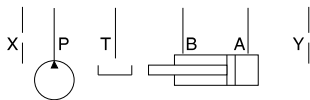
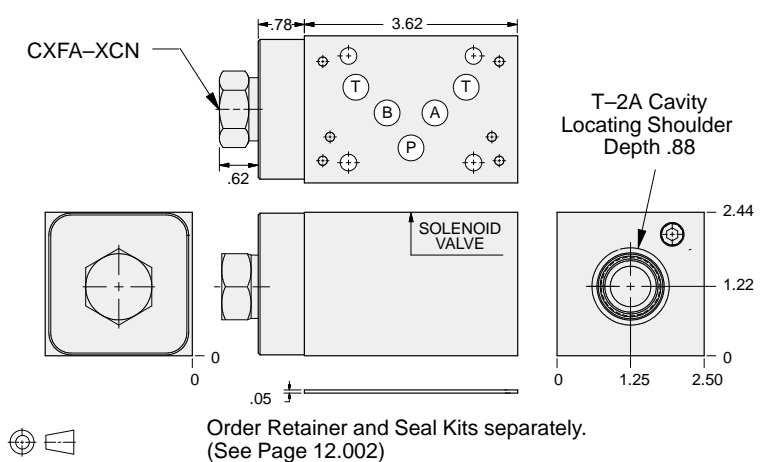
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJ2		BJ2/S	



FUNCTION

On B Drain to T
Reverse FF Check

Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJ3		BJ3/S	

05xy REDUCING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

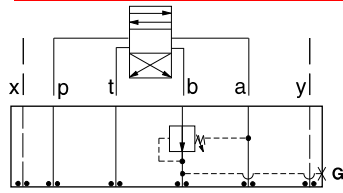
	Pilot Operated Reducing Valve		
	PBFB Page 3.06		
	Air Controlled, Pilot Operated Reducing/Relieving Valve		
	PBFC Page 3.08		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



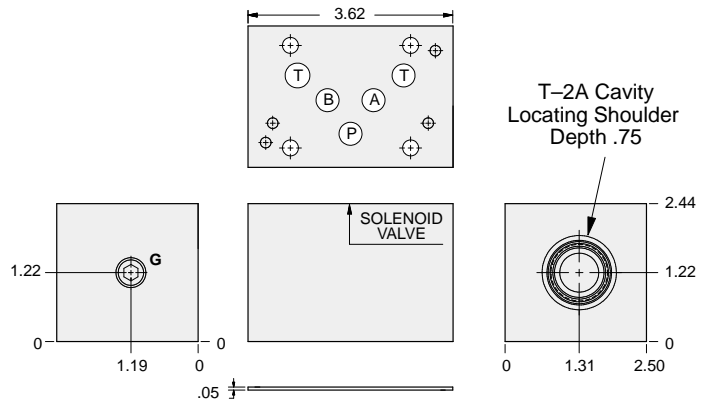
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



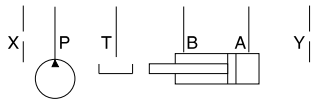
FUNCTION

On B
Drained to A

Reducing Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJB		BJB/S	
.25 BSPP	BJB/M		BJB/T	

05xy REDUCING

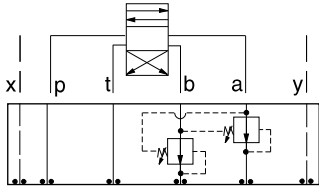
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing Valve		
	PBFB Page 3.06		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



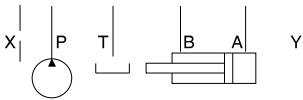
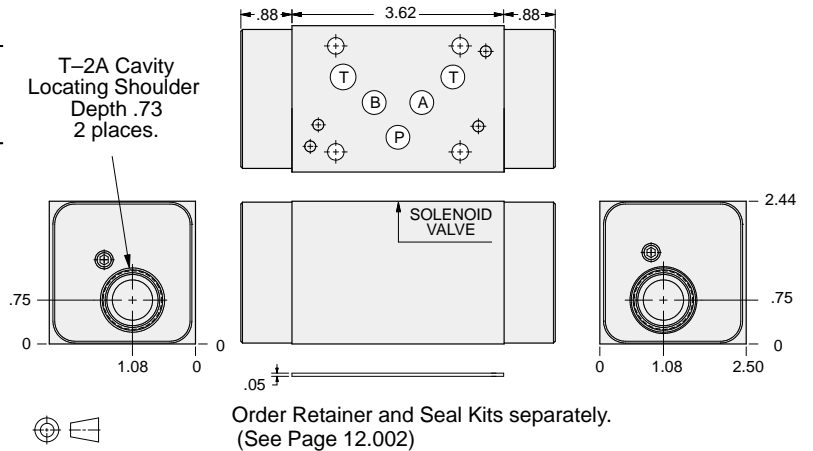
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **A** and **B**
Drains to Opposite Port

Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJY		BJY/S	

05_{xy} REDUCING

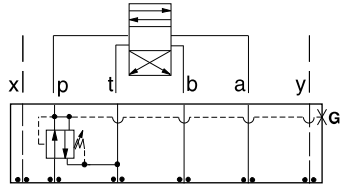
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Reducing Valve</i>		
	PBFB Page 3.06		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



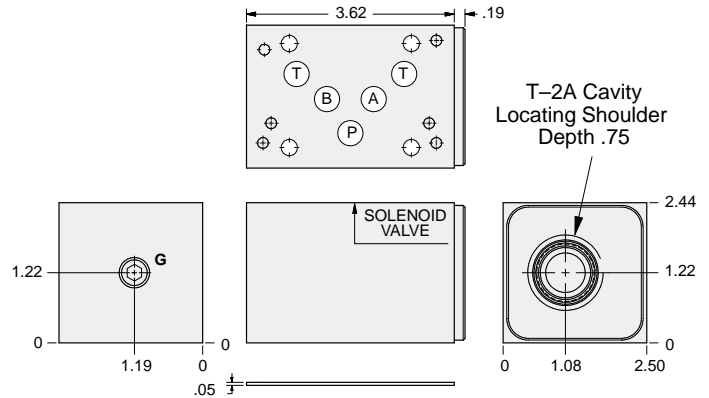
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



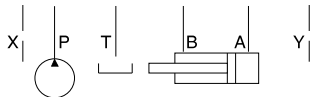
FUNCTION

On P Tank to T
Drained to T

Reducing/Relieving Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJP		BJP/S	
.25 BSPP	BJP/M		BJP/T	

05xy REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing/Relieving Valve		
	PPFB Page 3.10		
	Air Controlled, Pilot Operated Reducing/Relieving Valve		
	PPFC Page 3.12		
OTHER VALVES:			

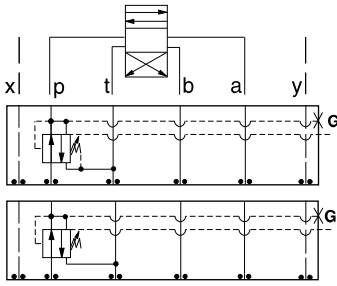


ISO 05 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

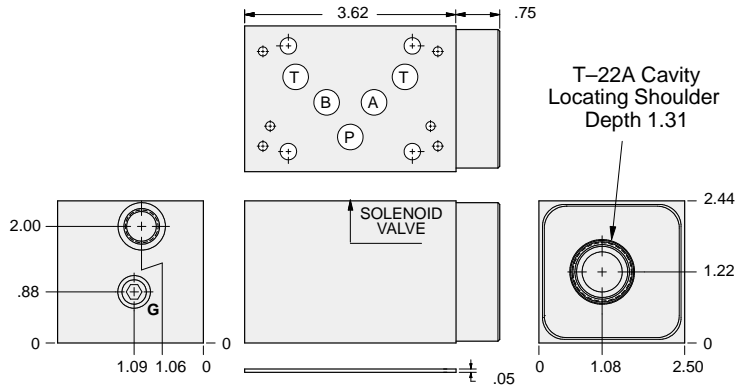
Reducing/Relieving Valves



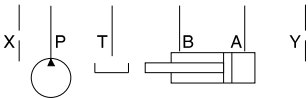
FUNCTION

On P Tank to T
Vented Externally

On P Tank to T
Drained Externally



Order Retainer and Seal Kits separately.
(See Page 12.002)



External Port	Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
SAE-6	.25 NPTF	NJP		NJP/S	
.25 BSPP	.25 BSPP	NJP/M		NJP/T	

05xyREDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing/Relieving Valve with Drain Port		
	PVFA Page 3.14		
	Pilot Operated Reducing/Relieving Valve with Vent Port		
	PVFB Page 3.16		
OTHER VALVES:			

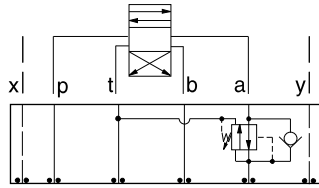


ISO 05 X,Y SANDWICH BODIES



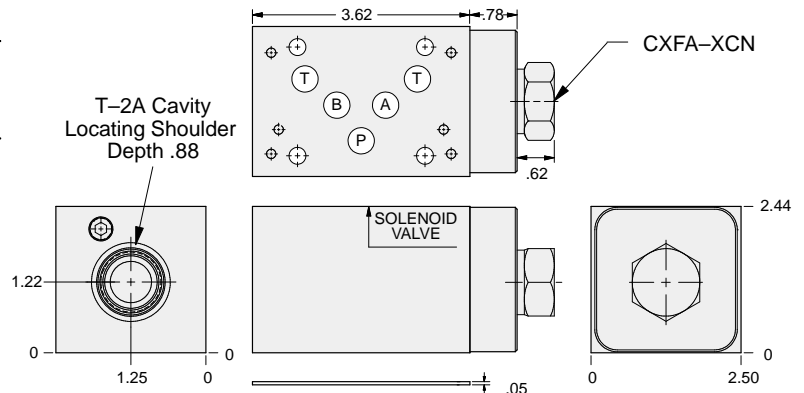
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves

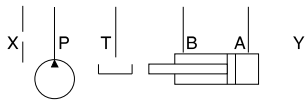


FUNCTION

On **A** Tank to **T**
Drained to **T**
Reverse FF Check

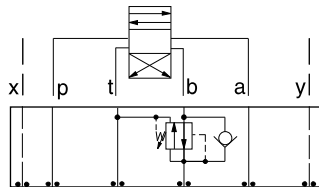


Order Retainer and Seal Kits separately.
(See Page 12.002)



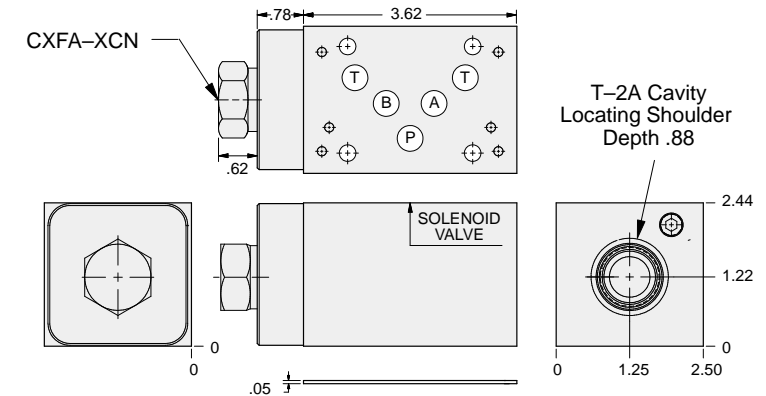
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJ2		BJ2/S	

Reducing/Relieving Valves

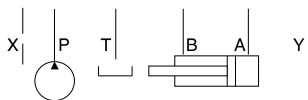


FUNCTION

On **B** Tank to **T**
Drained to **T**
Reverse FF Check



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJ3		BJ3/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

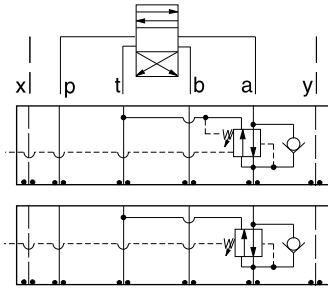
	Pilot Operated Reducing/Relieving Valve		
	PPFB Page 3.10		
	Air Controlled, Pilot Operated Reducing/Relieving Valve		
	PPFC Page 3.12		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

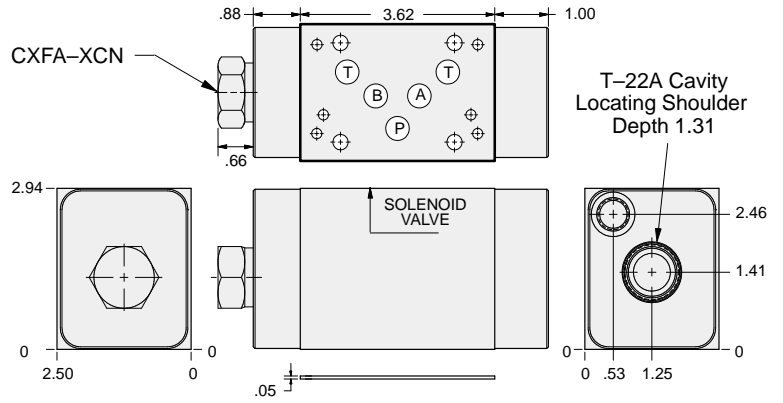


FUNCTION

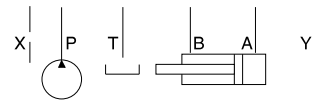
On A tank to T
Vented Externally
Reverse FF Check

On A tank to T
Drained Externally
Reverse FF Check

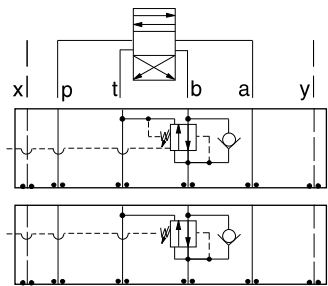
Reducing/Relieving Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



External Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	NJ2		NJ2/S	
.25 BSPP	NJ2/M		NJ2/T	

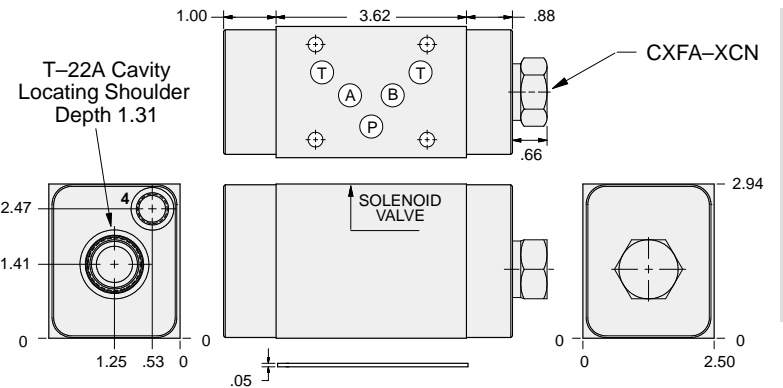


FUNCTION

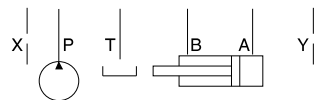
On B Tank to T
Vented Externally
Reverse FF Check

On B Tank to T
Drained Externally
Reverse FF Check

Reducing/Relieving Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



Mounting Holes	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	NJ3		NJ3/S	
.25 BSPP	NJ3/M		NJ3/T	

05xy REDUCING/RELIEVING

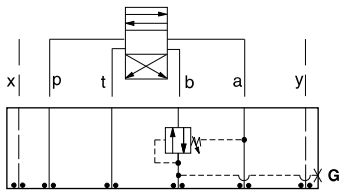
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing/Relieving Valve with Drain Port		
	PVFA Page 3.14		
	Pilot Operated Reducing/Relieving Valve with Vent Port		
	PVFB Page 3.16		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



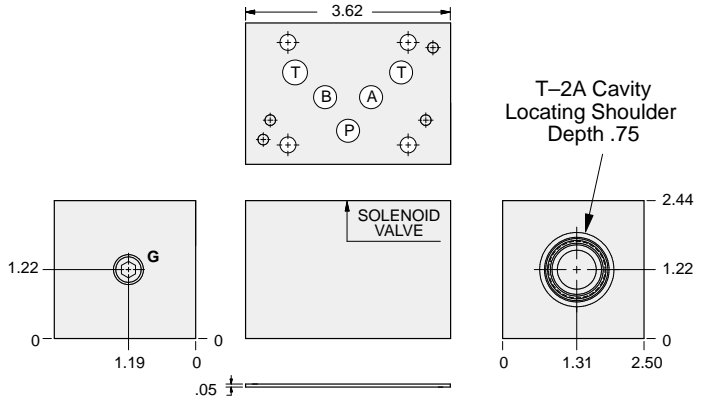
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



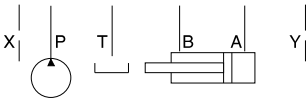
FUNCTION

On **B** Tank to **A**
Drained to **A**

Reducing/Relieving Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJB		BJB/S	
.25 BSPP	BJB/M		BJB/T	

05xyREDUCING/RELIEVING

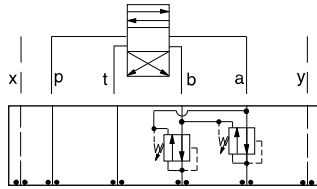
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing/Relieving Valve		
	PPFB Page 3.10		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



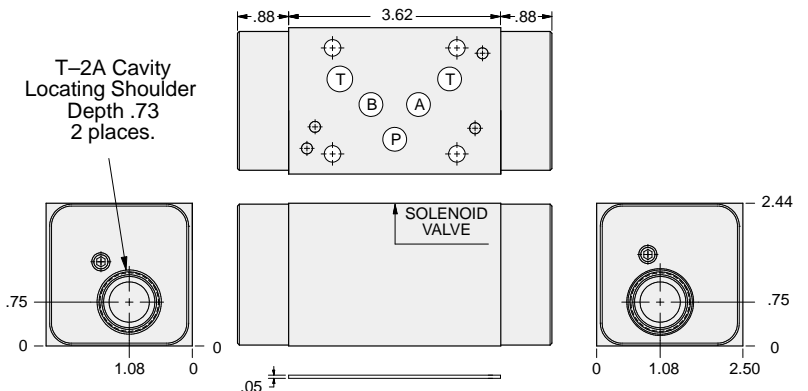
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



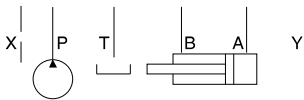
FUNCTION

On **A** and **B**
Tanks and Drains to
Opposite Port

Reducing/Relieving Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJY		BJY/S	

05xy REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing/Relieving Valve		
	PPFB Page 3.10		
OTHER VALVES:			

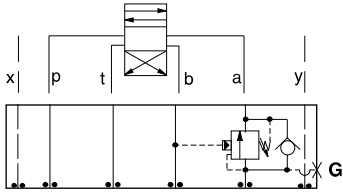


ISO 05 X,Y SANDWICH BODIES



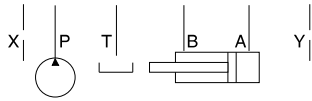
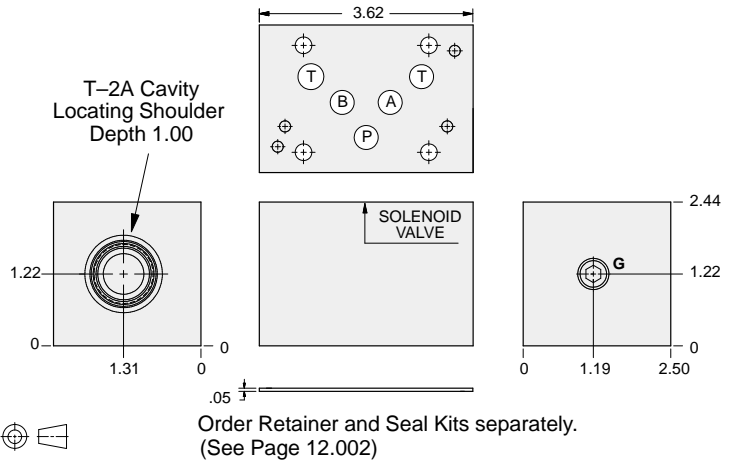
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Counterbalance Valves



FUNCTION

On A Pilot
from B



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJA		BJA/S	
.25 BSPP	BJA/M		BJA/T	

05xy COUNTERBALANCE

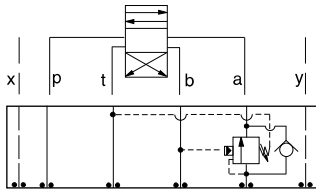
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBEA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBEG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBEH Page 4.14		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



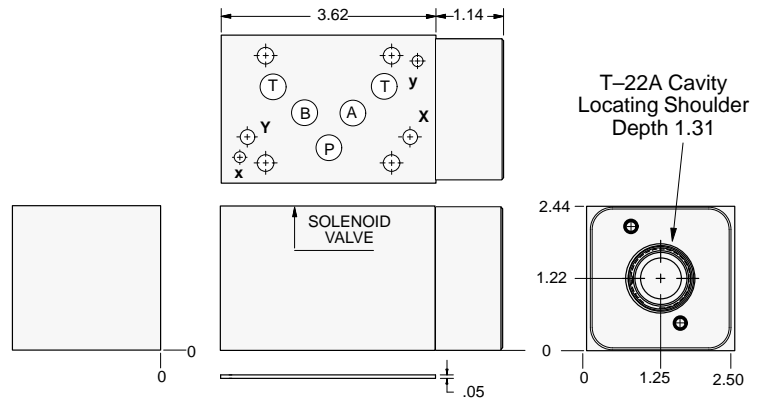
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



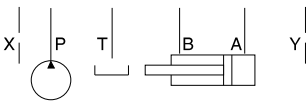
FUNCTION

On A Pilot
from B
Vent to T

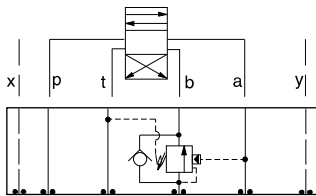
Counterbalance Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



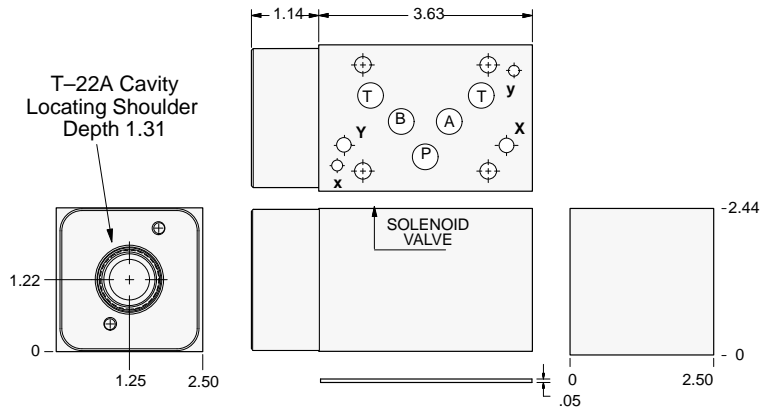
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NJA		NJA/S	



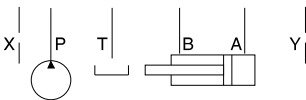
FUNCTION

On B Pilot
from A
Vent to T

Counterbalance Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NJB		NJB/S	

05xy COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

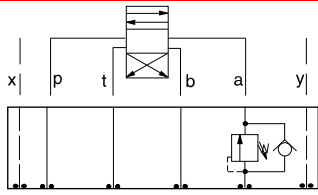
	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWEA Page 4.18		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWEG Page 4.20		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



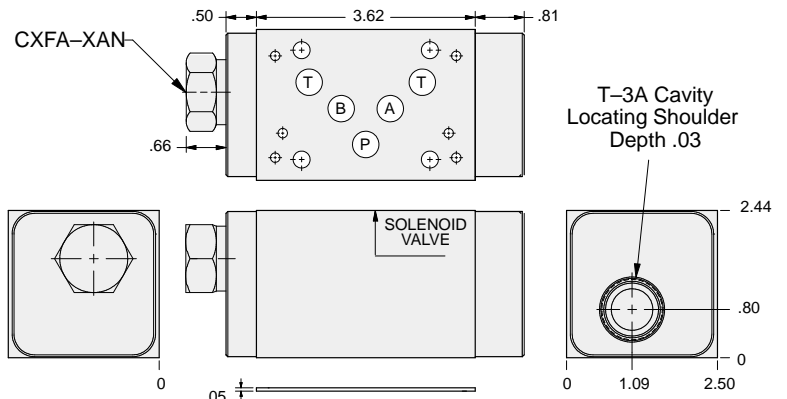
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



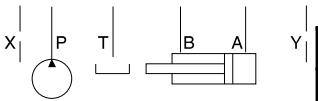
FUNCTION

On A
No Pilot Assist

Counterbalance Valves

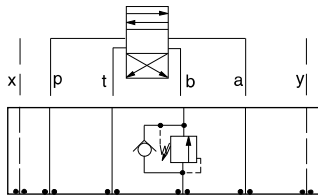


Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CJ4		CJ4/S	

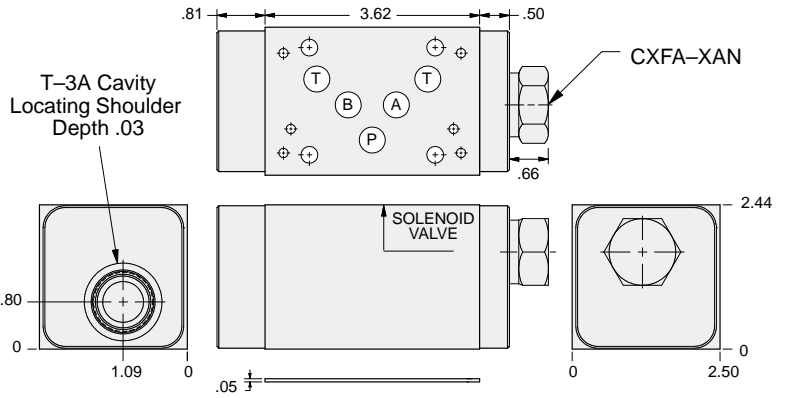
05xy COUNTERBALANCE



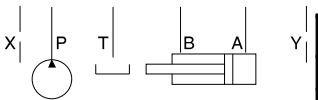
FUNCTION

On B
No pilot assist

Counterbalance Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CJ5		CJ5/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Direct Acting Relief Valve		
	RDFA Page 1.10		
OTHER VALVES:			

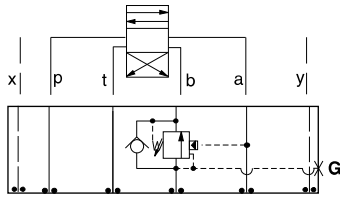


ISO 05 X,Y SANDWICH BODIES



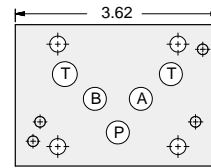
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Counterbalance Valves

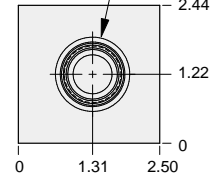
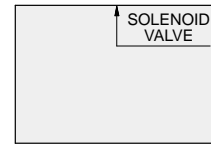
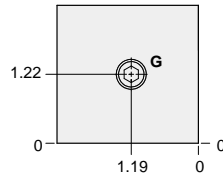


FUNCTION

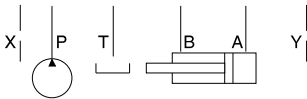
On B
Pilot from A



T-2A Cavity
Locating Shoulder
Depth 1.00



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJB		BJB/S	
.25 BSPP	BJB/M		BJB/T	

05_{xy} COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

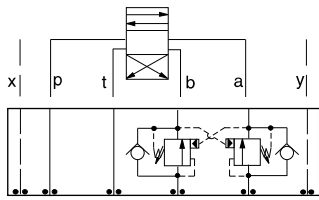
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBEA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBEG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBEH Page 4.14		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

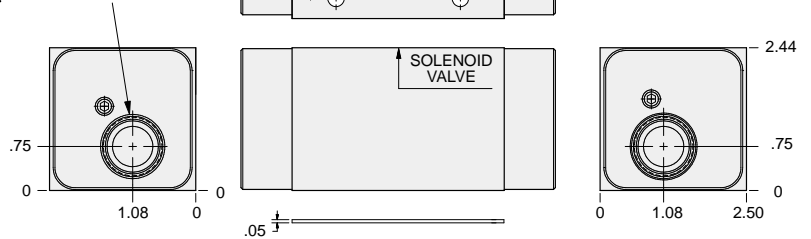


FUNCTION

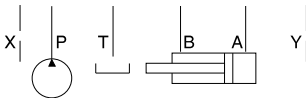
On **A** and **B**
Cross-Piloted

Counterbalance Valves

T-2A Cavity
Locating Shoulder
Depth .73
2 places.



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJY		BJY/S	

05xy COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

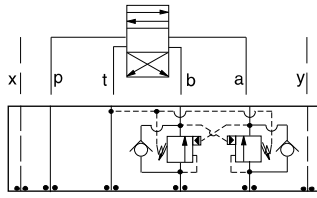
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBEA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBEG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBEH Page 4.14		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



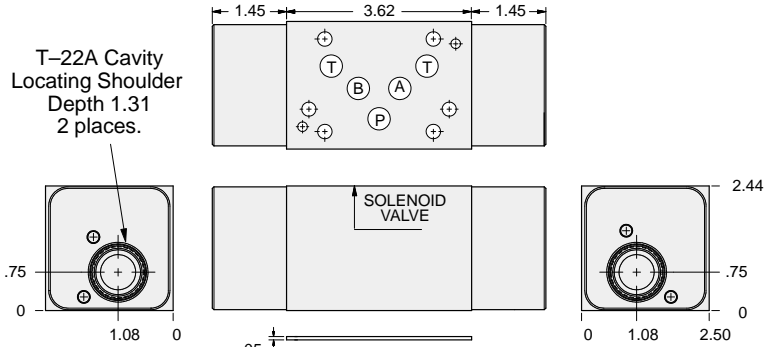
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



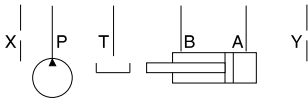
FUNCTION

On **A** and **B**
Cross-Piloted
Vents to **T**

Counterbalance Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NJY		NJY/S	

05xy COUNTERBALANCE

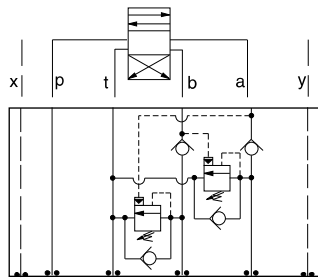
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWEA Page 4.18		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWEG Page 4.20		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



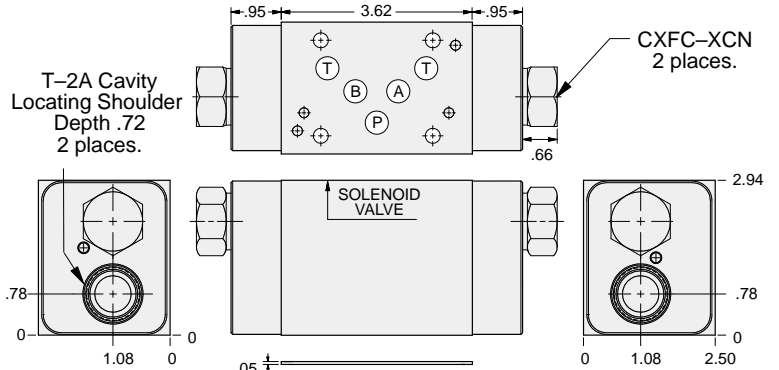
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



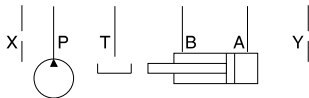
FUNCTION

Cushion Lock
Circuit
On **A** and **B**

Counterbalance Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJ8		BJ8/S	

05xy COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBEA Page 4.10		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBEG Page 4.12		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBEH Page 4.14		
OTHER VALVES:			

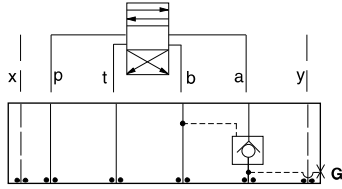


ISO 05 X,Y SANDWICH BODIES



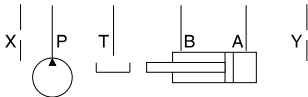
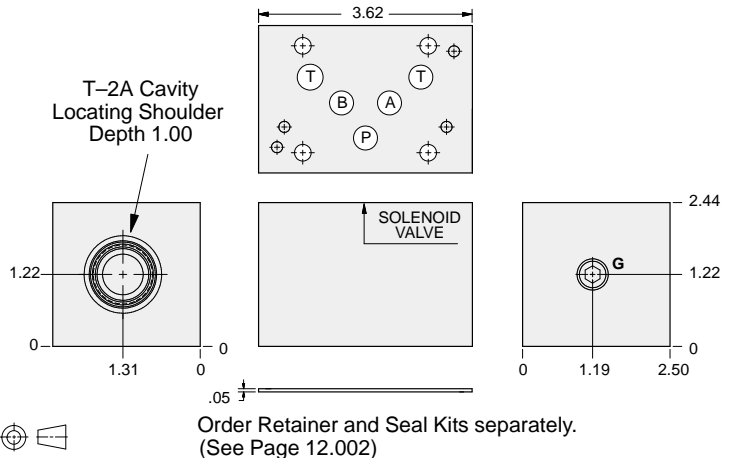
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves



FUNCTION

On A
Pilot from B



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJA		BJA/S	
.25 BSPP	BJA/M		BJA/T	

05xy P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CKEB Page 4.16		
OTHER VALVES:			

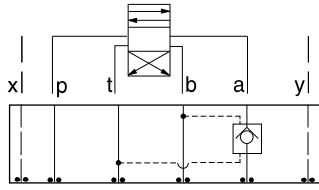


ISO 05 X,Y SANDWICH BODIES



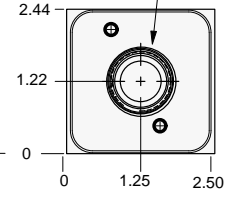
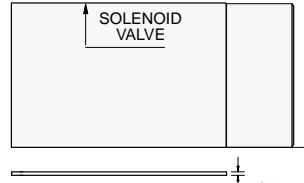
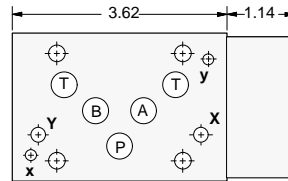
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves

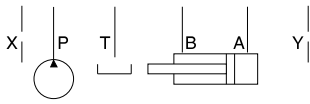


FUNCTION

On **A**
Pilot from **B**
Vent to **T**

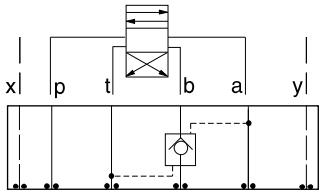


Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NJA		NJA/S	

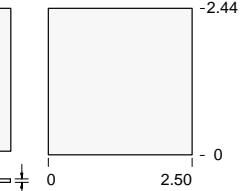
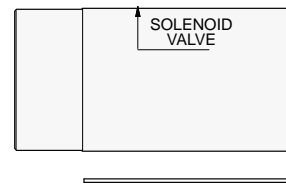
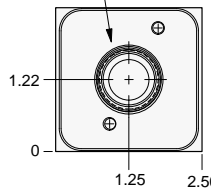
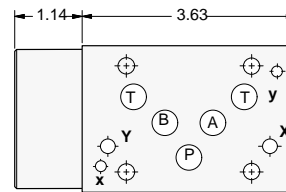
Pilot Operated Check Valves



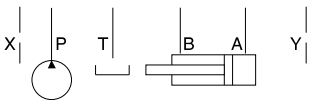
FUNCTION

On **B**
Pilot from **A**
Vent to **T**

T-22A Cavity
Locating Shoulder
Depth 1.31



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NJB		NJB/S	

05xy P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVEV Page 4.22		
OTHER VALVES:			

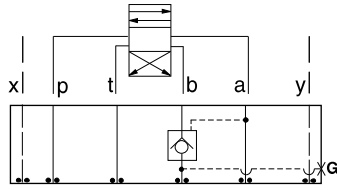


ISO 05 X,Y SANDWICH BODIES



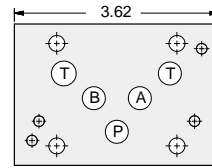
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves

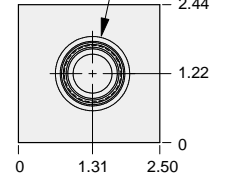
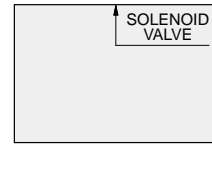
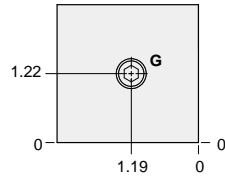


FUNCTION

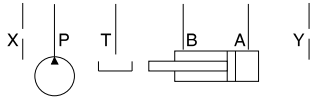
On B
Pilot from A



T-2A Cavity
Locating Shoulder
Depth 1.00



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BJB		BJB/S	
.25 BSPP	BJB/M		BJB/T	

05xy P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot-to-Open Check Valve, 3:1 Pilot Ratio</i>		
	CKEB Page 4.16		
OTHER VALVES:			

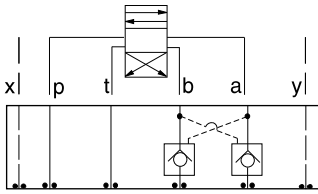


ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

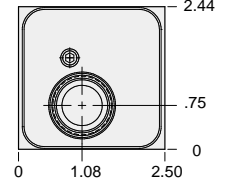
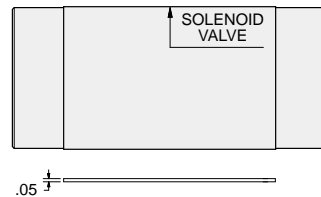
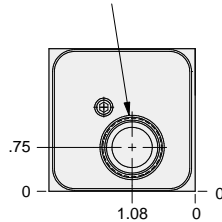
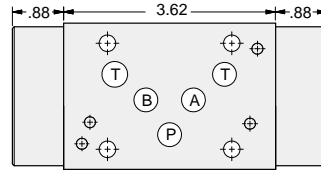
Pilot Operated Check Valves



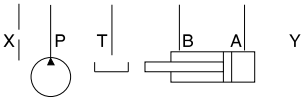
FUNCTION

On A and B
Cross-Piloted

T-2A Cavity
Locating Shoulder
Depth .73
2 places.



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJY		BJY/S	

05xy P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CKEB Page 3.16		
OTHER VALVES:			

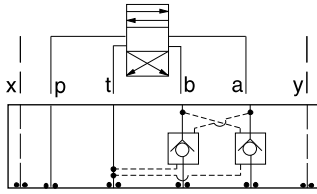


ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

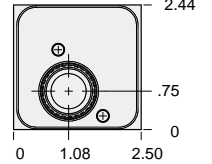
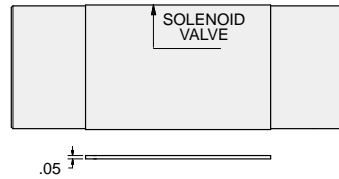
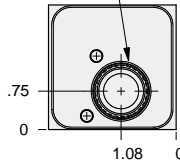
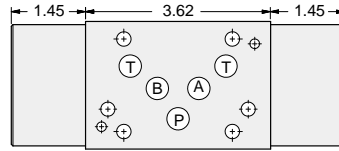
Pilot Operated Check Valves



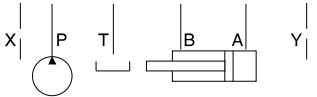
FUNCTION

On **A** and **B**
Cross-Piloted
Vents to **T**

T-22A Cavity
Locating Shoulder
Depth 1.31
2 places.



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NJY		NJY/S	

05xy P.O. CHECK

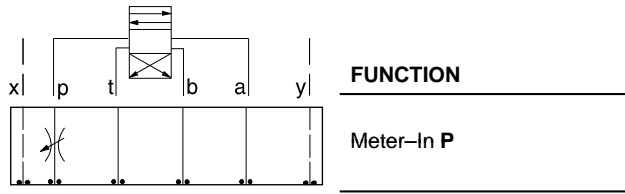
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVEV Page 4.22		
OTHER VALVES:			



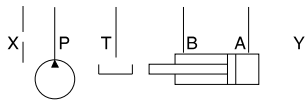
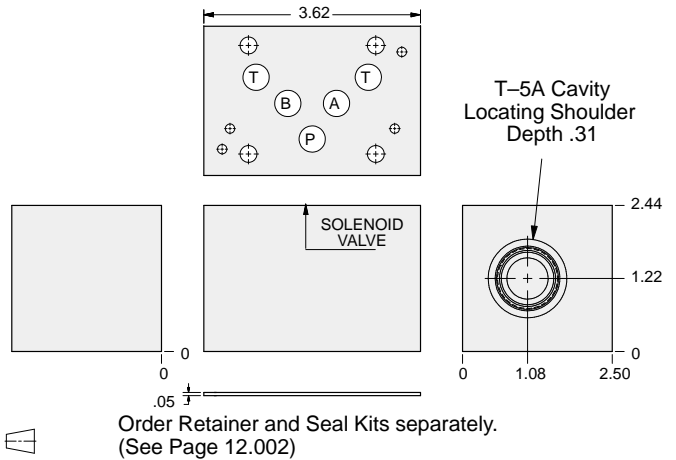
ISO 05 X,Y SANDWICH BODIES



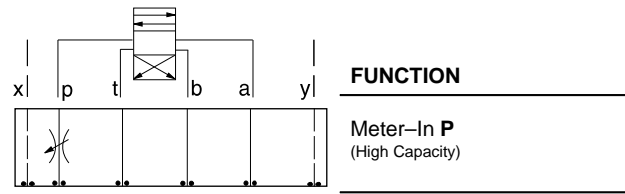
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



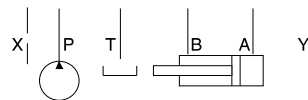
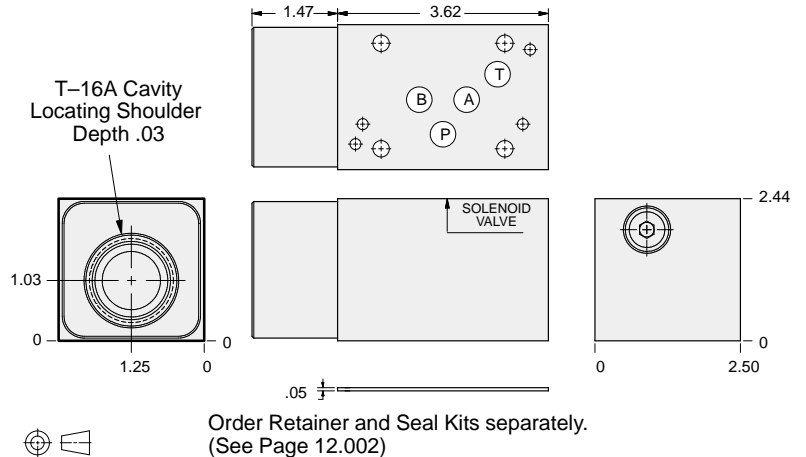
Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJP		DJP/S	



Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJO		DJO/S	

05xy FLOW CONTROL

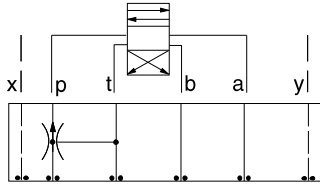
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve		
	NF*C Page 5.12, 5.13		
	Fixed Orifice, Pressure-Compensated Flow Control		
	FX*A Page 5.20, 5.21		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



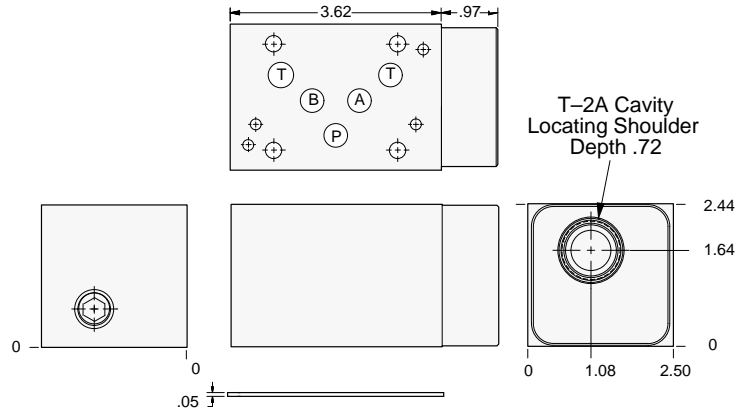
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



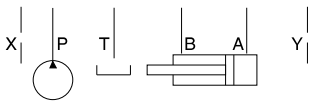
FUNCTION

Priority Flow on P

Flow Control Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
DJN		DJN/S	

05xy FLOW CONTROL

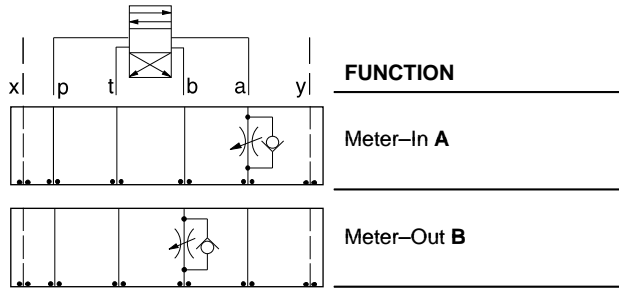
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Priority Flow Control, Bypass/Restrictive, Fixed Orifice		
	FRDA Page 6.02		
OTHER VALVES:			



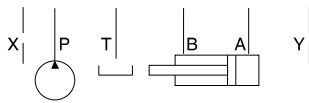
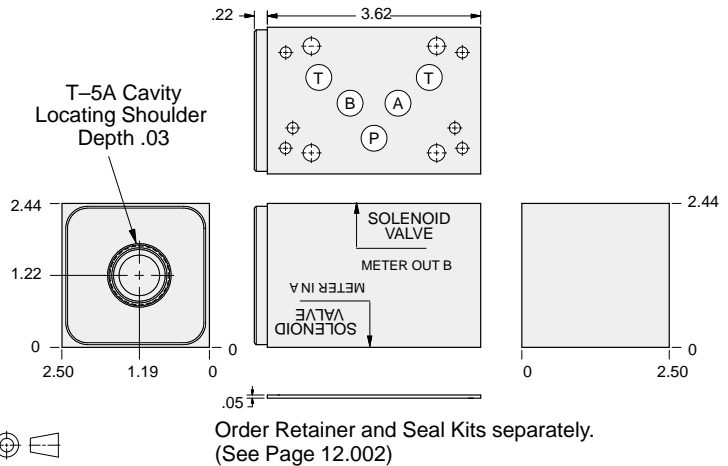
ISO 05 X,Y SANDWICH BODIES



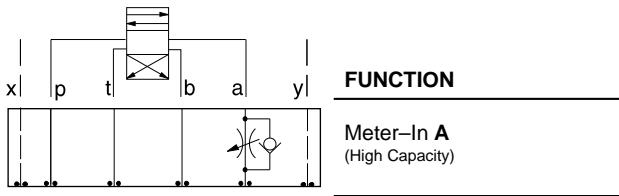
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



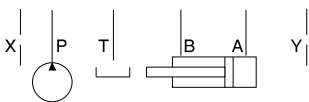
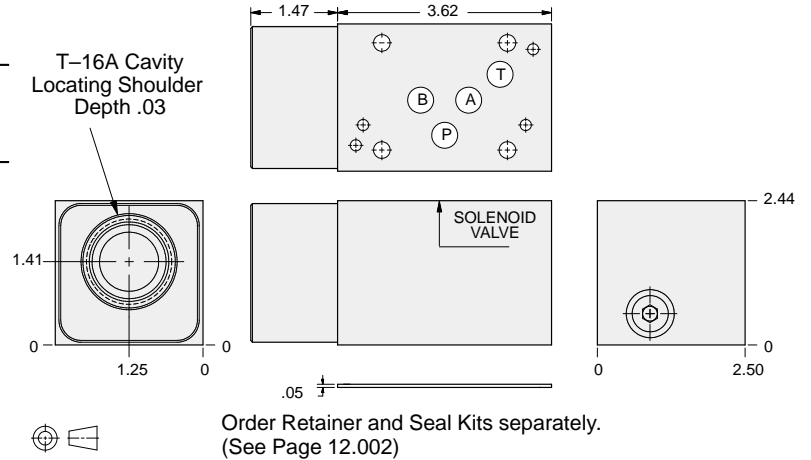
Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJB		DJB/S	



Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJC		DJC/S	

05xy FLOW CONTROL

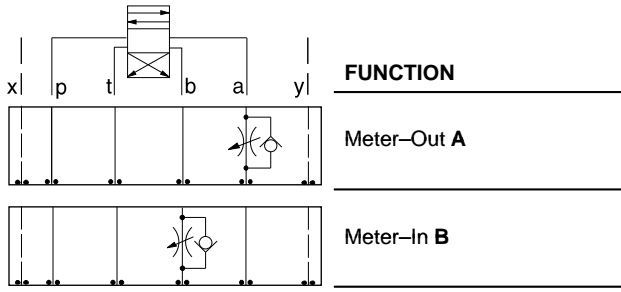
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NF*C Page 5.12, 5.13		Fixed Orifice, Pressure-Compensated Flow Control FX*A Page 5.20, 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check NC*B Page 5.16, 5.17		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FC*B Page 5.22, 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NC*C Page 5.18, 5.19		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDCB Page 5.24, FDEA Page 5.25
OTHER VALVES:	CNEC, CNGC		



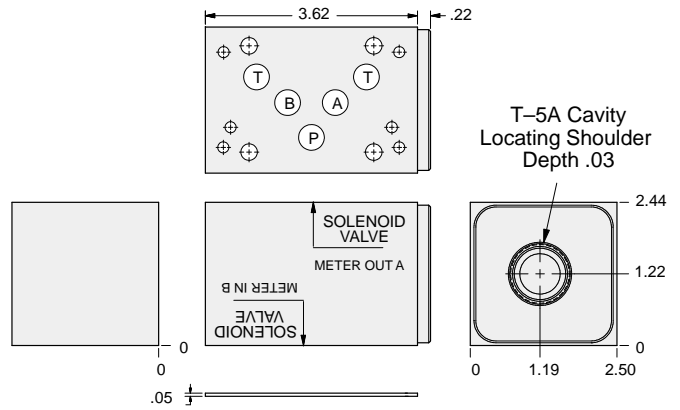
ISO 05 X,Y SANDWICH BODIES



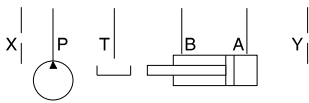
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



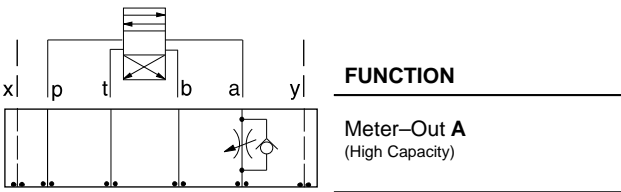
Flow Control Valves



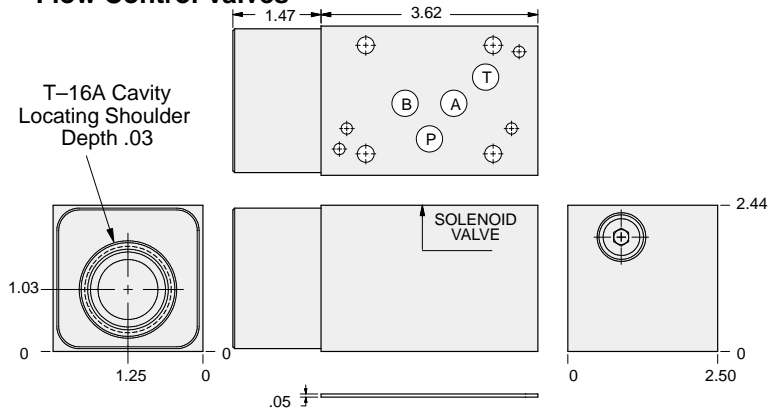
Order Retainer and Seal Kits separately.
(See Page 12.002)



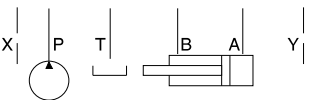
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJA		DJA/S	



Flow Control Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJD		DJD/S	

05xy FLOW CONTROL

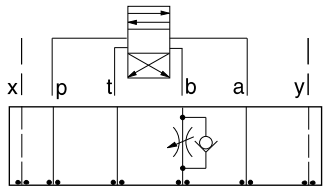
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NF*C Page 5.12, 5.13		Fixed Orifice, Pressure-Compensated Flow Control FX*A Page 5.20, 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check NC*B Page 5.16, 5.17		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FC*B Page 5.22, 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NC*C Page 5.18, 5.19		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDCB Page 5.24, FDEA Page 5.25
OTHER VALVES:	CNEC, CNGC		



ISO 05 X,Y SANDWICH BODIES



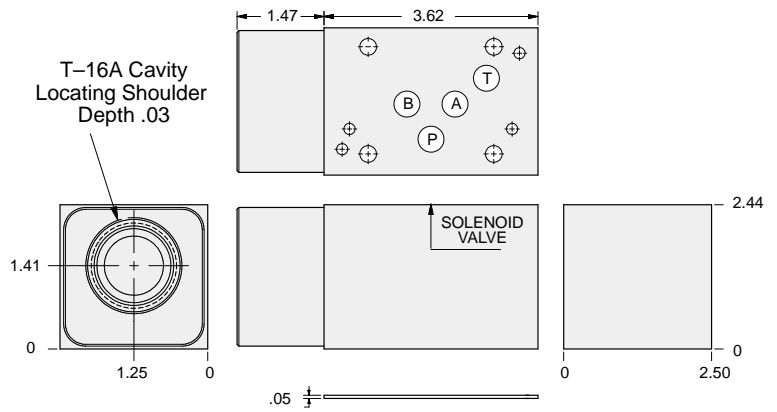
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



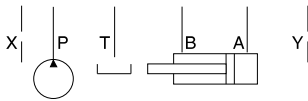
FUNCTION

Meter-In B
(High Capacity)

Flow Control Valves

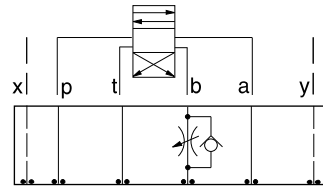


Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJE		DJE/S	

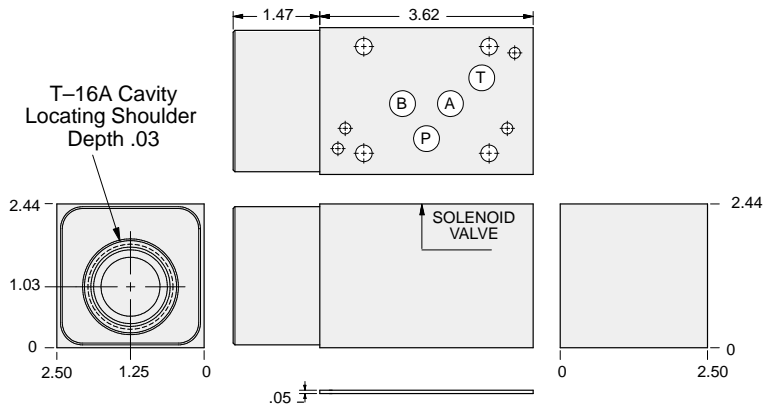
05xy FLOW CONTROL



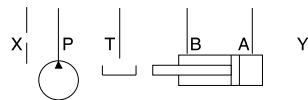
FUNCTION

Meter-Out B
(High Capacity)

Flow Control Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJF		DJF/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

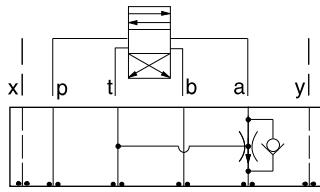
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NFEC Page 5.13		FXEA Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCFB Page 5.17		FCEB Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCFC Page 5.19		FDEA Page 5.25
OTHER VALVES:	CNGC		



ISO 05 X,Y SANDWICH BODIES



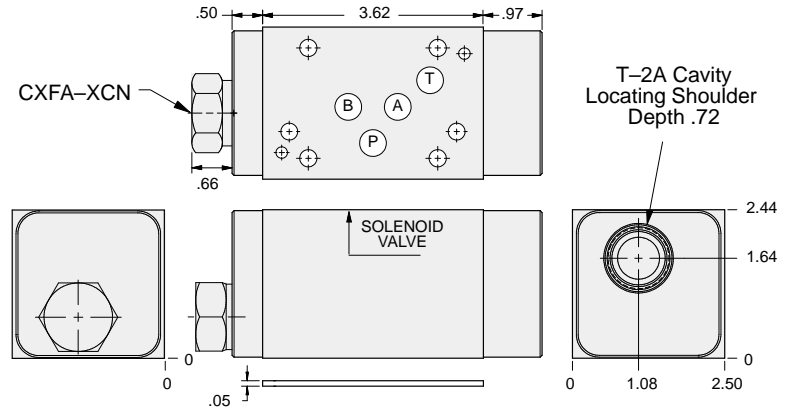
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



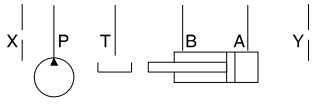
FUNCTION

Priority Flow
On A, Bypass to T
Reverse FF Check

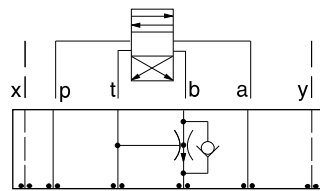
Flow Control Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



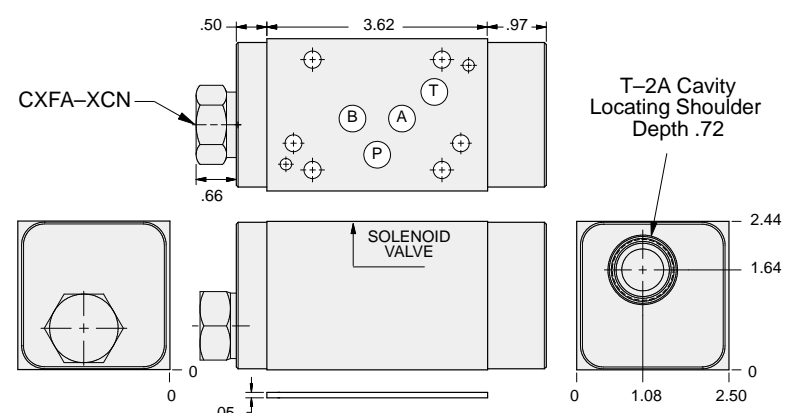
ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
WHY		WHY/S	



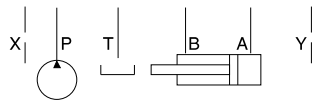
FUNCTION

Priority Flow
On B, Bypass to T
Reverse FF Check

Flow Control Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
WHZ		WHZ/S	

05xy FLOW CONTROL

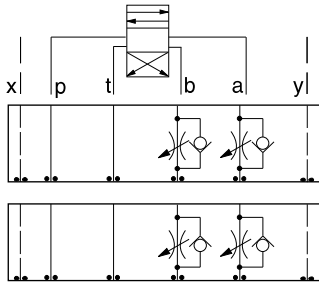
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Priority Flow Control, Bypass/Restrictive, Fixed Orifice		
	FRDA Page 6.02		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

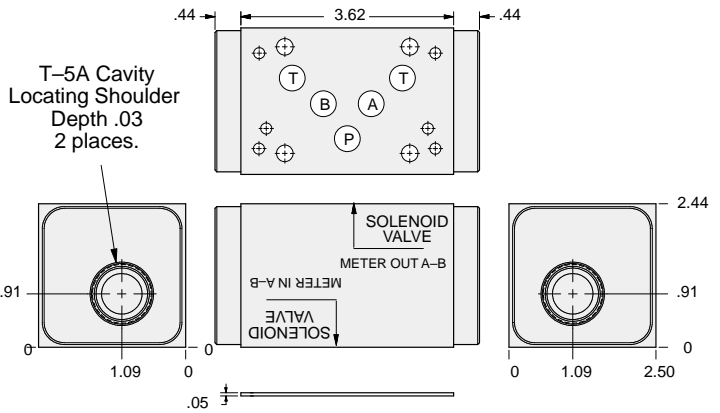


FUNCTION

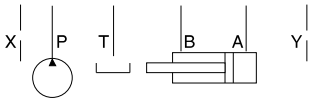
Meter-In
A and B

Meter-Out
A and B

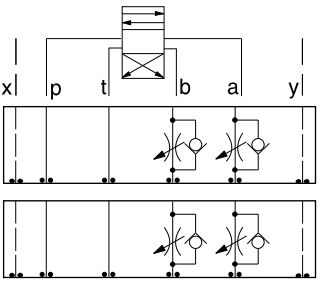
Flow Control Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJY		DJY/S	

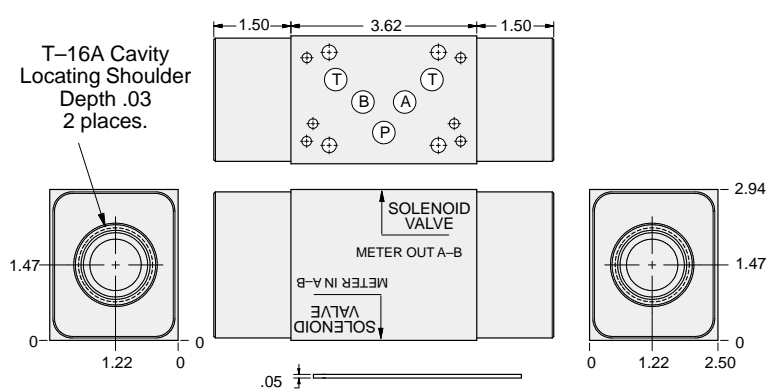


FUNCTION

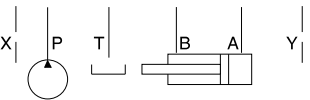
Meter-In
A and B
(High Capacity)

Meter-Out
A and B
(High Capacity)

Flow Control Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJZ		DJZ/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

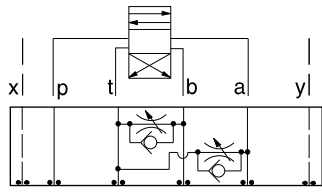
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.12, 5.13		FX*A Page 5.20, 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.16, 5.17		FC*B Page 5.22, 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.18, 5.19		FDCB Page 5.24, FDEA Page 5.25
OTHER VALVES:	CNEC, CNGC		



ISO 05 X,Y SANDWICH BODIES



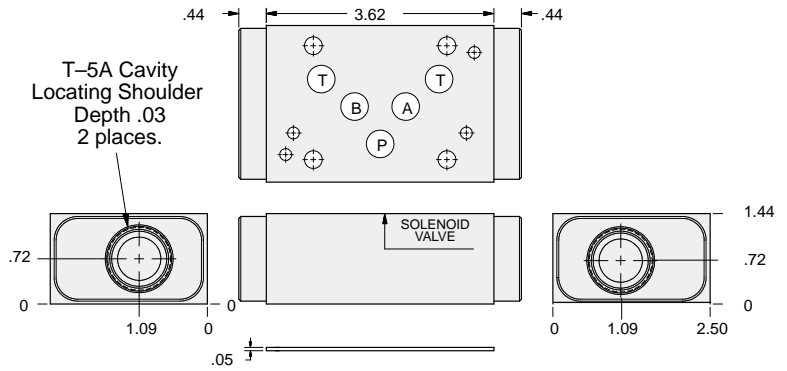
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



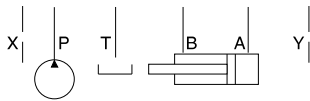
FUNCTION

Bleed-Off
A and B to T

Flow Control Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJX		DJX/S	

05xy FLOW CONTROL

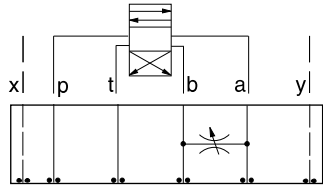
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NFDC Page 5.12		FXDA Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCEB Page 5.16		FCDB Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NCEC Page 5.18		FDCB Page 5.24
OTHER VALVES:	CNEC, CNGC		



ISO 05 X,Y SANDWICH BODIES



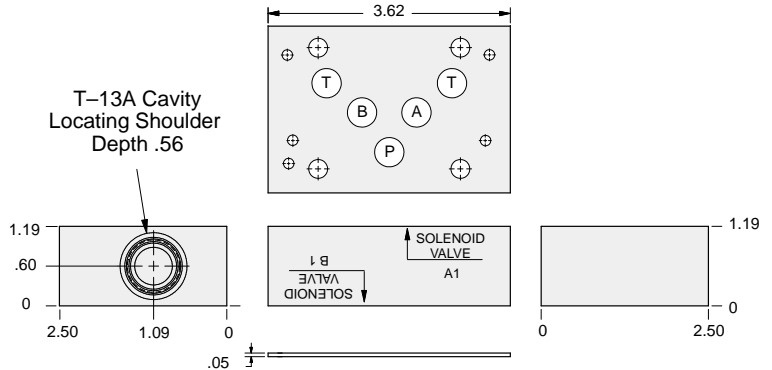
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



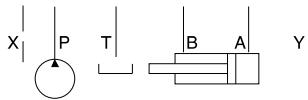
FUNCTION

Bleed-Off
A to B and
B to A

Flow Control Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJS		DJS/S	

05xy FLOW CONTROL

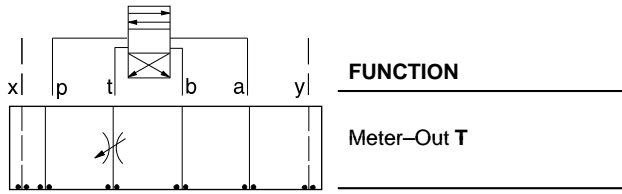
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fixed Orifice Restrictor Valve with Reverse Free Flow Check NFCC Page 5.12		Fixed Orifice, Pressure-Compensated Flow Control FXCA Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check NCCB Page 5.16		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FCCB Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NCCC Page 5.18		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDCA Page 5.24
OTHER VALVES:	CNEC, CNGC		



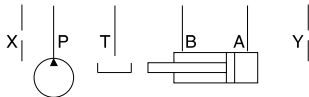
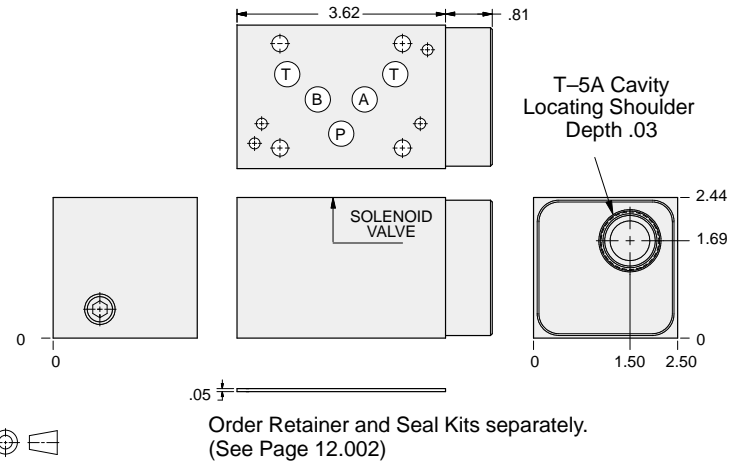
ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJT		DJT/S	

05xy FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NFDC Page 5.12		Fixed Orifice, Pressure-Compensated Flow Control FXDA Page 5.20
	Fully Adjustable Needle Valve with Reverse Free Flow Check NCEB Page 5.16		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FCDB Page 5.22
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NCEC Page 5.18		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDCB Page 5.24
OTHER VALVES:	CNEC		

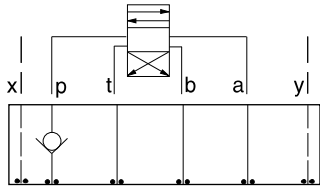




ISO 05 X,Y SANDWICH BODIES



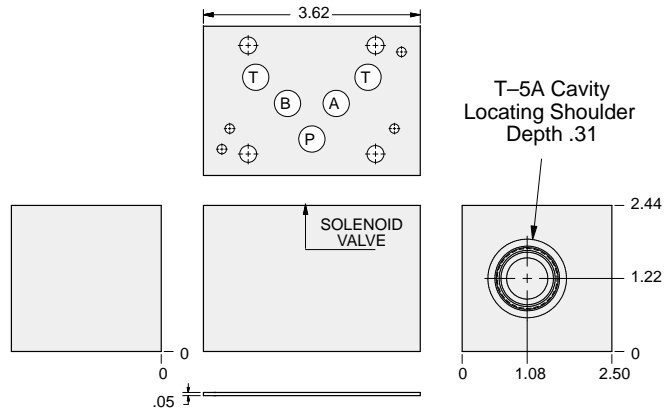
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



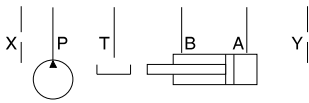
FUNCTION

On P

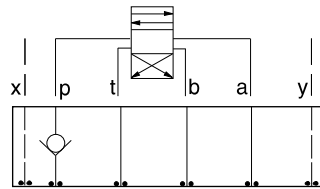
Check Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



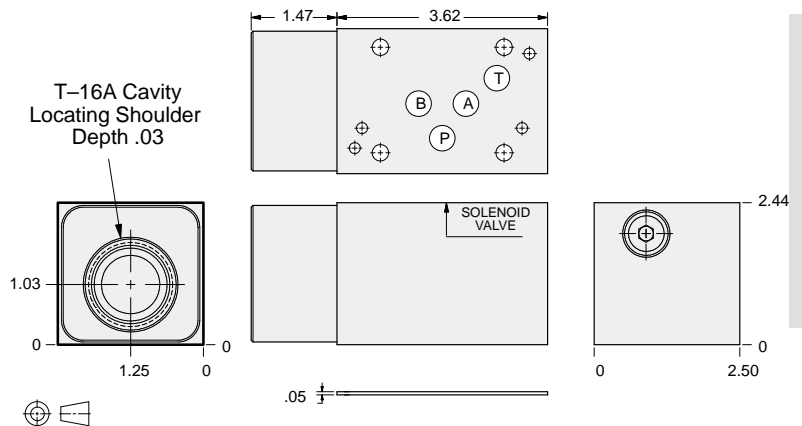
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJP		DJP/S	



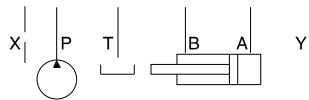
FUNCTION

On P
(High Capacity)

Check Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJO		DJO/S	

05xy CHECK

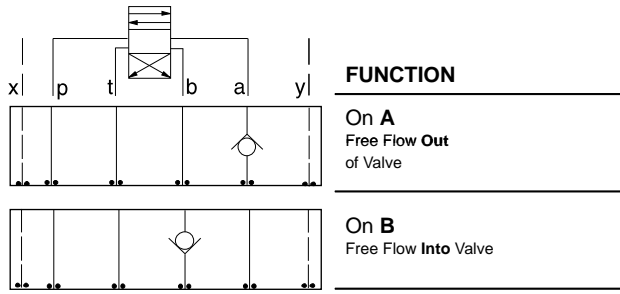
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08 (use with DJP)		
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXHA Page 5.09 (use with DJO)		
OTHER VALVES:			



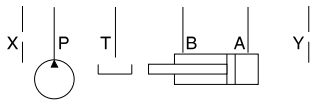
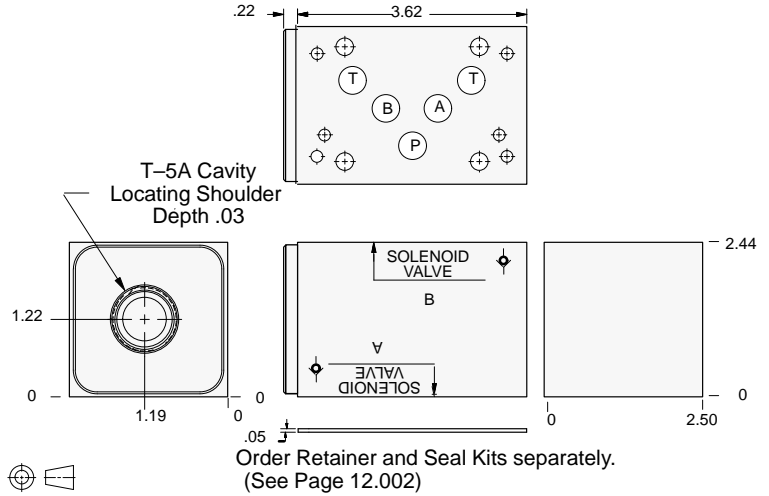
ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

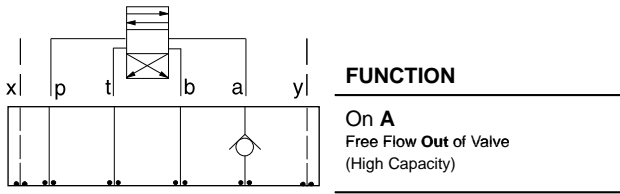


Check Valves

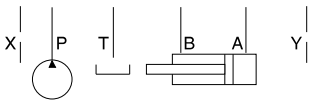
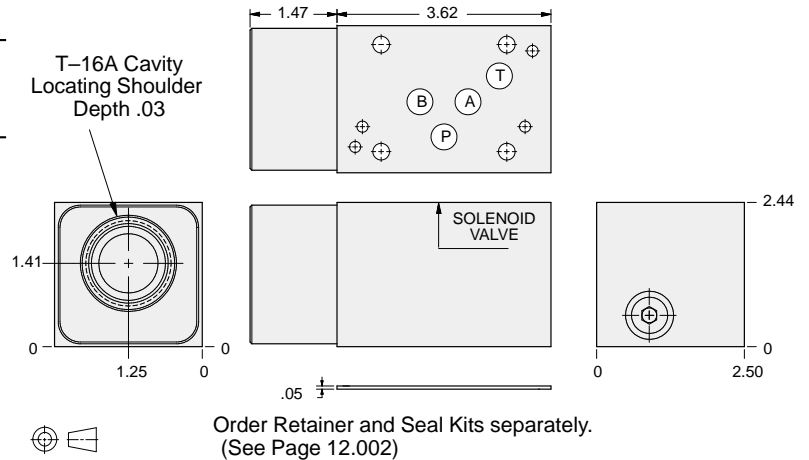


ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJK		DJK/S	

05xy CHECK



Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJC		DJC/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

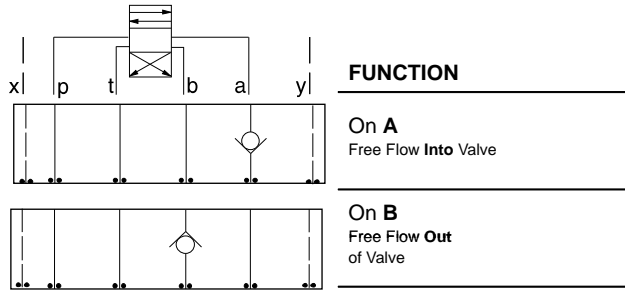
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08, (use with DJK)		
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXHA Page 5.09 (use with DJC)		
OTHER VALVES:			



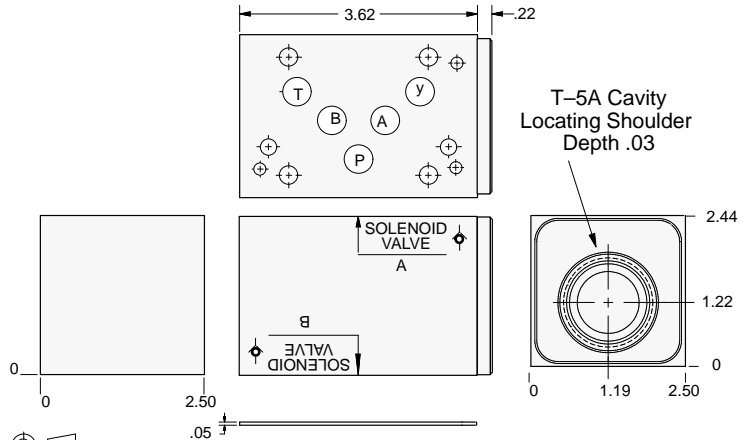
ISO 05 X,Y SANDWICH BODIES



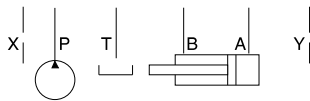
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



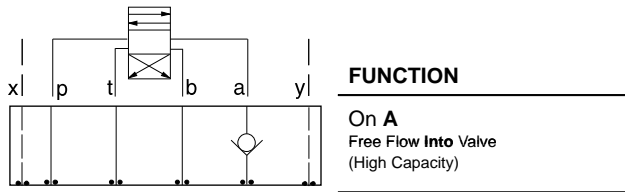
Check Valves



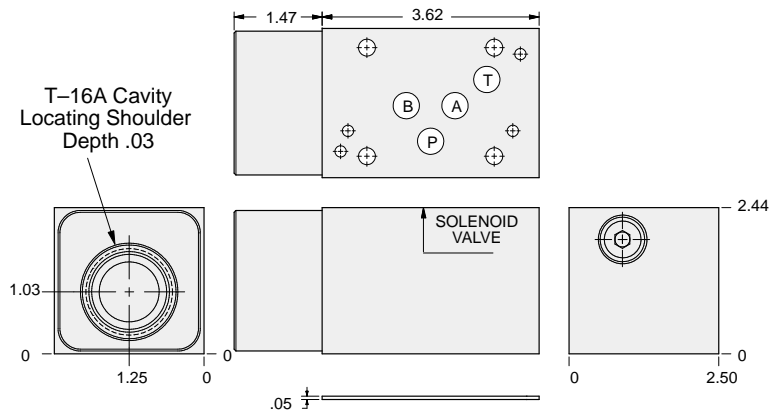
Order Retainer and Seal Kits separately.
(See Page 12.002)



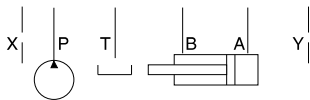
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJJ		DJJ/S	



Check Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJD		DJD/S	

05xy CHECK

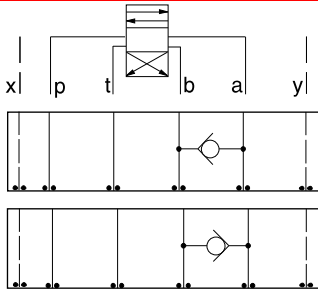
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08 (use with DJJ)		
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXHA Page 5.09 (use with DJJ)		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

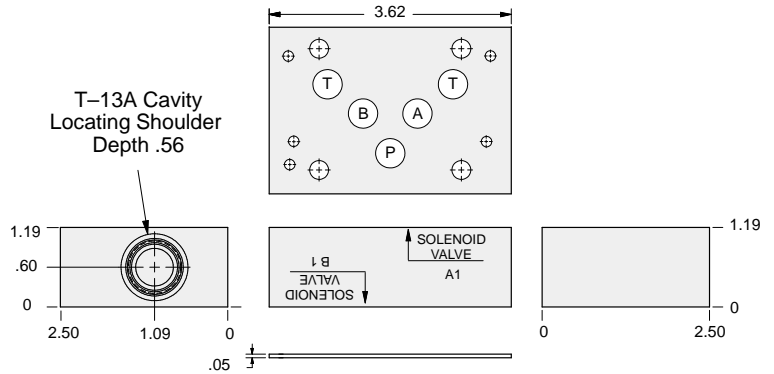


FUNCTION

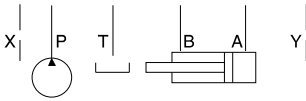
B to A

A to B

Check Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
DJS		DJS/S	

05_{xy} CHECK

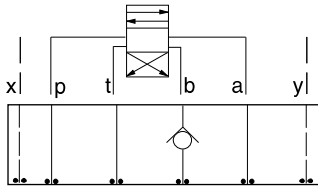
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXDA Page 3.08		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



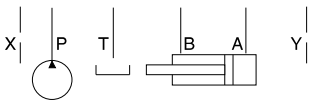
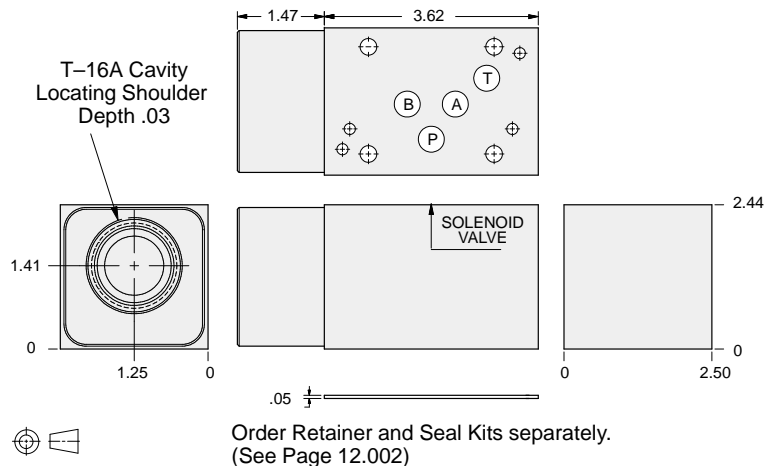
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



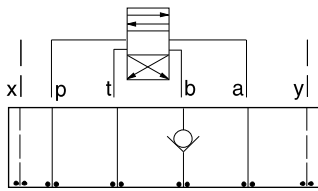
FUNCTION

On B
Free Flow Out of Valve
(High Capacity)

Check Valves



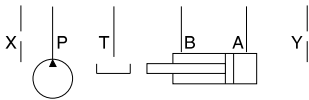
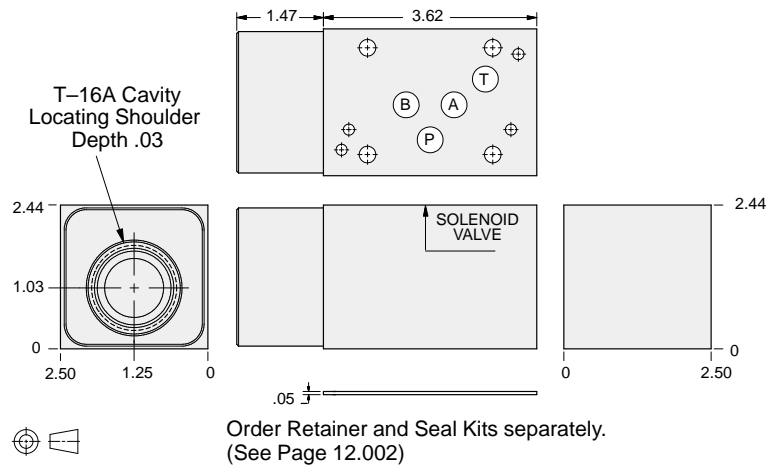
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJE		DJE/S	



FUNCTION

On B
Free Flow Into Valve
(High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJF		DJF/S	

05xy CHECK

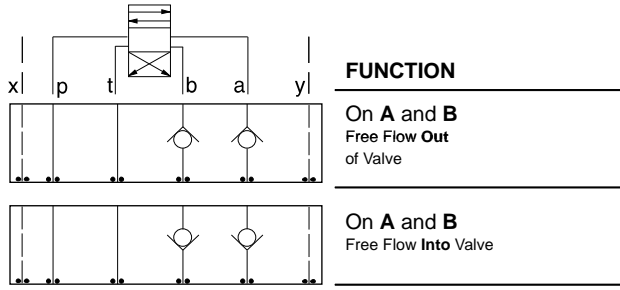
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXHA Page 5.09		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

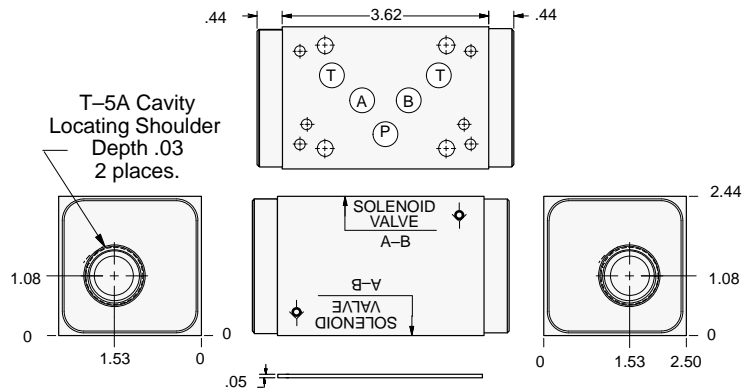


FUNCTION

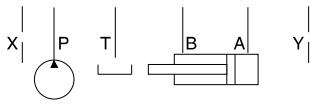
On A and B
Free Flow Out
of Valve

On A and B
Free Flow Into
Valve

Check Valves

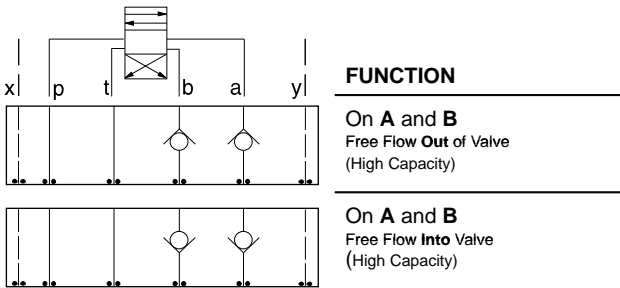


Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJL		DJL/S	

05xy CHECK

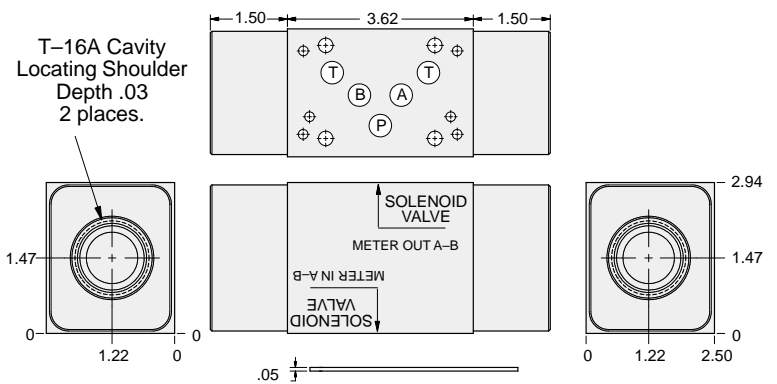


FUNCTION

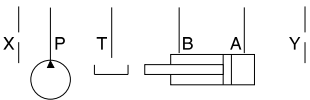
On A and B
Free Flow Out
of Valve
(High Capacity)

On A and B
Free Flow Into
Valve
(High Capacity)

Check Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJZ		DJZ/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

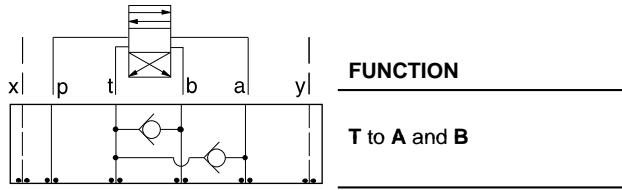
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08 (use with DJL)		
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXHA Page 5.09 (use with DJZ)		
OTHER VALVES:	NFEC, FXEA		



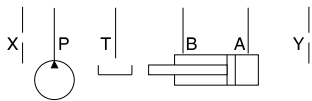
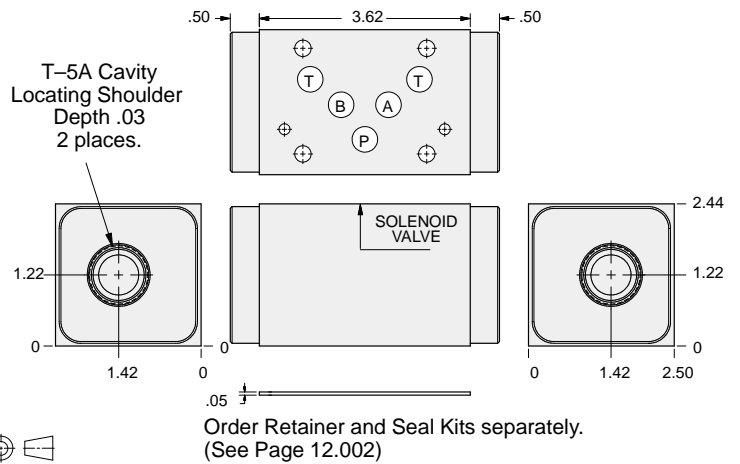
ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJW		DJW/S	

05_{xy} CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08		
OTHER VALVES:			

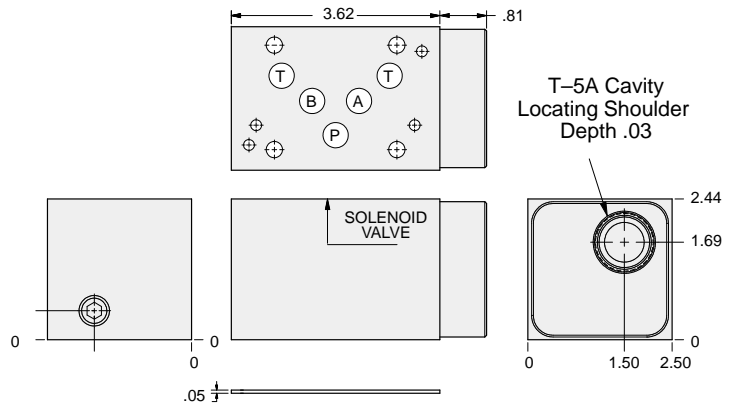
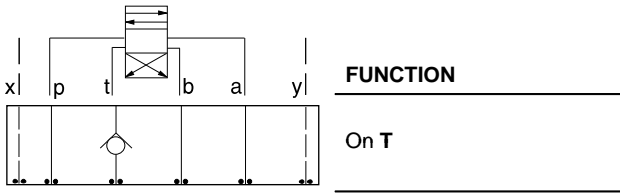


ISO 05 X,Y SANDWICH BODIES

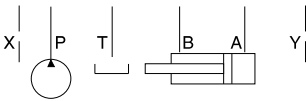


- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Check Valves



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	DJT		DJT/S	
.25 BSPP	DJT/M		DJT/T	

05xy CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXFA Page 5.08		
OTHER VALVES:			

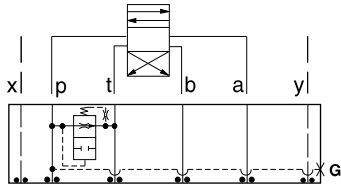




ISO 05 X,Y SANDWICH BODIES



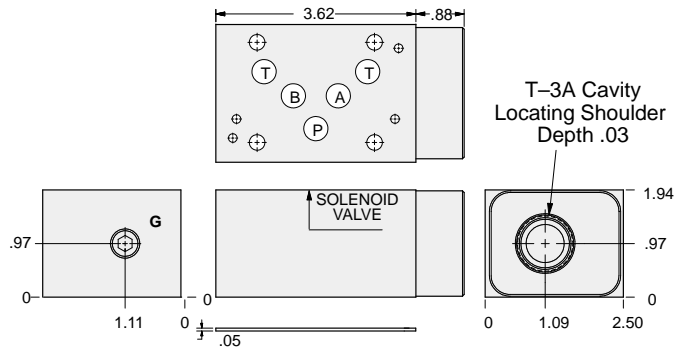
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



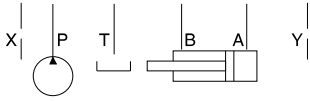
FUNCTION

Air-Bleed and Start-Up

Circuit Savers



Order Retainer and Seal Kits separately.
(See Page 12.002)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CJP		CJP/S	
.25 BSPP	CJP/M		CJP/T	

05_{xy} CIRCUIT SAVER

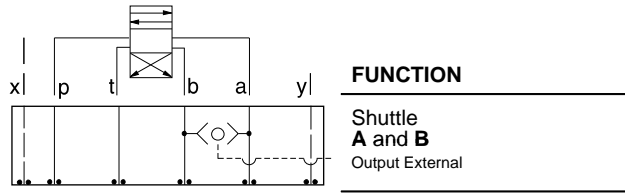
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Air Bleed and Start-up Valve		
	NQEB Page 10.16		
OTHER VALVES:			



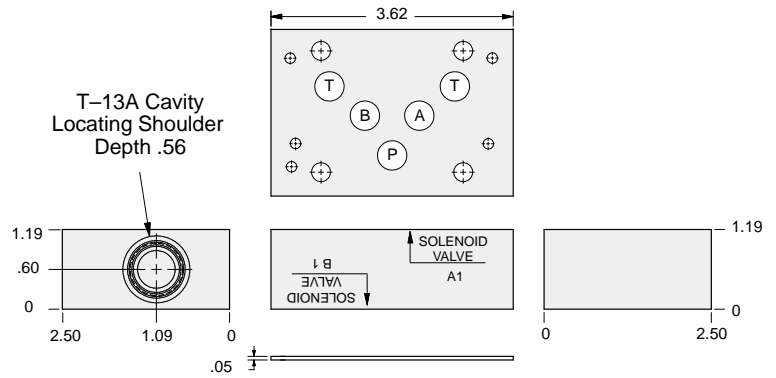
ISO 05 X,Y SANDWICH BODIES



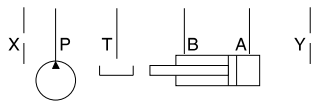
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



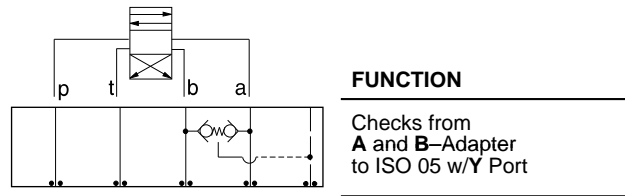
Circuit Savers



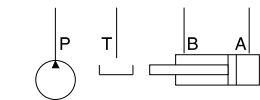
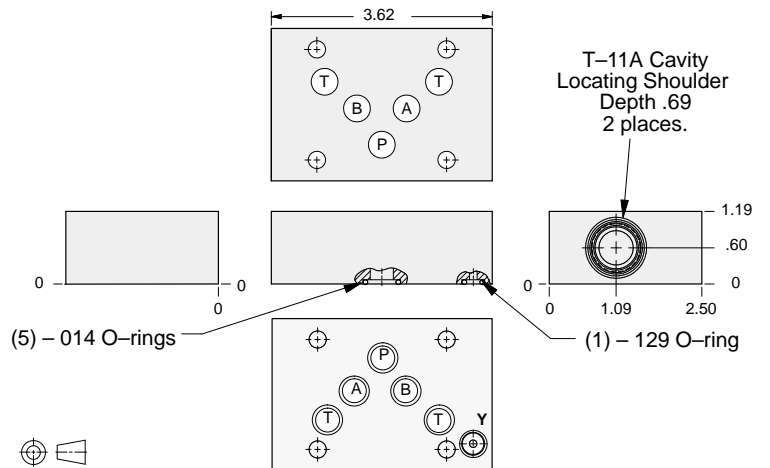
Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DJS		DJS/S	



Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJS		BJS/S	

05xy CIRCUIT SAVER

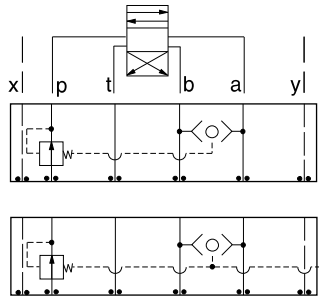
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
 1-2 Ext.	2 Port Shuttle Valve, Signal External		
	CSAA Page 10.09 (use with DJS)		
 1-2 3	3 Port Back-to-Back Check Valve, Signal at Port 3		
	CDAB Page 10.10 (use with BJS)		
OTHER VALVES:			



ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

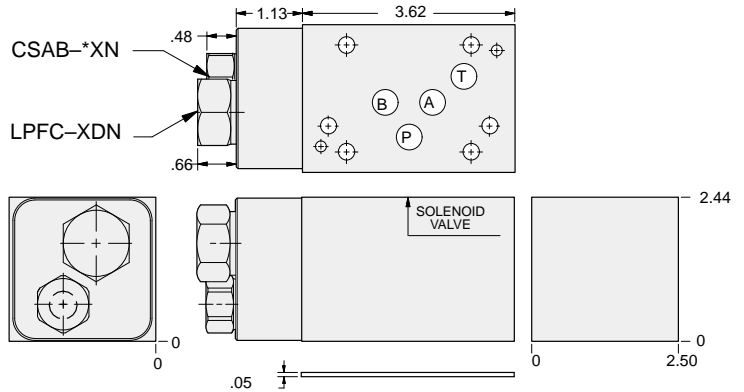


FUNCTION

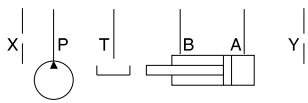
Pressure Compensator (Restrictive)

Pressure Compensator (Restrictive) w/Load-Sensing Port

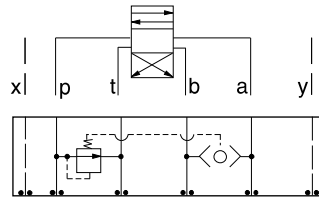
Circuit Savers



Order Retainer and Seal Kits separately. (See Page 12.002)



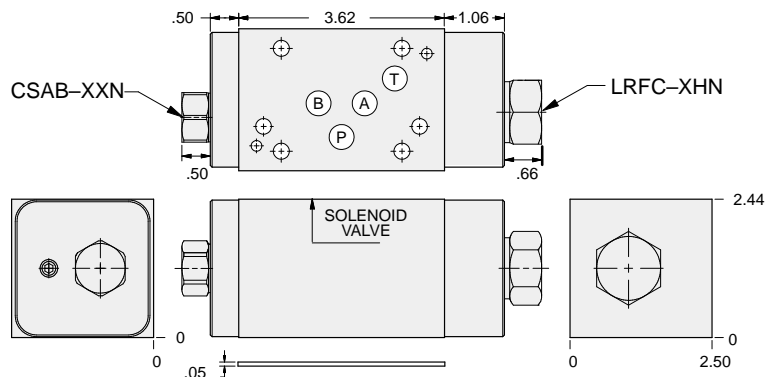
Shuttle Cartridge	Load-Sensing Port in Shuttle	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
CSAB-XXN	None	YFEK-XHN-BB		YFEK-XHN-BB/S	
CSAB-AXN	SAE-4	YFEQ-XHN-BB		YFEQ-XHN-BB/S	
CSAB-BXN	.25 BSPP	YFEQ-XHN-BB/M		YFEQ-XHN-BB/T	



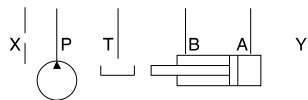
FUNCTION

Pressure Compensator (Bypass)

Circuit Savers



Order Retainer and Seal Kits separately. (See Page 12.002)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YFEW-XHN-BB		YFEW-XHN-BB/S	

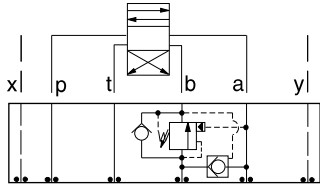
05xy CIRCUIT SAVER



ISO 05 X,Y SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

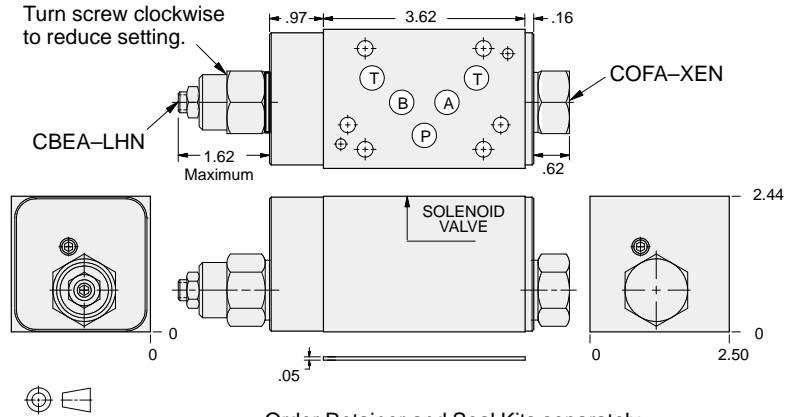


FUNCTION

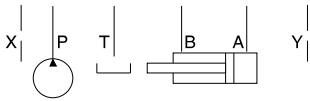
B to A
Regenerative

Circuit Savers

Turn screw clockwise to reduce setting.



Order Retainer and Seal Kits separately.
(See Page 12.002)



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
YDEL-LHN-BB		YDEL-LHN-BB/S	

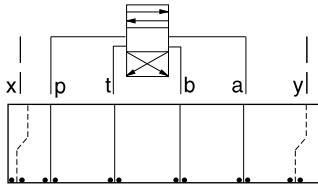
05_{xy} CIRCUIT SAVER



ISO 05 X,Y SANDWICH BODIES



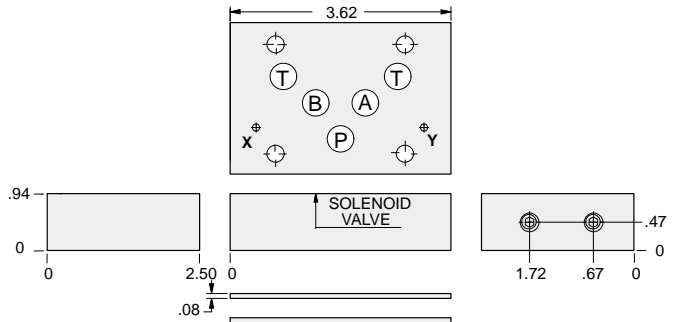
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



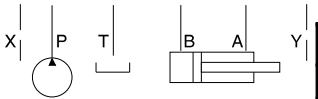
FUNCTION

ISO 05 with X and Y
Amer to Euro

Circuit Savers

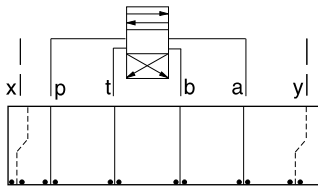


Order Seal Kit
#990-120-009
separately.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZSX		ZSX/S	

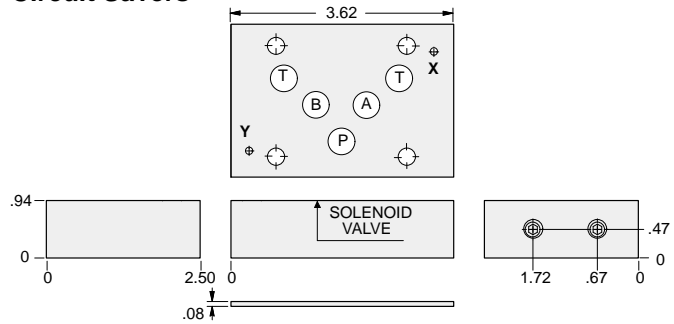
05_{xy} CIRCUIT SAVER



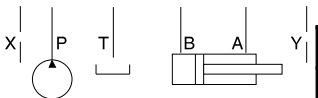
FUNCTION

ISO 05 with X and Y
Euro to Amer

Circuit Savers



Order Seal Kit
#990-120-012
separately.



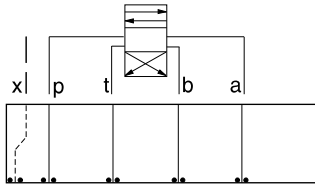
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZSW		ZSW/S	



ISO 05 X,Y SANDWICH BODIES



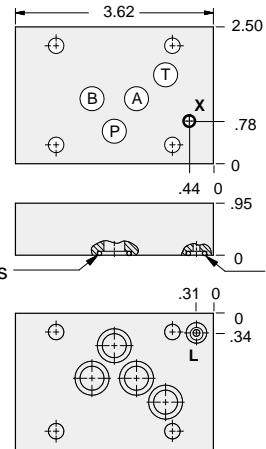
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

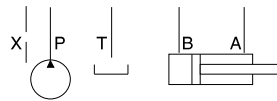
Bosch L Port to ISO 05 X Port (European)

Circuit Savers

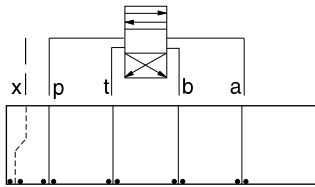


(4) - 014 O-rings

(1) - 010 O-ring



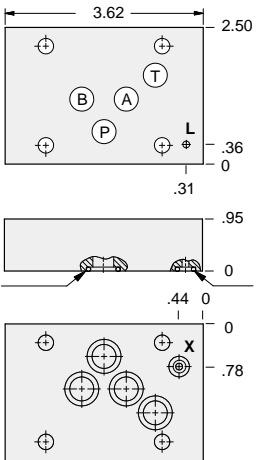
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZJA		ZJA/S	



FUNCTION

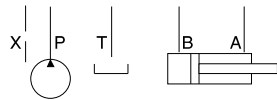
ISO 05 X Port (European) to Bosch L Port

Circuit Savers



(4) - 014 O-rings

(1) - 010 O-ring



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
ZJB		ZJB/S	

05_{xy} CIRCUIT SAVER

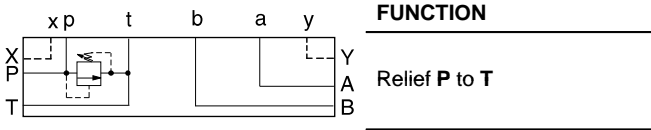


ISO 05 X,Y SANDWICH BODIES

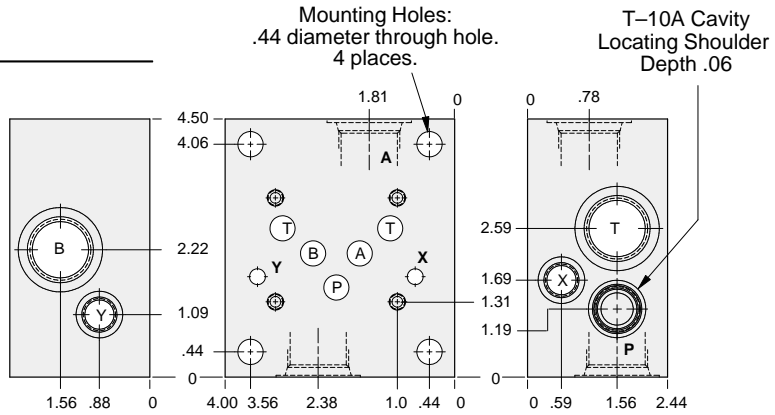


- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Side Ported Subplates

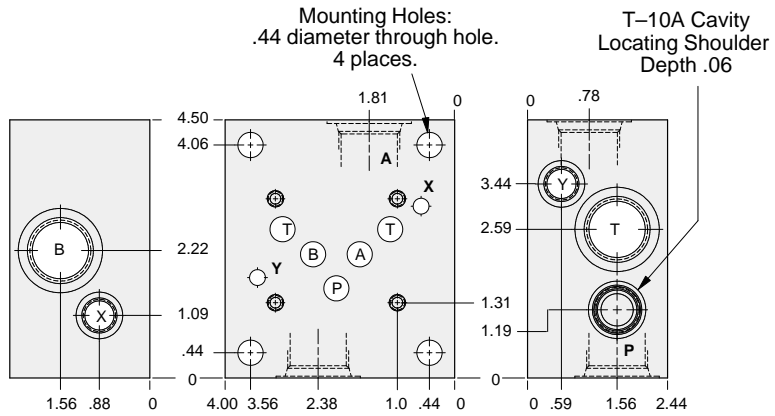


4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0



CETOP VERSION

4 Interface Bolt Holes
x .50 deep
Inch: .250-20 UNC
Metric: M6 x 1.0



U.S. VERSION

05xy SUBPLATE

Bolt Hole Interface	Port A,B,P,T	Port X,Y	ALUMINUM			DUCTILE IRON		
			Model Code U.S.	Model Code CETOP	List Price	Model Code U.S.	Model Code CETOP	List Price
Inch	.50 NPTF	.25 NPTF	ZHH	ZHP		ZHH/S	ZHP/S	
Inch	.75 NPTF	.25 NPTF	ZHJ	ZHQ		ZHJ/S	ZHQ/S	
Inch	SAE-10	SAE-6	ZHK	ZHR		ZHK/S	ZHR/S	
Inch	SAE-12	SAE-6	ZHL	ZHS		ZHL/S	ZHS/S	
Metric	.50 BSPP	.25 BSPP	ZHM	ZHT		ZHM/S	ZHT/S	
Metric	.75 BSPP	.25 BSPP	ZHN	ZHV		ZHN/S	ZHV/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPEC Page 1.06		RDDA Page 1.10
	Pilot Operated, Rapid Response Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RPEE Page 1.08		RQEB Page 1.12

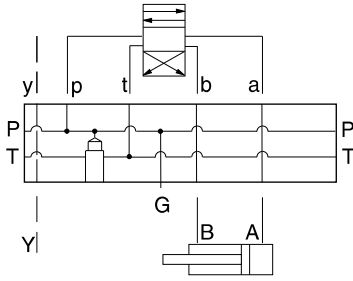


BAR MANIFOLDS



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

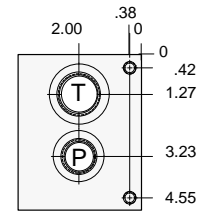
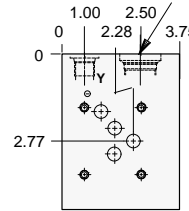
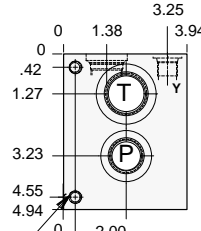
D05 H (U.S) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

One Station
(U.S. Version)

T-3A Cavity
Locating Shoulder
Depth .31



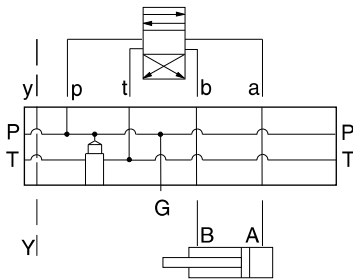
Mounting Holes:
Inch: .375 – 16UNC
x .75 in. Deep.
Metric: M10 x 1.5 – 6H
x .75 in. Deep.
2 places each end



Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VMC		VMC/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VMJ		VMJ/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VMR		VMR/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

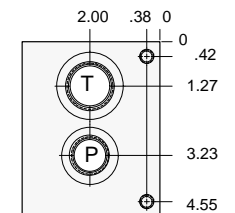
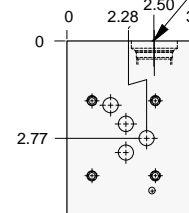
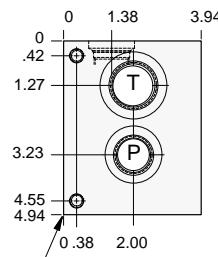
D05 H (CETOP) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

One Station
(CETOP Version)

T-3A Cavity
Locating Shoulder
Depth .31



Mounting Holes:
Inch: .375 – 16UNC
x .75 in. Deep.
Metric: M10 x 1.5 – 6H
x .75 in. Deep.
2 places each end



Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VRE		VRE/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VRL		VRL/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VRT		VRT/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			

BAR MANIFOLDS

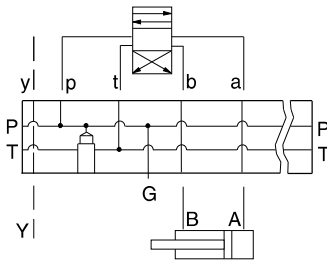


BAR MANIFOLDS



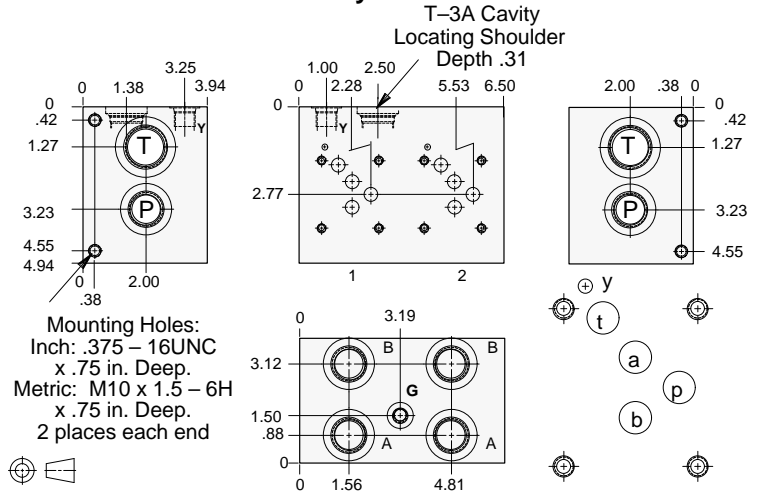
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

D05 H (U.S.) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

Two Station
(U.S. Version)

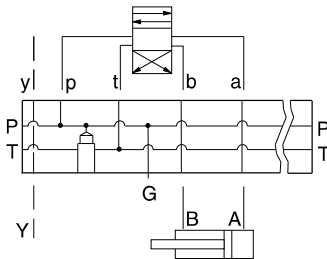


Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VMD		VMD/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VMK		VMK/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VMT		VMT/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

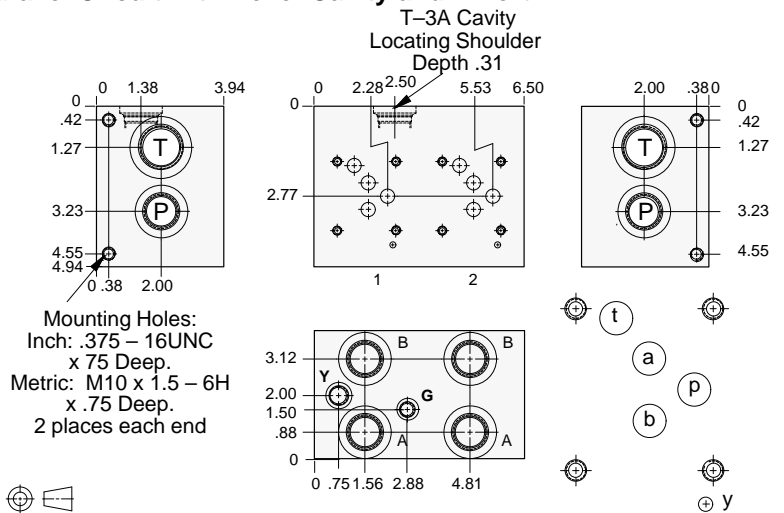
BAR MANIFOLDS

D05 H (CETOP) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

Two Station
(CETOP Version)



Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VRF		VRF/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VRM		VRM/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VRV		VRV/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			

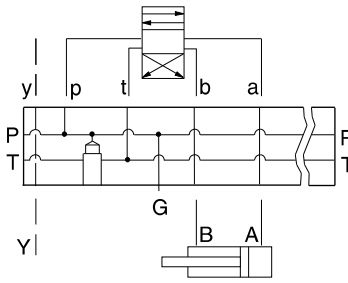


BAR MANIFOLDS



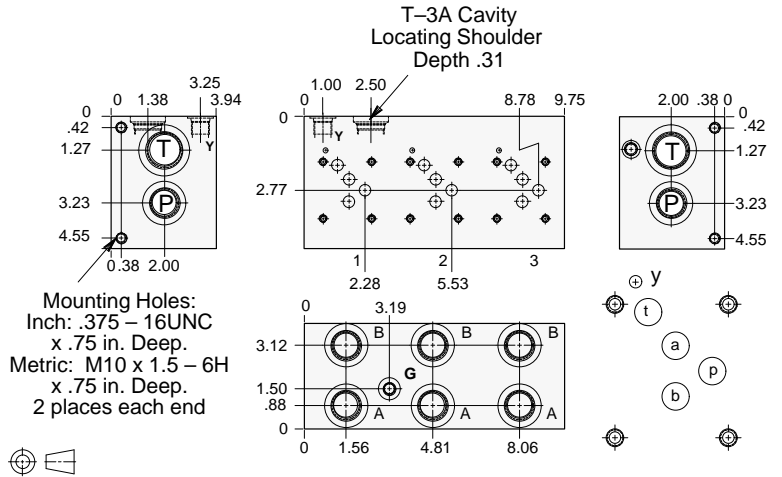
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

D05 H (U.S.) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

Three Station
(U.S. Version)

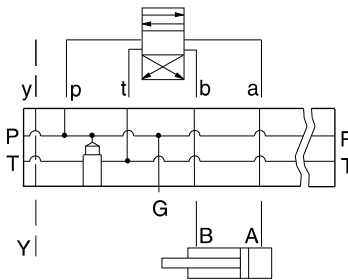


Mounting Holes:
Inch: .375 – 16UNC
x .75 in. Deep.
Metric: M10 x 1.5 – 6H
x .75 in. Deep.
2 places each end

Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VME		VME/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VML		VML/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VMW		VMW/S	

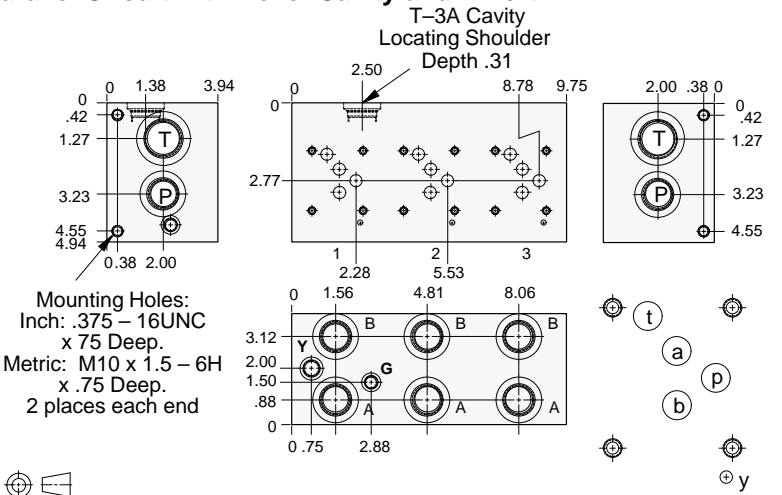
Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

D05 H (CETOP) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

Three Station
(CETOP Version)



Mounting Holes:
Inch: .375 – 16UNC
x .75 Deep.
Metric: M10 x 1.5 – 6H
x .75 Deep.
2 places each end

Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VRG		VRG/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VRN		VRN/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VRW		VRW/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			

BAR MANIFOLDS

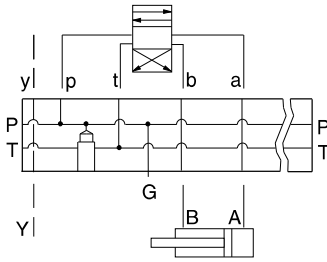


BAR MANIFOLDS



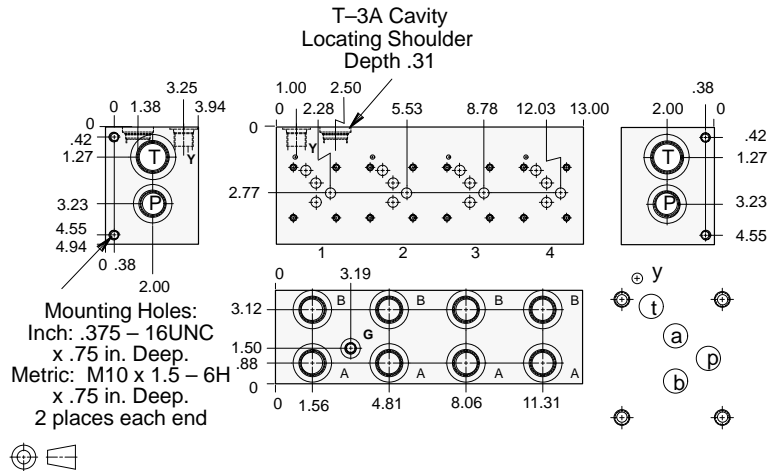
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

D05 H (U.S.) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

Four Station
(U.S. Version)

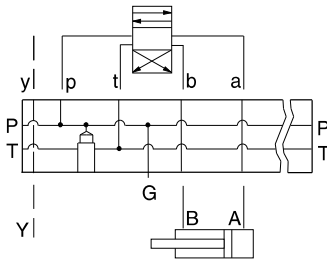


Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VMF		VMF/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VMM		VMM/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VMX		VMX/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

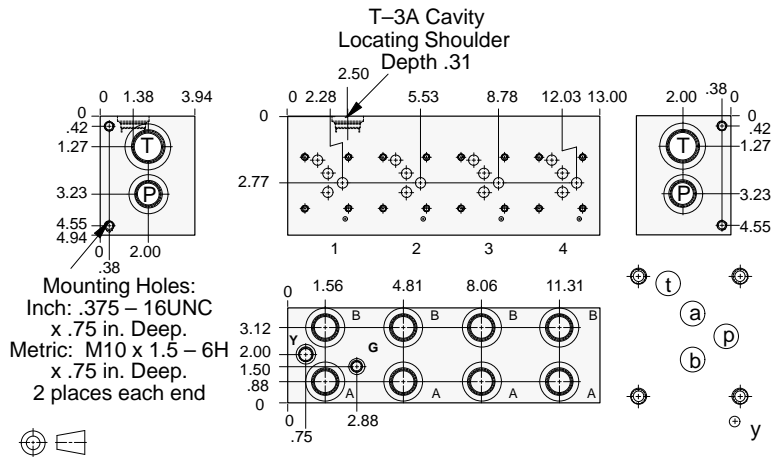
BAR MANIFOLDS

D05 H (CETOP) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

Four Station
(CETOP Version)



Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VRH		VRH/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VRP		VRP/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VRX		VRX/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			

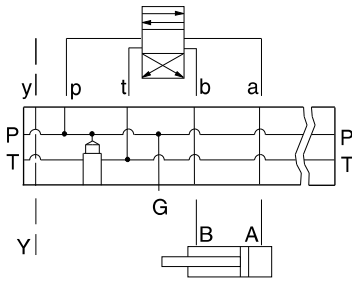


BAR MANIFOLDS



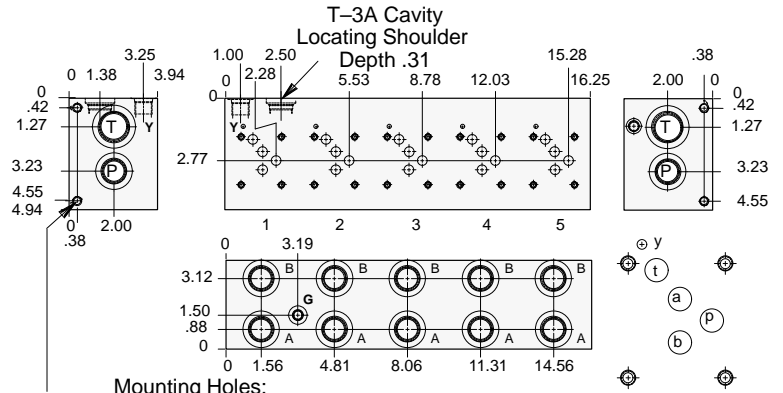
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

D05 H (U.S.) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

Five Station
(U.S. Version)

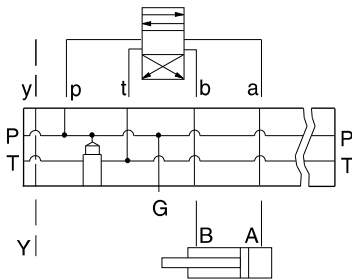


Mounting Holes:
Inch: .375 – 16UNC x .75 in. Deep.
Metric: M10 x 1.5 – 6H x .75 in. Deep.
2 places each end

Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VMG		VMG/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VMN		VMN/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VMY		VMY/S	

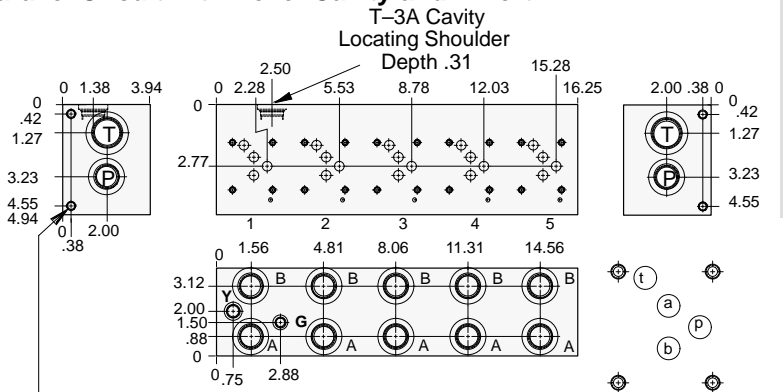
Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

D05 H (CETOP) Parallel Circuit with Relief Cavity and Y Port



FUNCTION

Five Station
(CETOP Version)



Mounting Holes:
Inch: .375 – 16UNC x .75 in. Deep.
Metric: M10 x 1.5 – 6H x .75 in. Deep.
2 places each end

Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VRJ		VRJ/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VRR		VRR/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VRY		VRY/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			

BAR MANIFOLDS



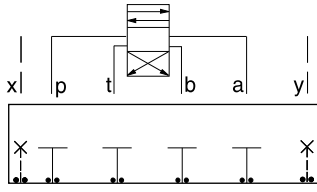


ISO 05 X,Y SANDWICH BODIES



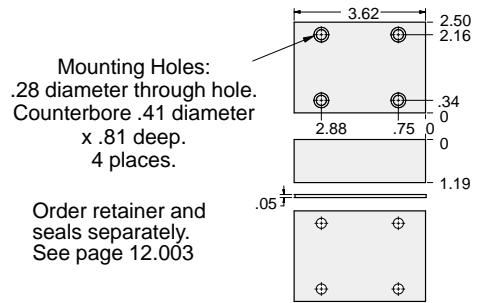
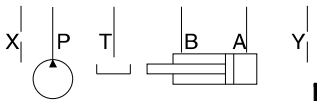
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Cover Plates



FUNCTION

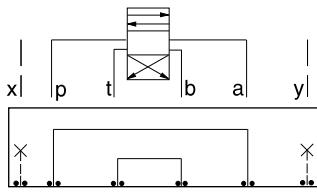
All Ports Blocked



Order retainer and seals separately. See page 12.003

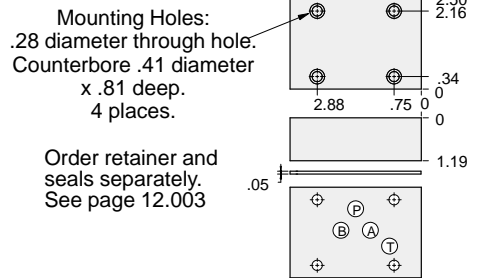
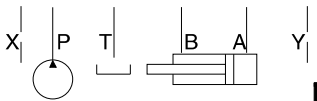
ALUMINIUM		SG IRON	
Model Code	List Price	Model Code	List Price
ZJP		ZJP/S	

Cover Plates



FUNCTION

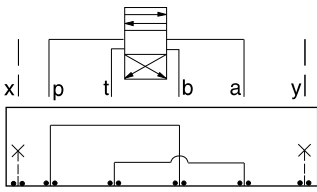
P to A and B to T



Order retainer and seals separately. See page 12.003

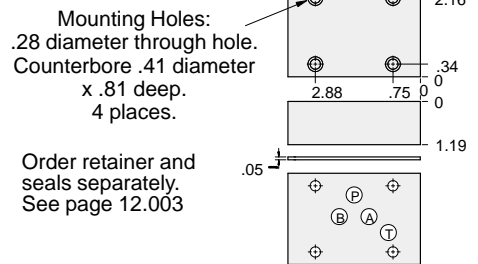
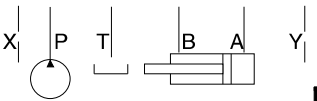
ALUMINIUM		SG IRON	
Model Code	List Price	Model Code	List Price
ZJM		ZJM/S	

Cover Plates



FUNCTION

P to B and A to T



Order retainer and seals separately. See page 12.003

ALUMINIUM		SG IRON	
Model Code	List Price	Model Code	List Price
ZJJ		ZJJ/S	

05xy COVER PLATE

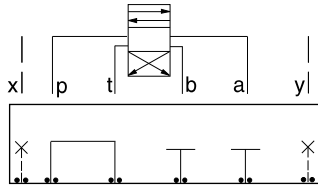


ISO 05 X,Y SANDWICH BODIES



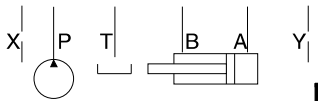
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Cover Plates



FUNCTION

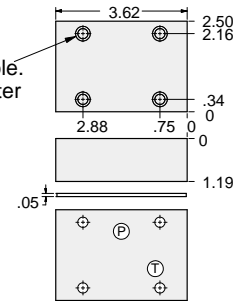
P to T
A and B blocked



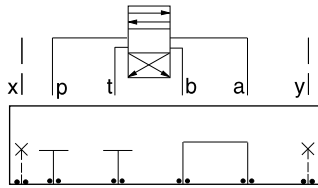
ALUMINIUM		SG IRON	
Model Code	List Price	Model Code	List Price
ZJN		ZJN/S	

Mounting Holes:
.28 diameter through hole.
Counterbore .41 diameter
x .81 deep.
4 places.

Order retainer and
seals separately.
See page 12.003

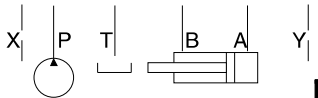


Cover Plates



FUNCTION

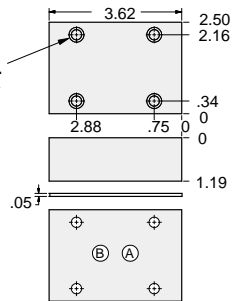
A to B
P and T blocked



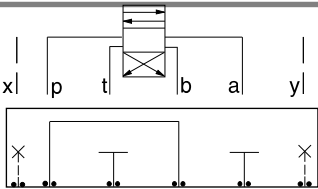
ALUMINIUM		SG IRON	
Model Code	List Price	Model Code	List Price
ZJL		ZJL/S	

Mounting Holes:
.28 diameter through hole.
Counterbore .41 diameter
x .81 deep.
4 places.

Order retainer and
seals separately.
See page 12.003

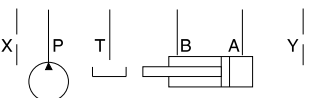


Cover Plates



FUNCTION

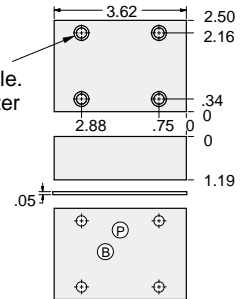
P to B
A and T blocked



ALUMINIUM		SG IRON	
Model Code	List Price	Model Code	List Price
ZJK		ZJK/S	

Mounting Holes:
.28 diameter through hole.
Counterbore .41 diameter
x .81 deep.
4 places.

Order retainer and
seals separately.
See page 12.003



05xy COVER PLATE

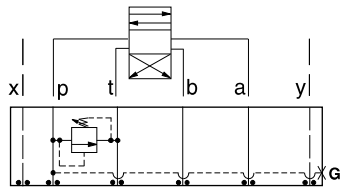




ISO 07 SANDWICH BODIES



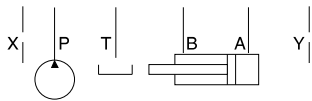
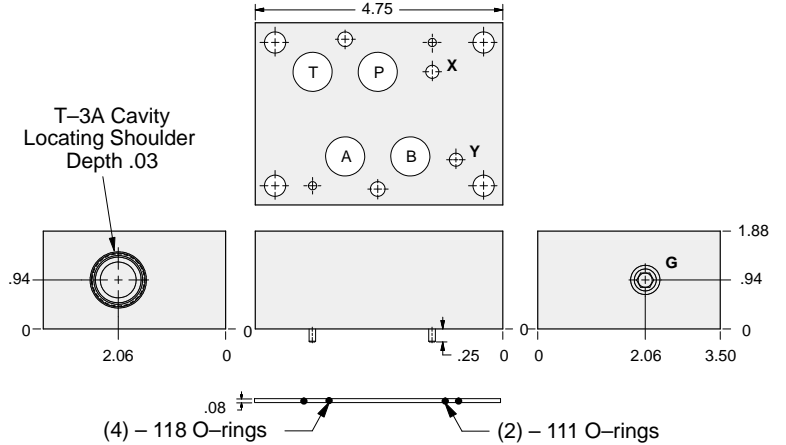
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

P to T

Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CKP		CKP/S	
.25 BSPP	CKP/M		CKP/T	

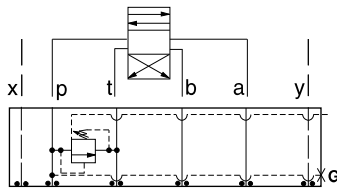
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RPGC Page 1.06		RQGB Page 1.12
	Pilot Operated, Rapid Response Relief Valve		Air Controlled, Pilot Operated Relief Valve
	RPGE Page 1.08		RPGD Page 1.14
	Direct Acting Relief Valve		
	RDFA Page 1.10		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



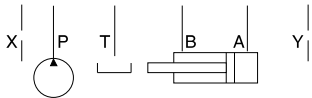
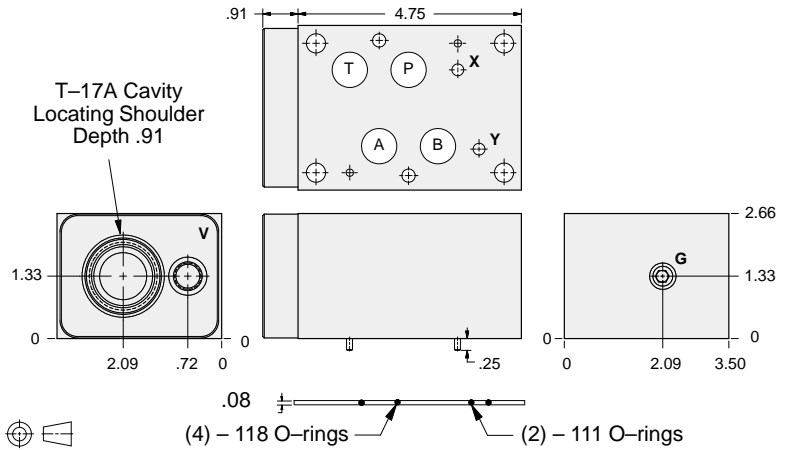
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

P to T
Externally Vented

Relief Valves



Vent Port	Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
SAE-6	.25 NPTF	CKQ		CKQ/S	
.25 BSPP	.25 BSPP	CKQ/M		CKQ/T	

07 RELIEF

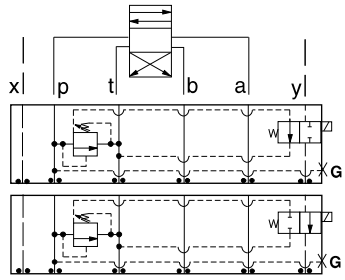
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Vented Relief Valve</i>		
	RVGA Page 1.19		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

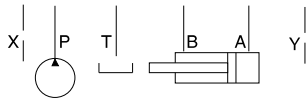
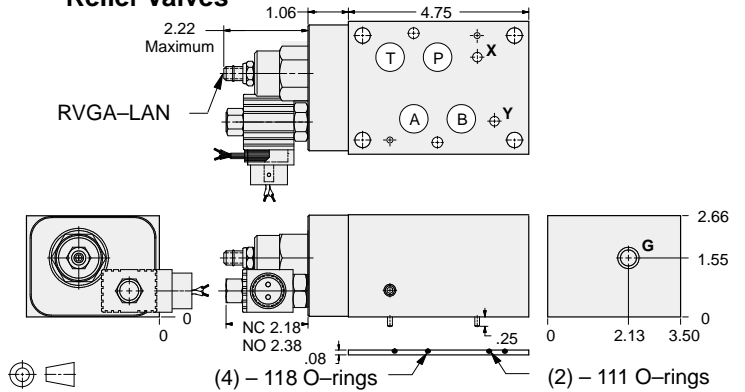


FUNCTION

P to T
N.O. Solenoid
Vented *

P to T
N.C. Solenoid
Vented *

Relief Valves



Solenoid Type	Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
N.O.	.25 NPTF	YRFI-LAN-*B		YRFI-LAN-*B/S	
N.O.	.25 BSPP	YRFI-LAN-*B/M		YRFI-LAN-*B/T	
N.C.	.25 NPTF	YRFJ-LAN-*B		YRFJ-LAN-*B/S	
N.C.	.25 BSPP	YRFJ-LAN-*B/M		YRFJ-LAN-*B/T	

* Select solenoid connection/voltage option from page 14.16 and add option price to List Price.

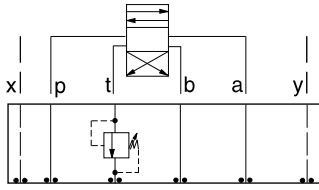


ISO 07 SANDWICH BODIES



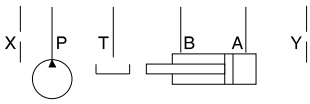
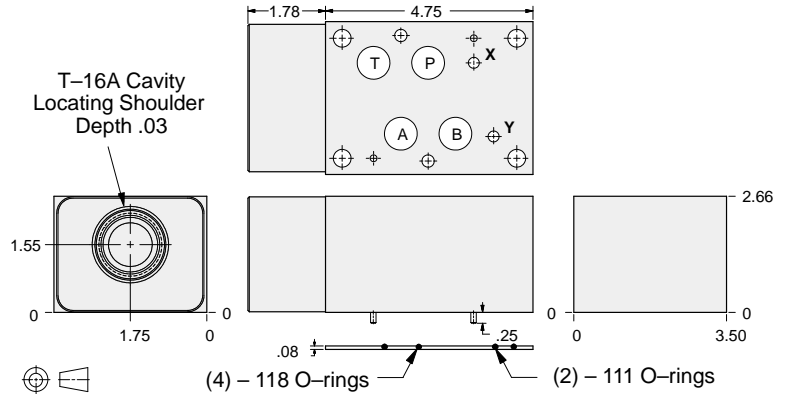
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Relief Valves



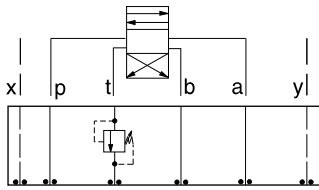
FUNCTION

Out of T



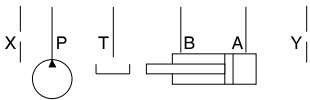
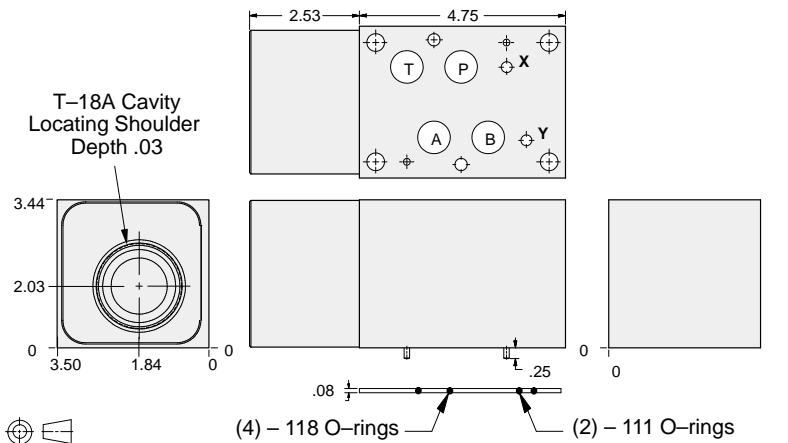
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKT		DKT/S	

Relief Valves



FUNCTION

Out of T
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKV		DKV/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

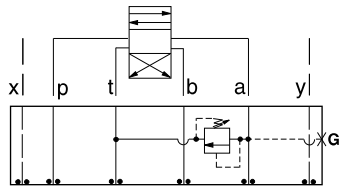
	Pilot Operated Relief Valve RP*C Page 1.07		Pilot Operated "Kick-Down" Relief Valve RQ*B Page 1.13
	Pilot Operated, Rapid Response Relief Valve RP*E Page 1.09		Air Controlled, Pilot Operated Relief Valve RP*D Page 1.15
	Direct Acting Relief Valve RD*A Page 1.11		
OTHER VALVES:			



ISO 07 SANDWICH BODIES

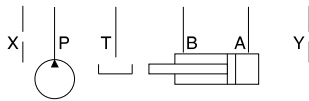
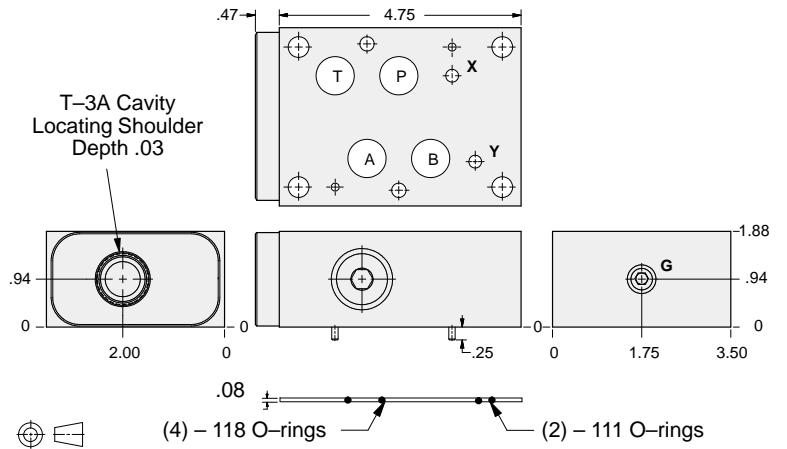


- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION
A to T

Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CKA		CKA/S	
.25 BSPP	CKA/M		CKA/T	

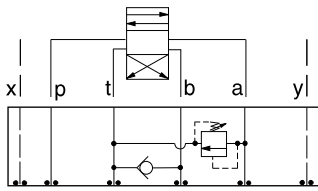
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve RPGC Page 1.06		Pilot Operated "Kick-Down" Relief Valve RQGB Page 1.12
	Pilot Operated, Rapid Response Relief Valve RPGE Page 1.08		Air Controlled, Pilot Operated Relief Valve RPGD Page 1.14
	Direct Acting Relief Valve RDFA Page 1.10		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



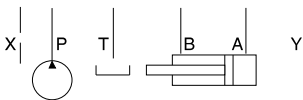
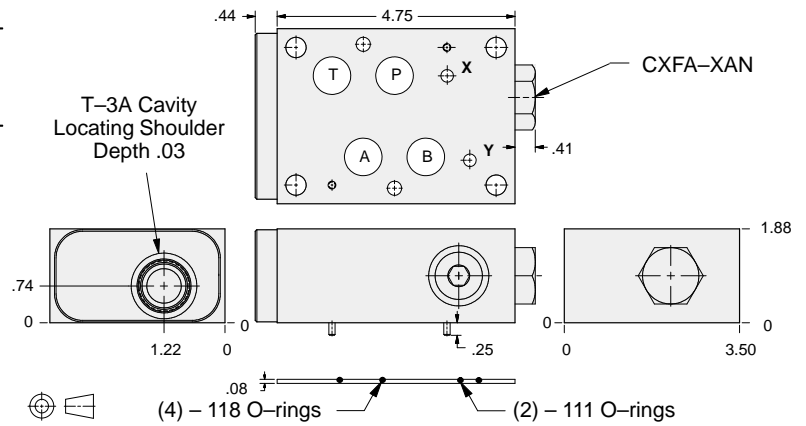
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

A to T
FF Check T to B

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CKJ		CKJ/S	

07 RELIEF

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

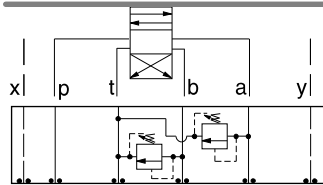
	<i>Pilot Operated Relief Valve</i> RPGC Page 1.06		<i>Pilot Operated "Kick-Down" Relief Valve</i> RQGB Page 1.12
	<i>Pilot Operated, Rapid Response Relief Valve</i> RPGE Page 1.08		<i>Air Controlled, Pilot Operated Relief Valve</i> RPGD Page 1.14
	<i>Direct Acting Relief Valve</i> RDFA Page 1.10		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



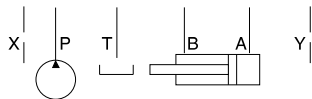
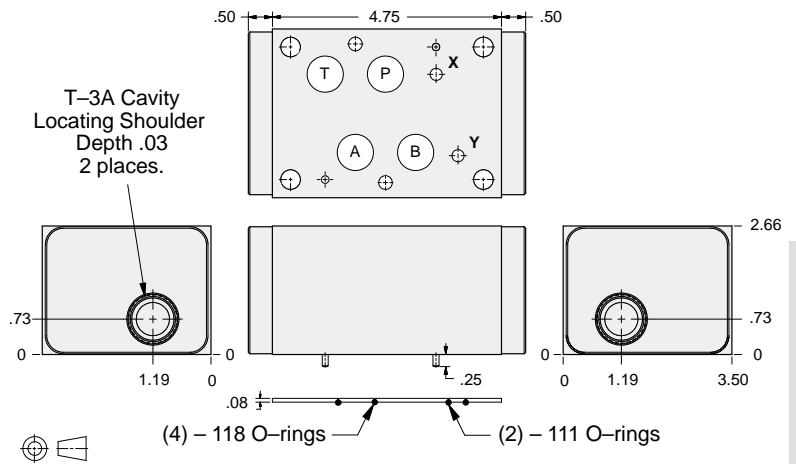
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

A and B to T
(High Capacity)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CKX		CKX/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

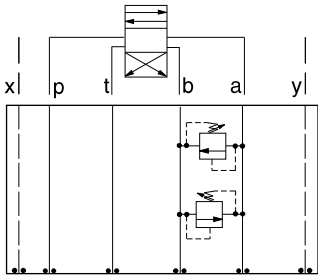
	Pilot Operated Relief Valve RPGC Page 1.06		Pilot Operated "Kick-Down" Relief Valve RQGB Page 1.12
	Pilot Operated, Rapid Response Relief Valve RPGE Page 1.08		Air Controlled, Pilot Operated Relief Valve RPGD Page 1.14
	Direct Acting Relief Valve RDFA Page 1.10		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



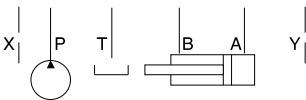
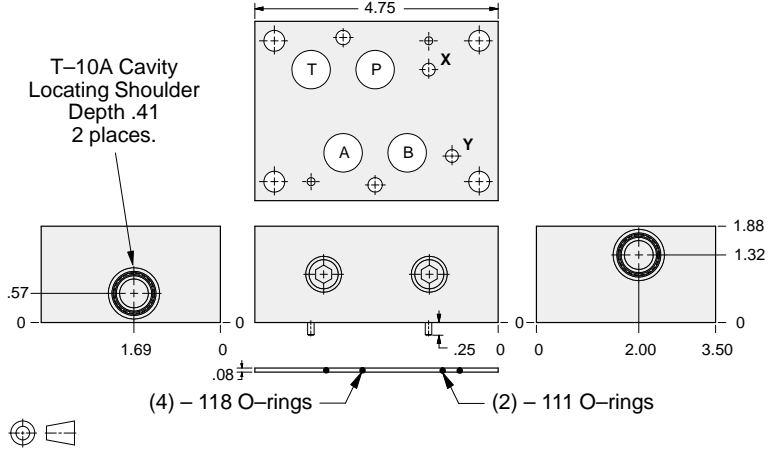
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

**A to B and
B to A**
(Cross-Port)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CKY		CKY/S	

07 RELIEF

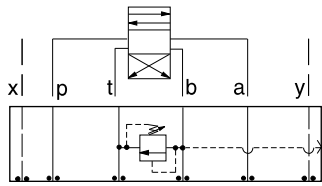
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RPEC Page 1.06		RQEB Page 1.12
	Pilot Operated, Rapid Response Relief Valve		
	RPEE Page 1.08		
	Direct Acting Relief Valve		
	RDDA Page 1.10		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



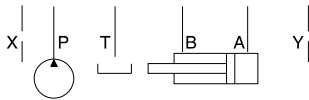
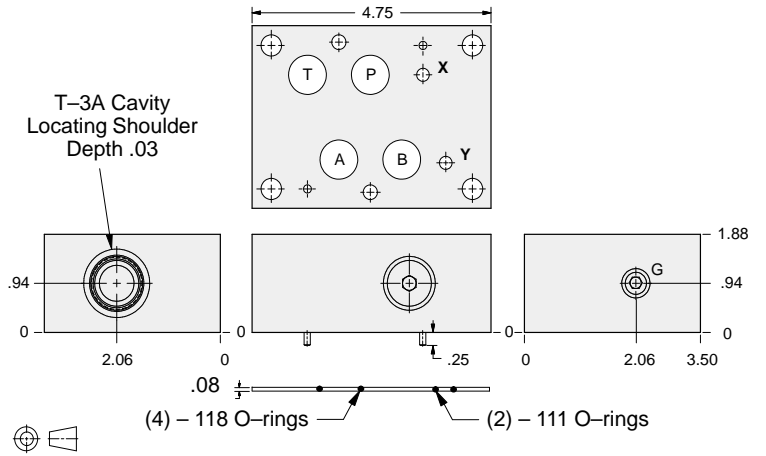
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

B to T

Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CKB		CKB/S	
.25 BSPP	CKB/M		CKB/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve RPGC Page 1.06		Pilot Operated "Kick-Down" Relief Valve RQGB Page 1.12
	Pilot Operated, Rapid Response Relief Valve RPGE Page 1.08		Air Controlled, Pilot Operated Relief Valve RPGD Page 1.14
	Direct Acting Relief Valve RDFA Page 1.10		
OTHER VALVES:			

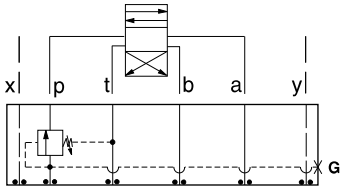


ISO 07 SANDWICH BODIES



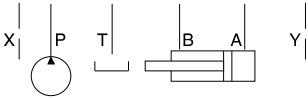
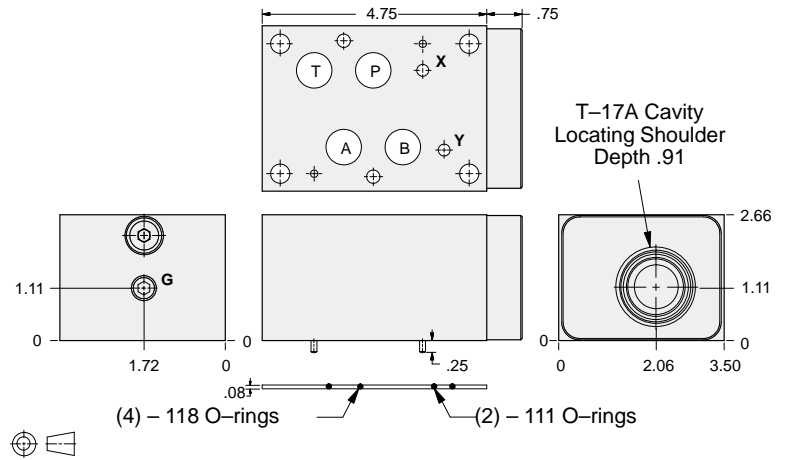
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Sequence Valves



FUNCTION

In to P



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BKW		BKW/S	
.25 BSPP	BKW/M		BKW/T	

07 SEQUENCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

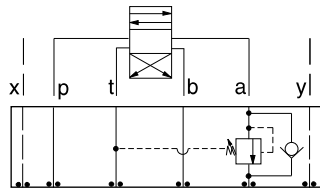
	<i>Pilot Operated Sequence Valve</i>		
	RSHC Page 2.07		
	<i>Pilot Operated "Kick-Down" Sequence Valve</i>		
	SQHB Page 2.09		
	<i>Air Controlled, Pilot Operated Sequence Valve</i>		
	RSHE Page 2.11		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



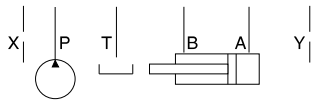
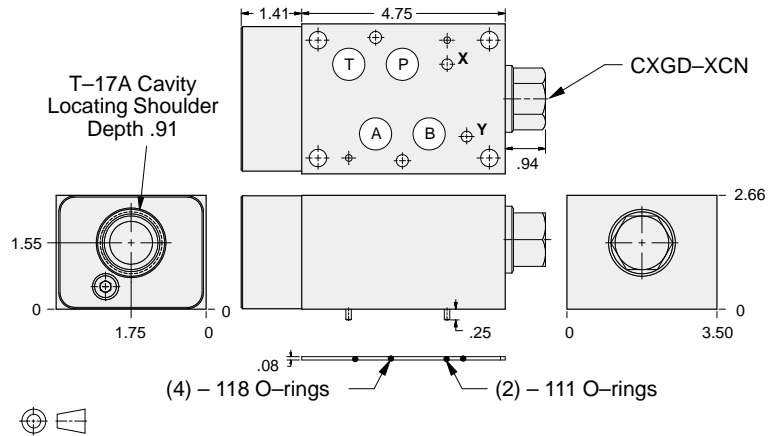
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



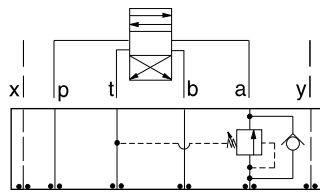
FUNCTION

In to A
Reverse FF Check

Sequence Valves



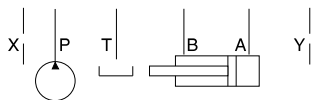
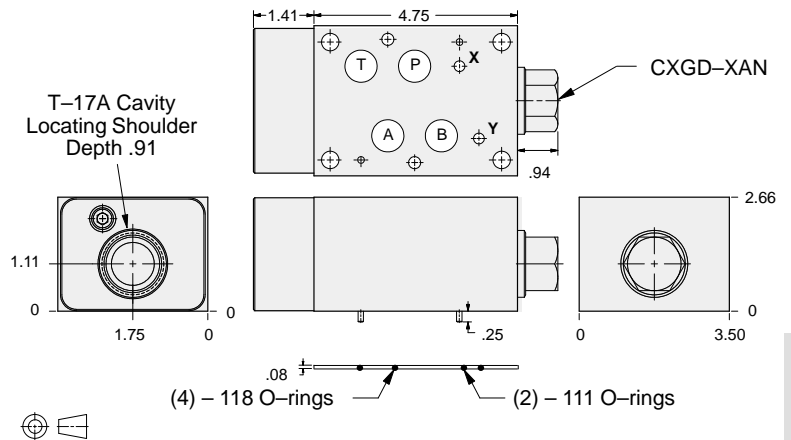
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BK4		BK4/S	



FUNCTION

Out of A
Reverse FF Check

Sequence Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BK6		BK6/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

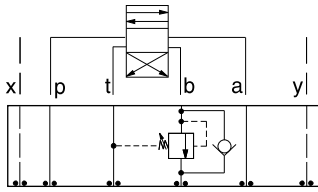
	Pilot Operated Sequence Valve		
	RSHC Page 2.07		
	Pilot Operated "Kick-Down" Sequence Valve		
	SQHB Page 2.09		
	Air Controlled, Pilot Operated Sequence Valve		
	RSHE Page 2.11		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



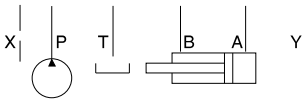
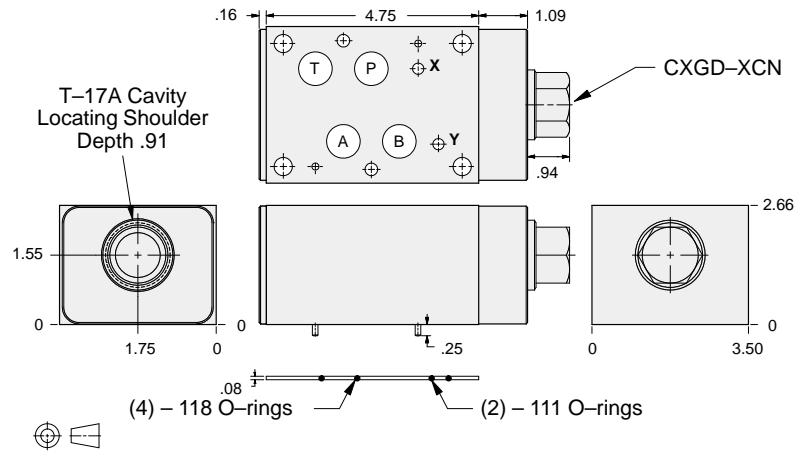
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



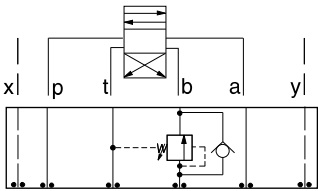
FUNCTION

In to B
Reverse FF Check

Sequence Valves



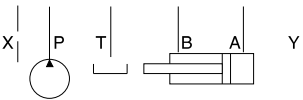
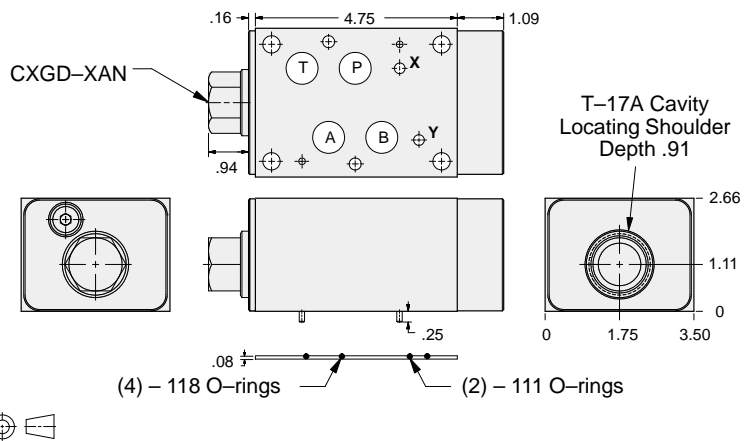
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BK5		BK5/S	



FUNCTION

Out of B
Reverse FF Check

Sequence Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BK7		BK7/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Sequence Valve		
	RSHC Page 2.07		
	Pilot Operated "Kick-Down" Sequence Valve		
	SQHB Page 2.09		
	Air Controlled, Pilot Operated Sequence Valve		
	RSHE Page 2.11		
OTHER VALVES:			

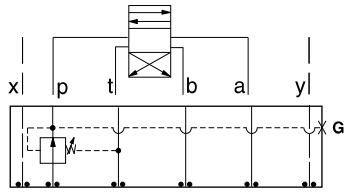


ISO 07 SANDWICH BODIES



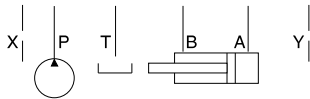
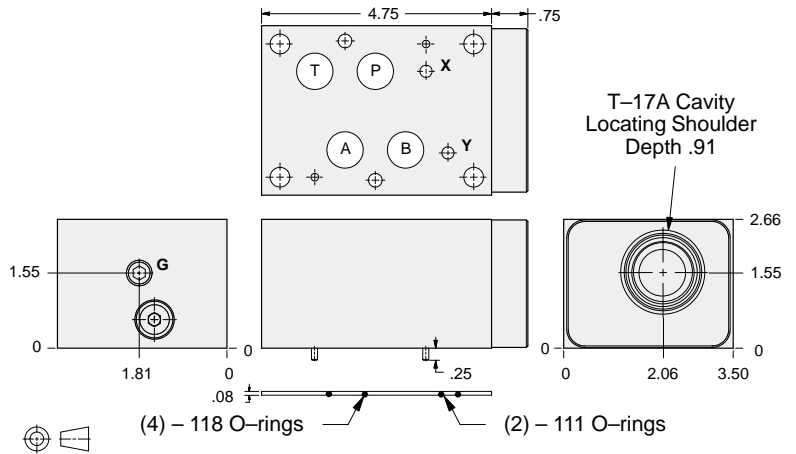
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing Valves



FUNCTION

On P
Drained to T



Gauge Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BKP		BKP/S	
.25 BSPP	BKP/M		BKP/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

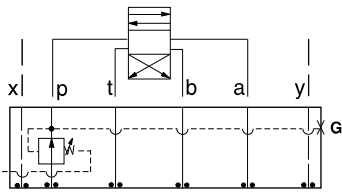
	Pilot Operated Reducing Valve		
	PBHB Page 3.07		
	Air Controlled, Pilot Operated Reducing Valve		
	PBHC Page 3.09		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



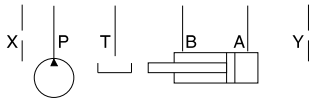
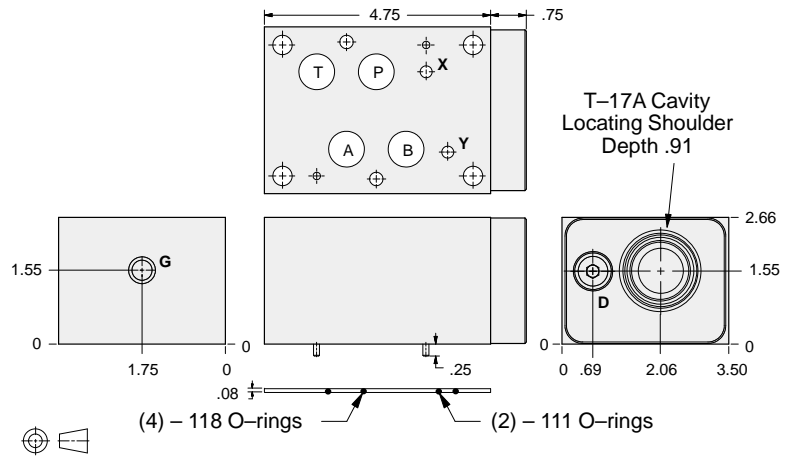
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On P
Drained Externally

Reducing Valves



Gauge Port (Plugged)	Drain Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
.25 NPTF	SAE-6	BKQ		BKQ/S	
.25 BSPP	.25 BSPP	BKQ/M		BKQ/T	

07 REDUCING

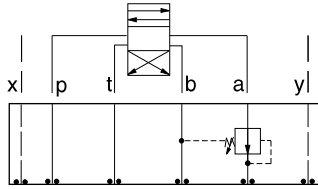
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Reducing Valve</i>		
	PBHP Page 3.07		
	<i>Air Controlled, Pilot Operated Reducing Valve</i>		
	PBHQ Page 3.09		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



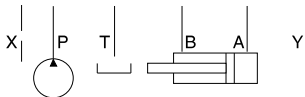
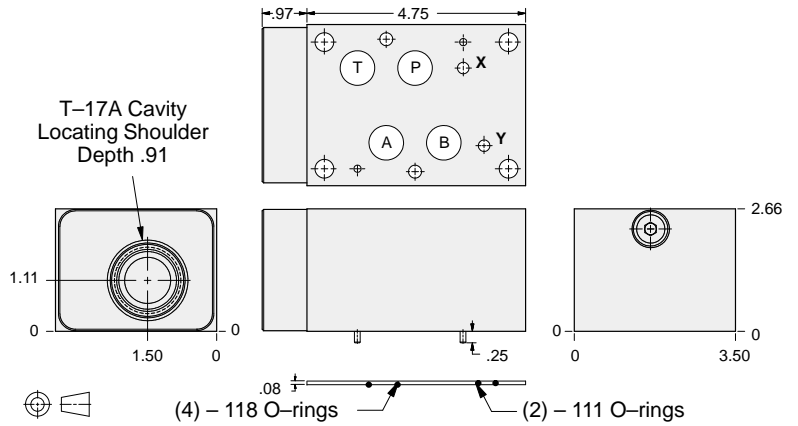
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On A
Drained to B

Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKA		BKA/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing Valve		
	PBHB Page 3.07		
OTHER VALVES:			

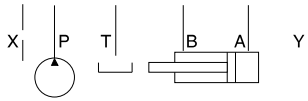
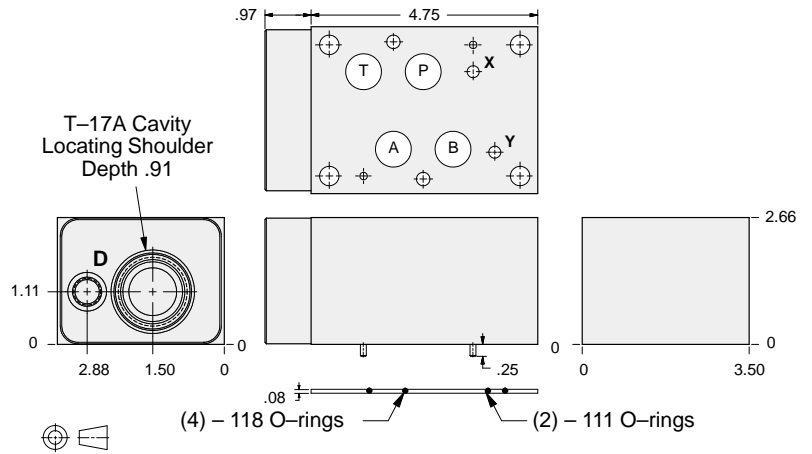
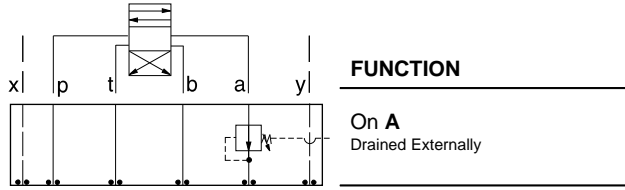


ISO 07 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing Valves



Drain Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	BKC		BKC/S	
.25 BSPP	BKC/M		BKC/T	

07 REDUCING

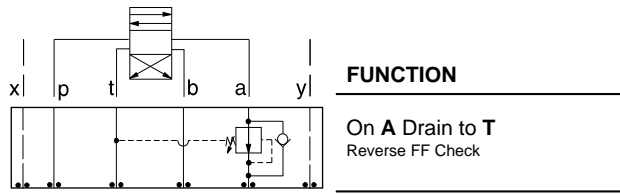
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing Valve		
	PBHB Page 3.07		
	Air Controlled, Pilot Operated Reducing Valve		
	PBHC Page 3.09		
OTHER VALVES:			



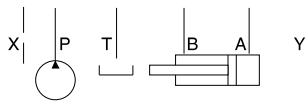
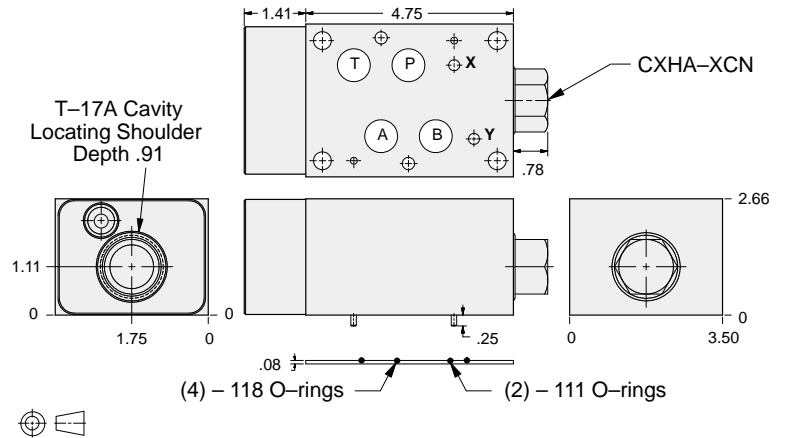
ISO 07 SANDWICH BODIES



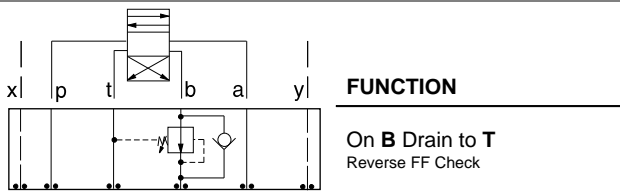
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



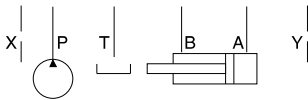
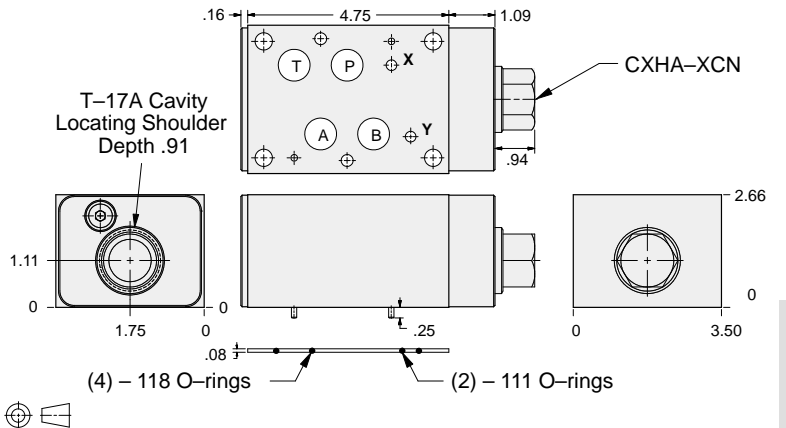
Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BK2		BK2/S	



Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKJ		BKJ/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

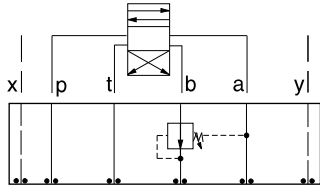
	Pilot Operated Reducing Valve		
	PBHB Page 3.07		
	Air Controlled, Pilot Operated Reducing Valve		
	PBHC Page 3.09		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



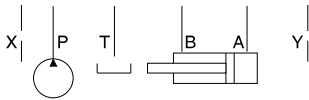
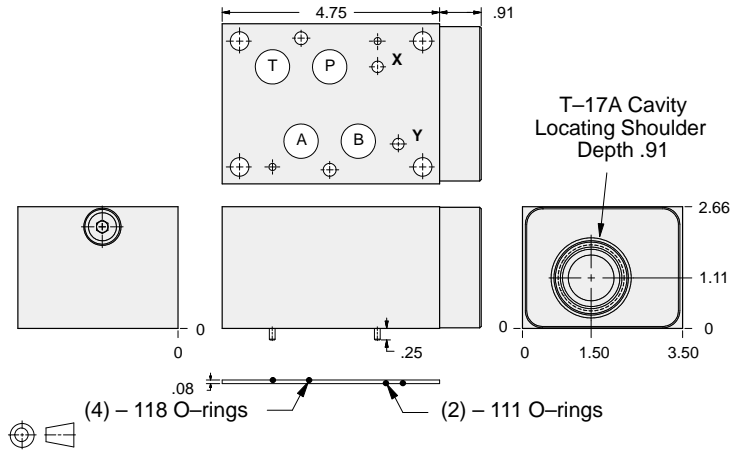
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **B**
Drained to **A**

Reducing Valves



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
BKB		BKB/S	

07 REDUCING

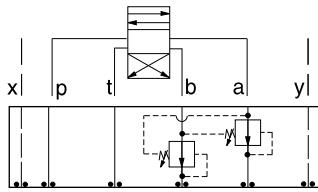
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Reducing Valve</i>		
	PBHB Page 3.07		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



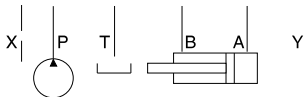
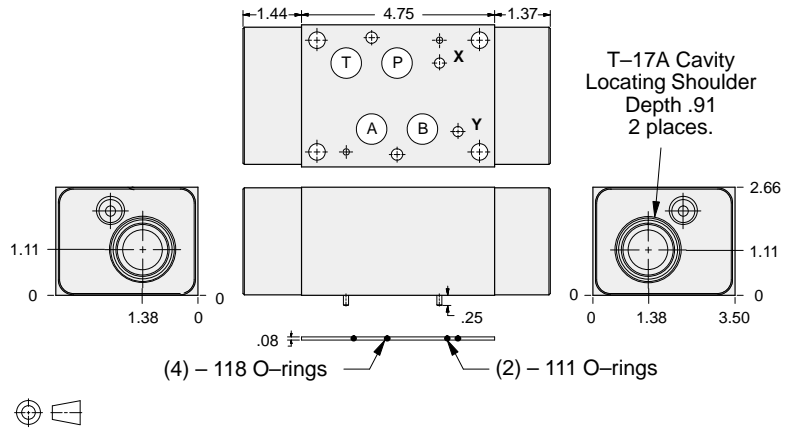
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On A and B
Drains to Opposite Port

Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKY		BKY/S	

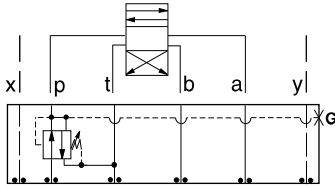
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing Valve		
	PBHB Page 3.07		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



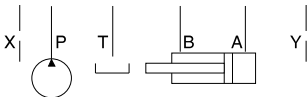
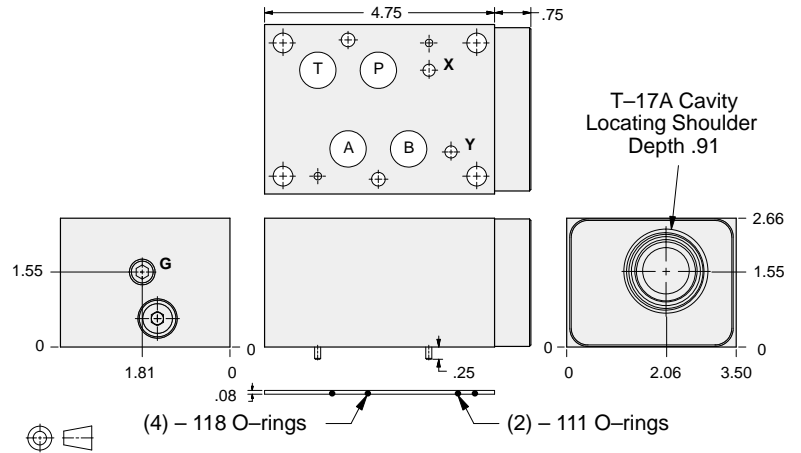
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On P Tank to T
Drained to T

Reducing/Relieving Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	BKP		BKP/S	
.25 BSPP	BKP/M		BKP/T	

07 REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing/Relieving Valve		
	PPHB Page 3.11		
	Air Controlled, Pilot Operated Reducing/Relieving Valve		
	PPHC Page 3.13		
OTHER VALVES:			

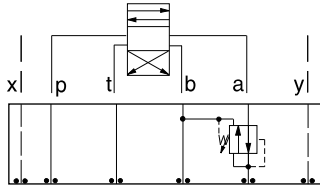


ISO 07 SANDWICH BODIES



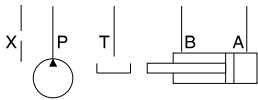
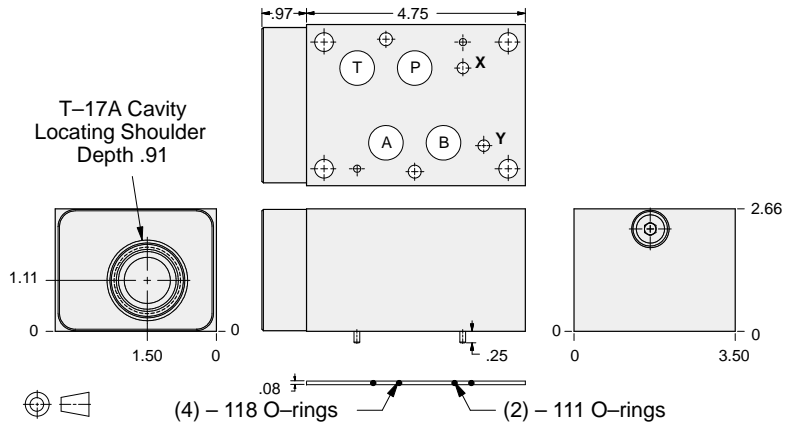
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves



FUNCTION

On A Tank to B
Drained to B



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJA		BJA/S	

07 REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Reducing/Relieving Valve</i>		
	PPHB Page 3.11		
OTHER VALVES:			

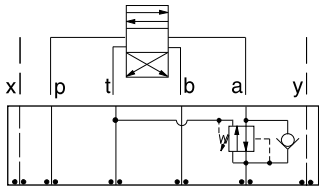


ISO 07 SANDWICH BODIES



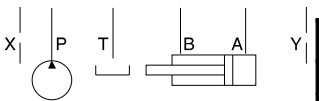
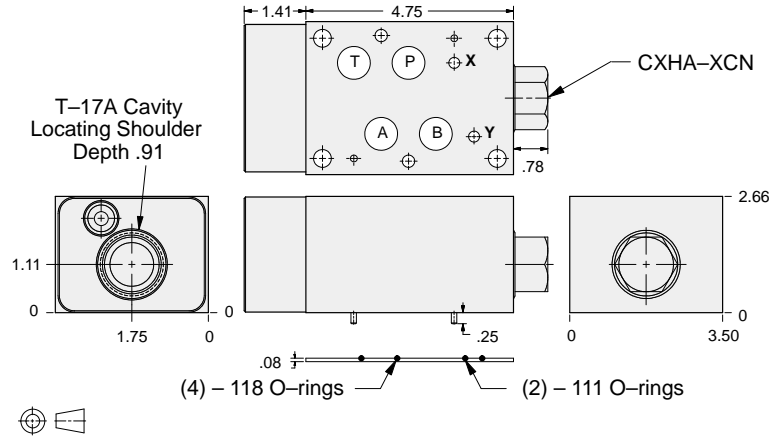
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves



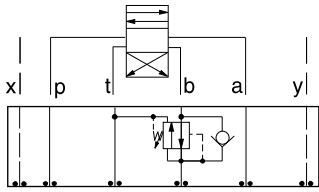
FUNCTION

On A Tank to T
Drained to T
Reverse FF Check



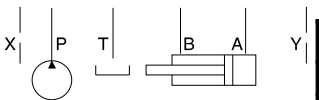
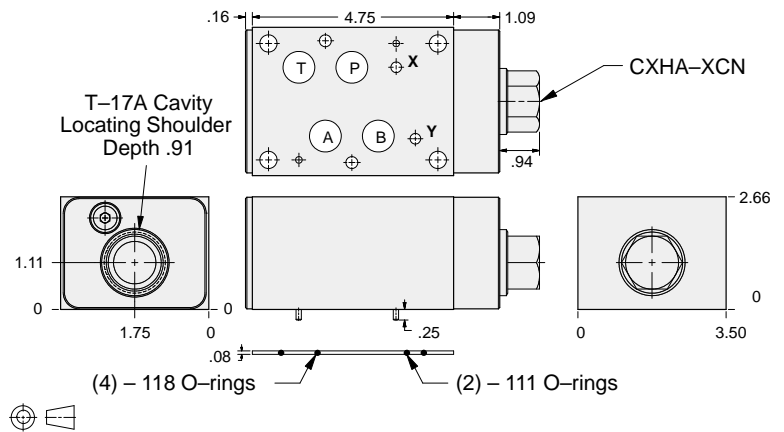
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BK2		BK2/S	

Reducing/Relieving Valves



FUNCTION

On B Tank to T
Drained to T
Reverse FF Check



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKJ		BKJ/S	

07 REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing/Relieving Valve		
	PPHB Page 3.11		
	Air Controlled, Pilot Operated Reducing/Relieving Valve		
	PPHC Page 3.13		
OTHER VALVES:			

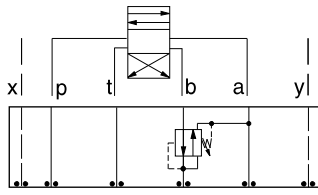


ISO 07 SANDWICH BODIES



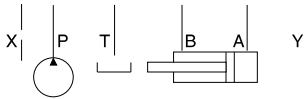
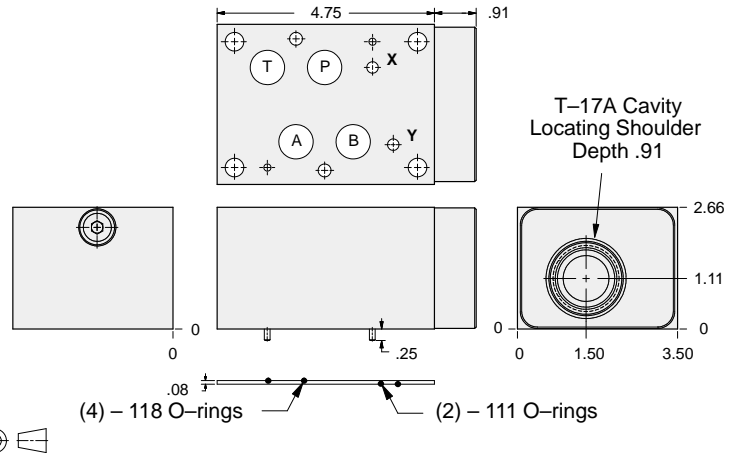
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves



FUNCTION

On B Tank to A
Drained to A



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKB		BKB/S	

07 REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Reducing/Relieving Valve</i>		
	PPHB Page 3.11		
OTHER VALVES:			

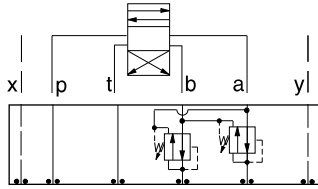


ISO 07 SANDWICH BODIES



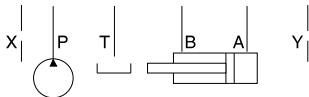
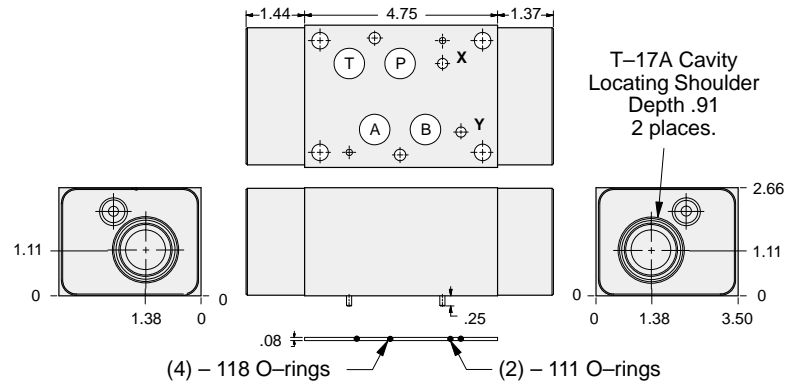
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves



FUNCTION

On **A** and **B**
Tanks and Drains to
Opposite Port



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
BKY		BKY/S	

07 REDUCING/RELIEVING

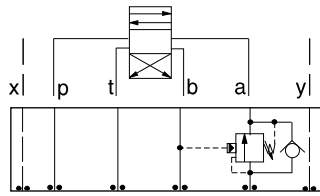
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Reducing/Relieving Valve</i>		
	PPHB Page 3.11		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



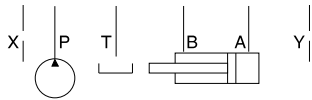
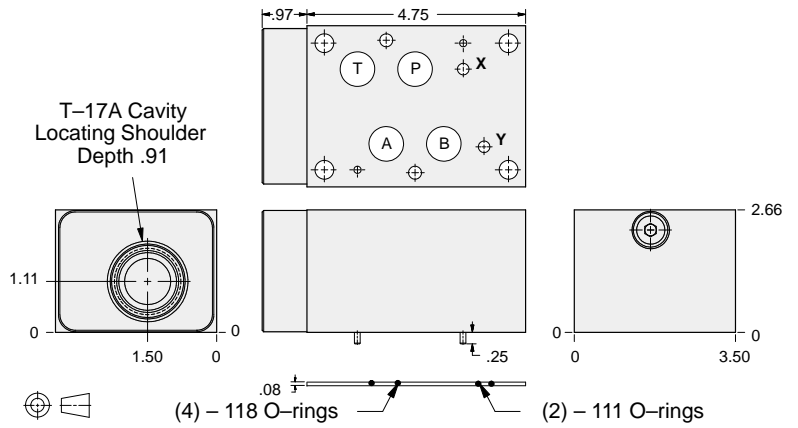
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

 On A Pilot
 from B

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BJA		BJA/S	

07 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBGA Page 4.11		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBGG Page 4.13		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBGHP Page 4.15		
OTHER VALVES:			

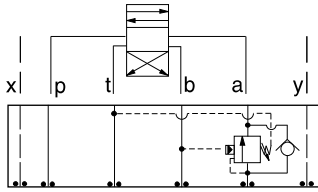


ISO 07 SANDWICH BODIES



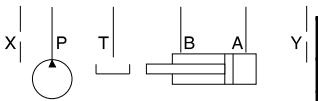
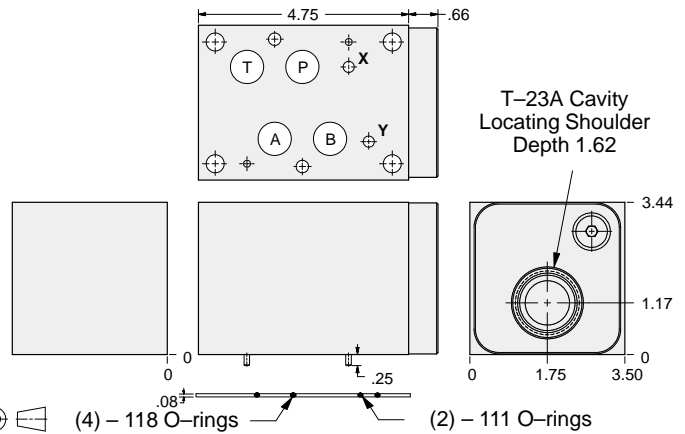
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Counterbalance Valves



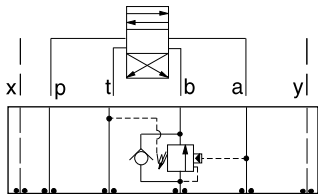
FUNCTION

On A Pilot
from B
Vent to T



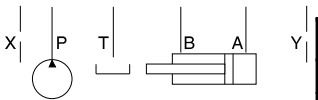
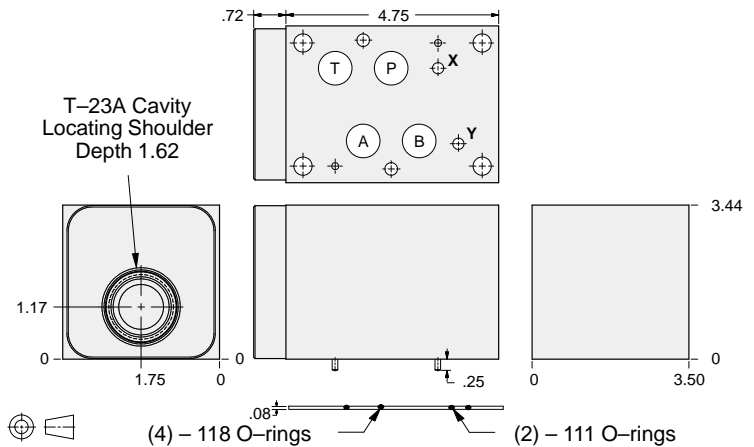
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NKA		NKA/S	

Counterbalance Valves



FUNCTION

On B Pilot
from A
Vent to T



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NKB		NKB/S	

07 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

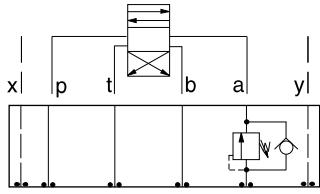
	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWGA Page 4.19		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWGG Page 4.21		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



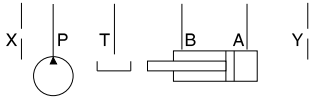
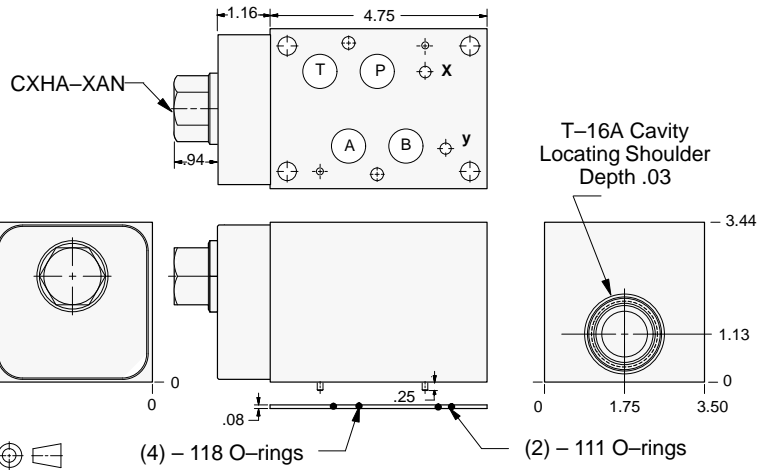
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



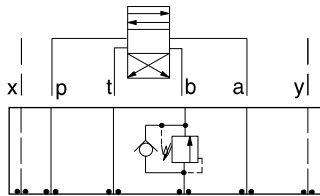
FUNCTION

On A
No pilot assist

Counterbalance Valves



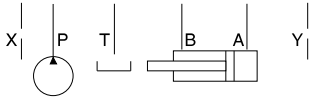
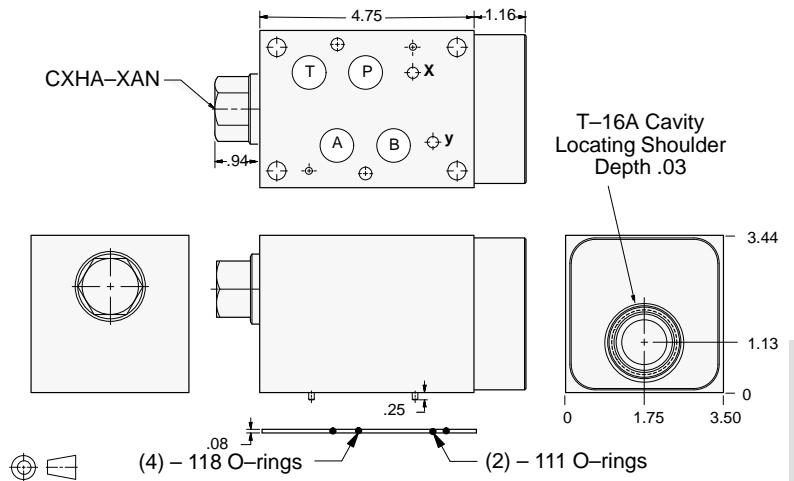
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CK4		CK4/S	



FUNCTION

On B
No pilot assist

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Part Number	List Price
CK5		CK5/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

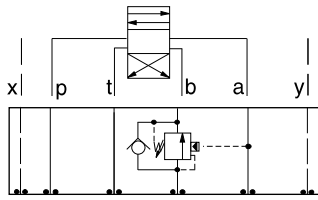
	Direct Acting Relief Valve		
	RDHA Page 1.11		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



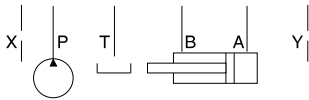
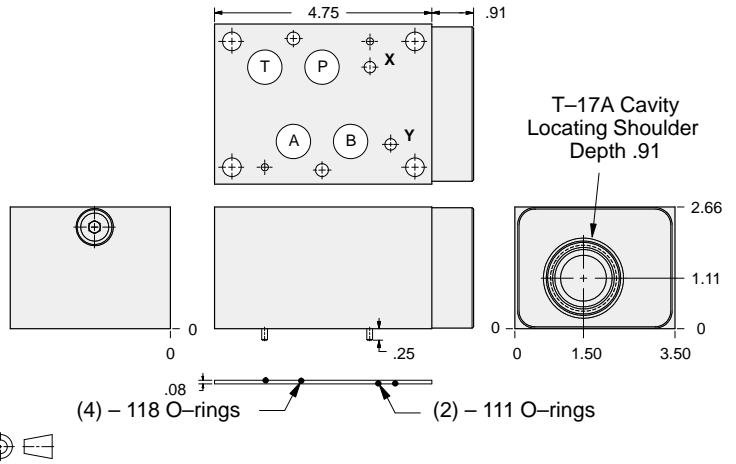
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **B**
Pilot from **A**

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKB		BKB/S	

07 COUNTERBALANCE

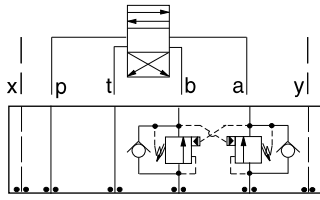
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBG Page 4.11		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBGG Page 4.13		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBGH Page 4.15		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



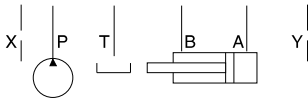
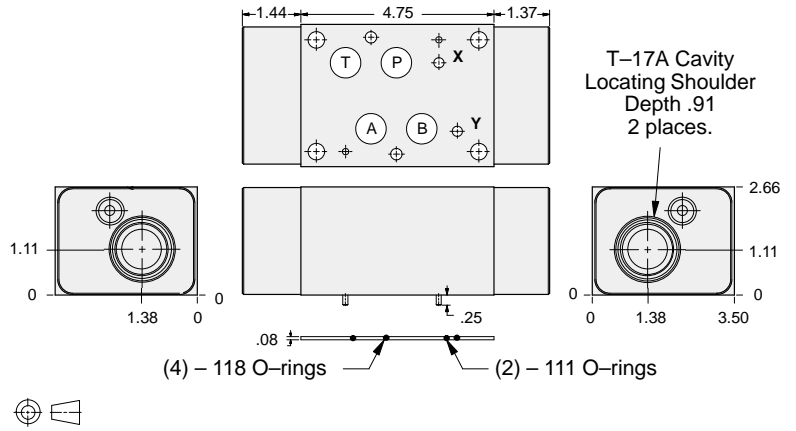
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On A and B
Cross-Piloted

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKY		BKY/S	

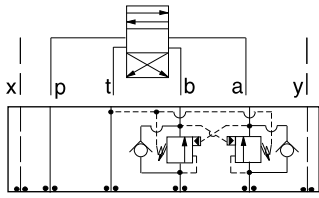
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CBGAP Page 4.11		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CBGG Page 4.13		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CBGHP Page 4.15		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



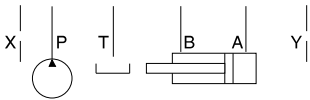
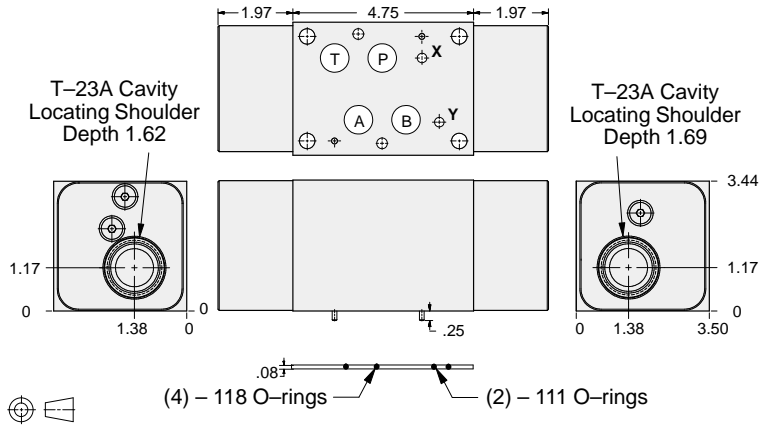
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **A** and **B**
Cross-Piloted
Vents to **T**

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NKY		NKY/S	

07 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWGA Page 4.19		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWGG Page 4.21		
OTHER VALVES:			

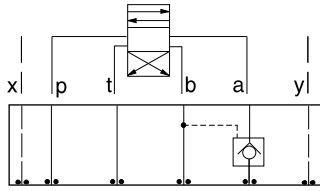


ISO 07 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

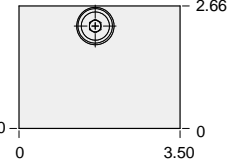
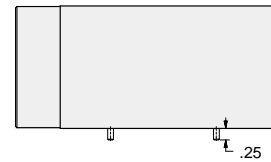
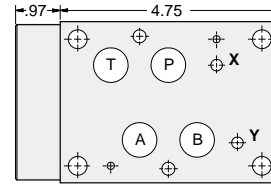
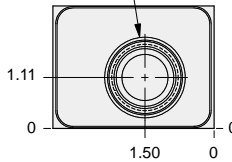
Pilot Operated Check Valves



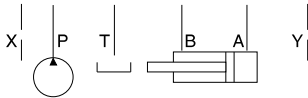
FUNCTION

On A
Pilot from B

T-17A Cavity
Locating Shoulder
Depth .91



(4) - 118 O-rings (2) - 111 O-rings



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKA		BKA/S	

07 P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot-to-Open Check Valve, 3:1 Pilot Ratio</i>		
	CKGB Page 4.17		
OTHER VALVES:			

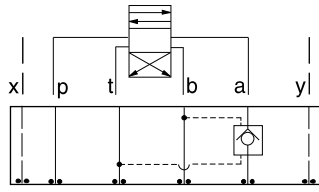


ISO 07 SANDWICH BODIES



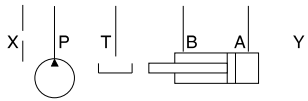
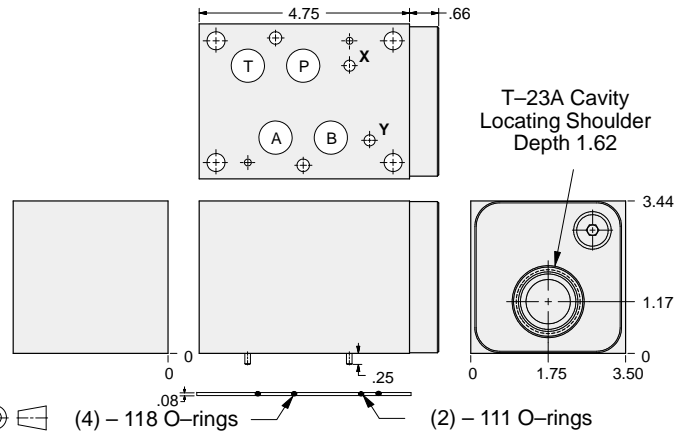
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves



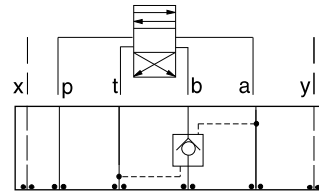
FUNCTION

On A
Pilot from B
Vent to T



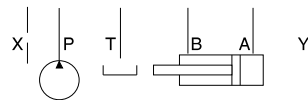
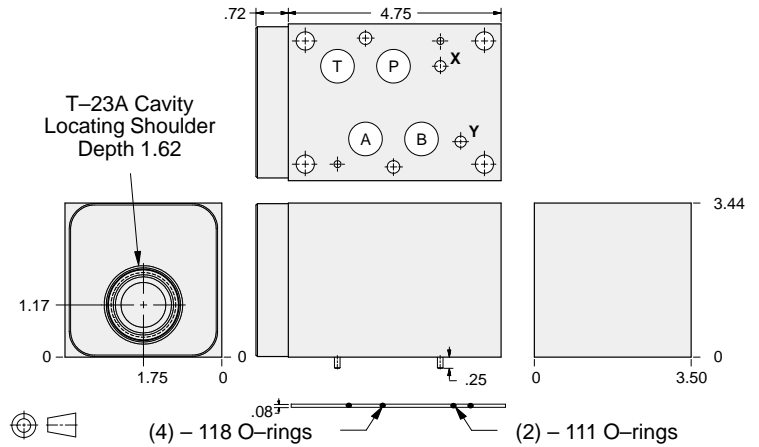
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NKA		NKA/S	

Pilot Operated Check Valves



FUNCTION

On B
Pilot from A
Vent to T



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NKB		NKB/S	

07 P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVGV Page 4.23		
OTHER VALVES:			

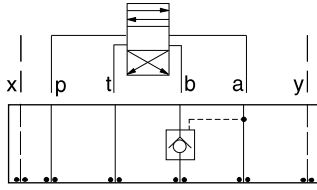


ISO 07 SANDWICH BODIES



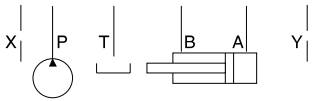
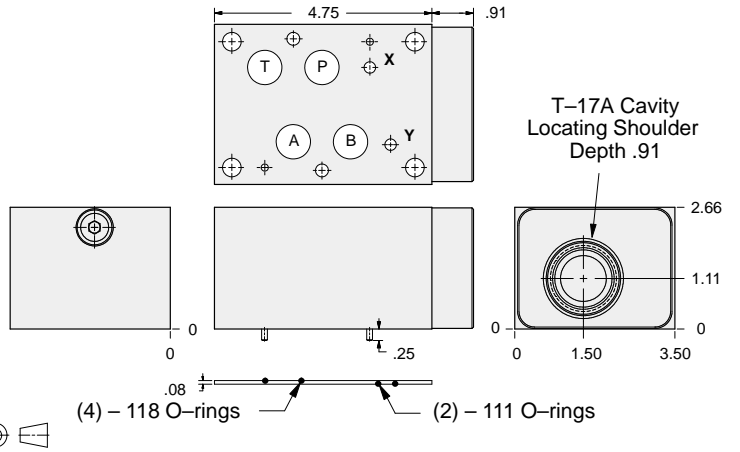
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves




FUNCTION

On B
Pilot from A



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKB		BKB/S	

07 P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CKGBPage 4.17		
OTHER VALVES:			

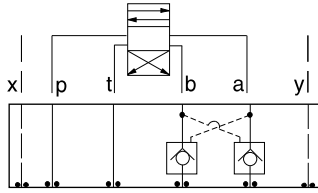


ISO 07 SANDWICH BODIES



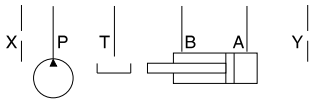
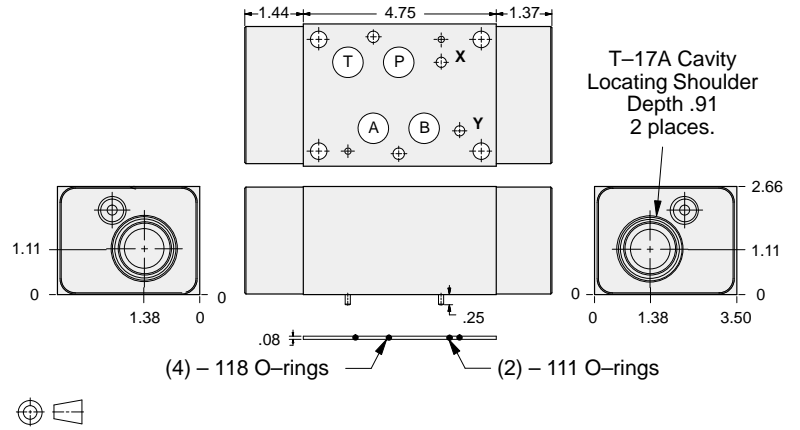
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves



FUNCTION

On A and B
Cross-Piloted



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKY		BKY/S	

07 P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CKGB Page 4.17		
OTHER VALVES:			

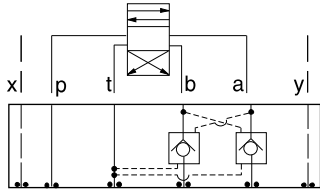


ISO 07 SANDWICH BODIES



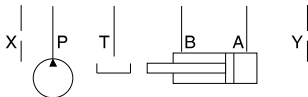
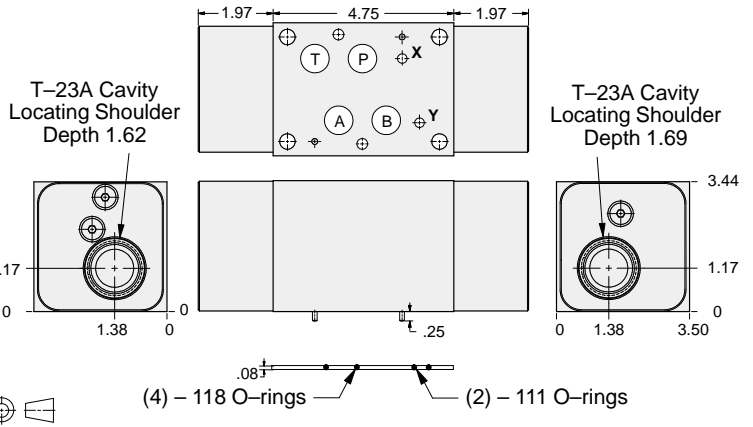
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves



FUNCTION

On **A** and **B**
Cross-Piloted
Vents to **T**



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
NKY		NKY/S	

07 P.O. CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVGV Page 4.23		
OTHER VALVES:			

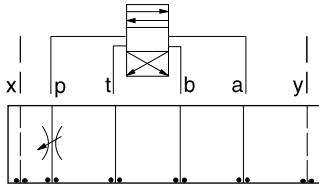


ISO 07 SANDWICH BODIES



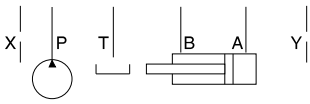
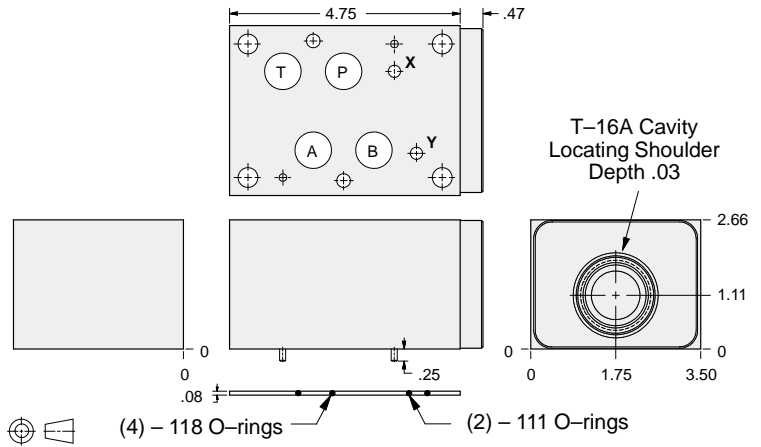
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Flow Control Valves



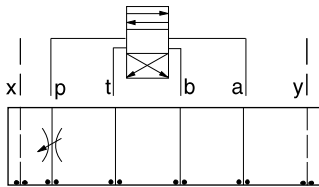
FUNCTION

Meter-In P



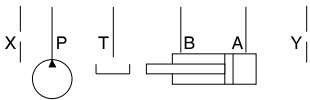
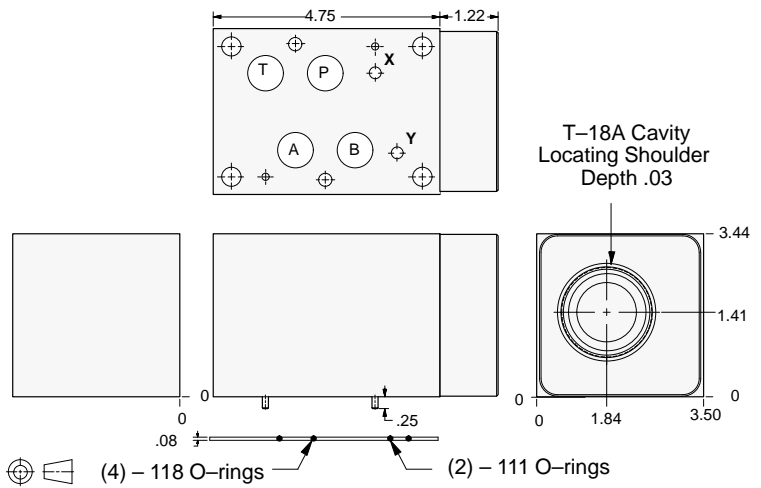
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKP		DKP/S	

Flow Control Valves



FUNCTION

Meter-In P
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKO		DKO/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

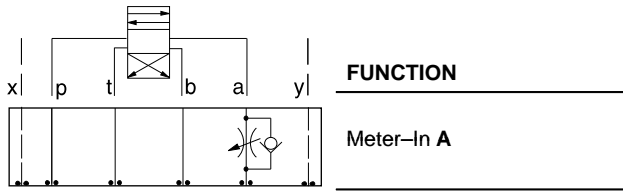
	Fully Adjustable Needle Valve		
	NF*C Page 5.13		
	Fixed Orifice, Pressure-Compensated Flow Control		
	FX*A Page 5.21		
OTHER VALVES:			



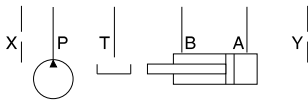
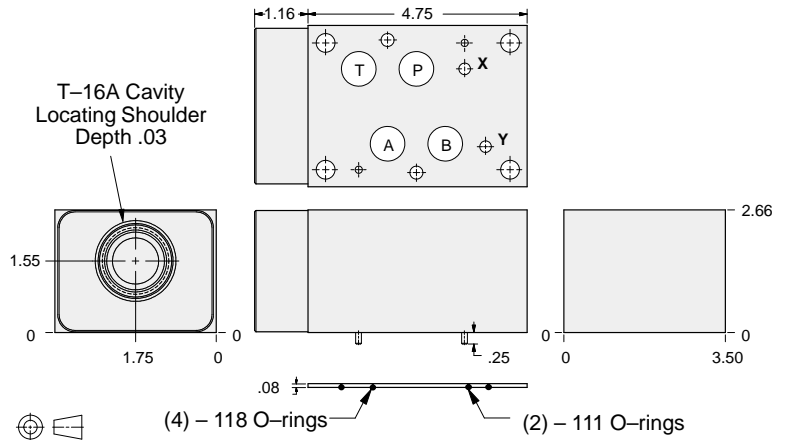
ISO 07 SANDWICH BODIES



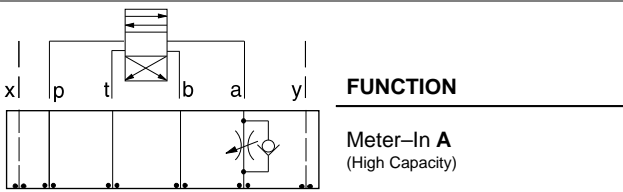
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



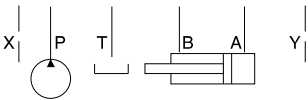
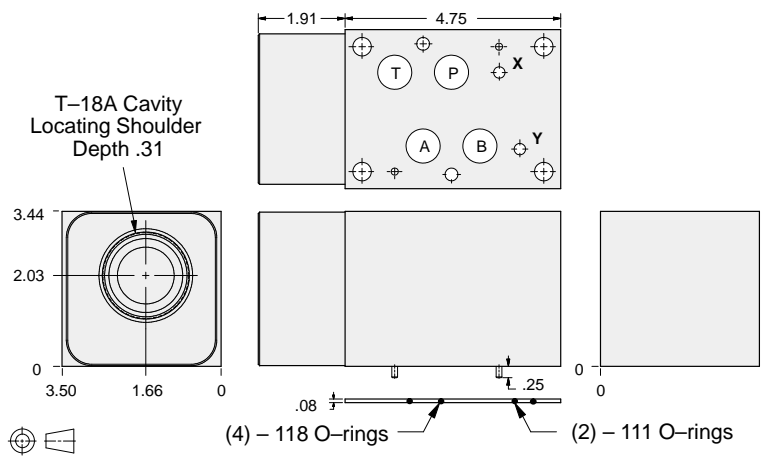
Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKC		DKC/S	



Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKG		DKG/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NF*C Page 5.13		Fixed Orifice, Pressure-Compensated Flow Control FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check NC*B Page 5.17		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NC*C Page 5.19		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FD*A Page 5.25
OTHER VALVES:	CN*C		

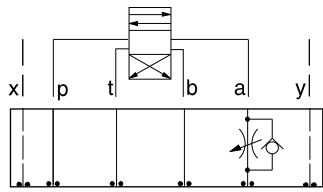
07 FLOW CONTROL



ISO 07 SANDWICH BODIES



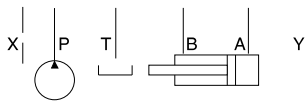
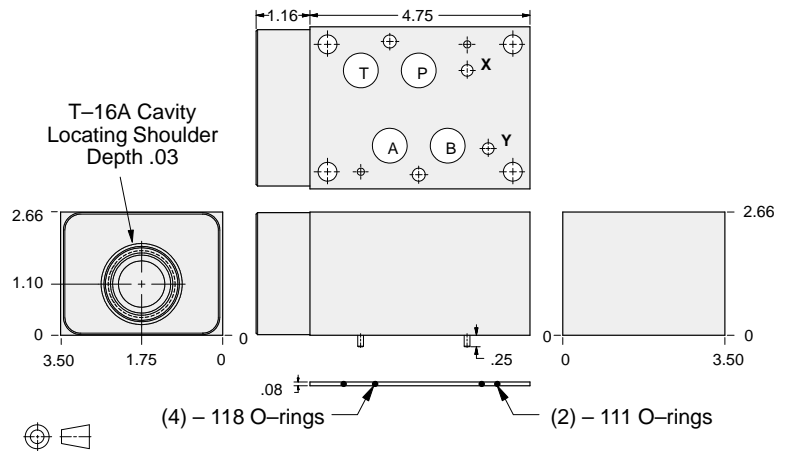
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



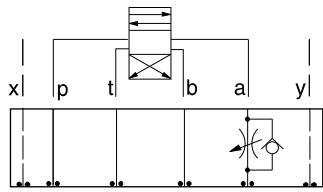
FUNCTION

Meter-Out A

Flow Control Valves



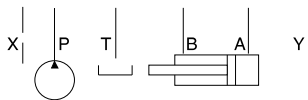
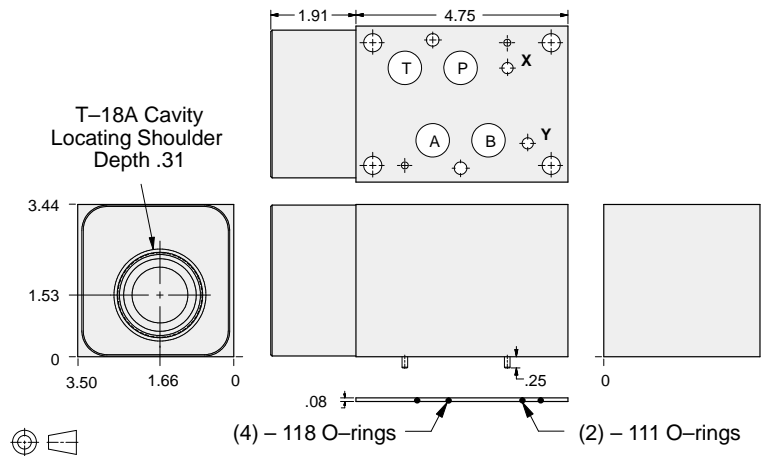
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKA		DKA/S	



FUNCTION

Meter-Out A
(High Capacity)

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKE		DKE/S	

07 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

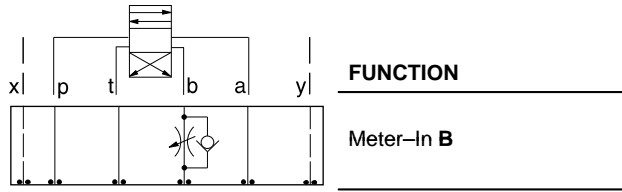
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.13		FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.17		FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.19		FD*A Page 5.25
OTHER VALVES:	CN*C		



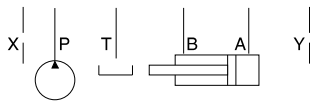
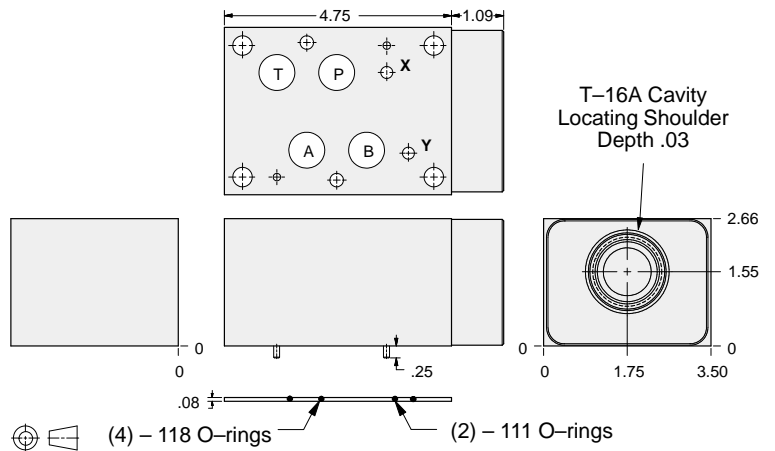
ISO 07 SANDWICH BODIES



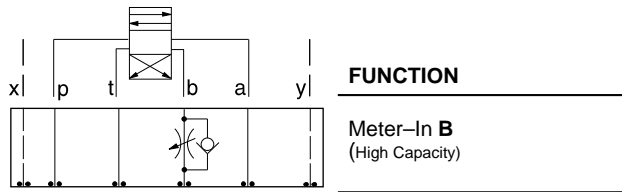
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



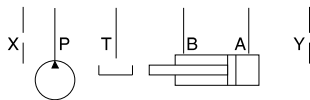
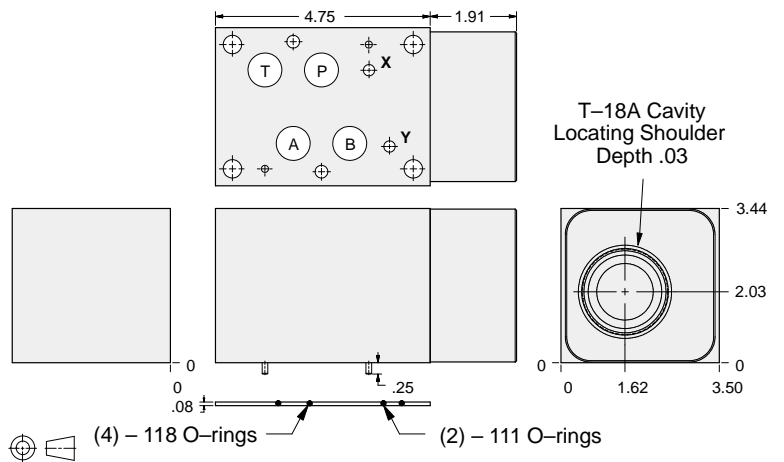
Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKD		DKD/S	



Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKI		DKI/S	

07 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NF*C Page 5.13		Fixed Orifice, Pressure-Compensated Flow Control FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check NC*B Page 5.17		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NC*C Page 5.19		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FD*A Page 5.25
OTHER VALVES:	CN*C		

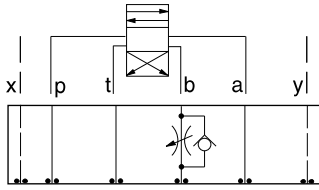


ISO 07 SANDWICH BODIES



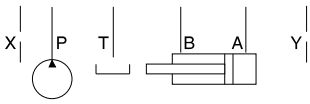
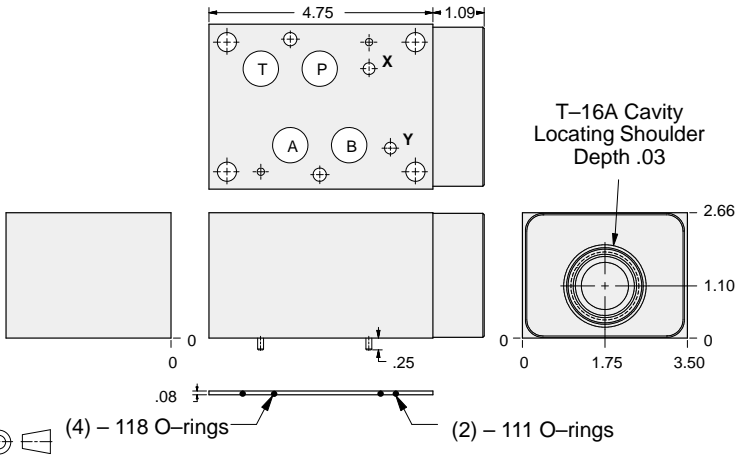
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Flow Control Valves



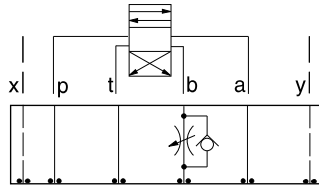
FUNCTION

Meter-Out B



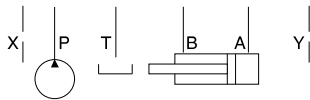
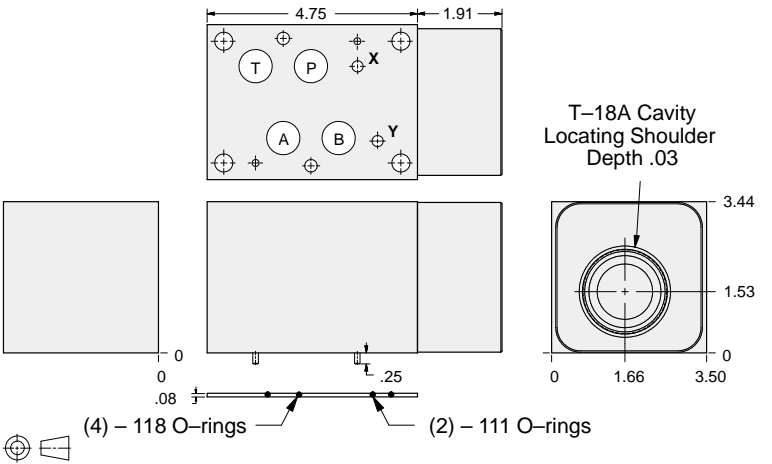
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKB		DKB/S	

Flow Control Valves



FUNCTION

Meter-Out B
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKF		DKF/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

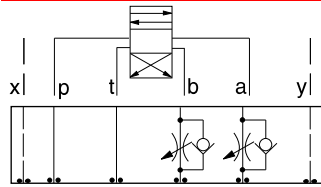
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.13		FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.17		FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.19		FD*A Page 5.25
OTHER VALVES:	CN*C		



ISO 07 SANDWICH BODIES



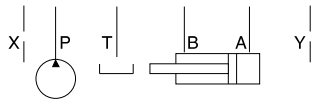
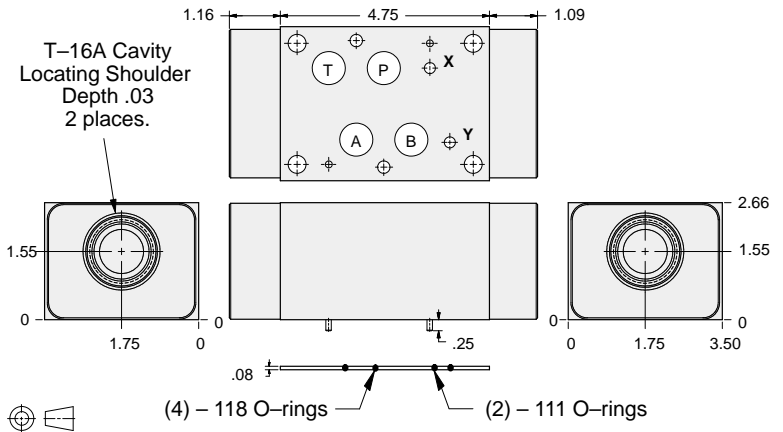
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



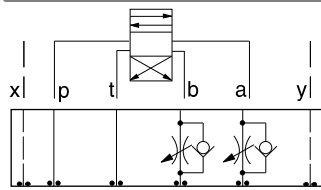
FUNCTION

Meter-In
A and B

Flow Control Valves



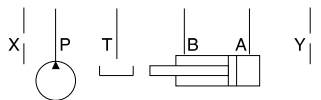
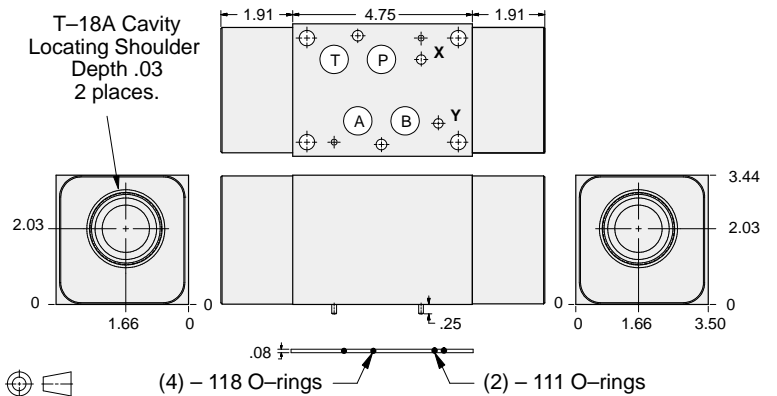
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKZ		DKZ/S	



FUNCTION

Meter-In
A and B
(High Capacity)

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKU		DKU/S	

07 FLOW CONTROL

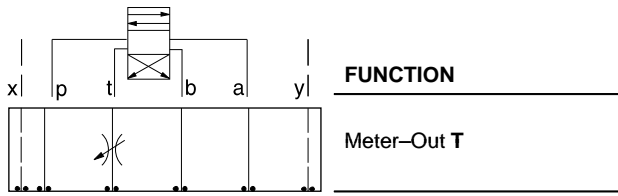
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.13		FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.17		FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.19		FD*A Page 5.25
OTHER VALVES:	CNGC, CNIC		



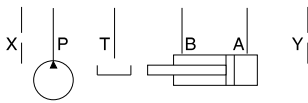
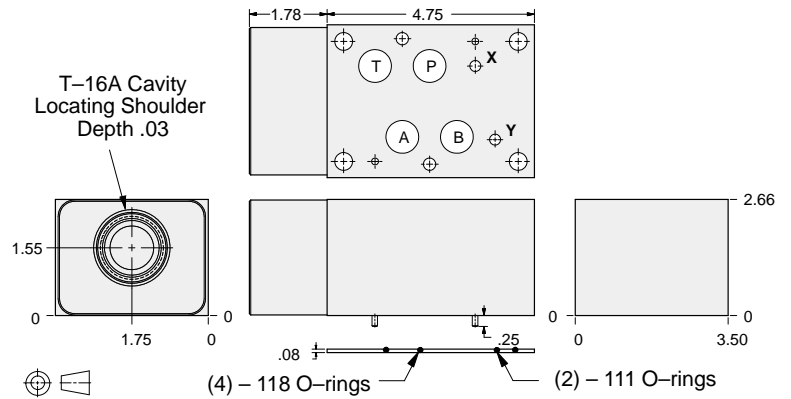
ISO 07 SANDWICH BODIES



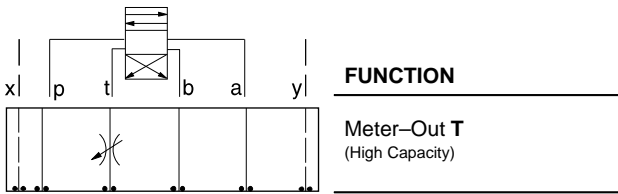
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



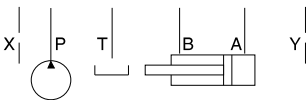
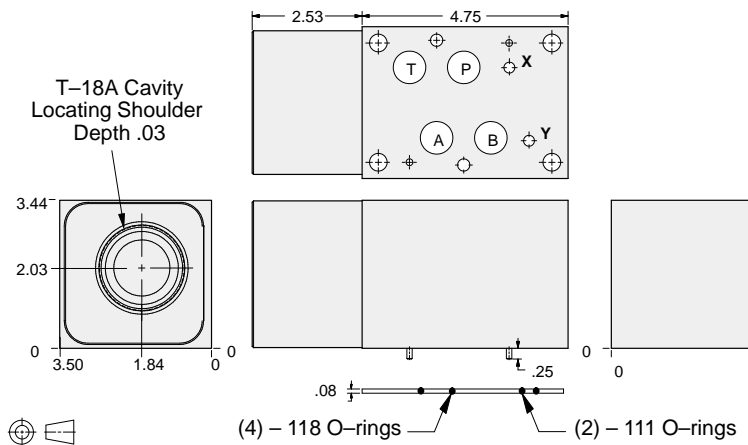
Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKT		DKT/S	



Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKV		DKV/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.13		FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.17		FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.19		FD*A Page 5.25
OTHER VALVES:	CN*C		

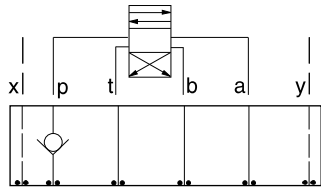
07 FLOW CONTROL



ISO 07 SANDWICH BODIES

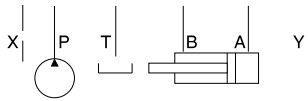
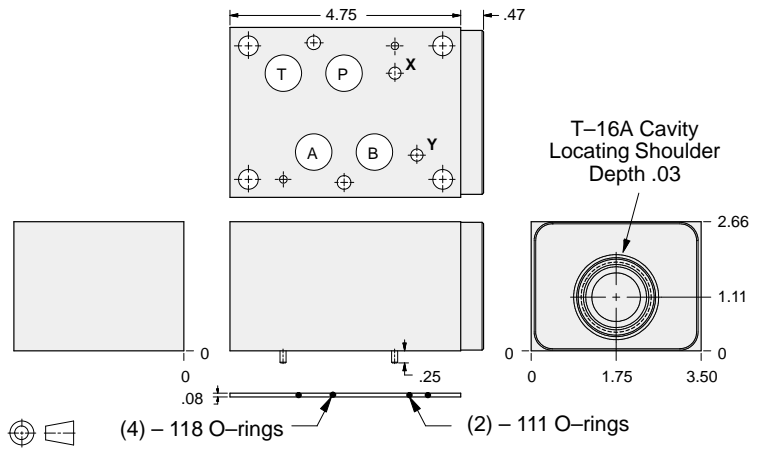


- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION
On P

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKP		DKP/S	

07 CHECK

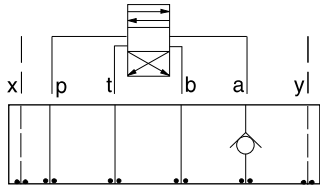
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXHA Page 5.09		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



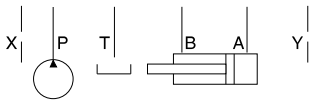
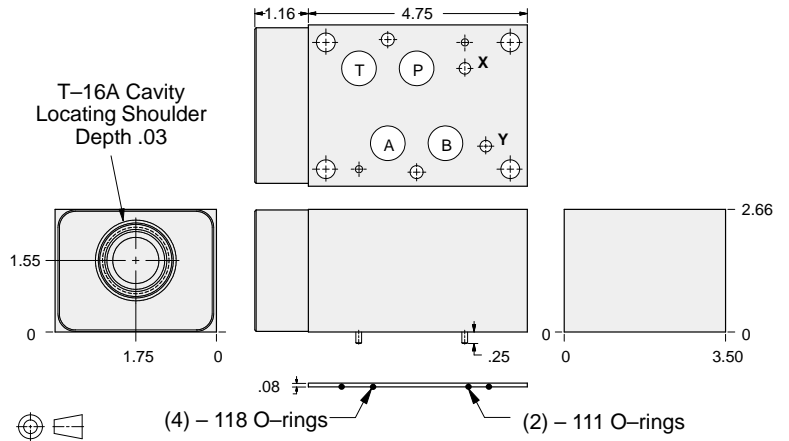
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



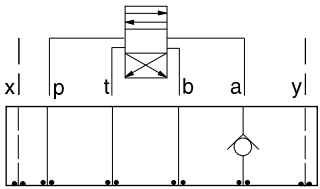
FUNCTION

On A
Free Flow Out
of Valve

Check Valves



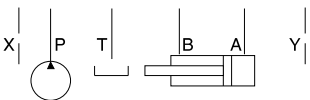
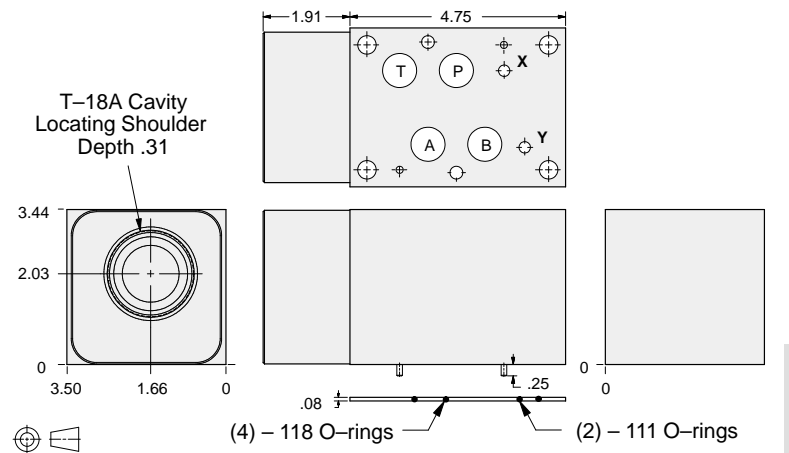
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKC		DKC/S	



FUNCTION

On A
Free Flow Out
of Valve (High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKG		DKG/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

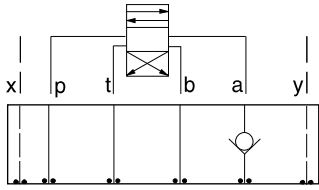


ISO 07 SANDWICH BODIES



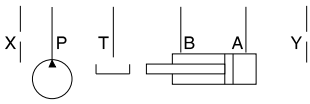
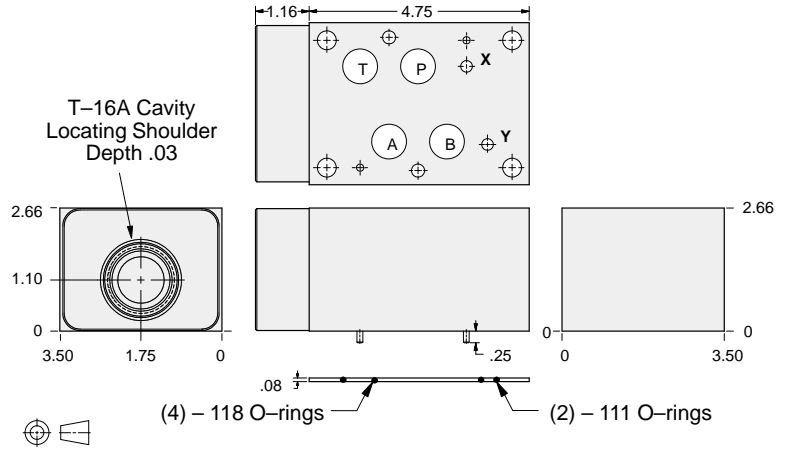
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Check Valves



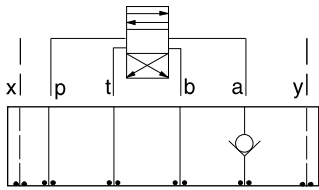
FUNCTION

On A
Free Flow Into Valve



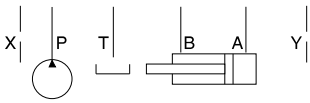
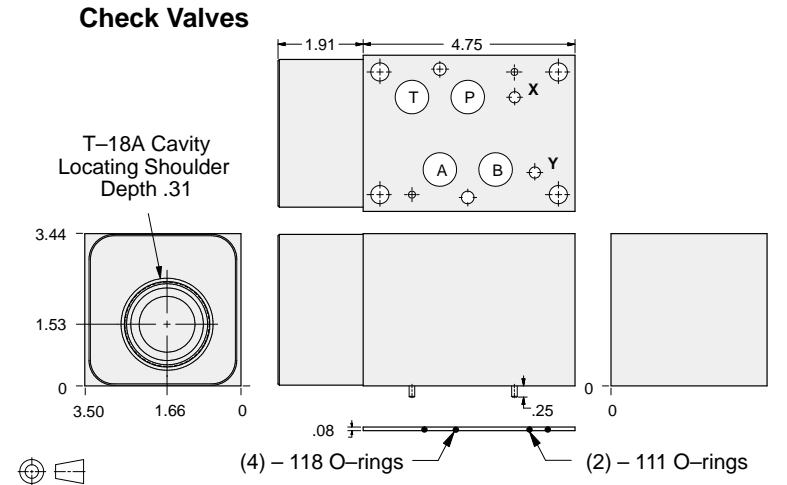
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKA		DKA/S	

Check Valves



FUNCTION

On A
Free Flow Into Valve
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKE		DKE/S	

07 CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

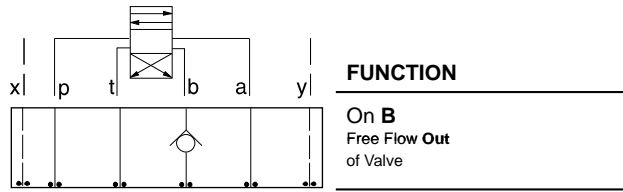
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			



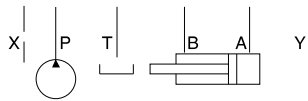
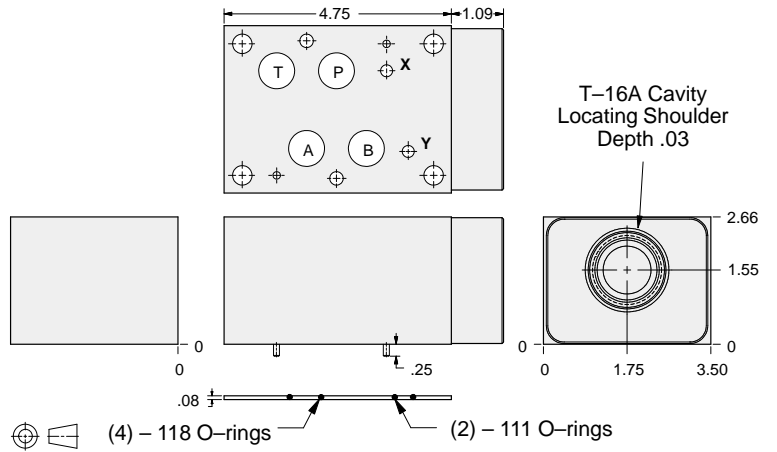
ISO 07 SANDWICH BODIES



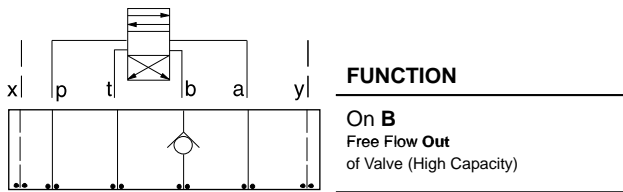
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



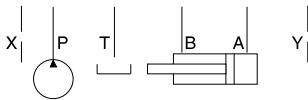
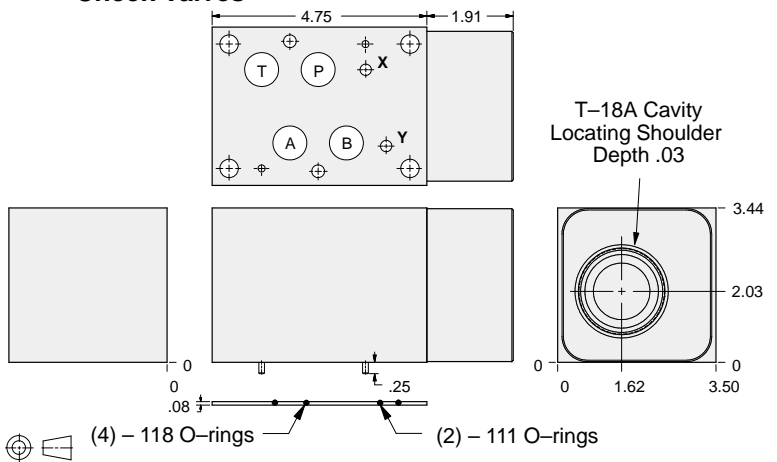
Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKD		DKD/S	



Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKI		DKI/S	

07 CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

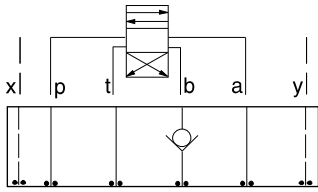


ISO 07 SANDWICH BODIES



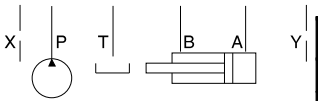
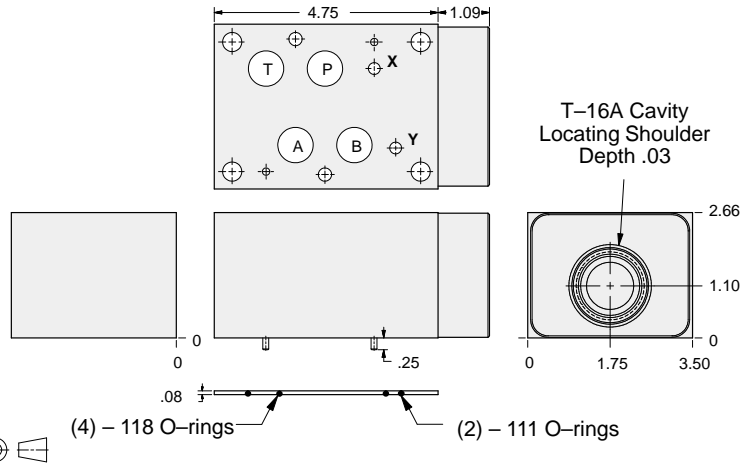
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Check Valves



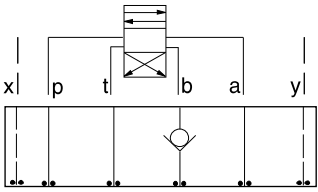
FUNCTION

On B
Free Flow Into Valve



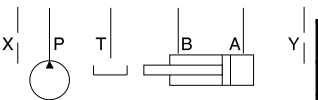
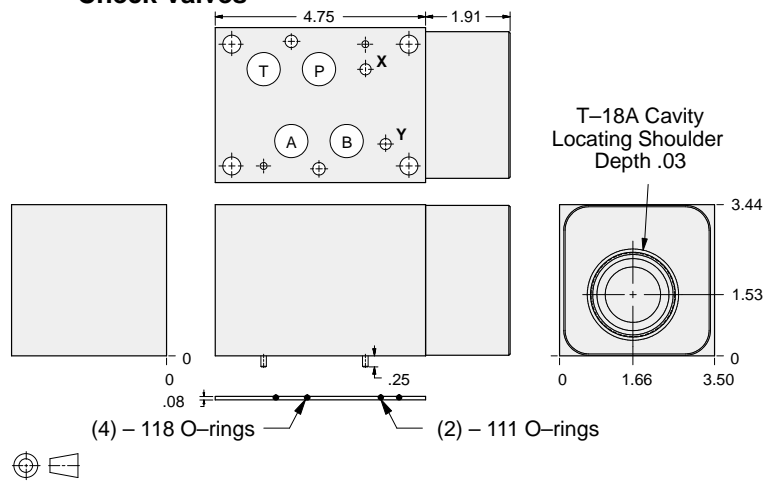
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKB		DKB/S	

Check Valves



FUNCTION

On B
Free Flow Into Valve
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKF		DKF/S	

07 CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

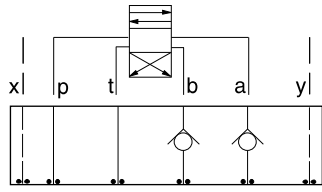
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



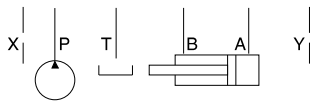
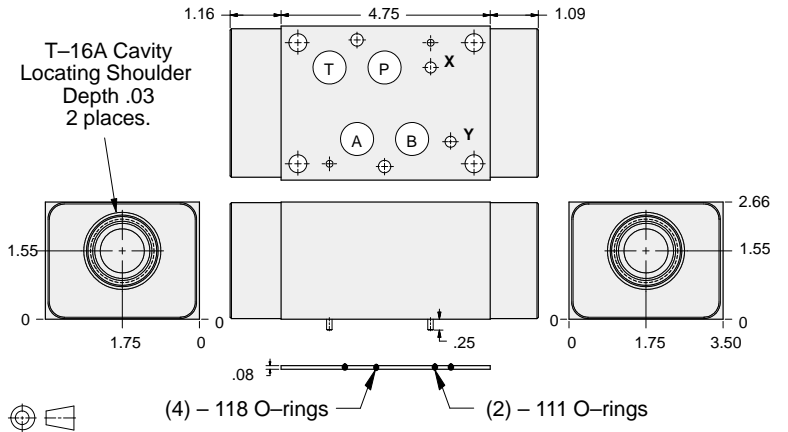
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



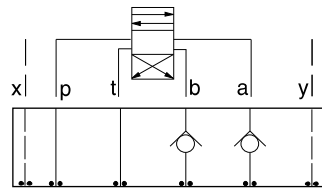
FUNCTION

On **A** and **B**
Free Flow Out
of Valve

Check Valves



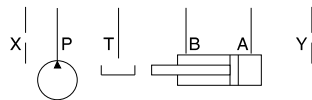
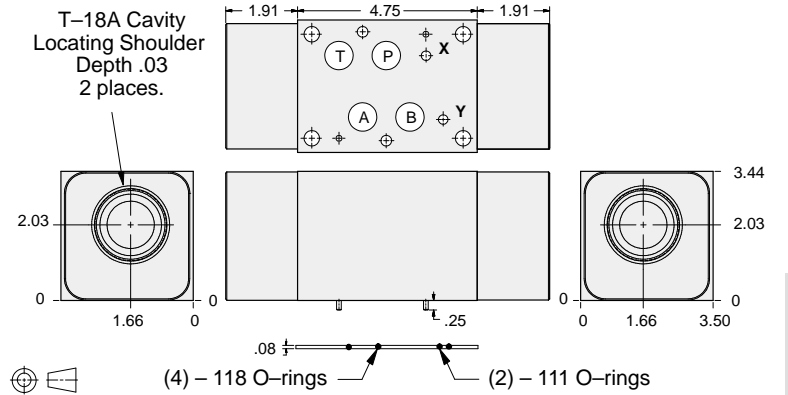
ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
DKZ		DKZ/S	



FUNCTION

On **A** and **B**
Free Flow Out
of Valve (High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
DKU		DKU/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

07 CHECK

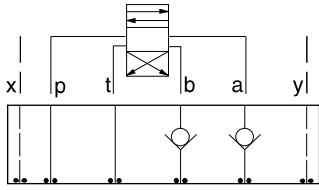


ISO 07 SANDWICH BODIES



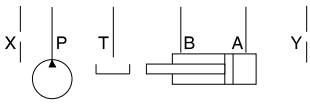
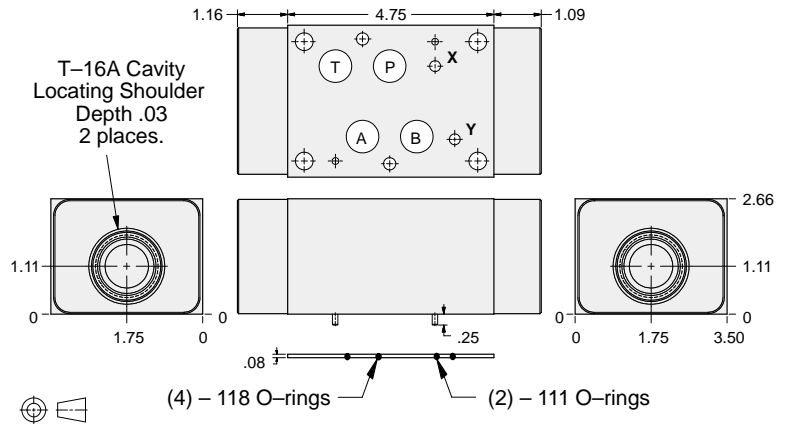
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Check Valves



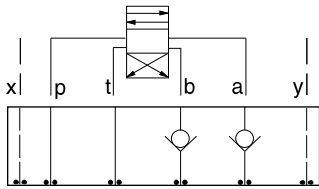
FUNCTION

On **A** and **B**
Free Flow Into Valve



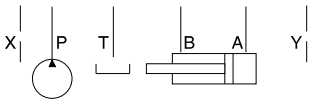
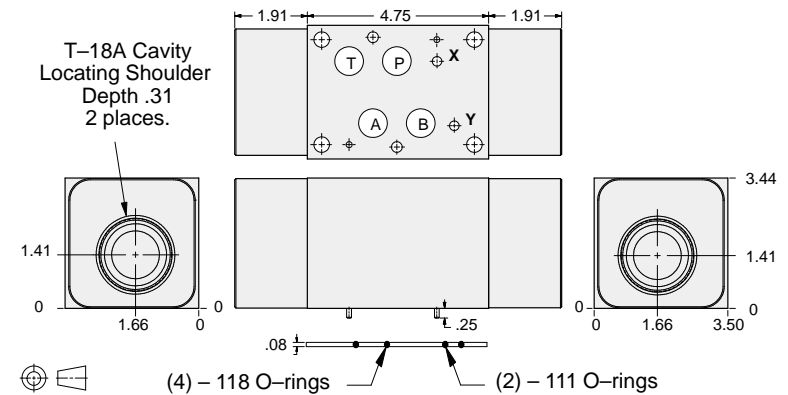
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKY		DKY/S	

Check Valves



FUNCTION

On **A** and **B**
Free Flow Into Valve
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKW		DKW/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

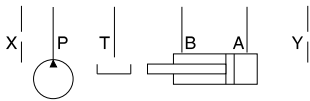
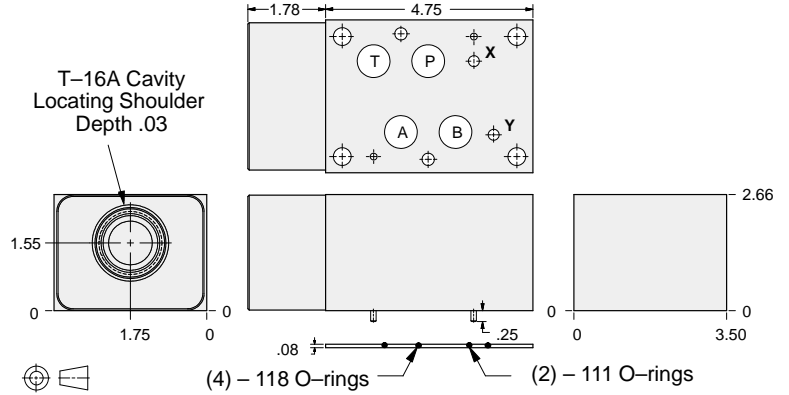
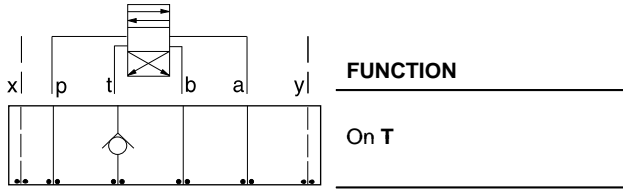


ISO 07 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKT		DKT/S	

07 CHECK

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CXHA Page 5.09		
OTHER VALVES:			

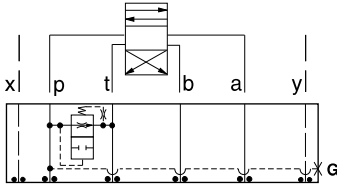


ISO 07 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

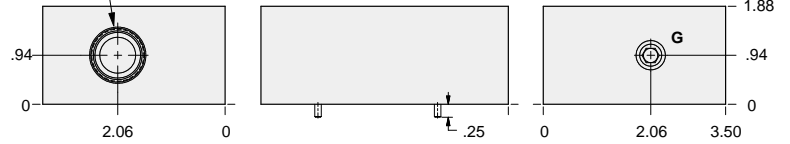
Circuit Savers



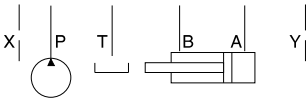
FUNCTION

Air-Bleed and Start-Up

T-3A Cavity Locating Shoulder Depth .03



(4) - 118 O-rings (2) - 111 O-rings



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CKP		CKP/S	
.25 BSPP	CKP/M		CKP/T	

07 CIRCUIT SAVER

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Air Bleed and Start-up Valve		
	NQEB Page 10.16		
OTHER VALVES:			

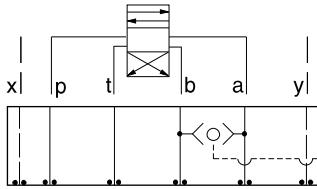


ISO 07 SANDWICH BODIES



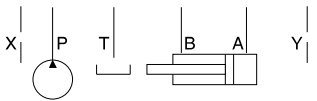
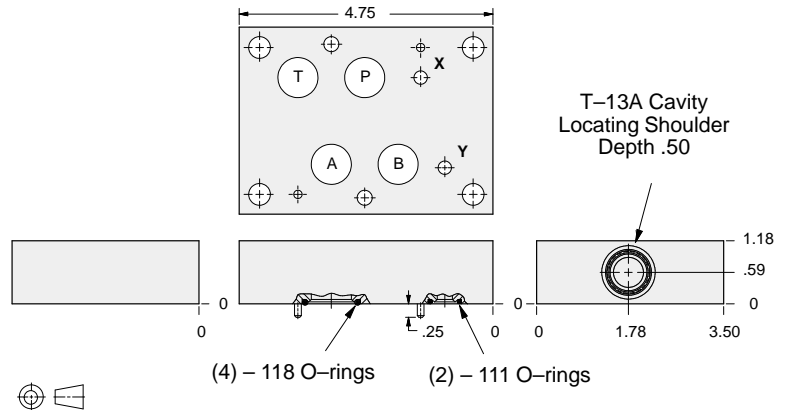
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Circuit Savers



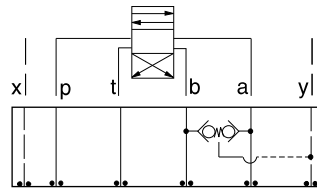
FUNCTION

Shuttle
A and B
Output External



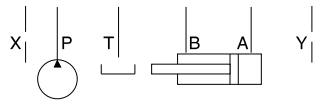
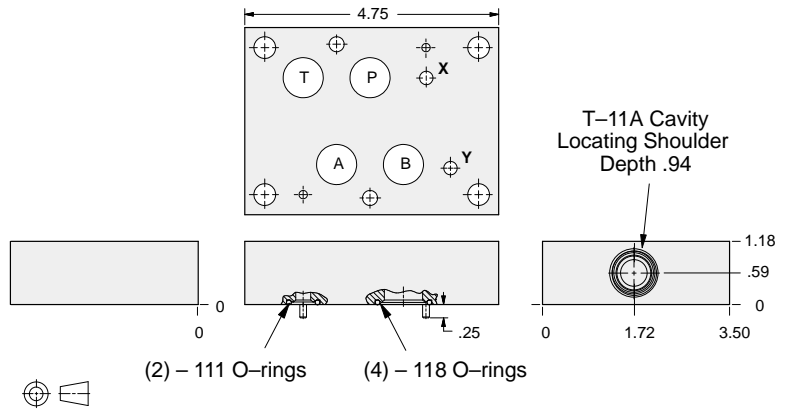
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
DKS		DKS/S	

Circuit Savers



FUNCTION

Checks from
A and B
Output to Y Port



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
BKS		BKS/S	

07 CIRCUIT SAVER

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

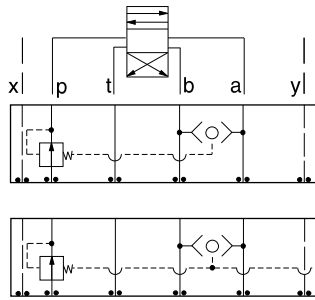
<p>1-2 Ext.</p>	2 Port Shuttle Valve, Signal External		
	CSAA Page 10.09 (use with DKS)		
<p>1-2 3</p>	3 Port Back-to-Back Check Valve, Signal at Port 3		
	CDAB Page 10.10 (use with BKS)		
OTHER VALVES:			



ISO 07 SANDWICH BODIES



ω Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
 ω See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

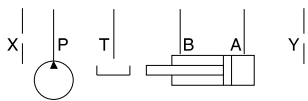
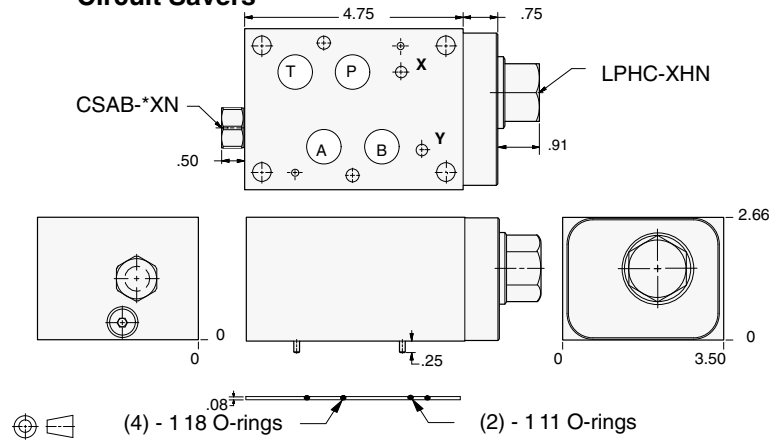


FUNCTION

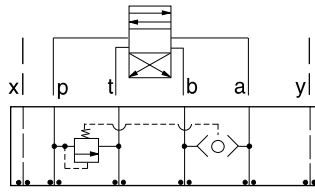
Pressure Compensator (Restrictive)

Pressure Compensator (Restrictive) w/Load-Sensing Port

Circuit Savers



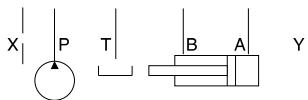
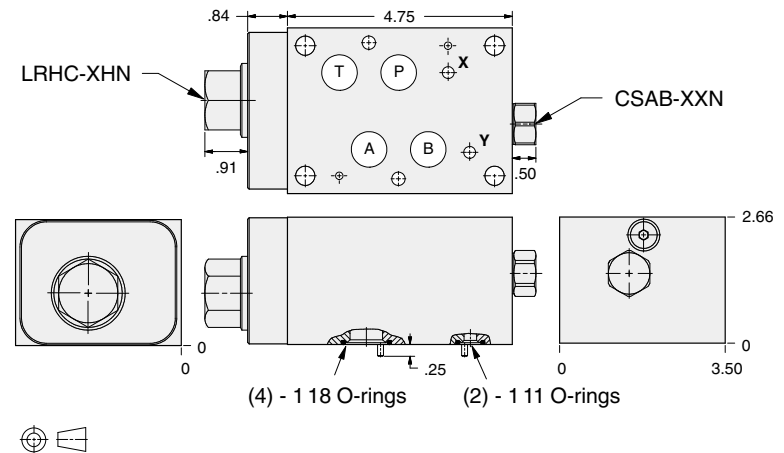
Shuttle Cartridge	External Shuttle Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
CSAB-XXN	None	YFFE-XHN-AB		YFFE-XHN-AB/S	
CSAB-AXN	SAE-4	YFFF-XHN-AB		YFFF-XHN-AB/S	
CSAB-BXN	.25 BSPP	YFFF-XHN-AB/M		YFFF-XHN-AB/T	



FUNCTION

Pressure Compensator (Bypass)

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YFFG-XHN-AB		YFFG-XHN-AB/S	

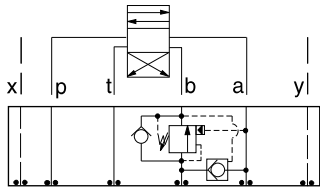
07 CIRCUIT SAVER



ISO 07 SANDWICH BODIES



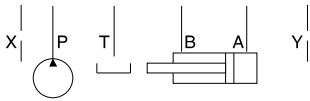
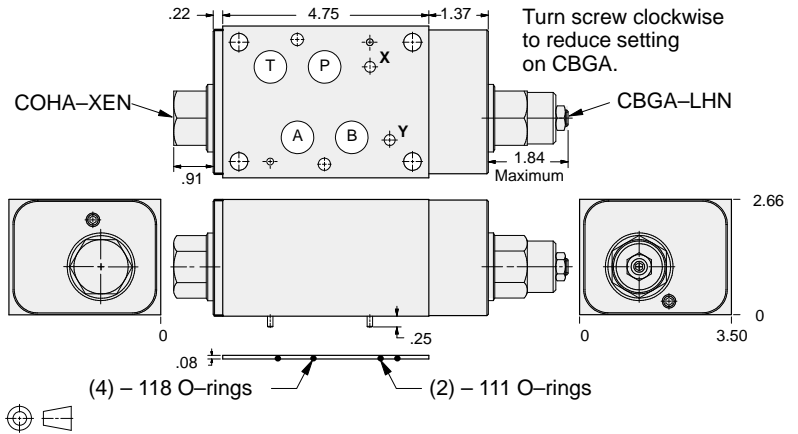
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

B to A
Regenerative

Circuit Savers



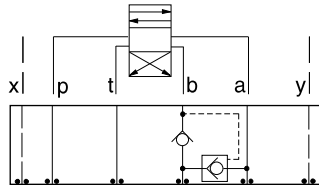
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDFG-LHN-AB		YDFG-LHN-AB/S	



ISO 07 SANDWICH BODIES



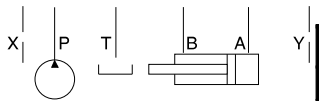
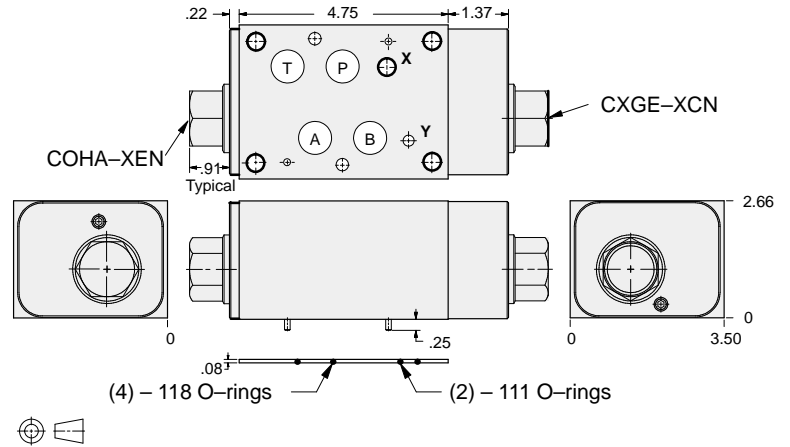
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



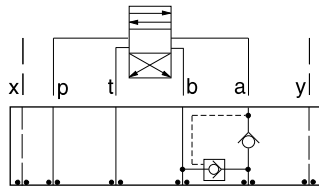
FUNCTION

B to A
Regenerative
(Full Time)

Circuit Savers



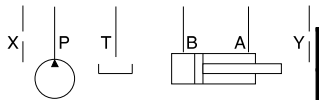
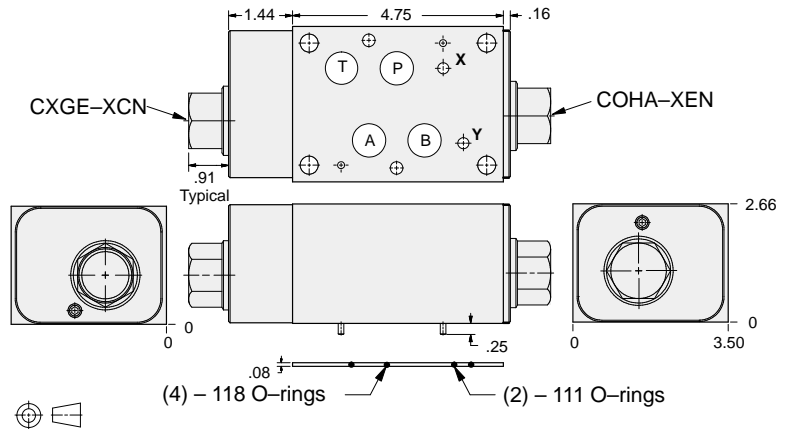
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDFH-XCN-AB		YDFH-XCN-AB/S	



FUNCTION

A to B
Regenerative
(Full Time)

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDFI-XCN-AB		YDFI-XCN-AB/S	

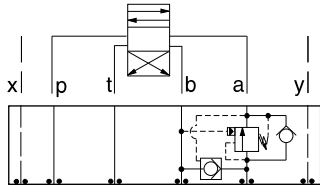
07 CIRCUIT SAVER



ISO 07 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

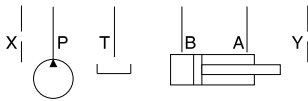
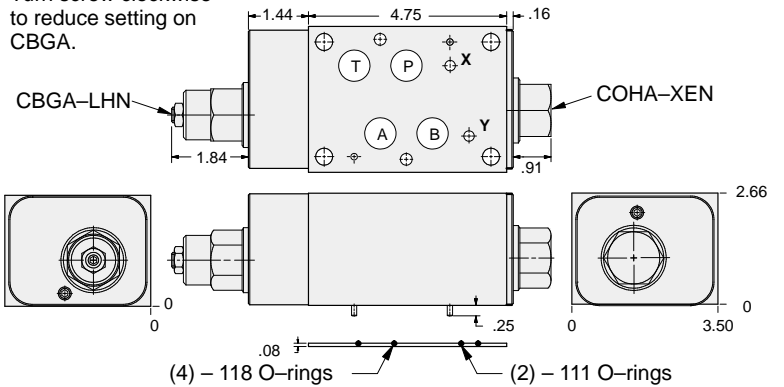


FUNCTION

A to B
Regenerative

Circuit Savers

Turn screw clockwise to reduce setting on CBGA.



ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
YDFE-LHN-AB		YDFE-LHN-AB/S	

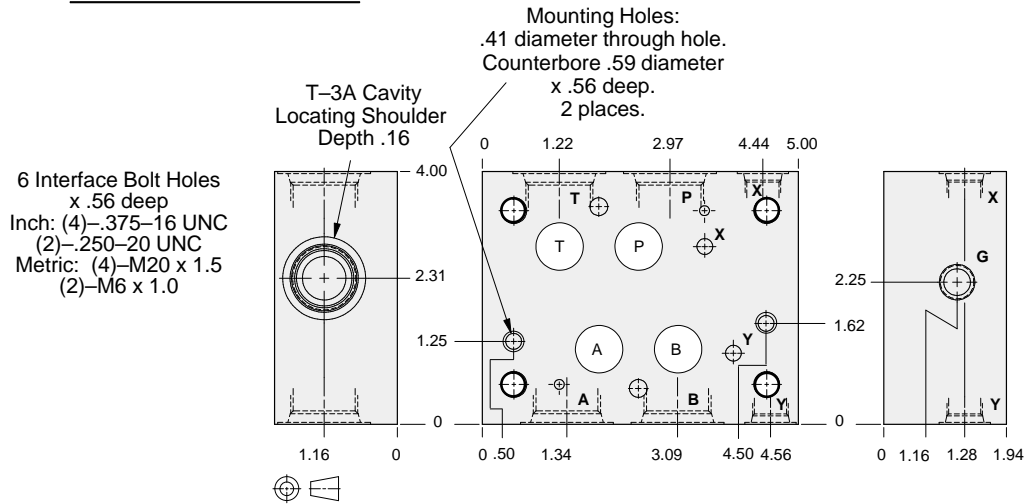
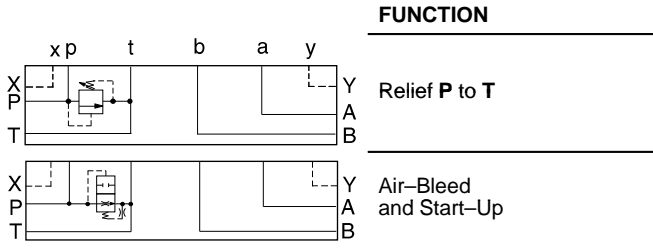


ISO 07 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Side Ported Subplates



Bolt Hole Interface	Gage Port (Plugged)	Port P,T,A,B	Port X,Y	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	.75 NPTF	.25 NFPT	ZLW		ZLW/S	
Inch	.25 NPTF	SAE-12	SAE-6	ZLX		ZLX/S	
Metric	.25 BSPP	.75 BSPP	.25 BSPP	ZLZ		ZLZ/S	

07 SUBPLATE

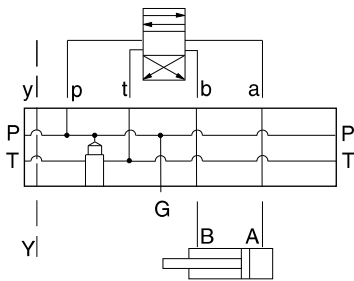
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve RPGC Page 1.06		Pilot Operated "Kick-Down" Relief Valve RQGB Page 1.12
	Pilot Operated, Rapid Response Relief Valve RPGE Page 1.08		Air Controlled, Pilot Operated Relief Valve RPGD Page 1.14
	Direct Acting Relief Valve RDFA Page 1.10		Air Bleed and Start-up Valve NQEB Page 10.16
OTHER VALVES:			



BAR MANIFOLDS



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

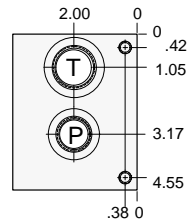
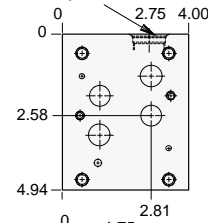
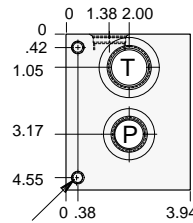


ISO 07 Parallel Circuit with Relief Cavity and Y Port

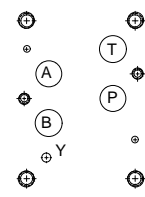
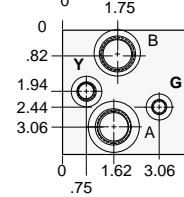
FUNCTION

One Station

T-3A Cavity
Locating Shoulder
Depth .09



Mounting Holes:
Inch: .375 – 16UNC
x .75 in. Deep.
Metric: M10 x 1.5 – 6H
x .75 in. Deep.
2 places each end



Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.00 NPTF	.75 NPTF	.25 NPTF	.25 NPTF	VLA		VLA/S	
inch	SAE-16	SAE-12	SAE-6	SAE-4	VLE		VLE/S	
metric	1.00 BSPP	.75 BSPP	.25 BSPP	.25 BSPP	VLJ		VLJ/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			

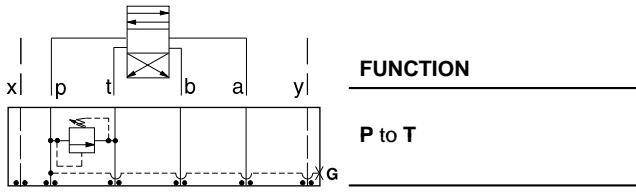
BAR MANIFOLDS



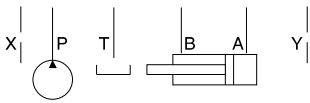
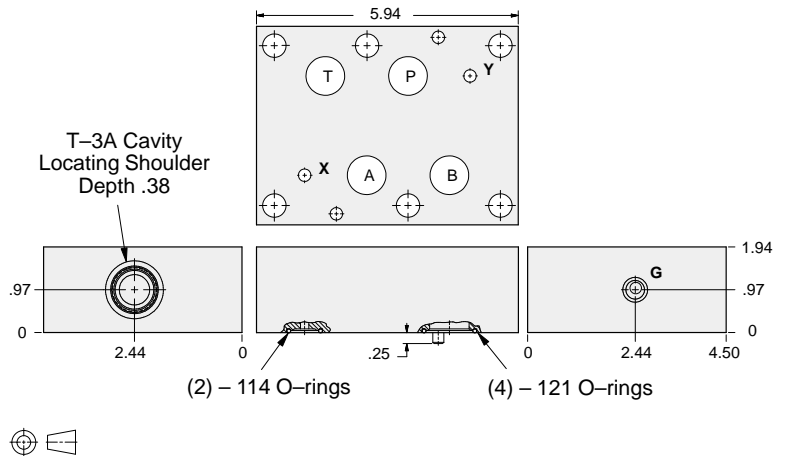
ISO 08 SANDWICH BODIES



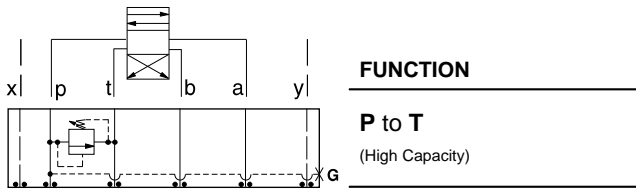
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



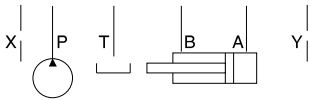
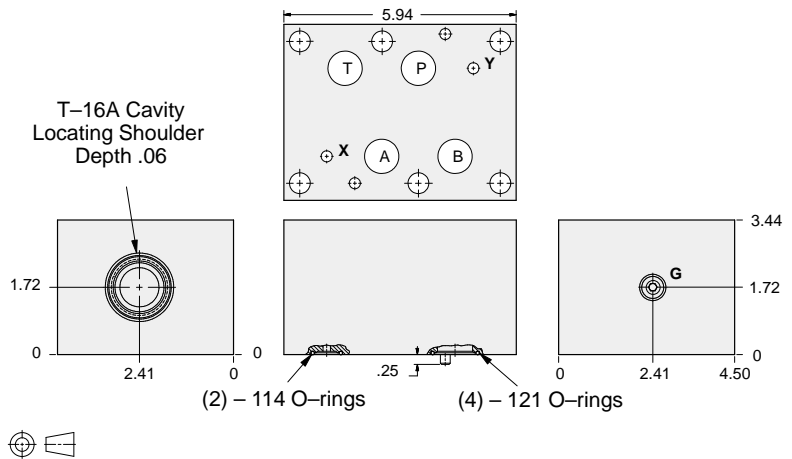
Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CDP		CDP/S	
.25 BSPP	CDP/M		CDP/T	



Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CDO		CDO/S	
.25 BSPP	CDO/M		CDO/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

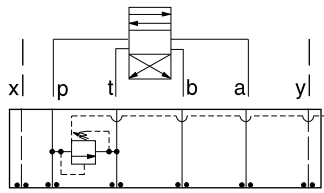
	<i>Pilot Operated Relief Valve</i> RP*C Page 1.06, 1.07		<i>Pilot Operated "Kick-Down" Relief Valve</i> RQ*B Page 1.12, 1.13
	<i>Pilot Operated, Rapid Response Relief Valve</i> RP*E Page 1.08, 1.09		<i>Air Controlled, Pilot Operated Relief Valve</i> RP*D Page 1.14, 1.15
	<i>Direct Acting Relief Valve</i> RD*A Page 1.10, 1.11		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



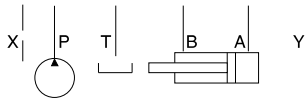
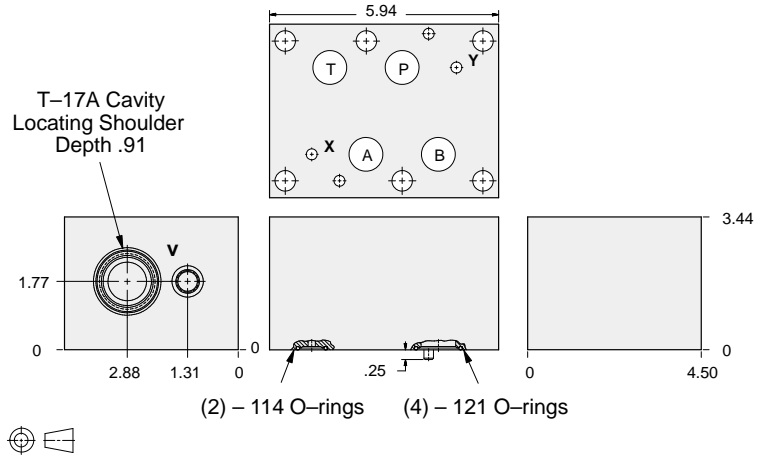
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

P to T
Externally Vented

Relief Valves



Vent Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	HBV		HBV/S	
.25 BSPP	HBV/M		HBV/T	

08 RELIEF

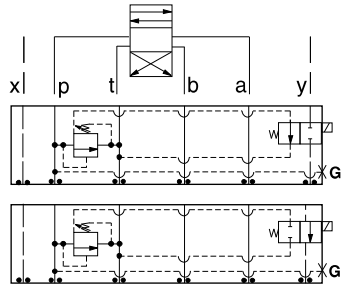
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Vented Relief Valve		
	RVGA Page 1.19		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

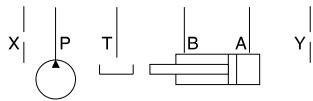
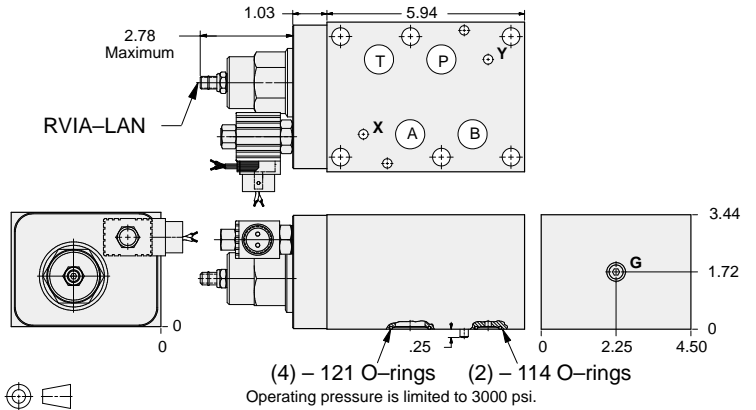


FUNCTION

P to T
N.O. Solenoid
Vented*

P to T
N.C. Solenoid
Vented*

Relief Valves



Solenoid Type	Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
N.O.	.25 NPTF	YRHI-LAN-*A		YRHI-LAN-*A/S	
N.O.	.25 BSPP	YRHI-LAN-*A/M		YRHI-LAN-*A/T	
N.C.	.25 NPTF	YRHJ-LAN-*A		YRHJ-LAN-*A/S	
N.C.	.25 BSPP	YRHJ-LAN-*A/M		YRHJ-LAN-*A/T	

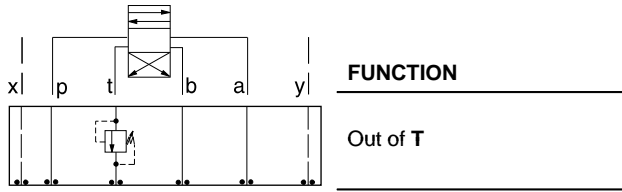
* Select solenoid connection/voltage option from page 14.16 and add option price to List Price.



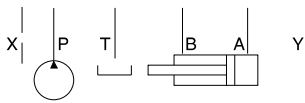
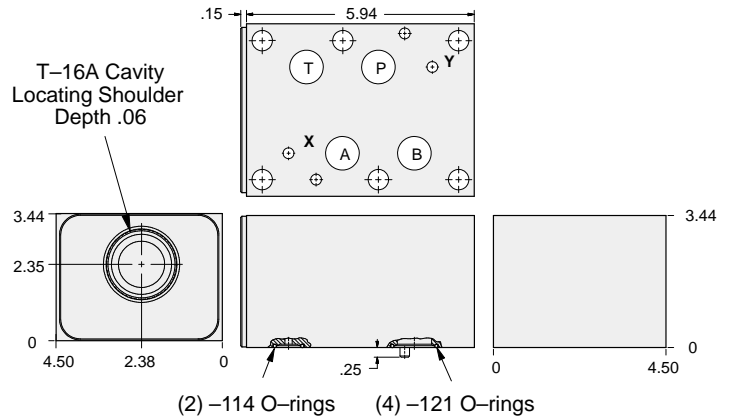
ISO 08 SANDWICH BODIES



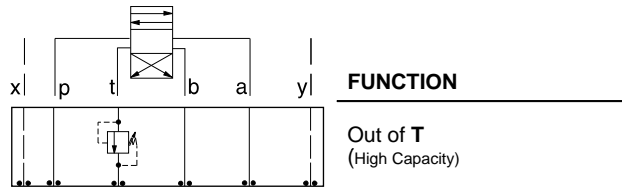
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



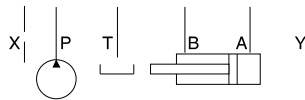
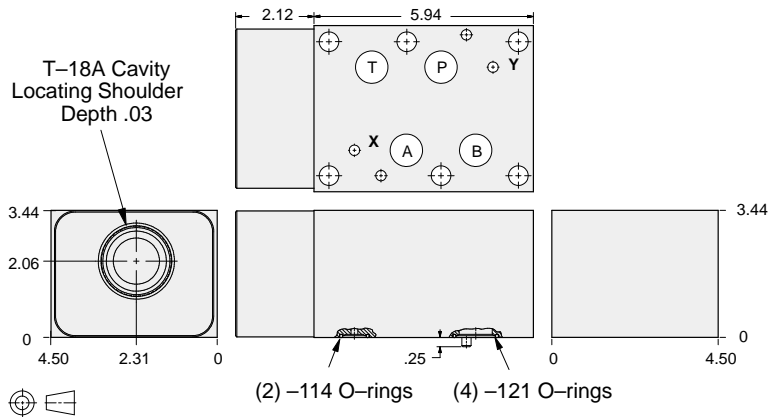
Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBT		IBT/S	



Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBV		IBV/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

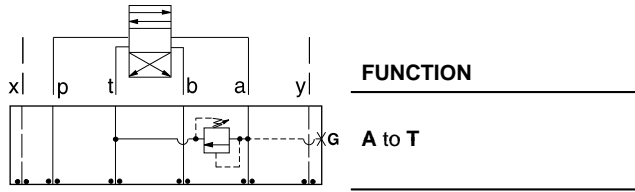
	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RP*C Page 1.07		RQ*B Page 1.13
	Pilot Operated, Rapid Response Relief Valve		Air Controlled, Pilot Operated Relief Valve
	RP*E Page 1.09		RP*D Page 1.15
	Direct Acting Relief Valve		
	RD*A Page 1.11		
OTHER VALVES:			



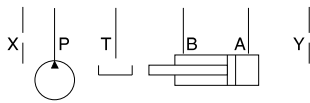
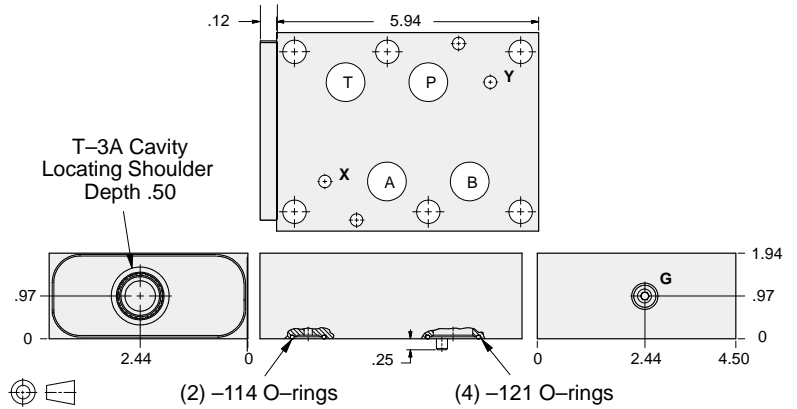
ISO 08 SANDWICH BODIES



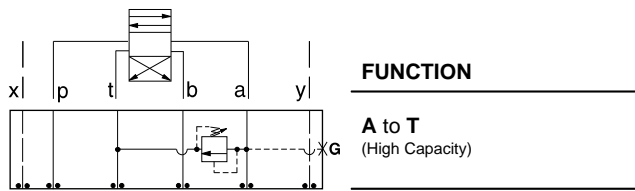
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



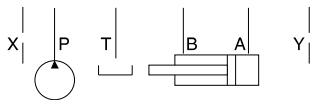
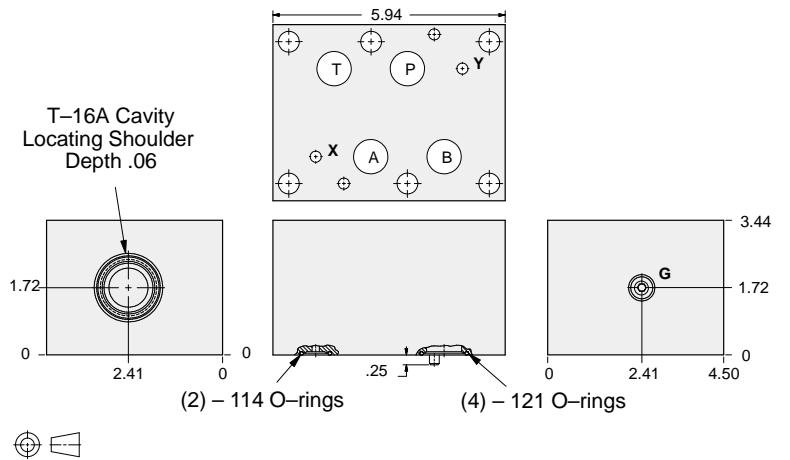
Relief Valves



Gauge Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CDA		CDA/S	
.25 BSPP	CDA/M		CDA/T	



Relief Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CDC		CDC/S	
.25 BSPP	CDC/M		CDC/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

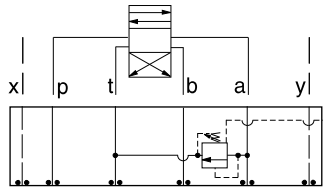
	Pilot Operated Relief Valve RP*C Page 1.06, 1.07		Pilot Operated "Kick-Down" Relief Valve RQ*B Page 1.12, 1.13
	Pilot Operated, Rapid Response Relief Valve RP*E Page 1.08, 1.09		Air Controlled, Pilot Operated Relief Valve RP*D Page 1.14, 1.15
	Direct Acting Relief Valve RD*A Page 1.10, 1.11		
	OTHER VALVES:		



ISO 08 SANDWICH BODIES



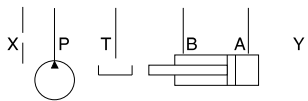
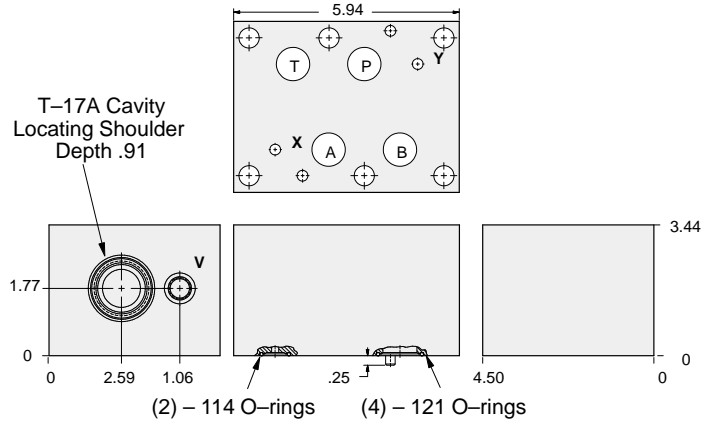
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



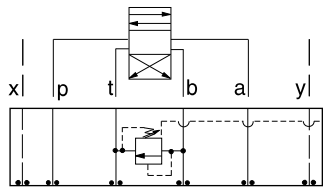
FUNCTION

A to T
Externally Vented

Relief Valves



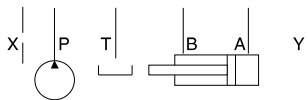
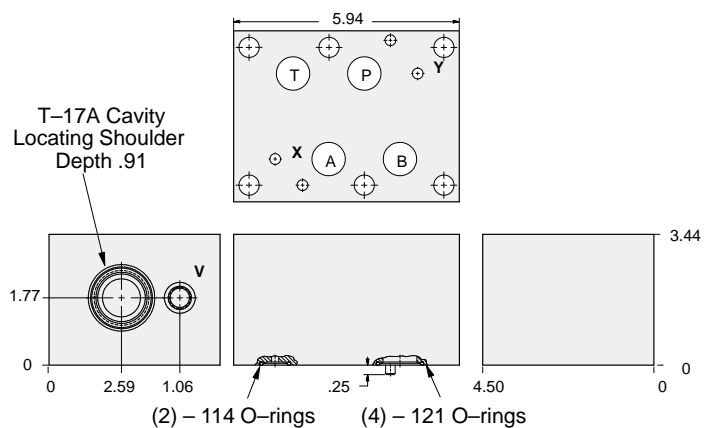
Vent Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
SAE-6	HBE		HBE/S	
.25 BSPP	HBE/M		HBE/T	



FUNCTION

B to T
Externally Vented

Relief Valves



Vent Port	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Part Number	List Price
SAE-6	HBF		HBF/S	
.25 BSPP	HBF/M		HBF/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

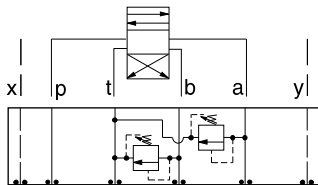
	Pilot Operated Vented Relief Valve		
	RVGA Page 1.19		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



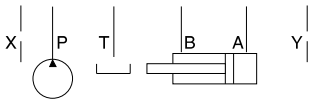
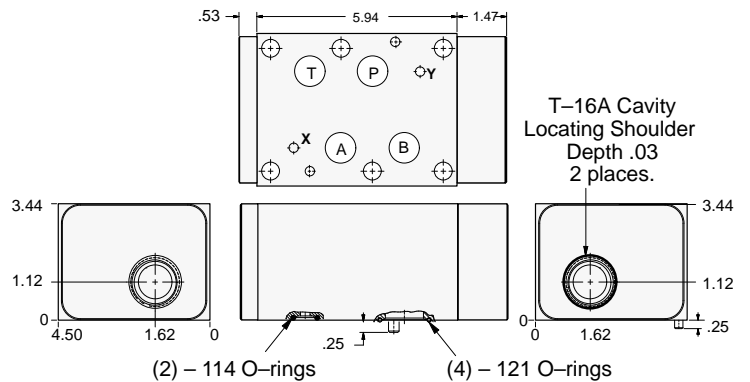
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

A and B to T
(High Capacity)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CDZ		CDZ/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Relief Valve		Pilot Operated "Kick-Down" Relief Valve
	RPIC Page 1.07		RQIB Page 1.13
	Pilot Operated, Rapid Response Relief Valve		Air Controlled, Pilot Operated Relief Valve
	RPIE Page 1.09		RPID Page 1.15
	Direct Acting Relief Valve		
	RDHA Page 1.11		
OTHER VALVES:			

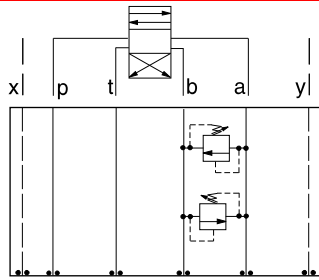
08 RELIEF



ISO 08 SANDWICH BODIES



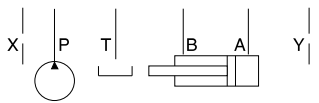
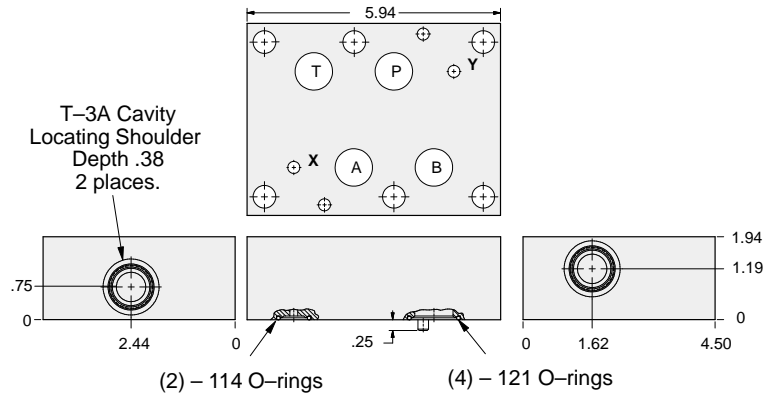
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



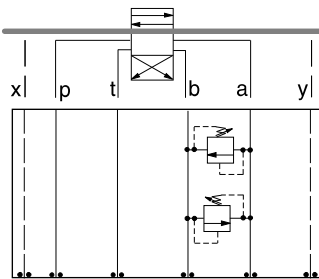
FUNCTION

**A to B and
B to A**
(Cross-Port)

Relief Valves



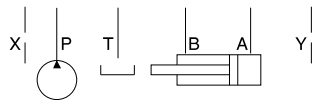
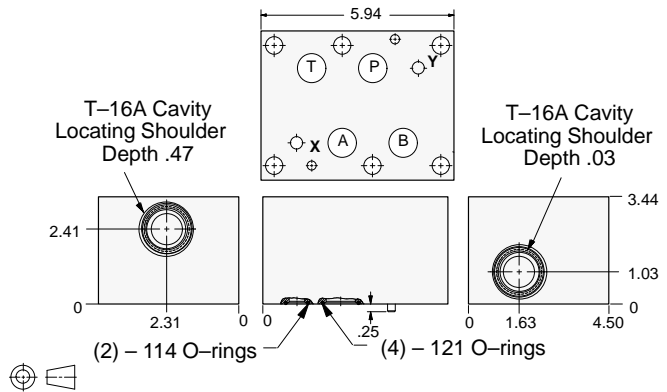
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CDY		CDYS	



FUNCTION

**A to B and
B to A**
(High Capacity)
(Cross-Port)

Relief Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CDW		CDWS	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

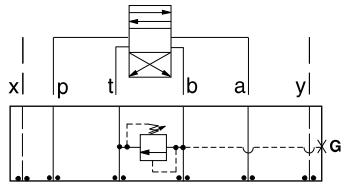
	<i>Pilot Operated Relief Valve</i>		<i>Pilot Operated "Kick-Down" Relief Valve</i>
	RP*C Page 1.06, 1.07		RQ*B Page 1.12, 1.13
	<i>Pilot Operated, Rapid Response Relief Valve</i>		<i>Air Controlled, Pilot Operated Relief Valve</i>
	RP*E Page 1.08, 1.09		RP*D Page 1.14, 1.15
	<i>Direct Acting Relief Valve</i>		
	RD*A Page 1.10, 1.11		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



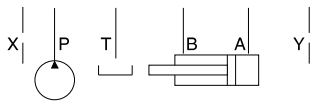
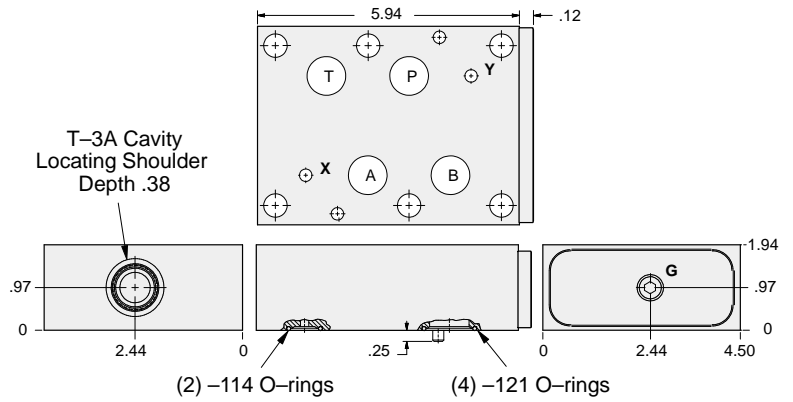
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

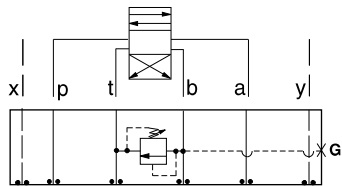
B to T

Relief Valves



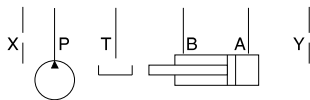
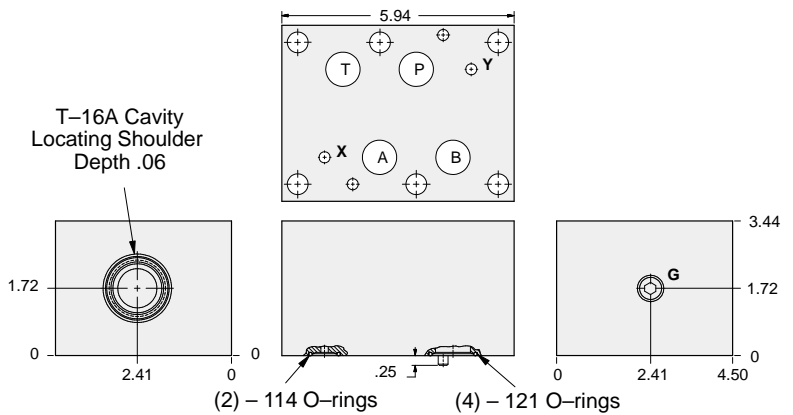
Gauge Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CDB		CDB/S	
.25 BSPP	CDB/M		CDB/T	

Relief Valves



FUNCTION

B to T
(High Capacity)



Gauge Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CDD		CDD/S	
.25 BSPP	CDD/M		CDD/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve RP*C Page 1.06, 1.07		Pilot Operated "Kick-Down" Relief Valve RQ*B Page 1.12, 1.13
	Pilot Operated, Rapid Response Relief Valve RP*E Page 1.08, 1.09		Air Controlled, Pilot Operated Relief Valve RP*D Page 1.14, 1.15
	Direct Acting Relief Valve RD*A Page 1.10, 1.11		
OTHER VALVES:			

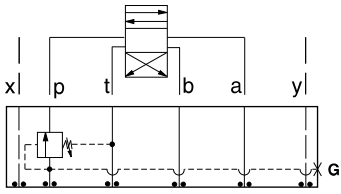


ISO 08 SANDWICH BODIES



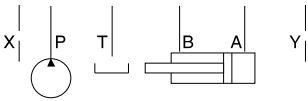
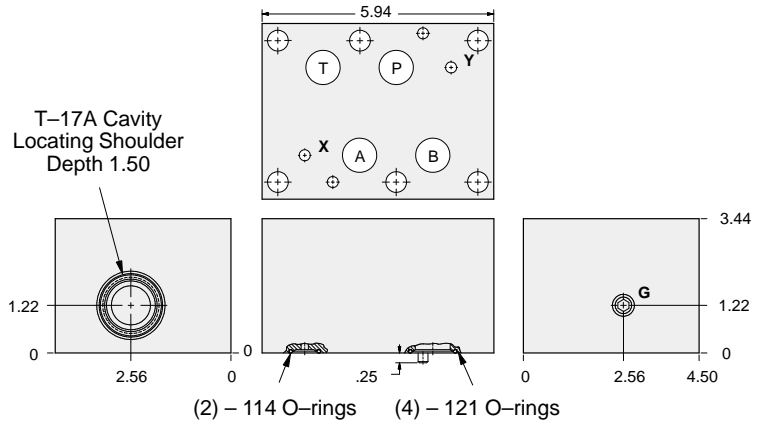
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Sequence Valves



FUNCTION

In to P



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HBW		HBW/S	
.25 BSPP	HBW/M		HBW/T	

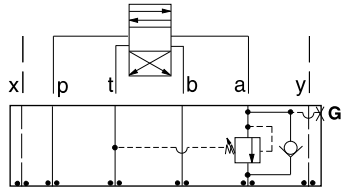
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	<i>Pilot Operated Sequence Valve</i>		<i>Direct Acting Sequence Valve with Reverse Free Flow Check</i>
	RSHC Page 2.07		SCGA Page 2.13
	<i>Pilot Operated "Kick-Down" Sequence Valve</i>		
	SQHB Page 2.09		
	<i>Air Controlled, Pilot Operated Sequence Valve</i>		
	RSHE Page 2.11		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



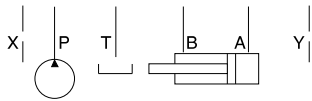
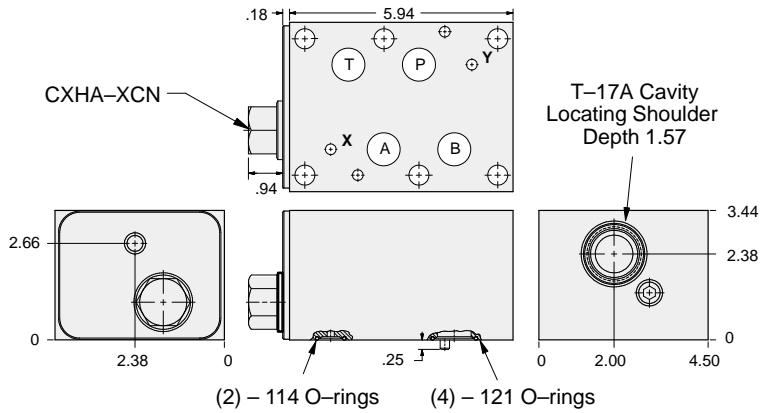
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



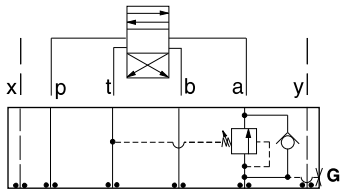
FUNCTION

In to A
Reverse FF Check

Sequence Valves



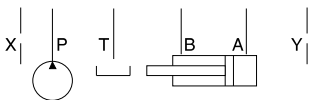
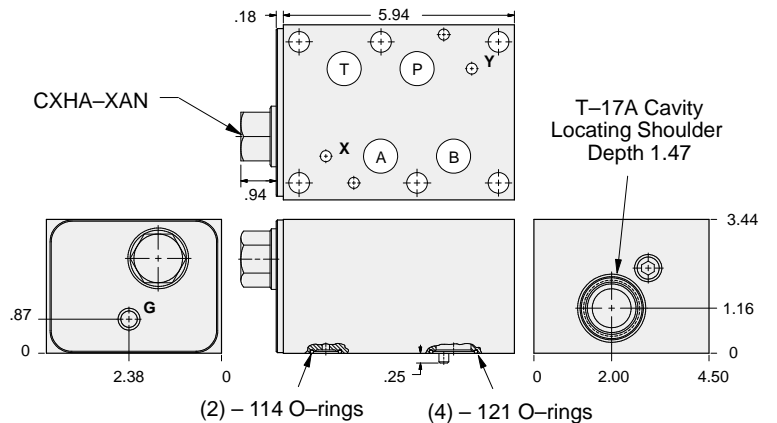
Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HB4		HB4/S	
.25 BSPP	HB4/M		HB4/T	



FUNCTION

Out of A
Reverse FF Check

Sequence Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HB6		HB6/S	
.25 BSPP	HB6/M		HB6/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

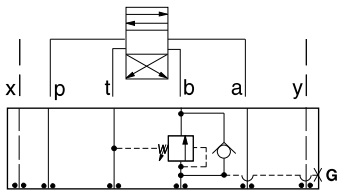
	Pilot Operated Sequence Valve		
	RSHC Page 2.07		
	Pilot Operated "Kick-Down" Sequence Valve		
	SQHB Page 2.09		
	Air Controlled, Pilot Operated Sequence Valve		
	RSHE Page 2.11		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



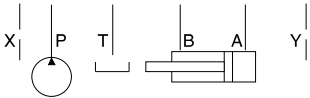
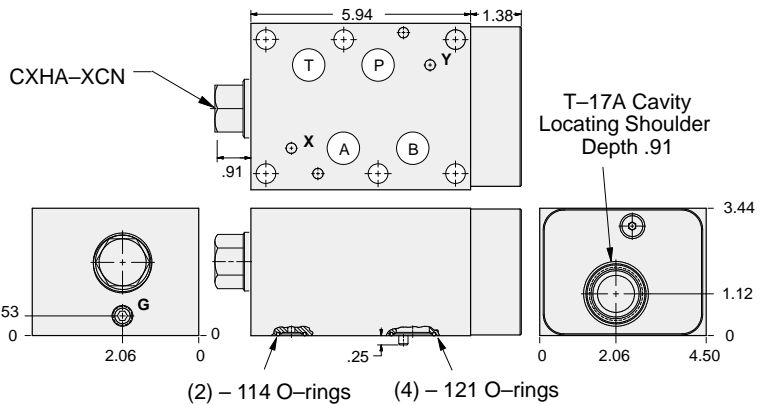
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Out of **B**
Reverse FF Check

Sequence Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HB7		HB7/S	
.25 BSPP	HB7/M		HB7/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

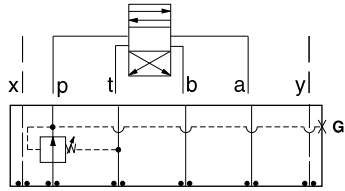
	Pilot Operated Sequence Valve		
	RSHC Page 2.07		
	Pilot Operated "Kick-Down" Sequence Valve		
	SQHB Page 2.09		
	Air Controlled, Pilot Operated Sequence Valve		
	RSHE Page 2.11		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



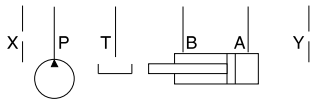
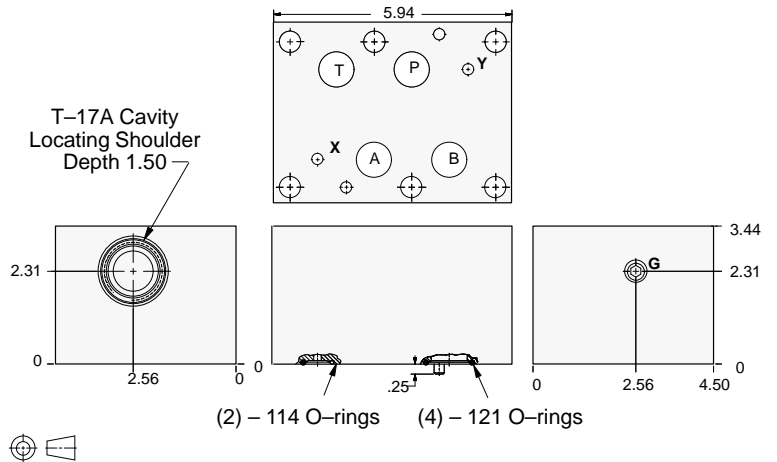
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

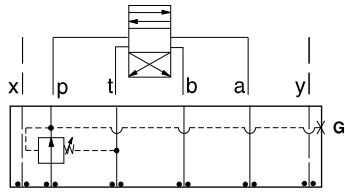
On P
Drained to T

Reducing Valves



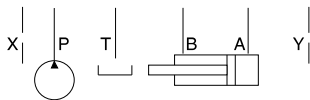
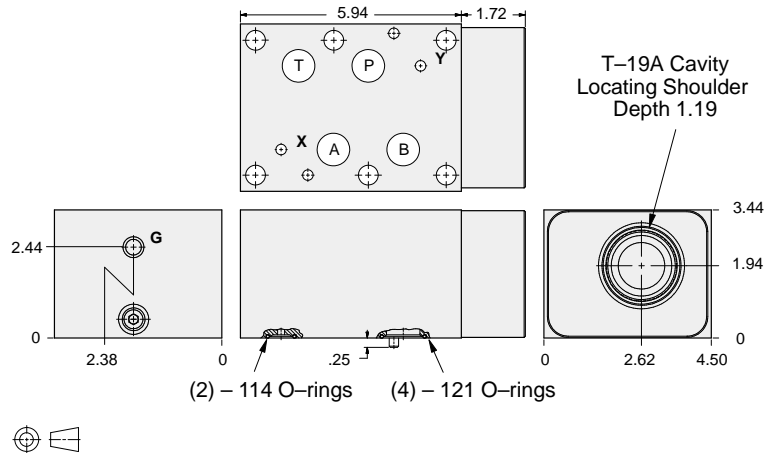
Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HBP		HBP/S	
.25 BSPP	HBP/M		HBP/T	

Reducing Valves



FUNCTION

On P
Drained to T
(High Capacity)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HBO		HBO/S	
.25 BSPP	HBO/M		HBO/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing Valve		
	PB*B Page 3.07		
	Air Controlled, Pilot Operated Reducing Valve		
	PB*C Page 3.09		
OTHER VALVES:			

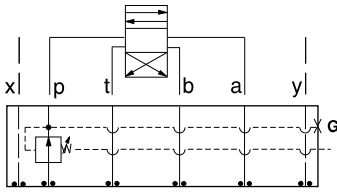


ISO 08 SANDWICH BODIES



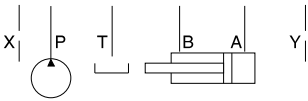
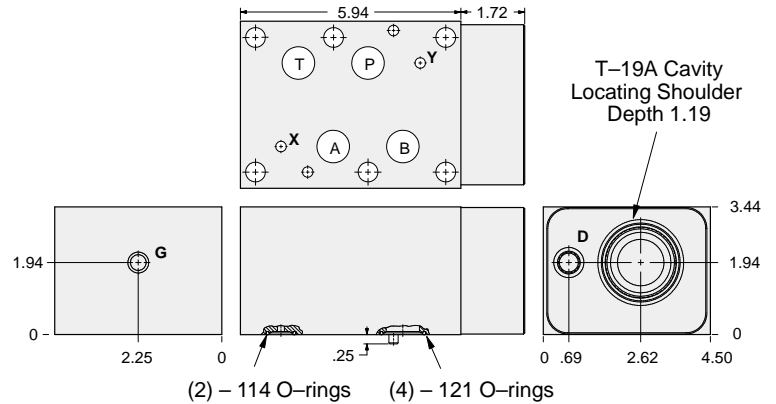
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing Valves



FUNCTION

On P
Drained Externally



Drain Port	Gage Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
SAE-6	.25 NPTF	HBQ		HBQ/S	
.25 BSPP	.25 BSPP	HBQ/M		HBQ/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

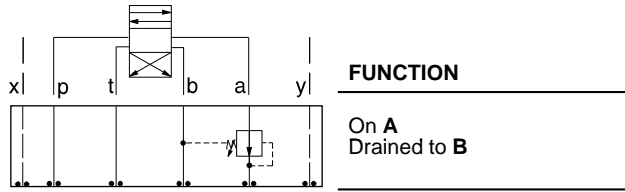
	<i>Pilot Operated Reducing Valve</i>		
	PBJB Page 3.07		
	<i>Air Controlled, Pilot Operated Reducing Valve</i>		
	PBJC Page 3.09		
OTHER VALVES:			



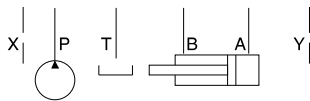
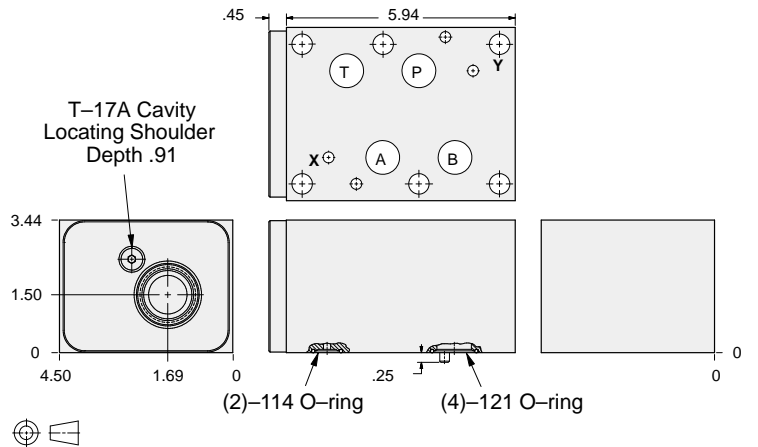
ISO 08 SANDWICH BODIES



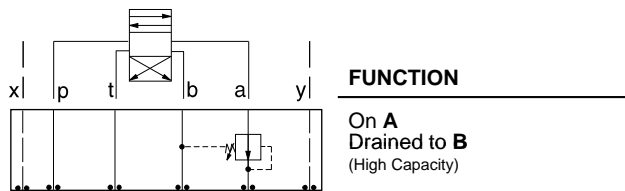
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



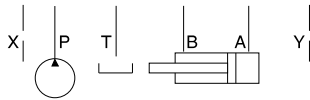
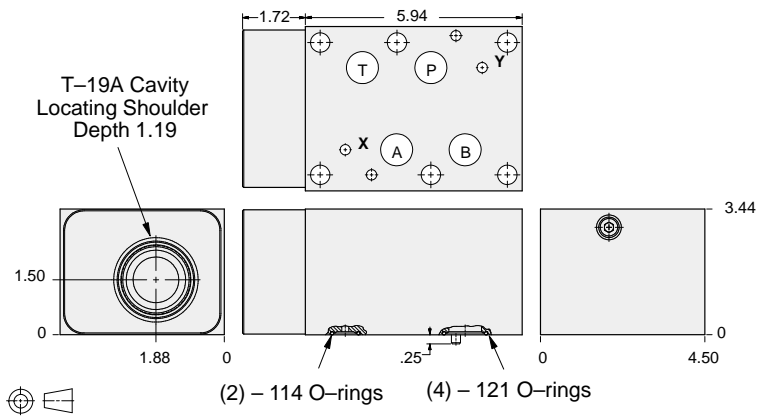
Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBL		HBL/S	



Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBA		HBA/S	

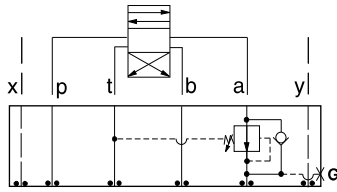
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing Valve		
	PB*B Page 3.07		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



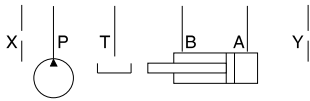
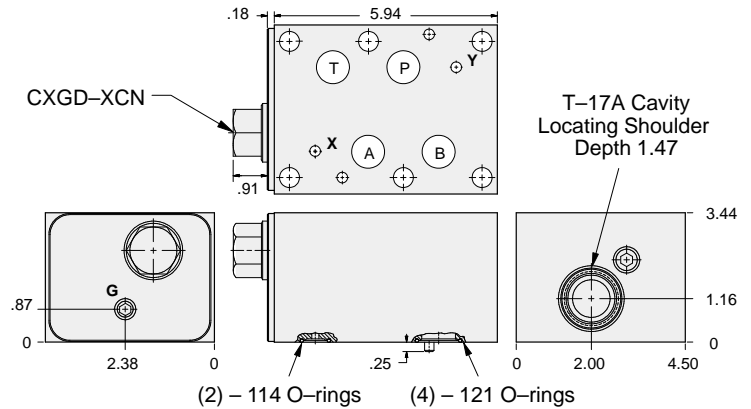
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

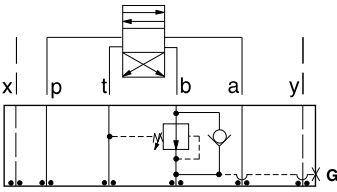
On A Drain to T
Reverse FF Check

Reducing Valves



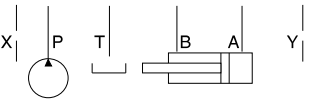
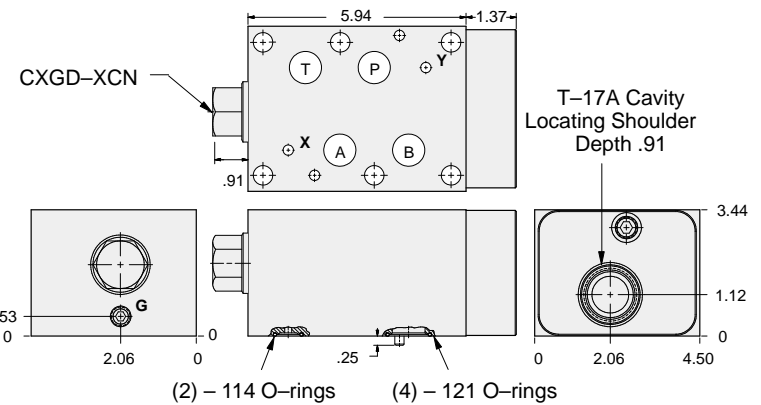
Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HBK		HBK/S	
.25 BSPP	HBK/M		HBK/T	

Reducing Valves



FUNCTION

On B Drain to T
Reverse FF Check



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HBJ		HBJ/S	
.25 BSPP	HBJ/M		HBJ/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing Valve		
	PBHB Page 3.07		
	Air Controlled, Pilot Operated Reducing Valve		
	PBHC Page 3.09		
OTHER VALVES:			

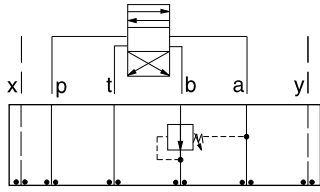


ISO 08 SANDWICH BODIES



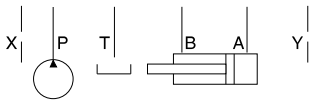
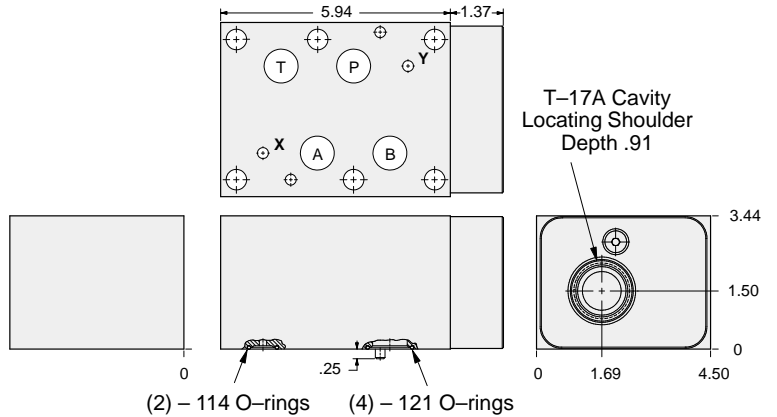
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing Valves



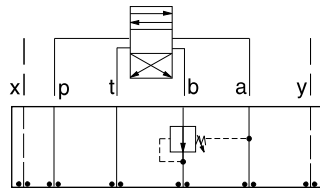
FUNCTION

On B
Drained to A



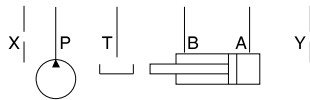
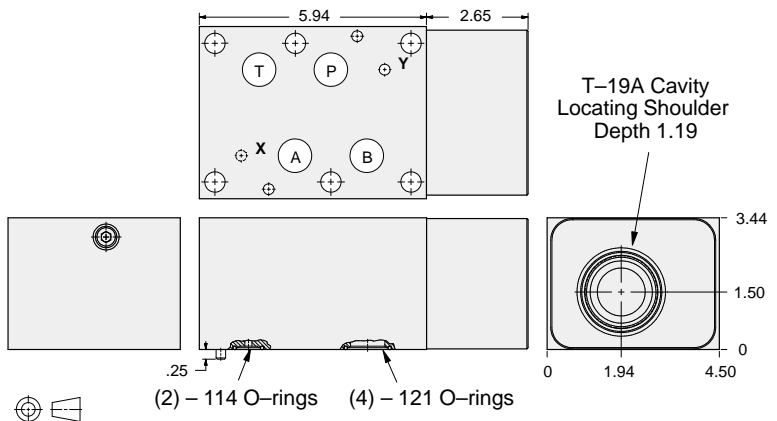
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBM		HBM/S	

Reducing Valves



FUNCTION

On B
Drained to A
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBB		HBB/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

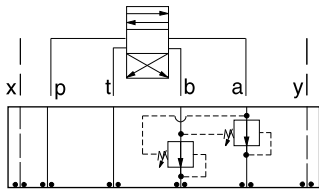
	Pilot Operated Reducing Valve		
	PB*B Page 3.07		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



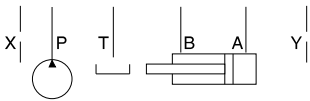
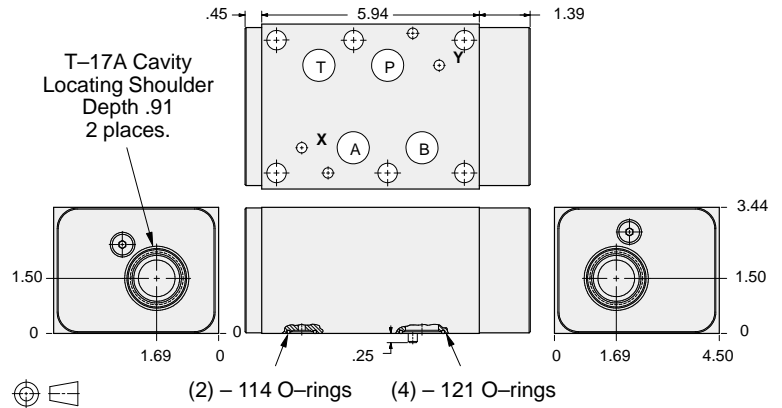
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



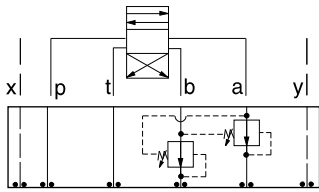
FUNCTION

On **A** and **B**
Drains to Opposite Port

Reducing Valves



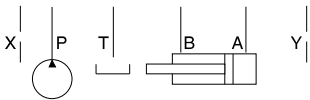
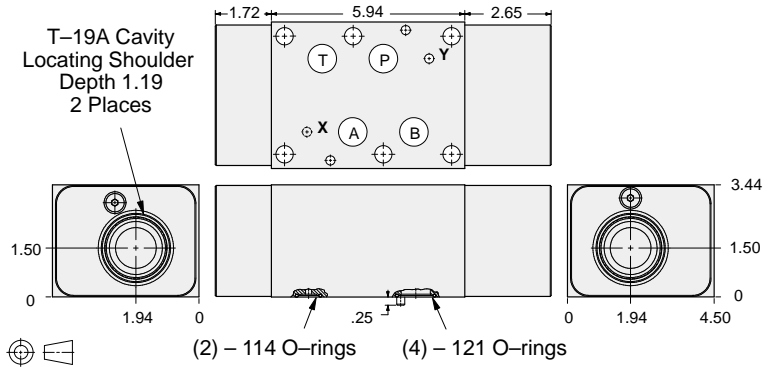
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBN		HBNS	



FUNCTION

On **A** and **B**
Drains to Opposite Port
(High Capacity)

Reducing Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBV		HBVS	

08 REDUCING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing Valve		
	PB*B Page 3.07		
OTHER VALVES:			

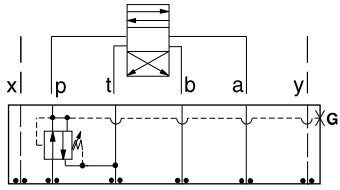


ISO 08 SANDWICH BODIES



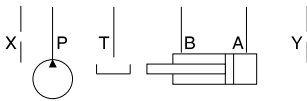
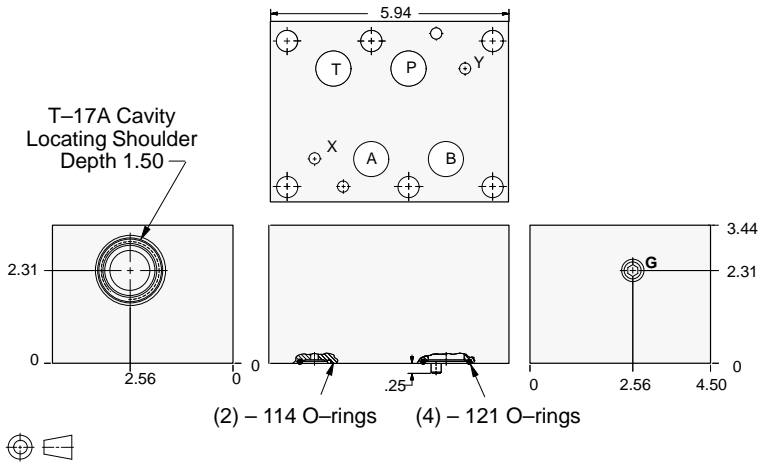
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves



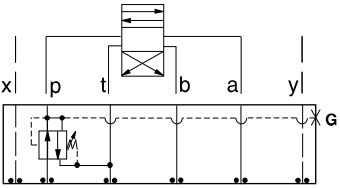
FUNCTION

On P Tank to T
Drained to T



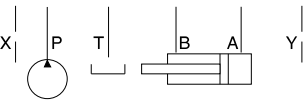
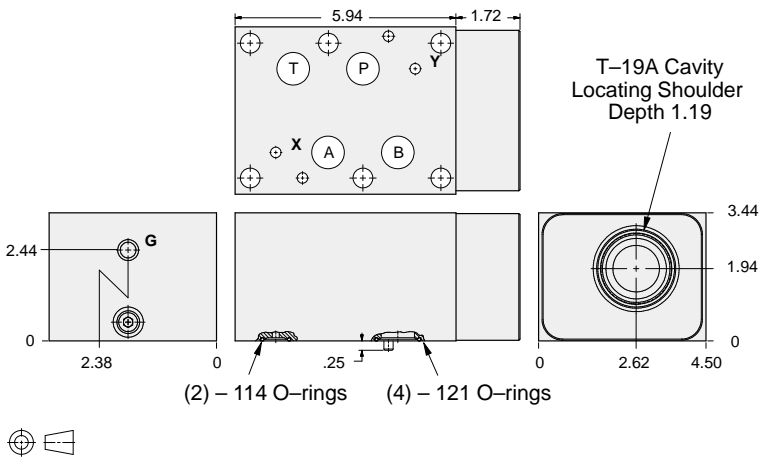
Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HBP		HBP/S	
.25 BSPP	HBP/M		HBP/T	

Reducing/Relieving Valves



FUNCTION

On P Tank to T
Drained to T
(High Capacity)



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HBO		HBO/S	
.25 BSPP	HBO/M		HBO/T	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot Operated Reducing/Relieving Valve</i>		
	PP*B Page 3.11		
	<i>Air Controlled, Pilot Operated Reducing/Relieving Valve</i>		
	PP*C Page 3.13		
OTHER VALVES:			

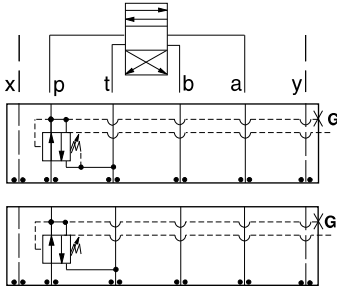


ISO 08 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves

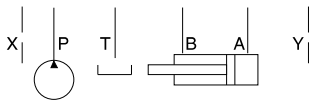
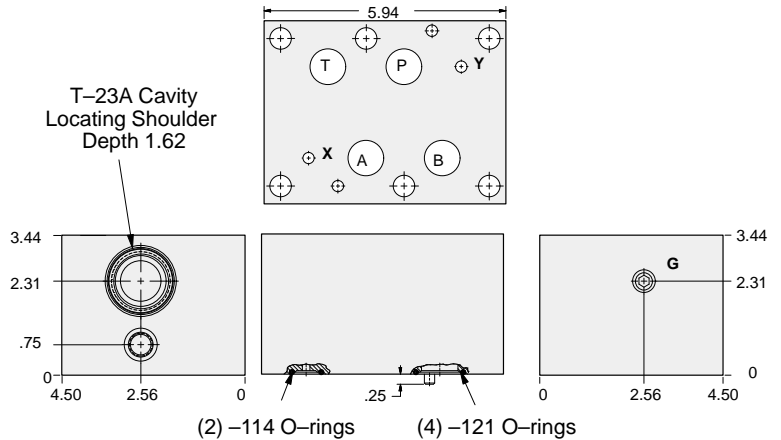


FUNCTION

On P Tank to T
Vented Externally

On P Tank to T
Drained Externally

T-23A Cavity
Locating Shoulder
Depth 1.62



External Port	Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
SAE-6	.25 NPTF	PBP		PBP/S	
.25 BSPP	.25 BSPP			PBP/T	

08 REDUCING/RELIEVING

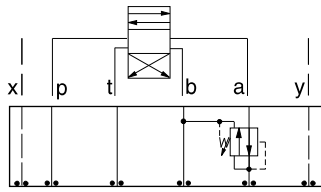
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing/Relieving Valve with Drain Port		
	PVHA Page 3.15		
	Pilot Operated Reducing/Relieving Valve with Vent Port		
	PVHB Page 3.17		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



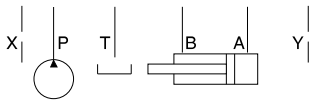
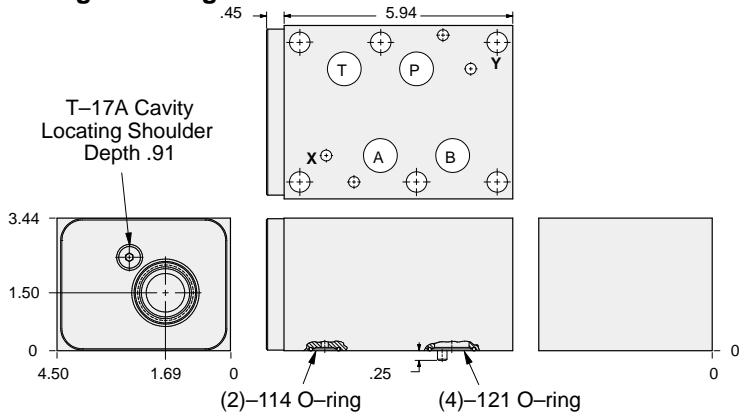
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



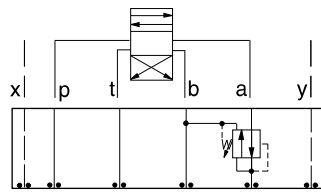
FUNCTION

On A Tank to B
Drained to B

Reducing/Relieving Valves



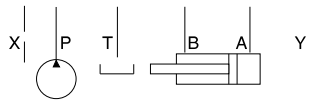
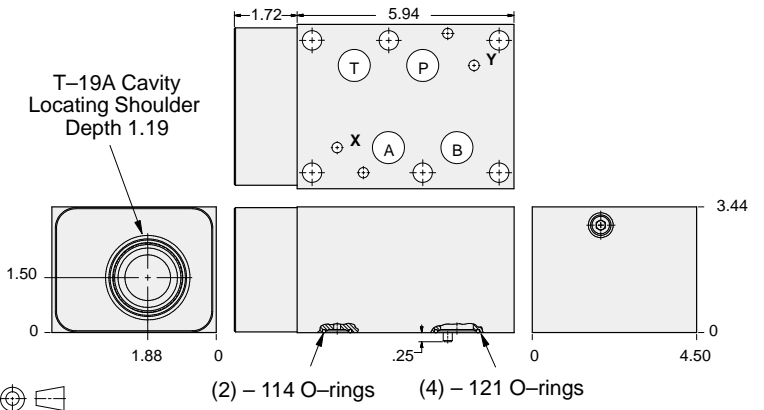
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBL		HBL/S	



FUNCTION

On A Tank to B
Drained to B
(High Capacity)

Reducing/Relieving Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBA		HBA/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing/Relieving Valve		
	PP*B Page 3.11		
OTHER VALVES:			

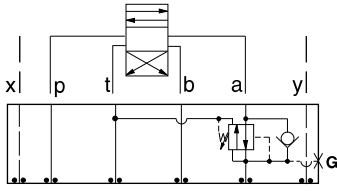


ISO 08 SANDWICH BODIES



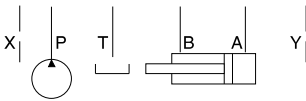
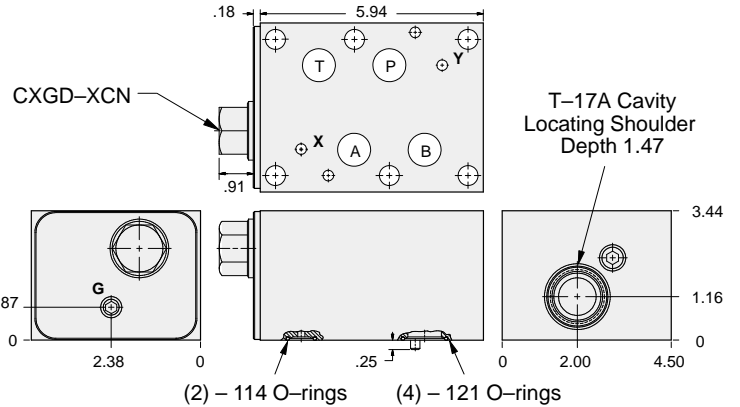
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves



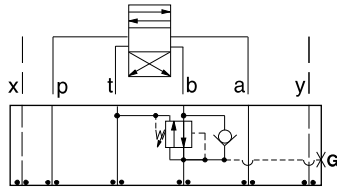
FUNCTION

On **A** Tank to **T**
Drained to **T**
Reverse FF Check



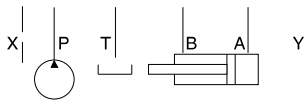
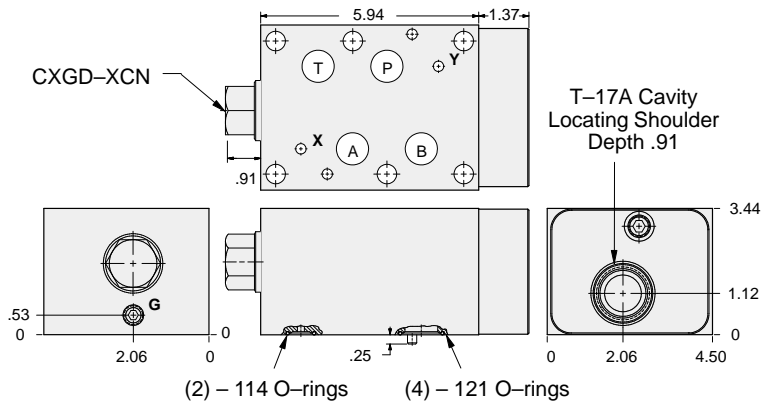
Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HBK		HBK/S	
.25 BSPP	HBK/M		HBK/T	

Reducing/Relieving Valves



FUNCTION

On **B** Tank to **T**
Drained to **T**
Reverse FF Check



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	HBJ		HBJ/S	
.25 BSPP	HBJ/M		HBJ/T	

08 REDUCING/RELIEVING

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing/Relieving Valve PPHB Page 3.11		
	Air Controlled, Pilot Operated Reducing/Relieving Valve PPHC Page 3.13		
OTHER VALVES:			

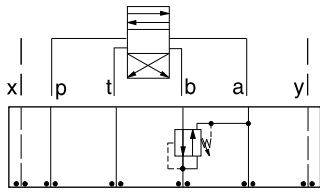


ISO 08 SANDWICH BODIES



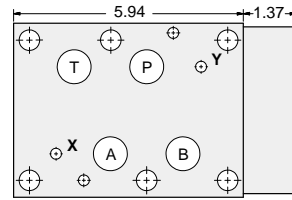
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves

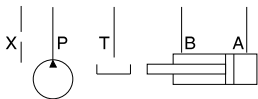
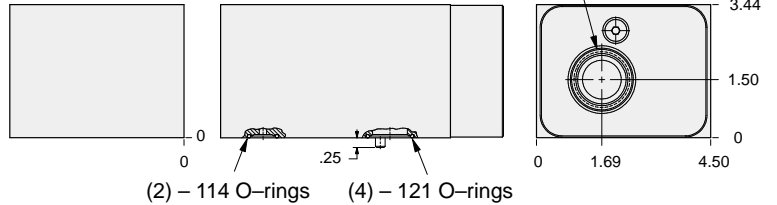


FUNCTION

On B Tank to A
Drained to A

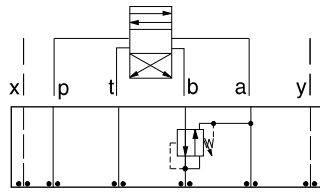


T-17A Cavity
Locating Shoulder
Depth .91



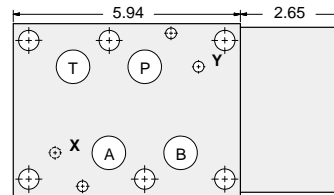
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBM		HBM/S	

Reducing/Relieving Valves

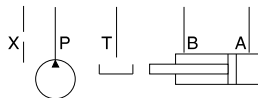
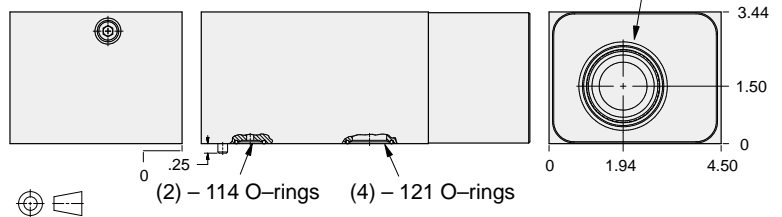


FUNCTION

On B Tank to A
Drained to A
(High Capacity)



T-19A Cavity
Locating Shoulder
Depth 1.19



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBB		HBB/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Reducing/Relieving Valve		
	PP*B Page 3.11		
OTHER VALVES:			

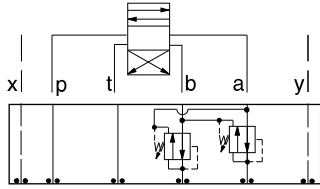


ISO 08 SANDWICH BODIES



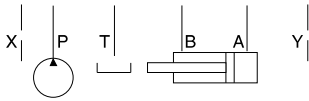
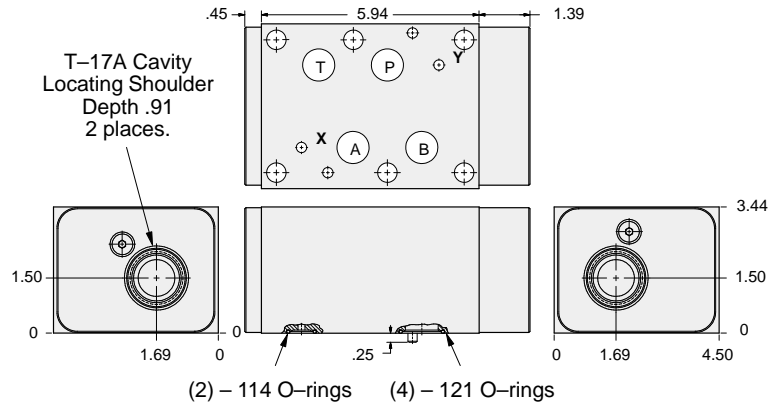
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Reducing/Relieving Valves



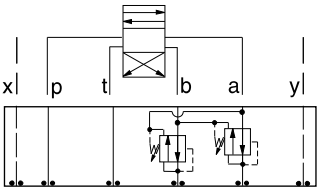
FUNCTION

On **A** and **B**
Tanks and Drains to
Opposite Port



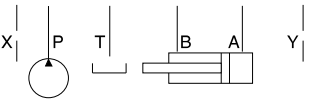
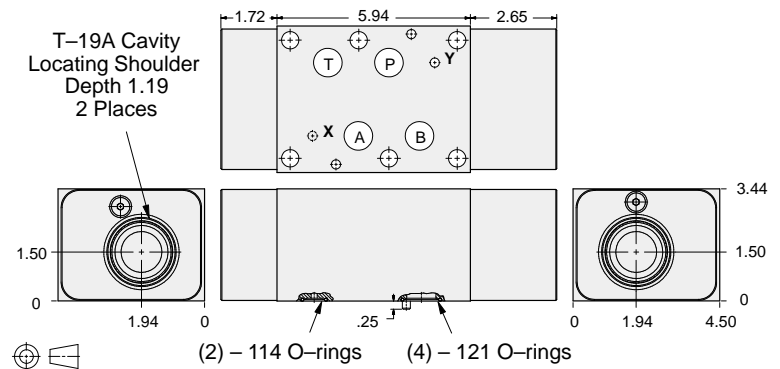
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBN		HBNS	

Reducing/Relieving Valves



FUNCTION

On **A** and **B**
Tanks and Drains to
Opposite Port
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBV		HBVS	

08 REDUCING/RELIEVING

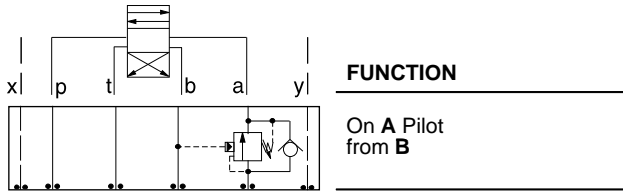
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Pilot Operated Reducing/Relieving Valve		
	PP*B Page 3.11		
OTHER VALVES:			



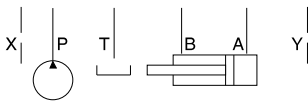
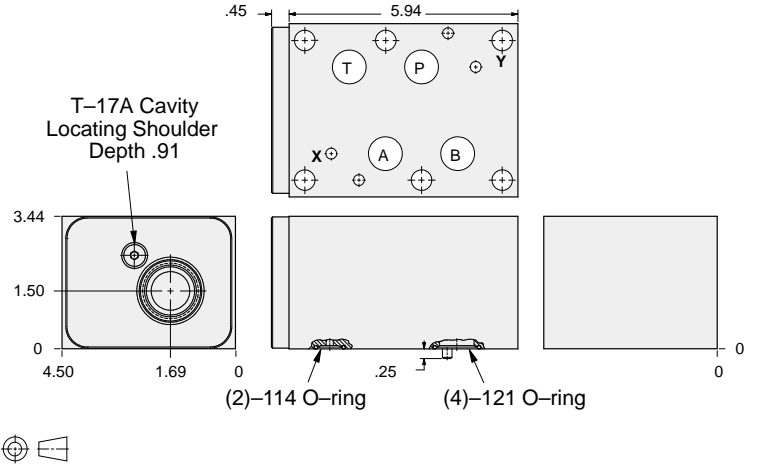
ISO 08 SANDWICH BODIES



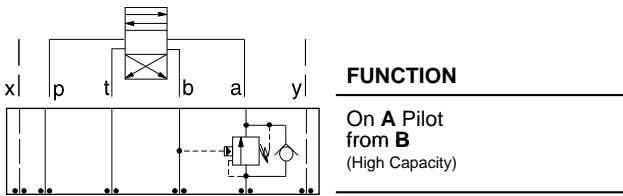
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



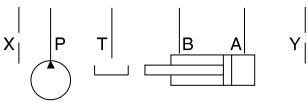
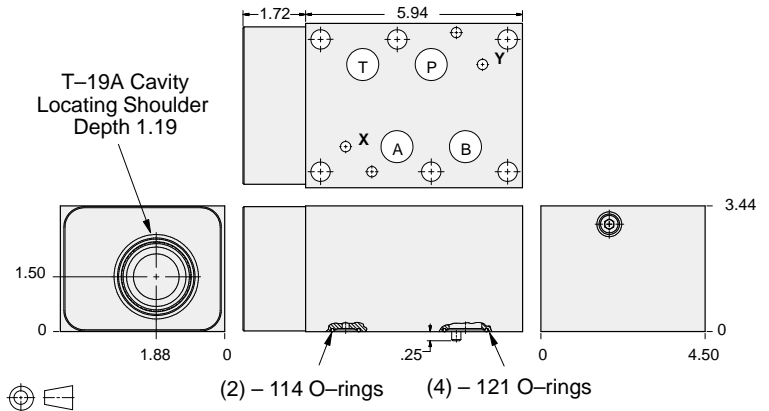
Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBL		HBL/S	



Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBA		HBA/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Counterbalance Valve, 3:1 Pilot Ratio		
	CB*A Page 4.11		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CB*G Page 4.13		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CB*H Page 4.15		
OTHER VALVES:			

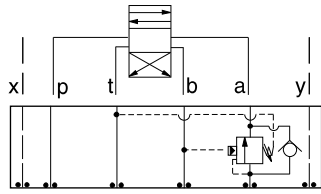
08 COUNTERBALANCE



ISO 08 SANDWICH BODIES



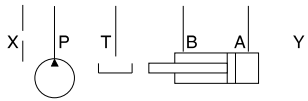
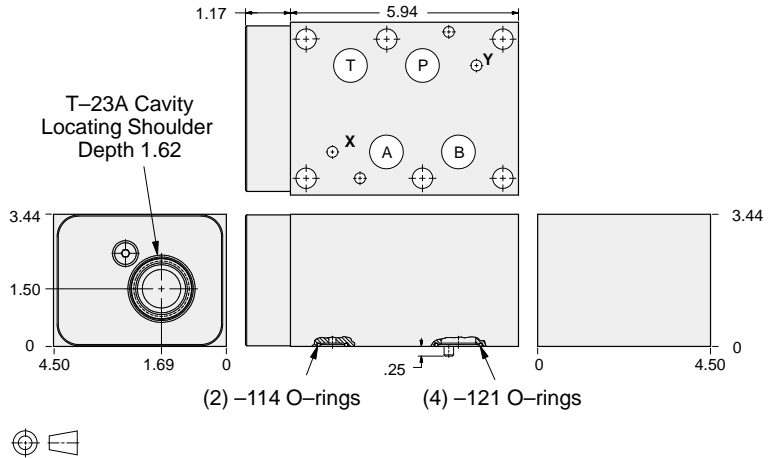
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



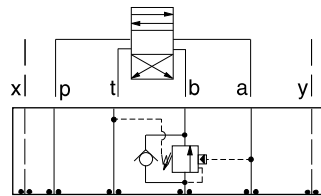
FUNCTION

On A Pilot
from B
Vent to T

Counterbalance Valves



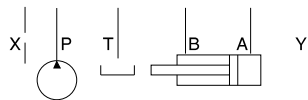
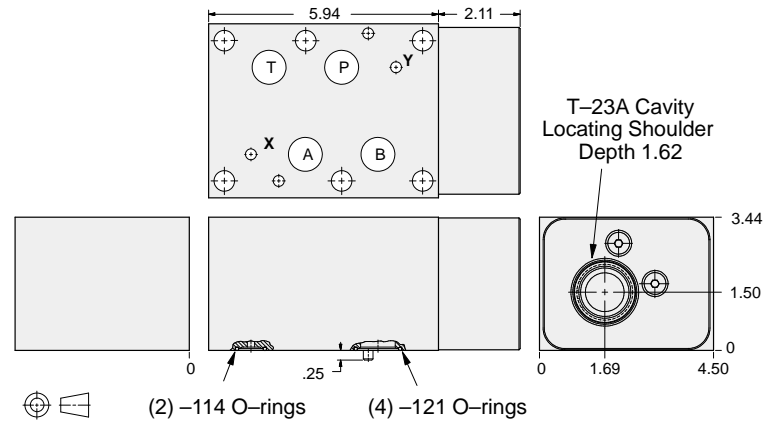
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
PBA		PBA/S	



FUNCTION

On B Pilot from A
Vent to T

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
PBB		PBB/S	

08 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

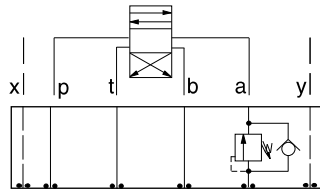
	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWGA Page 4.19		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWGG Page 4.21		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



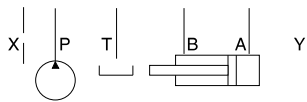
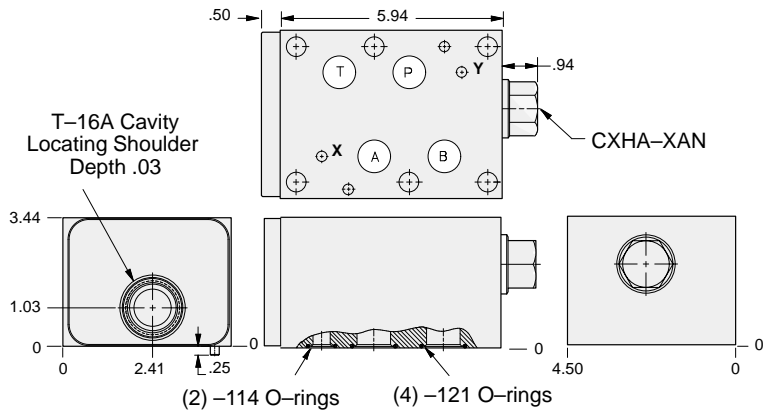
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On A
No pilot assist

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CD4		CD4/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Direct Acting Relief Valve		
	RDHA Page 1.09		
OTHER VALVES:			

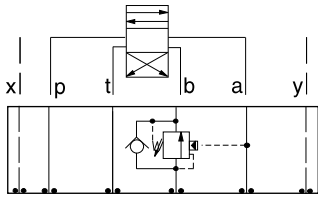


ISO 08 SANDWICH BODIES



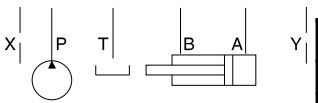
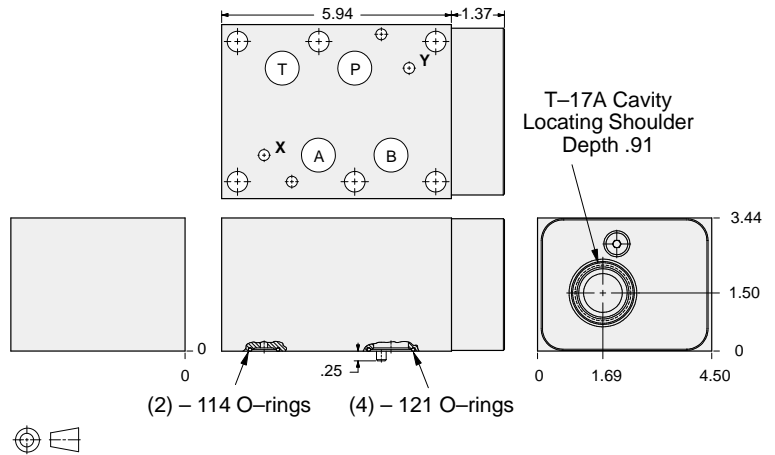
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Counterbalance Valves



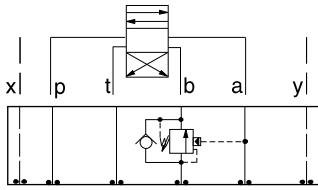
FUNCTION

On B
Pilot from A



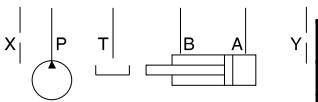
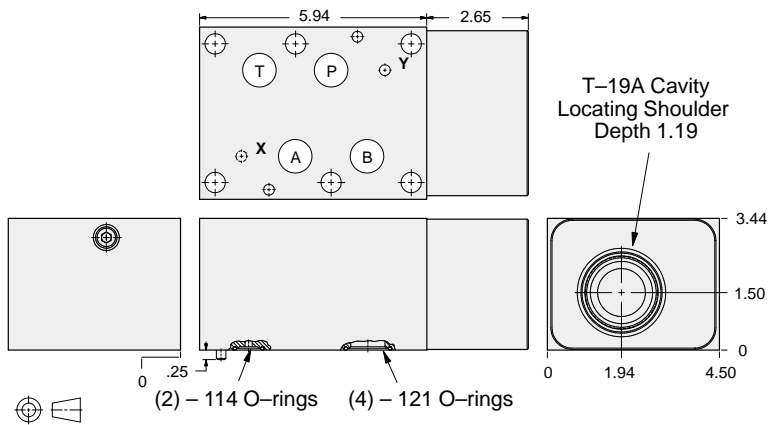
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBM		HBM/S	

Counterbalance Valves



FUNCTION

On B
Pilot from A
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBB		HBB/S	

08 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

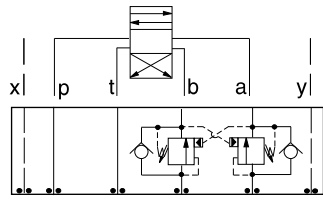
	Counterbalance Valve, 3:1 Pilot Ratio CB*A Page 4.11		
	Counterbalance Valve, 4.5:1 Pilot Ratio CB*G Page 4.13		
	Counterbalance Valve, 10:1 Pilot Ratio CB*H Page 4.15		
OTHER VALVES:			



ISO 08 SANDWICH BODIES



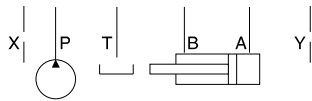
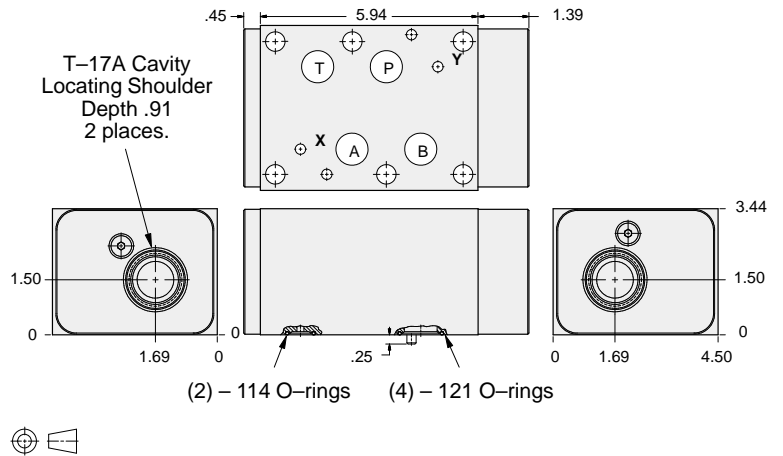
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



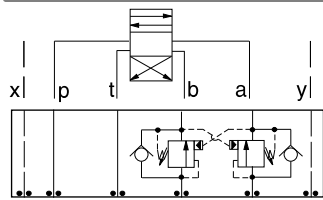
FUNCTION

On A and B
Cross-Piloted

Counterbalance Valves



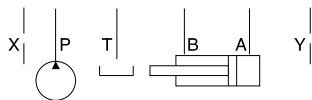
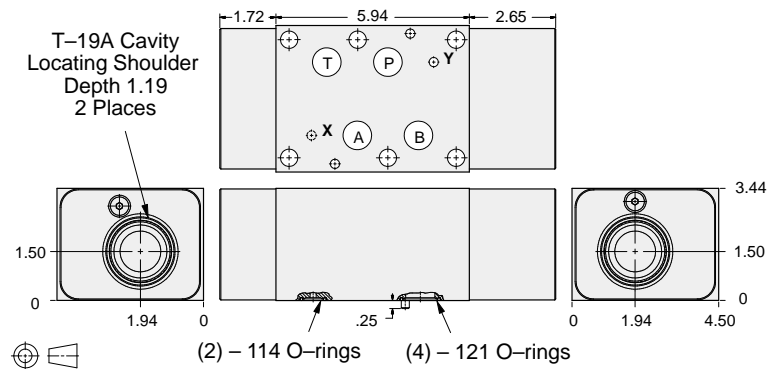
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBN		HBN/S	



FUNCTION

On A and B
Cross-Piloted
(High Capacity)

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBY		HBY/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Counterbalance Valve, 3:1 Pilot Ratio		
	CB*A Page 4.11		
	Counterbalance Valve, 4.5:1 Pilot Ratio		
	CB*G Page 4.13		
	Counterbalance Valve, 10:1 Pilot Ratio		
	CB*H Page 4.15		
OTHER VALVES:			

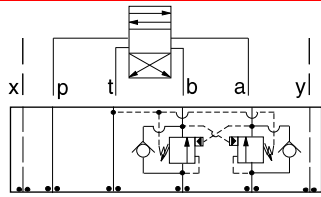
08 COUNTERBALANCE



ISO 08 SANDWICH BODIES



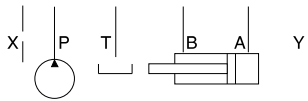
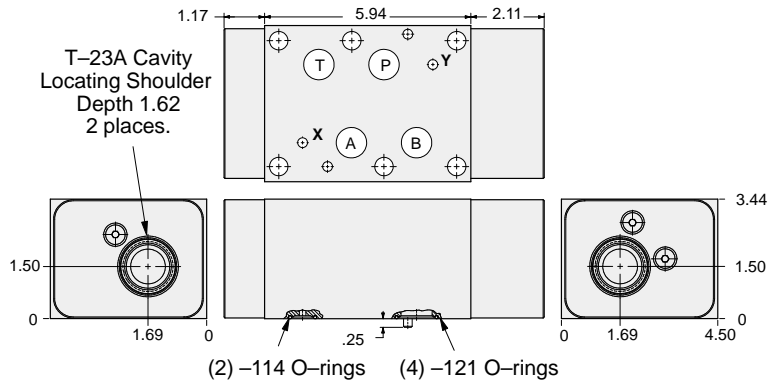
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

On **A** and **B**
Cross-Piloted
Vents to T

Counterbalance Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
PBY		PBY/S	

08 COUNTERBALANCE

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Vented Counterbalance Valve, 3:1 Pilot Ratio		
	CWGA Page 4.19		
	Vented Counterbalance Valve, 5:1 Pilot Ratio		
	CWGG Page 4.21		
OTHER VALVES:			

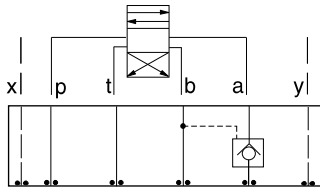


ISO 08 SANDWICH BODIES



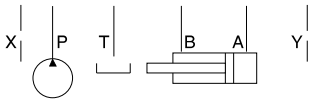
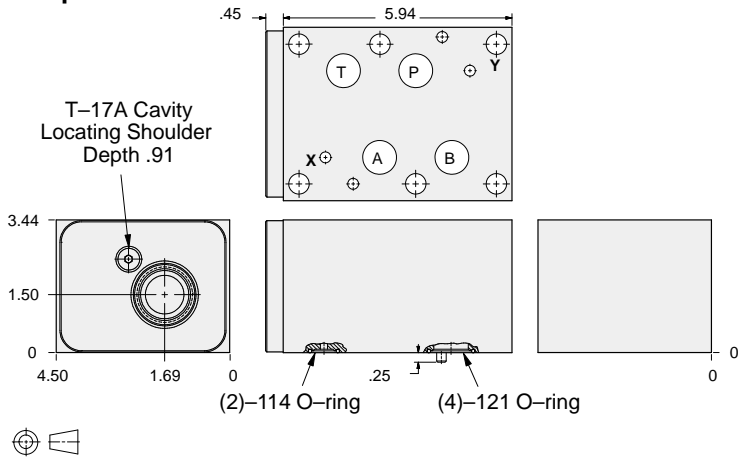
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves



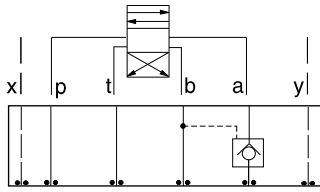
FUNCTION

On A
Pilot from B



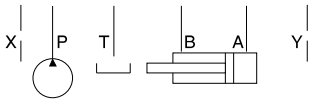
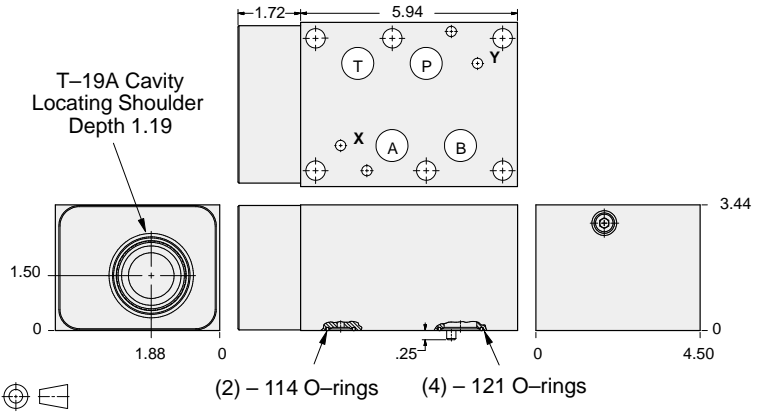
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBL		HBL/S	

Pilot Operated Check Valves



FUNCTION

On A
Pilot from B
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBA		HBA/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CK*B Page 4.17		
OTHER VALVES:			

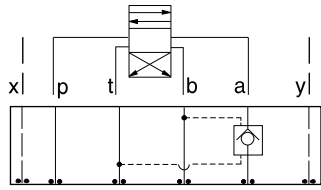


ISO 08 SANDWICH BODIES



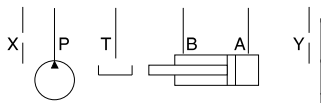
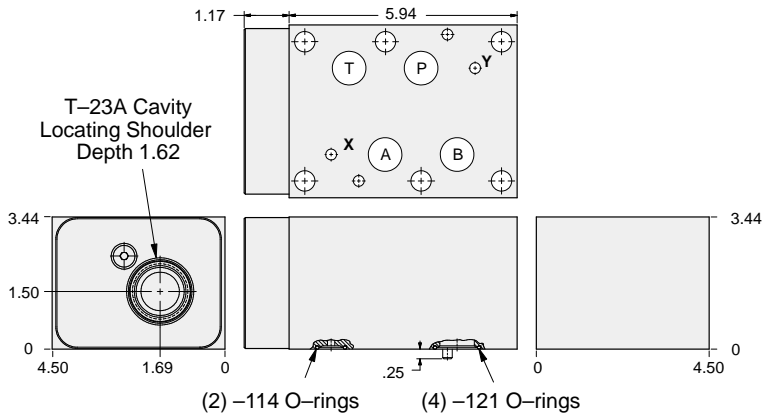
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves



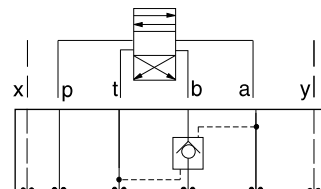
FUNCTION

On **A**
Pilot from **B**
Vent to **T**



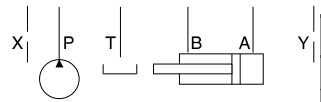
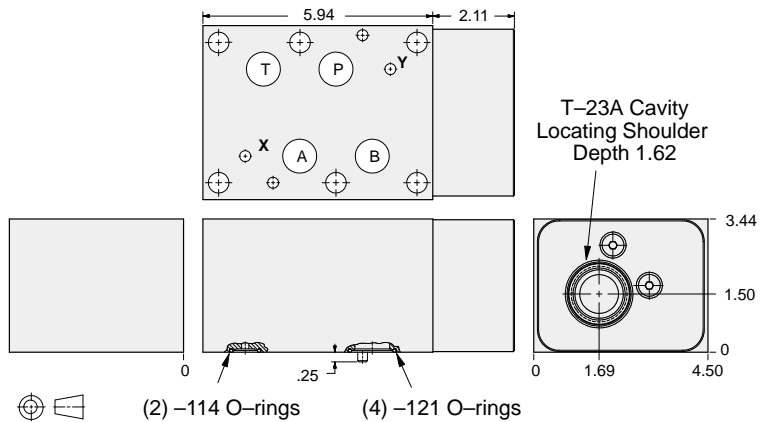
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
PBA		PBA/S	

Pilot Operated Check Valves



FUNCTION

On **B**
Pilot from **A**
Vent to **T**



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
PBB		PBB/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVGV Page 4.23		
OTHER VALVES:			

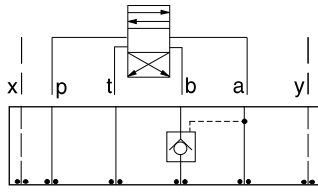


ISO 08 SANDWICH BODIES



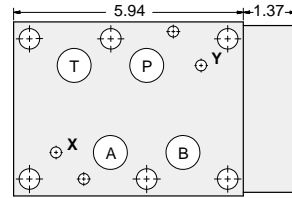
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves

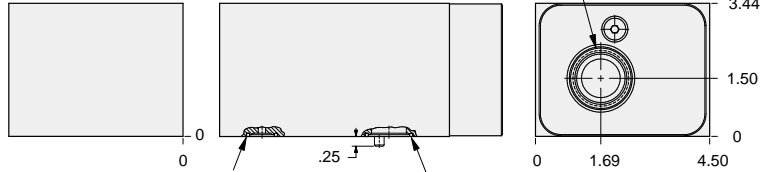


FUNCTION

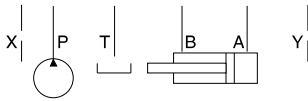
On B
Pilot from A



T-17A Cavity
Locating Shoulder
Depth .91

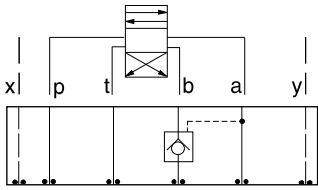


(2) - 114 O-rings (4) - 121 O-rings



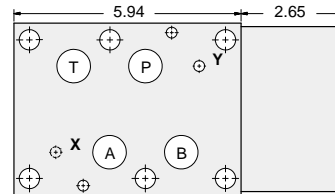
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBM		HBM/S	

Pilot Operated Check Valves

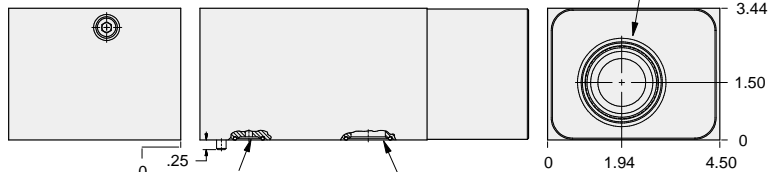


FUNCTION

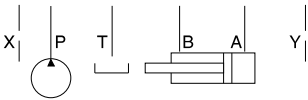
On B
Pilot from A
(High Capacity)



T-19A Cavity
Locating Shoulder
Depth 1.19



(2) - 114 O-rings (4) - 121 O-rings



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBB		HBB/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CK*B Page 4.17		
OTHER VALVES:			

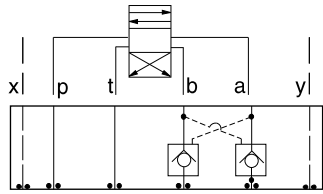


ISO 08 SANDWICH BODIES



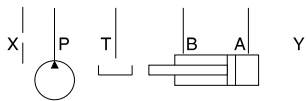
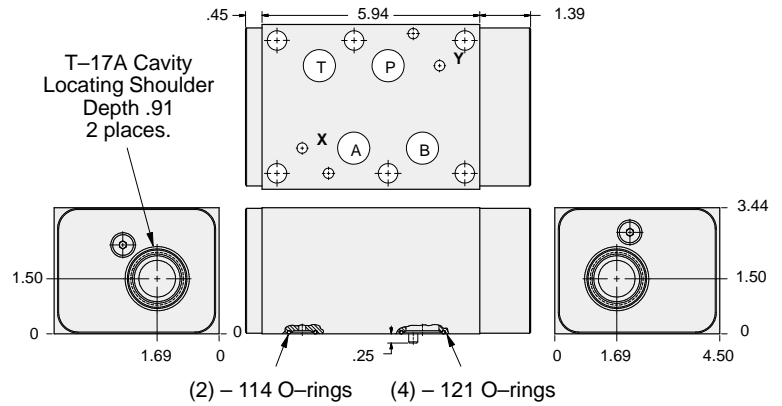
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves



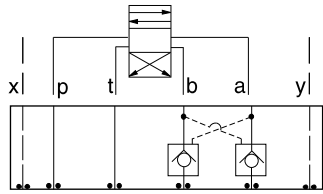
FUNCTION

On A and B
Cross-Piloted



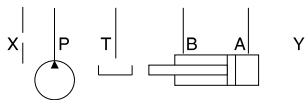
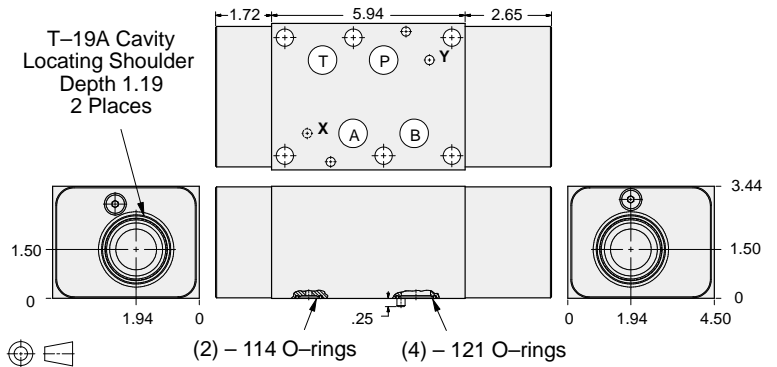
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBN		HBNS	

Pilot Operated Check Valves



FUNCTION

On A and B
Cross-Piloted
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	model Code	List Price
HBV		HBVS	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	<i>Pilot-to-Open Check Valve, 3:1 Pilot Ratio</i>		
	CK*B Page 4.17		
OTHER VALVES:			

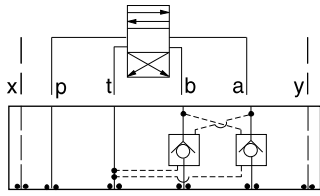


ISO 08 SANDWICH BODIES



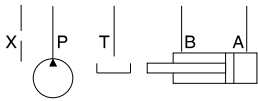
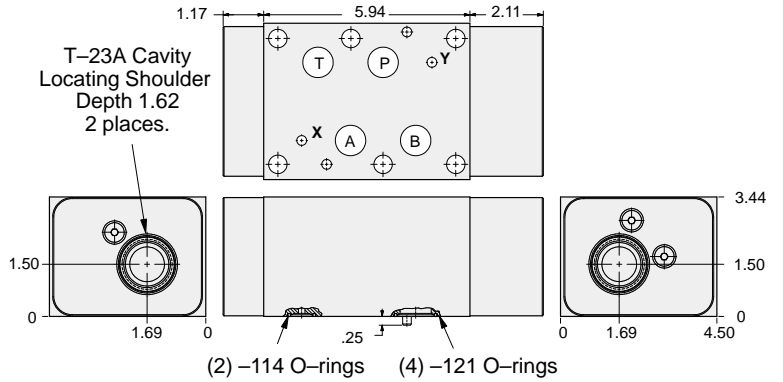
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Pilot Operated Check Valves



FUNCTION

On A and B
Cross-Piloted
Vents to T



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
PBY		PBY/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Vented Pilot-to-Open Check Valve, 3:1 Pilot Ratio		
	CVGV Page 4.23		
OTHER VALVES:			

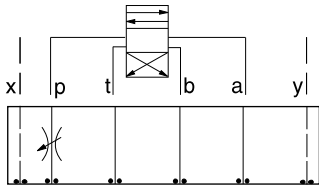
08 P.O. CHECK



ISO 08 SANDWICH BODIES



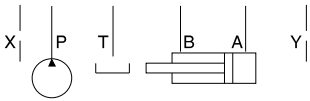
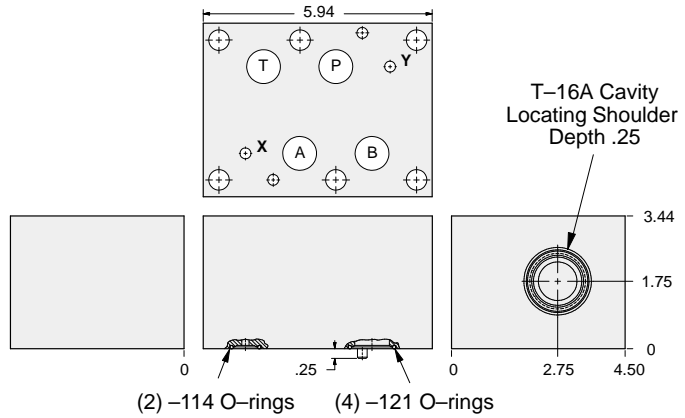
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



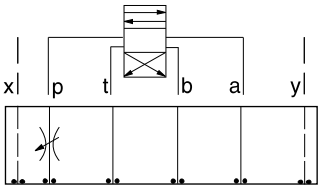
FUNCTION

Meter-In P

Flow Control Valves



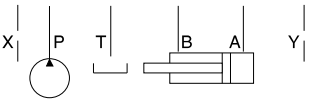
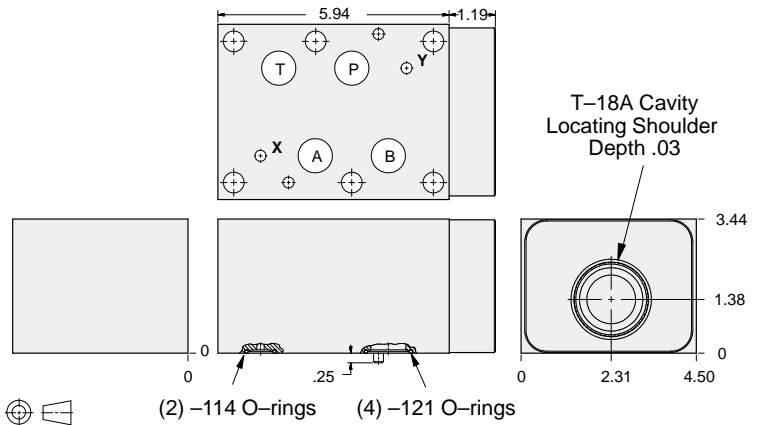
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBP		IBP/S	



FUNCTION

Meter-In P
(High Capacity)

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBO		IBO/S	

08 FLOW CONTROL

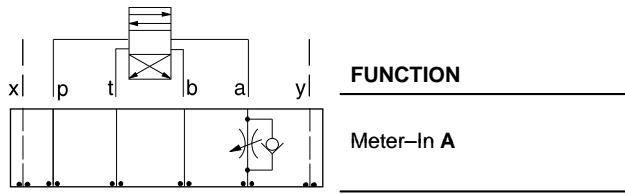
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve		
	NF*C Page 5.13		
	Fixed Orifice, Pressure-Compensated Flow Control		
	FX*A Page 5.21		
OTHER VALVES:			



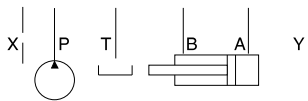
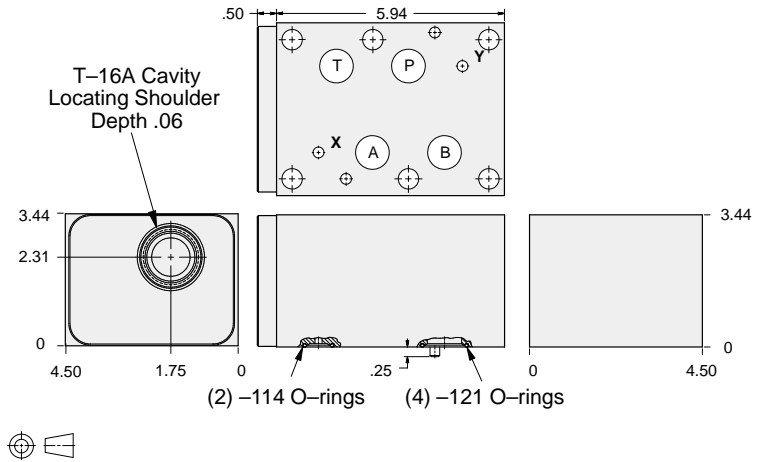
ISO 08 SANDWICH BODIES



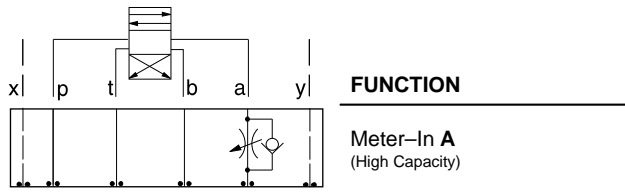
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



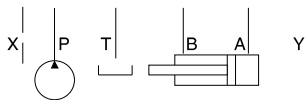
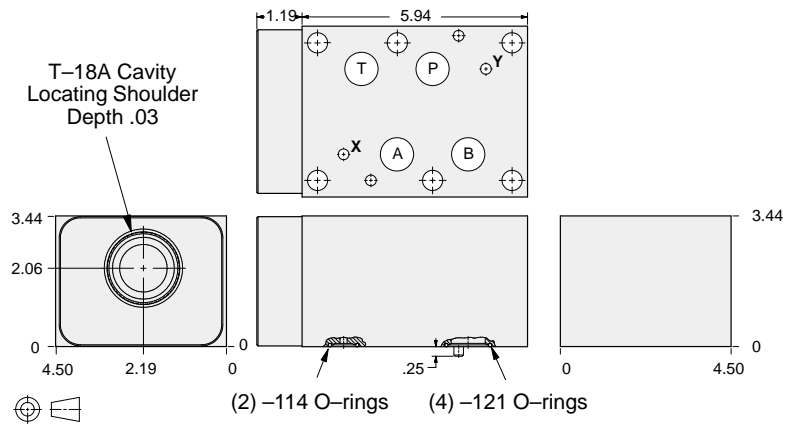
Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBC		IBC/S	



Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBG		IBG/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

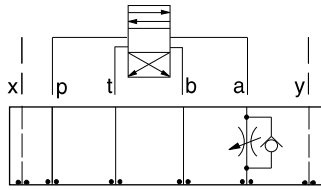
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.13		FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.17		FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.19		FD*A Page 5.25
OTHER VALVES:	CN*C		



ISO 08 SANDWICH BODIES



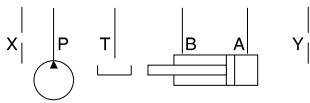
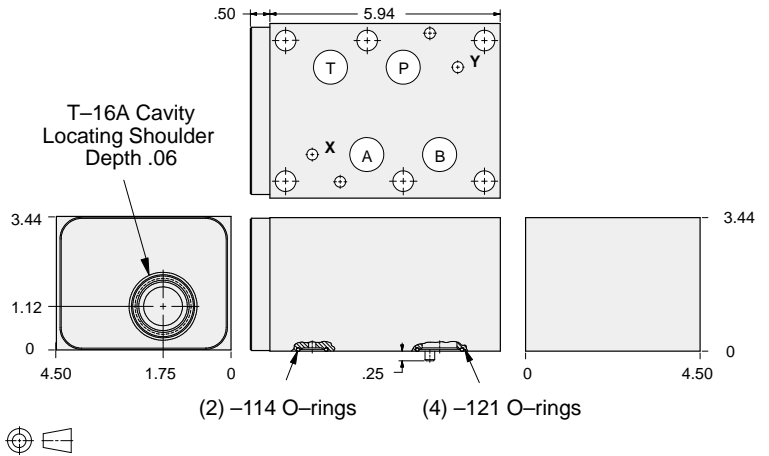
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



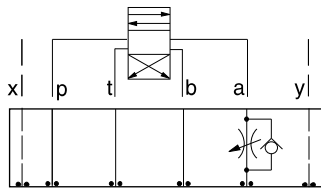
FUNCTION

Meter-Out A

Flow Control Valves



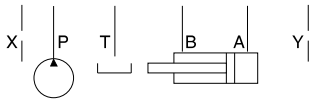
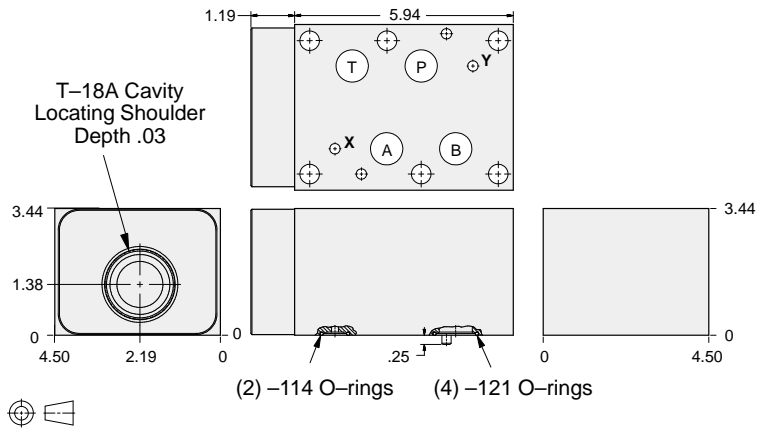
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBA		IBA/S	



FUNCTION

Meter-Out A
(High Capacity)

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBE		IBE/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NF*C Page 5.13		Fixed Orifice, Pressure-Compensated Flow Control FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check NC*B Page 5.17		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NC*C Page 5.19		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FD*A Page 5.25
OTHER VALVES:	CN*C		

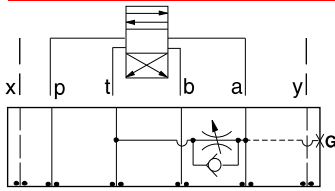
08 FLOW CONTROL



ISO 08 SANDWICH BODIES



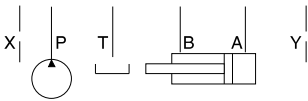
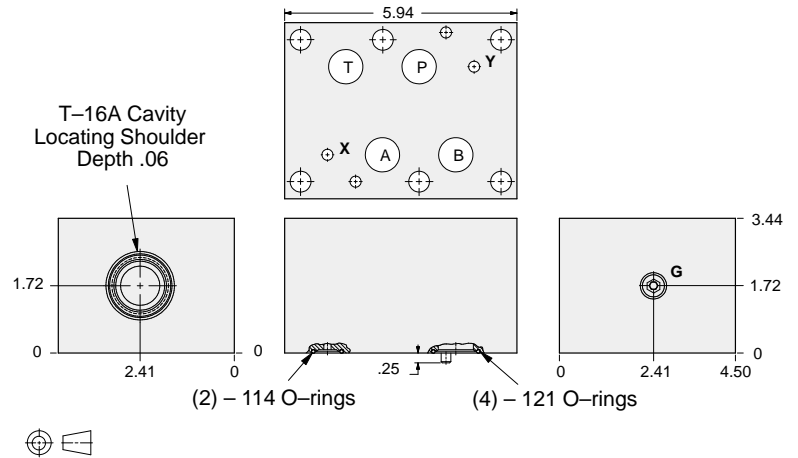
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Bleed-Off
A to T

Flow Control Valves



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CDC		CDC/S	
.25 BSPP	CDC/M		CDC/T	

08 FLOW CONTROL

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NFEC Page 5.13		Fixed Orifice, Pressure-Compensated Flow Control FXEA Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check NCFB Page 5.17		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FCEB Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NCFC Page 5.19		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FDEA Page 5.25
OTHER VALVES:	CNGC		

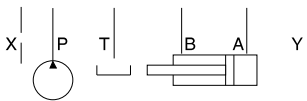
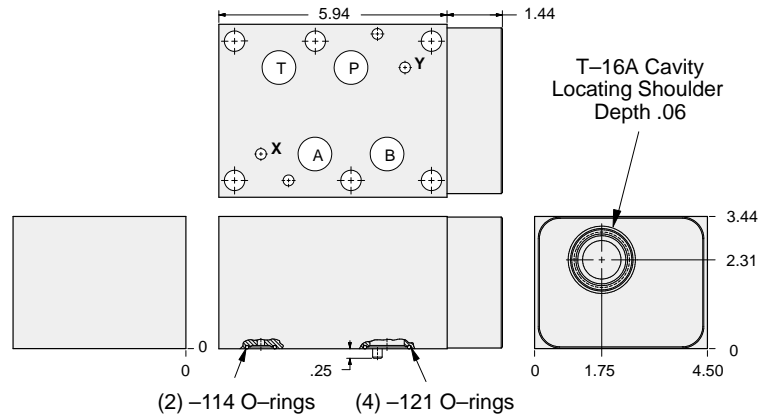
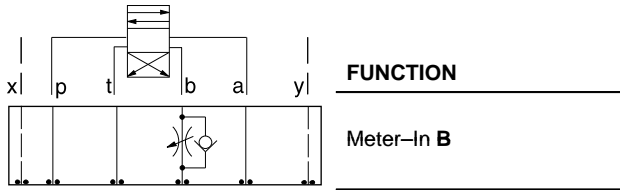


ISO 08 SANDWICH BODIES



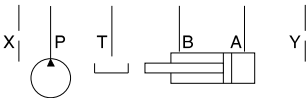
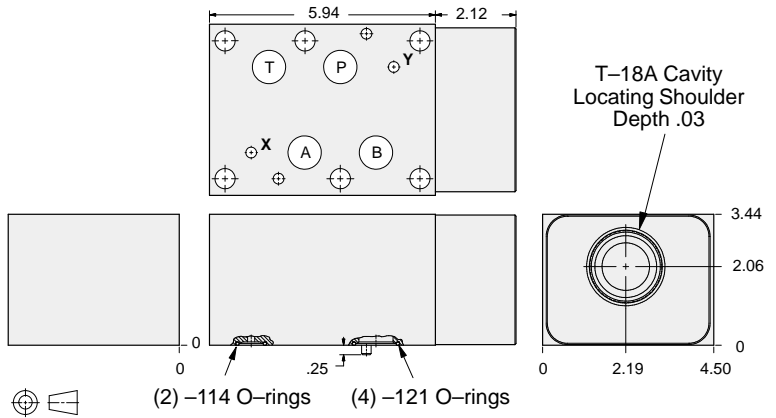
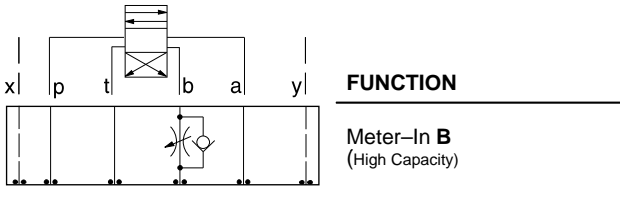
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBD		IBD/S	

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBH		IBH/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.13		FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.17		FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.19		FD*A Page 5.25
OTHER VALVES:	CN*C		

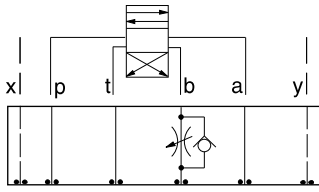
08 FLOW CONTROL



ISO 08 SANDWICH BODIES



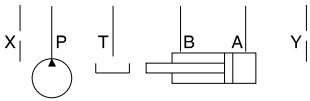
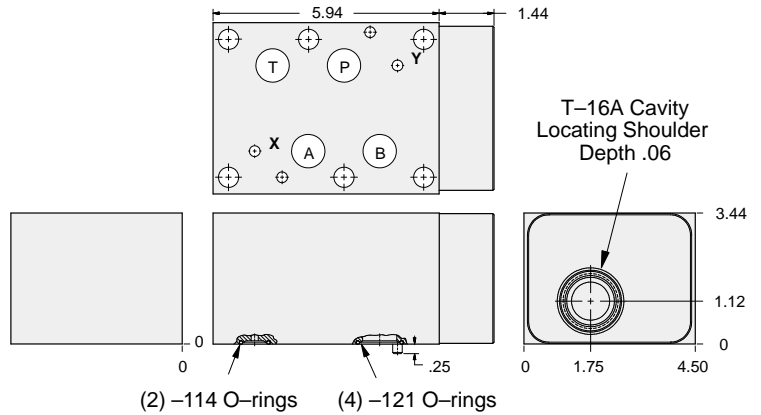
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



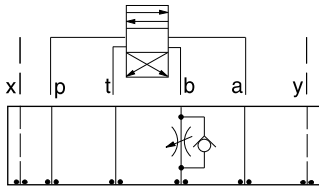
FUNCTION

Meter-Out B

Flow Control Valves



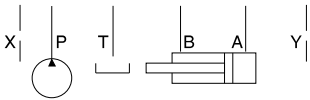
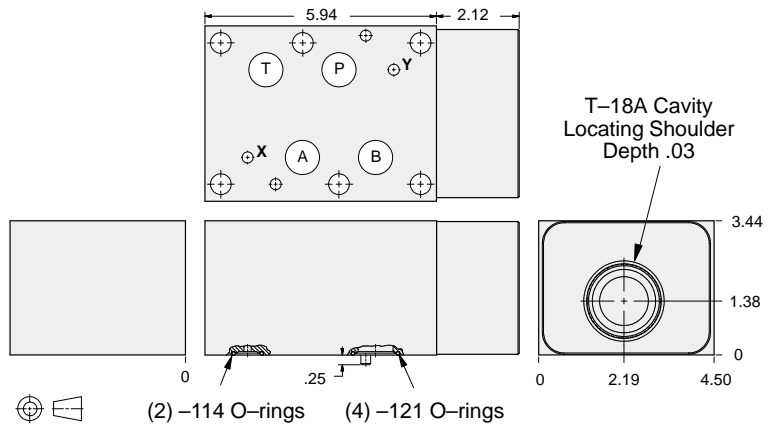
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBB		IBB/S	



FUNCTION

Meter-Out B
(High Capacity)

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBF		IBF/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.13		FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.17		FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.19		FD*A Page 5.25
OTHER VALVES:	CN*C		

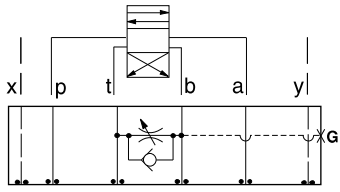


ISO 08 SANDWICH BODIES



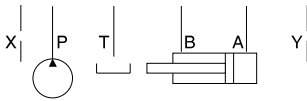
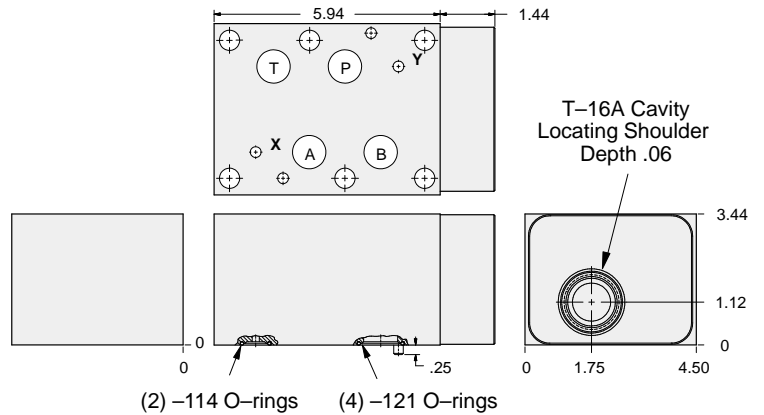
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Flow Control Valves



FUNCTION

Meter-Out B



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CDD		CDD/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NF*C Page 5.13		Fixed Orifice, Pressure-Compensated Flow Control FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check NC*B Page 5.17		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NC*C Page 5.19		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FD*A Page 5.25
OTHER VALVES:	CN*C		

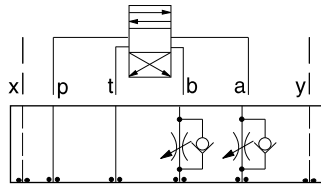
08 FLOW CONTROL



ISO 08 SANDWICH BODIES



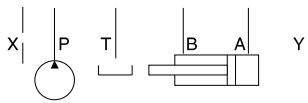
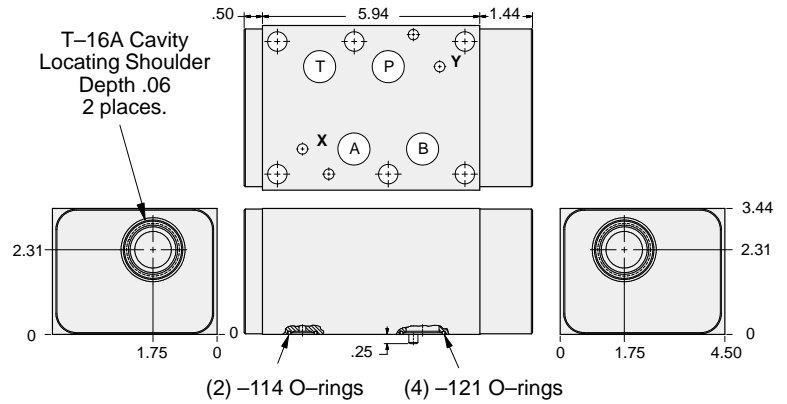
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



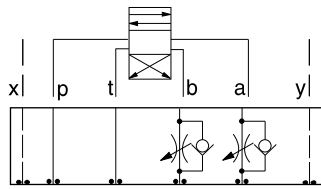
FUNCTION

Meter-In
A and B

Flow Control Valves



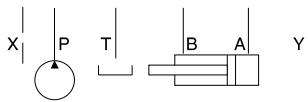
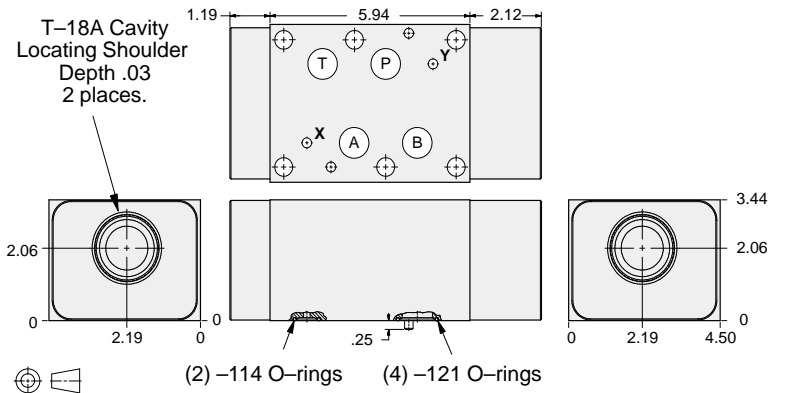
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBX		IBX/S	



FUNCTION

Meter-In
A and B
(High Capacity)

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBZ		IBZ/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

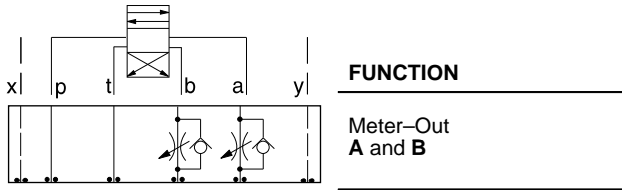
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.13		FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.17		FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.19		FD*A Page 5.25
OTHER VALVES:	CN*C		



ISO 08 SANDWICH BODIES



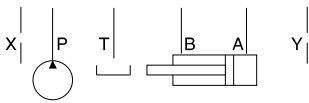
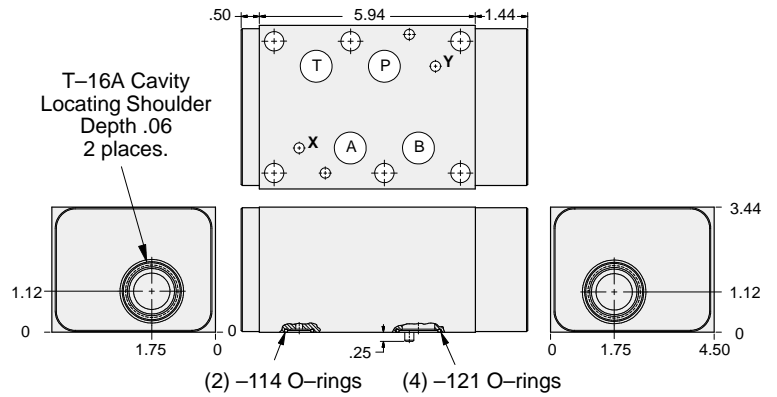
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



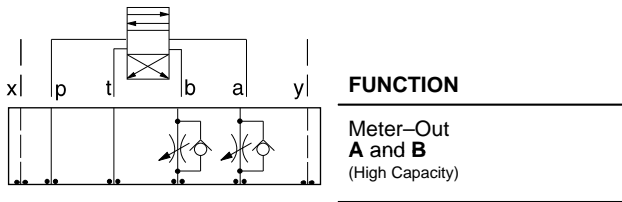
FUNCTION

Meter-Out
A and B

Flow Control Valves



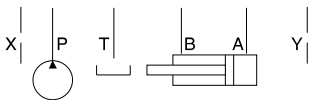
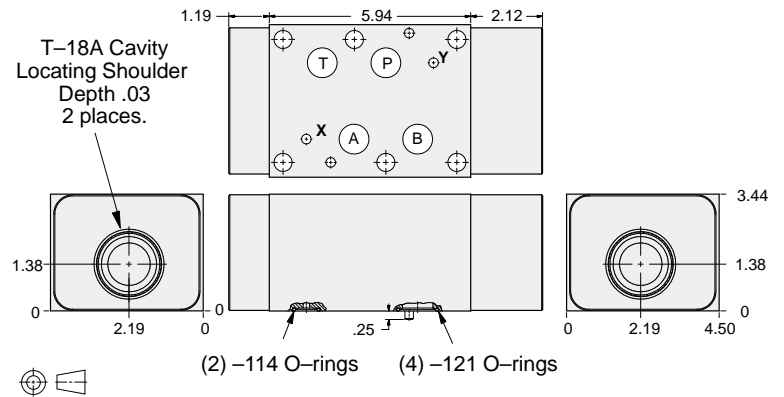
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBW		IBW/S	



FUNCTION

Meter-Out
A and B
(High Capacity)

Flow Control Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBY		IBY/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Fully Adjustable Needle Valve NF*C Page 5.13		Fixed Orifice, Pressure-Compensated Flow Control FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check NC*B Page 5.17		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow NC*C Page 5.19		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check FD*A Page 5.25
OTHER VALVES:	CN*C		

08 FLOW CONTROL

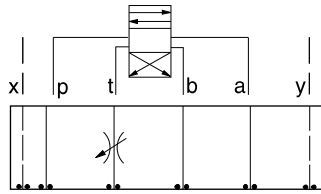


ISO 08 SANDWICH BODIES



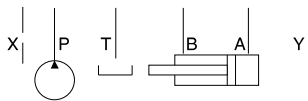
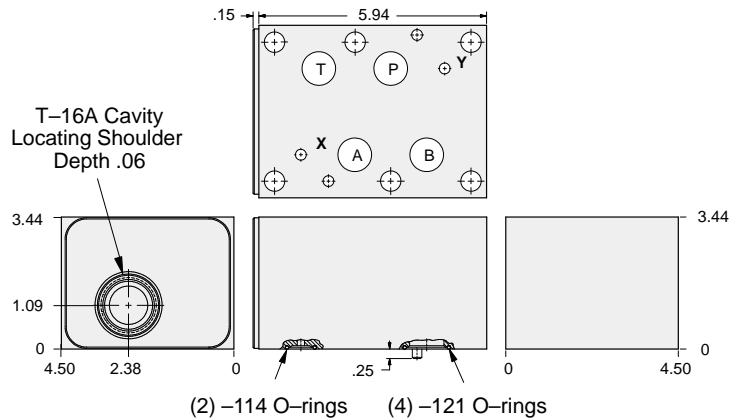
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Flow Control Valves



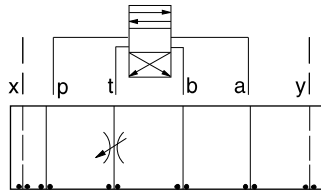
FUNCTION

Meter-Out T



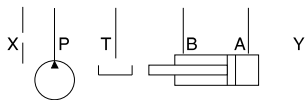
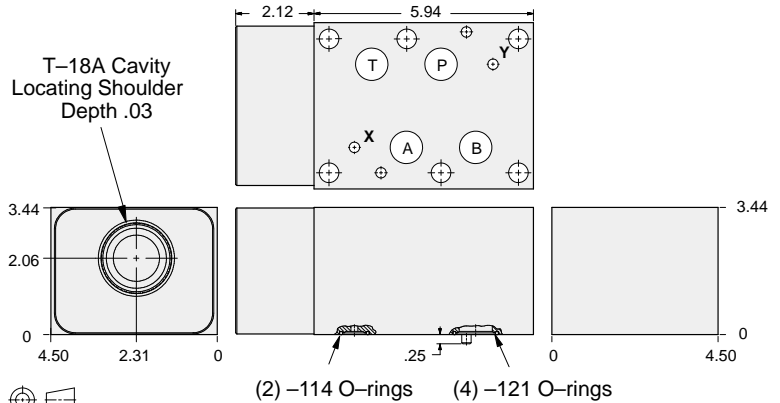
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBT		IBT/S	

Flow Control Valves



FUNCTION

Meter-Out T
(High Capacity)



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBV		IBV/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

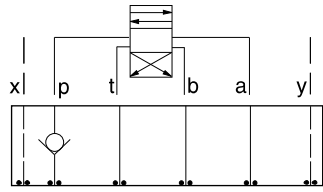
	Fully Adjustable Needle Valve		Fixed Orifice, Pressure-Compensated Flow Control
	NF*C Page 5.13		FX*A Page 5.21
	Fully Adjustable Needle Valve with Reverse Free Flow Check		Fixed Orifice, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*B Page 5.17		FC*B Page 5.23
	Fully Adjustable Needle Valve with Reverse Free Flow Check, Low Flow		Fully Adjustable, Pressure-Compensated Flow Control with Reverse Free Flow Check
	NC*C Page 5.19		FD*A Page 5.25
OTHER VALVES:	CN*C		



ISO 08 SANDWICH BODIES

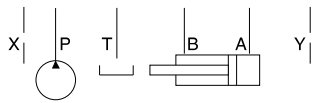
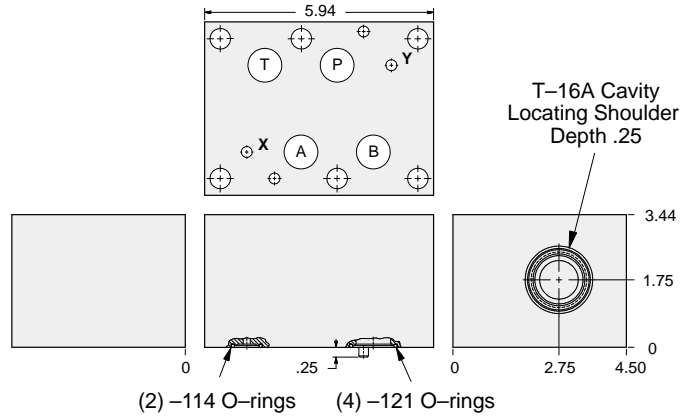


- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

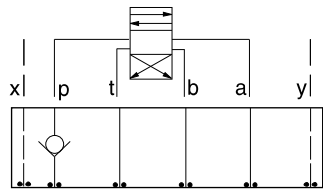


FUNCTION
On P

Check Valves

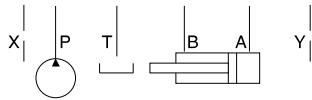
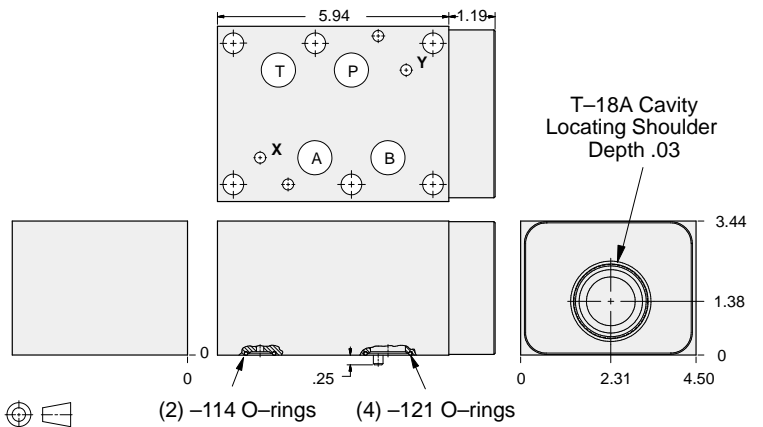


ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBP		IBP/S	



FUNCTION
On P
(High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBO		IBO/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

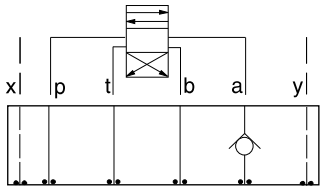
08 CHECK



ISO 08 SANDWICH BODIES



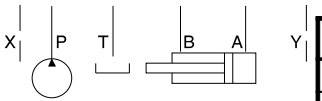
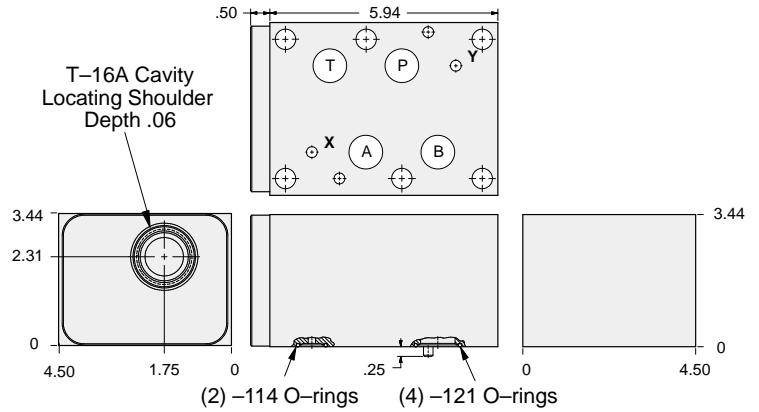
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



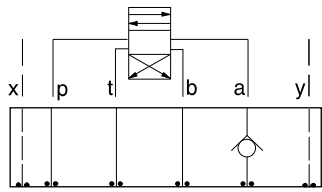
FUNCTION

On A
Free Flow Out
of Valve

Check Valves



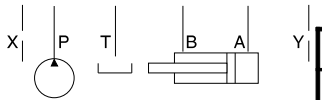
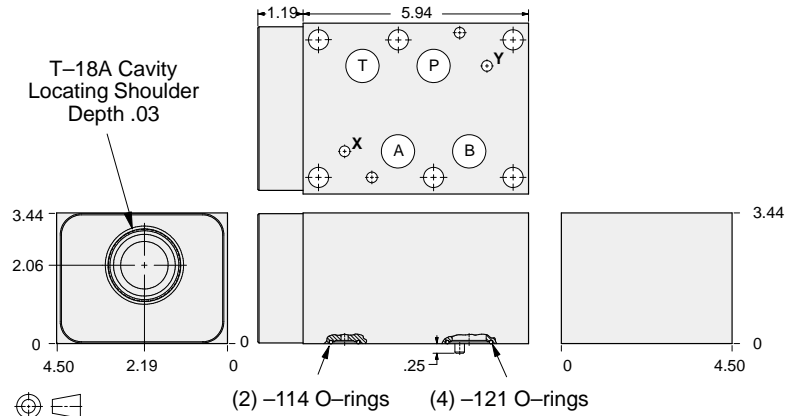
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBC		IBC/S	



FUNCTION

On A
Free Flow Out
of Valve (High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBG		IBG/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

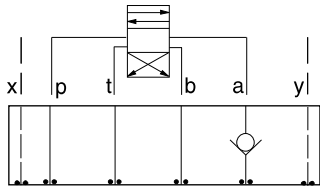
08 CHECK



ISO 08 SANDWICH BODIES



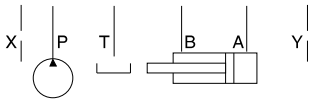
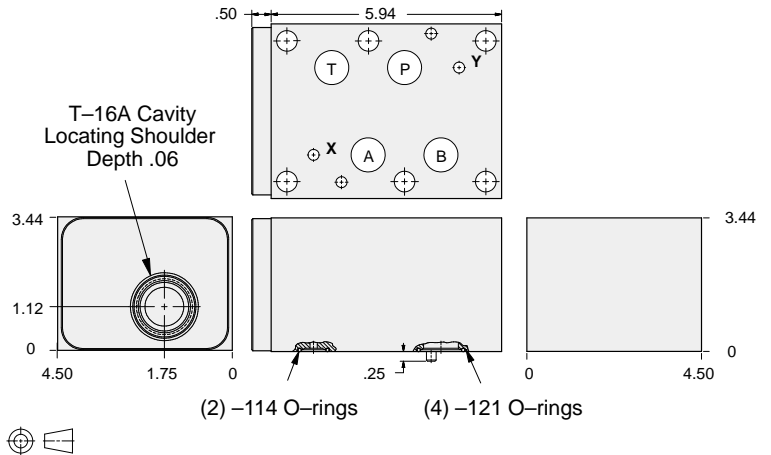
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



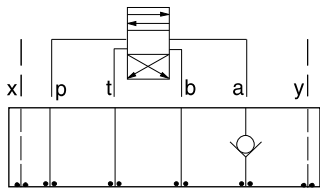
FUNCTION

On A
Free Flow Into Valve

Check Valves



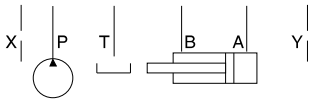
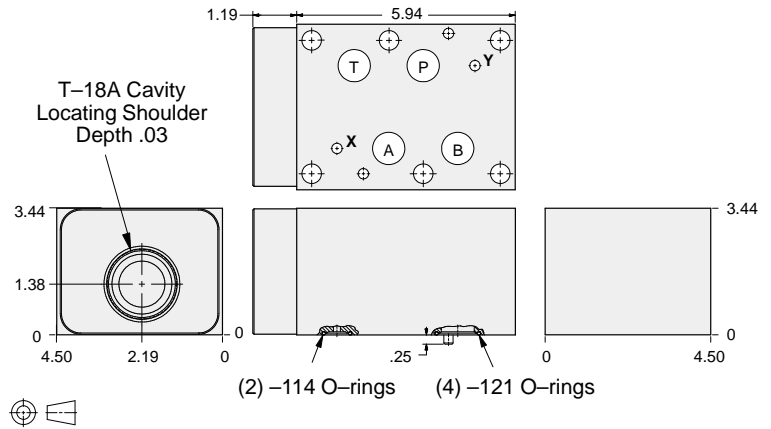
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBA		IBA/S	



FUNCTION

On A
Free Flow Into Valve
(High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBE		IBE/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

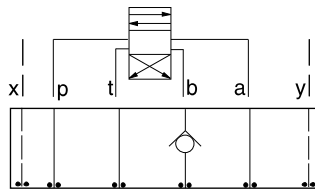
08 CHECK



ISO 08 SANDWICH BODIES



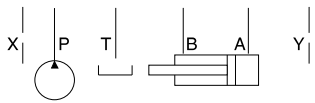
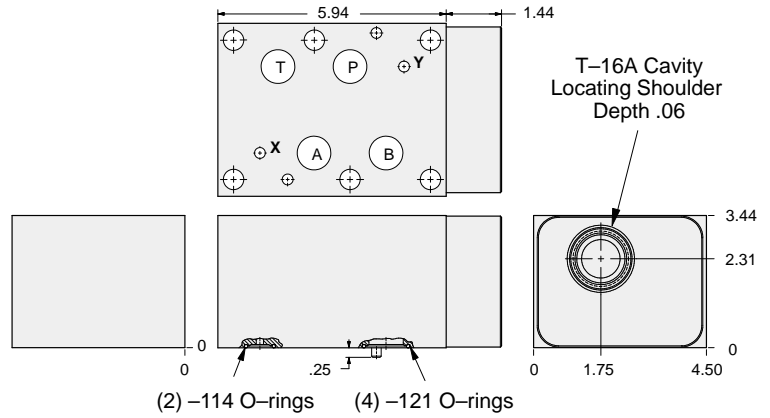
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



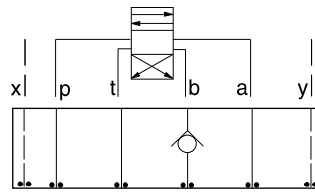
FUNCTION

On B
Free Flow Out
of Valve

Check Valves



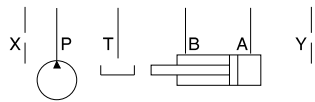
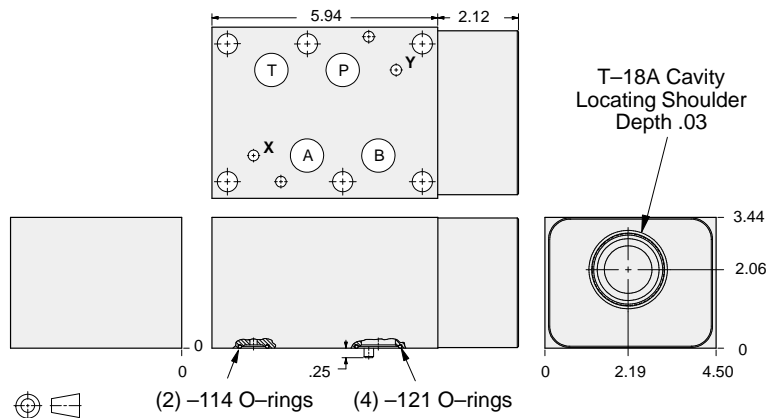
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBD		IBD/S	



FUNCTION

On B
Free Flow Out
of Valve (High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBH		IBH/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

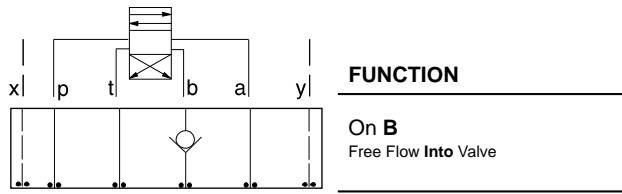
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			



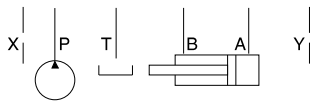
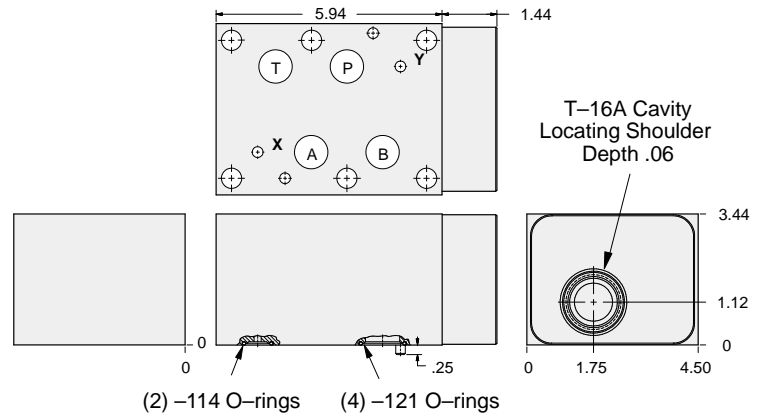
ISO 08 SANDWICH BODIES



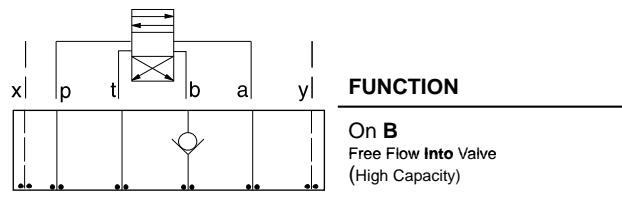
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



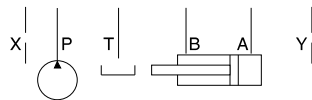
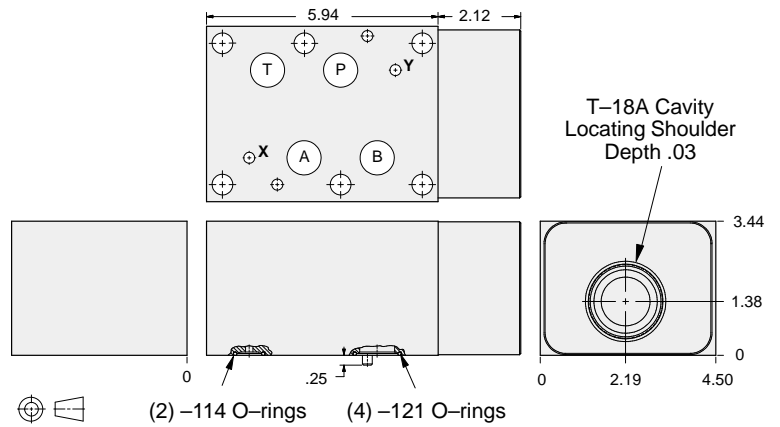
Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBB		IBB/S	



Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBF		IBF/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

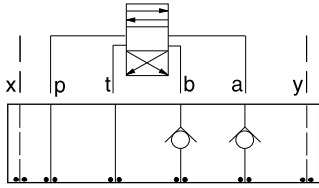
08 CHECK



ISO 08 SANDWICH BODIES



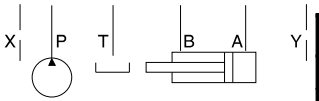
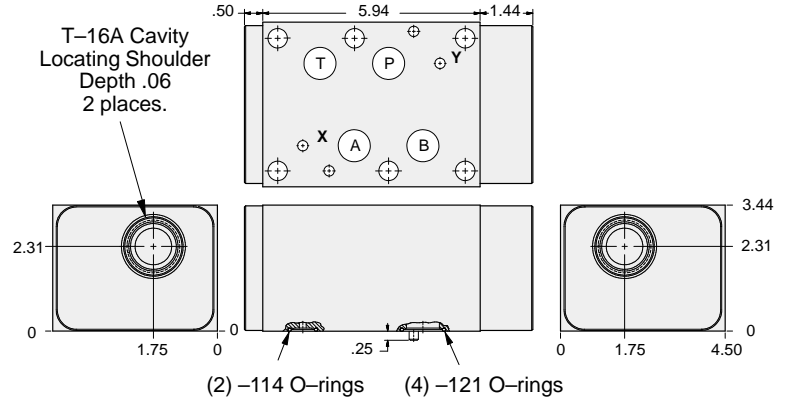
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



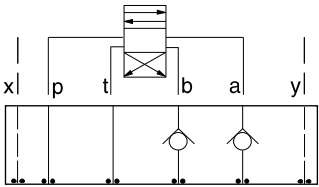
FUNCTION

On **A** and **B**
Free Flow Out
of Valve

Check Valves



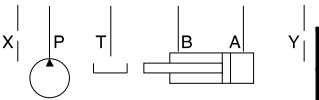
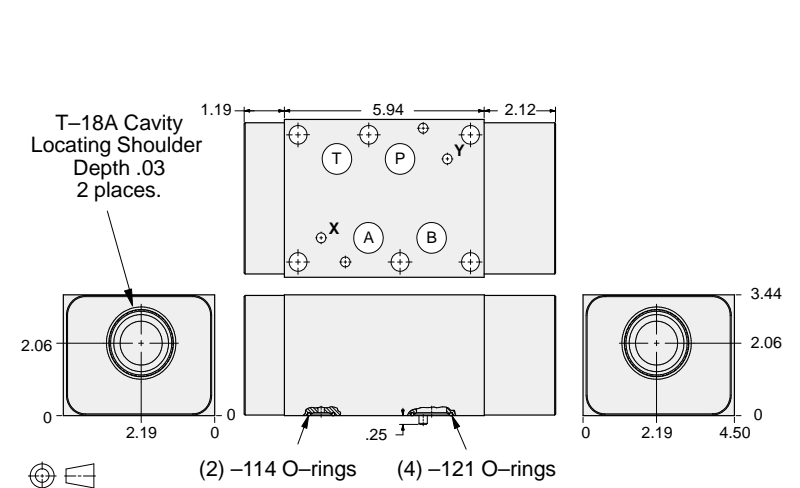
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBX		IBX/S	



FUNCTION

On **A** and **B**
Free Flow Out
of Valve (High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBZ		IBZ/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

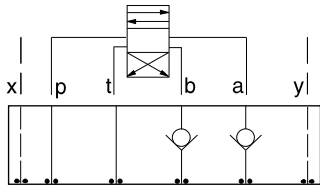
08 CHECK



ISO 08 SANDWICH BODIES



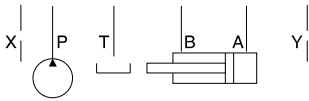
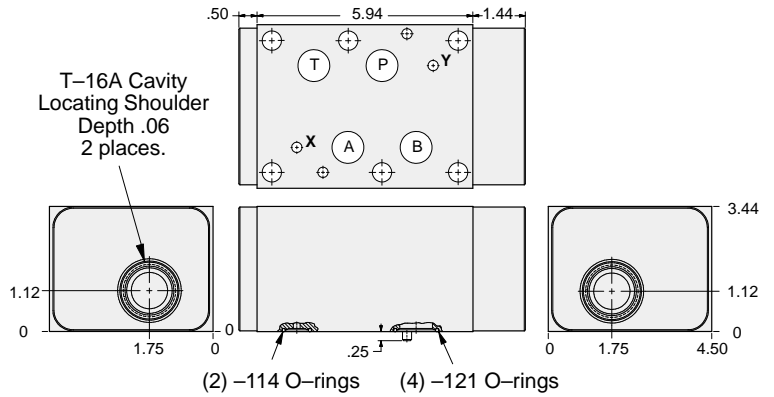
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



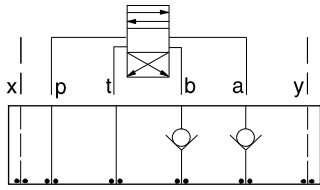
FUNCTION

On **A** and **B**
Free Flow Into Valve

Check Valves



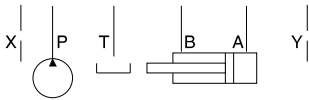
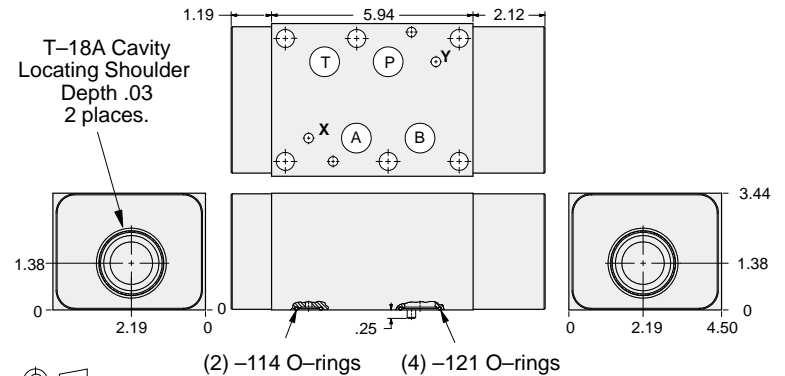
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBW		IBW/S	



FUNCTION

On **A**
Free Flow Into Valve
(High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBY		IBY/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

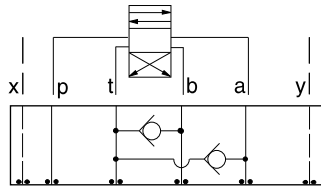
08 CHECK



ISO 08 SANDWICH BODIES



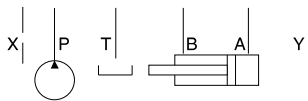
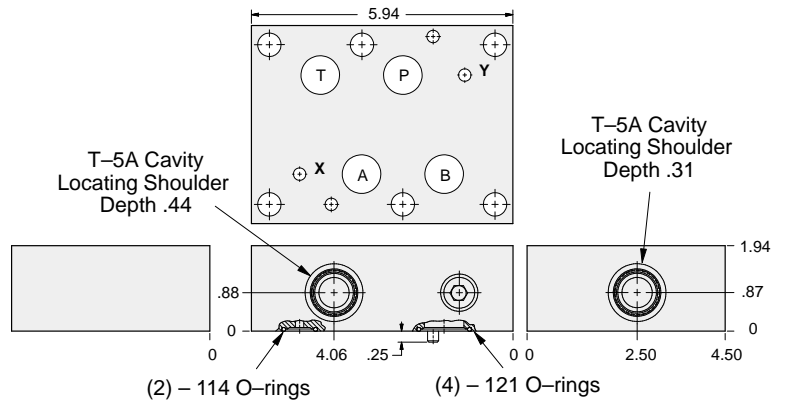
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



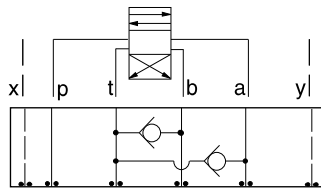
FUNCTION

T to A and B

Check Valves



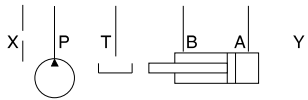
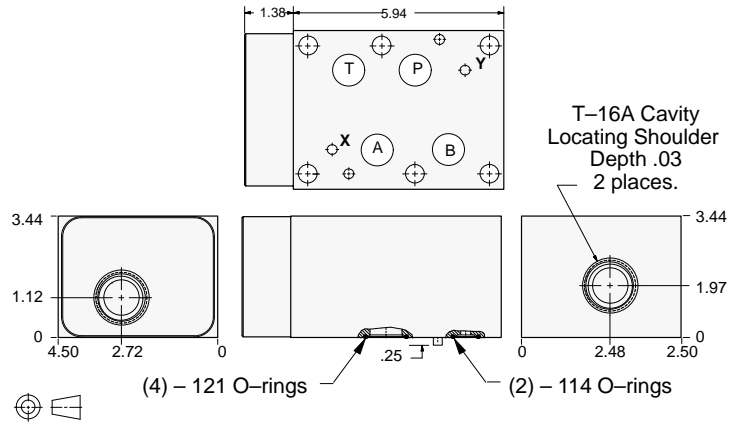
ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CDX		CDX/S	



FUNCTION

T to A and B
(High Capacity)

Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
CDV		CDV/S	

08 CHECK

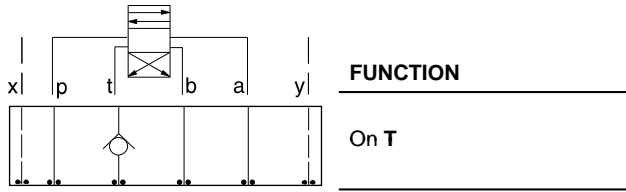
TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.08, 5.09		
OTHER VALVES:			



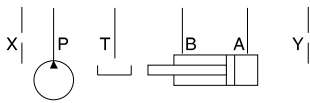
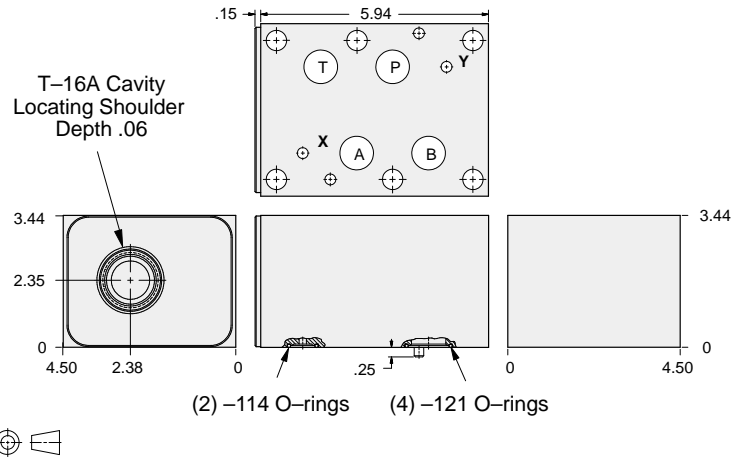
ISO 08 SANDWICH BODIES



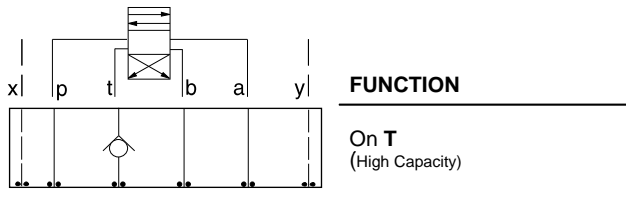
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



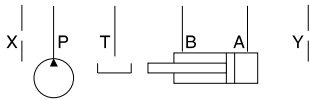
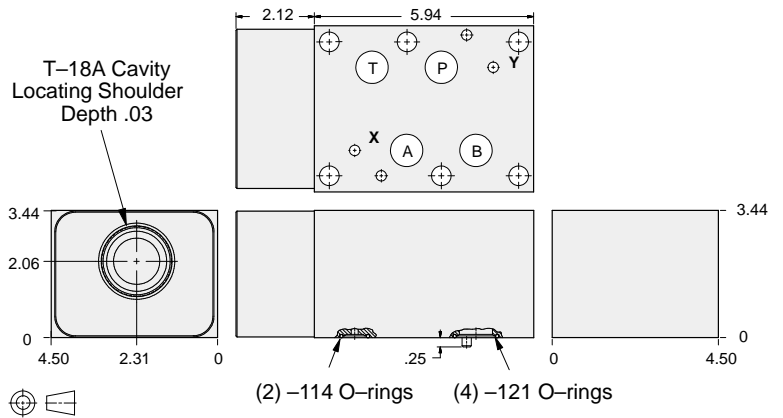
Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBT		IBT/S	



Check Valves



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBV		IBV/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Check Valve, Free Flow Port 1 to Port 2 (Nose-to-Side)		
	CX*A Page 5.09		
OTHER VALVES:			

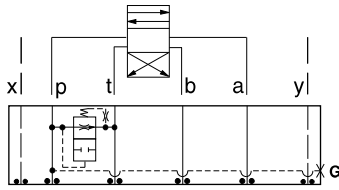
08 CHECK



ISO 08 SANDWICH BODIES



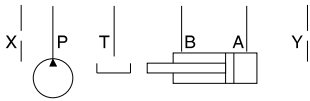
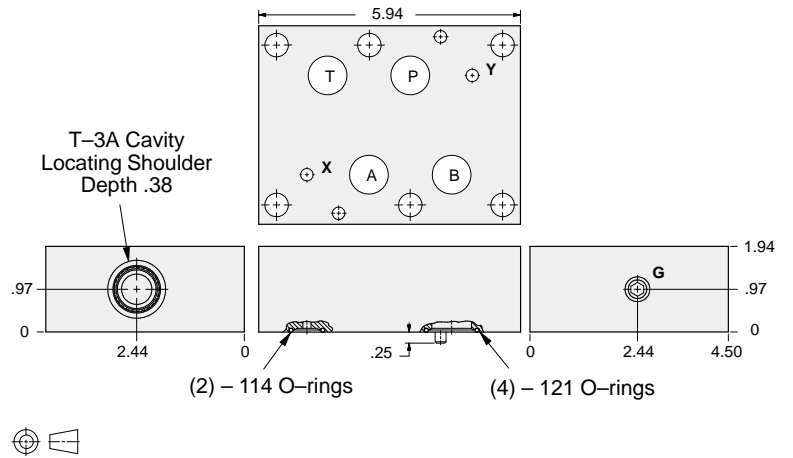
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



FUNCTION

Air-Bleed and Start-Up

Circuit Savers



Gage Port (Plugged)	ALUMINUM		DUCTILE IRON	
	Model Code	List Price	Model Code	List Price
.25 NPTF	CDP		CDP/S	
.25 BSPP	CDP/M		CDP/T	

08 CIRCUIT SAVER

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
	Air Bleed and Start-up Valve		
	NQEB Page 10.16		

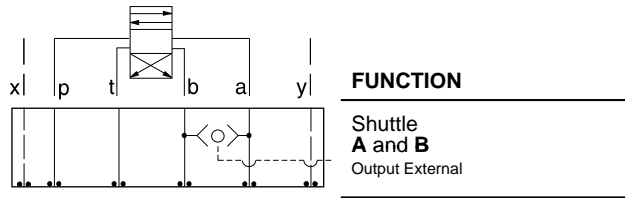
OTHER VALVES:



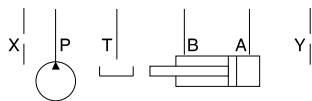
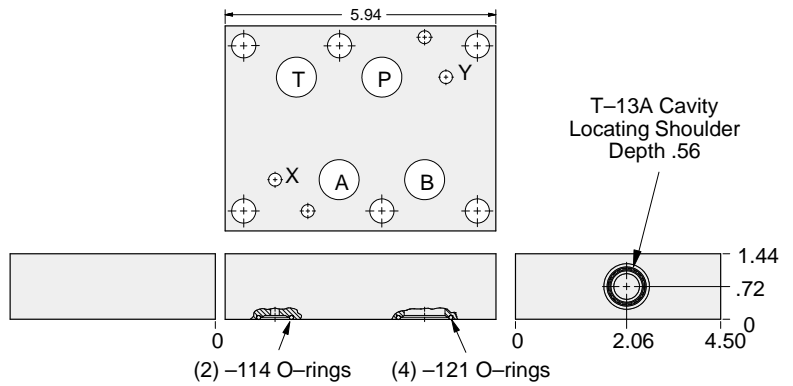
ISO 08 SANDWICH BODIES



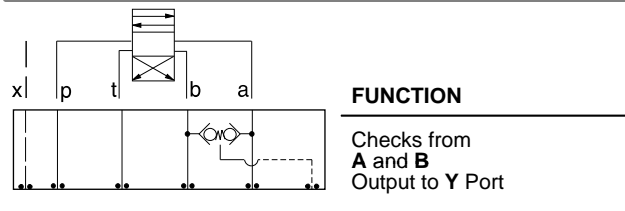
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



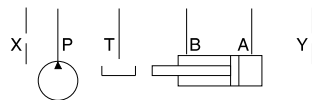
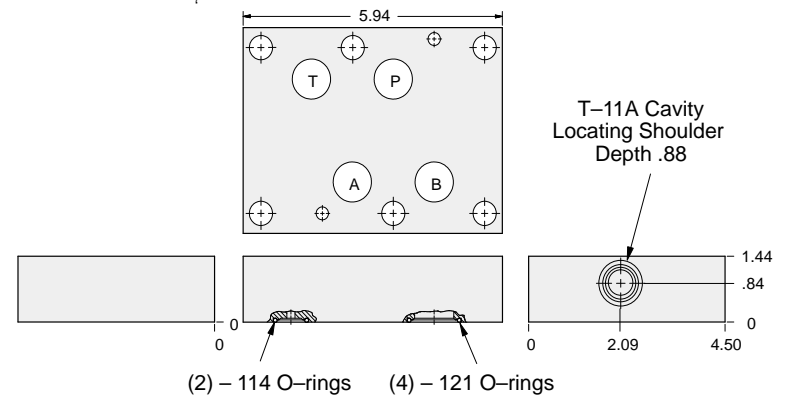
Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
IBS		IBS/S	



Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
HBS		HBS/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE			
 1-2 Ext.	2 Port Shuttle Valve, Signal External		
	CSAA Page 10.09, (use with IBS)		
 1-3 2	3 Port Back-to-Back Check Valve, Signal at Port 3		
	CDAB Page 10.10 (use with HBS)		
OTHER VALVES:			

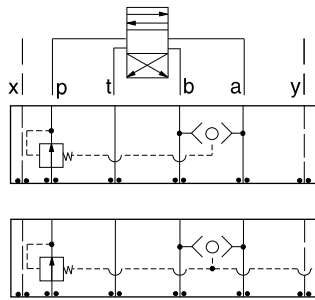
08 CIRCUIT SAVER



ISO 08 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

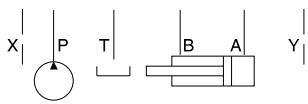
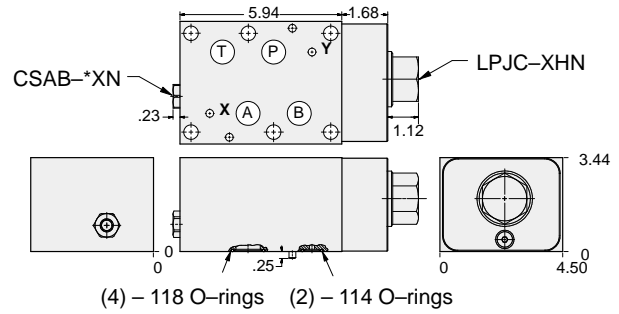


FUNCTION

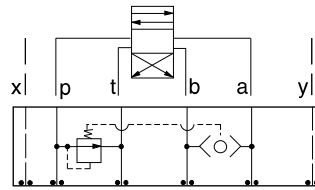
Pressure Compensator (Restrictive)

Pressure Compensator (Restrictive) w/Load-Sensing Port

Circuit Savers



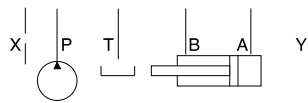
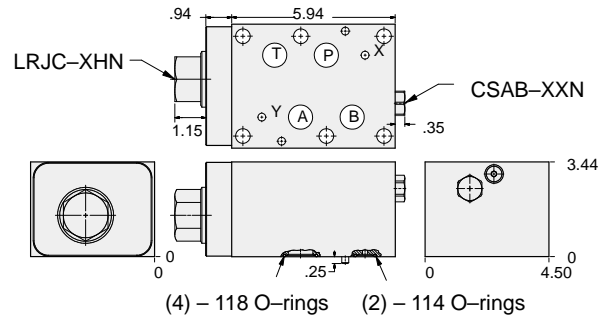
Shuttle Cartridge	External Shuttle Port	ALUMINUM		DUCTILE IRON	
		Model Code	List Price	Model Code	List Price
CSAB-XXN	None	YFIA-XHN-CA		YFIA-XHN-CA/S	
CSAB-AXN	SAE-4	YFIB-XHN-CA		YFIB-XHN-CA/S	
CSAB-BXN	.25 BSPP	YFIB-XHN-CA/M		YFIB-XHN-CA/T	



FUNCTION

Pressure Compensator (Bypass)

Circuit Savers



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YFIC-XHN-CA		YFIC-XHN-CA/S	

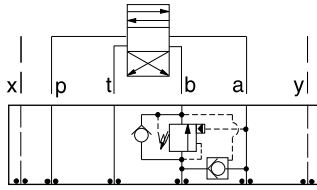


ISO 08 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

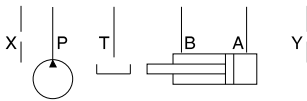
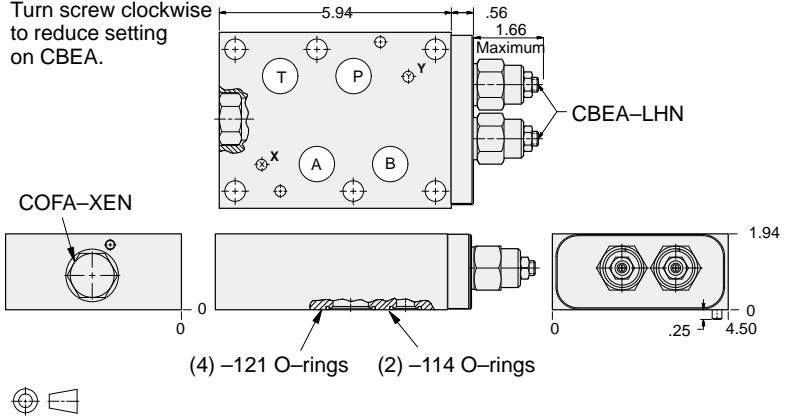
Circuit Savers



FUNCTION

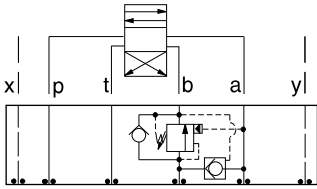
B to A
Regenerative

Turn screw clockwise to reduce setting on CBEA.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDFF-LHN-CA		YDFF-LHN-CA/S	

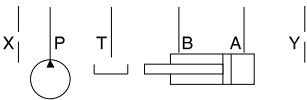
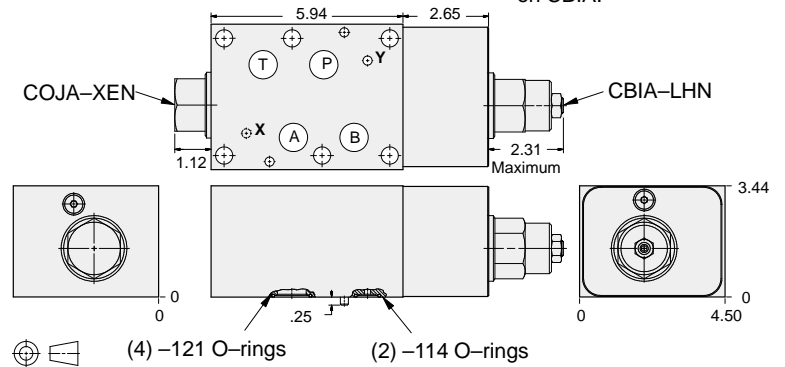
Circuit Savers



FUNCTION

B to A
Regenerative
(High Capacity)

Turn screw clockwise to reduce setting on CBIA.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDGF-LHN-CA		YDGF-LHN-CA/S	

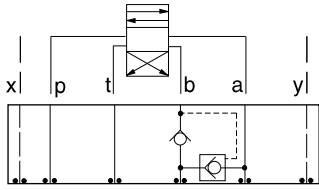
08 CIRCUIT SAVER



ISO 08 SANDWICH BODIES



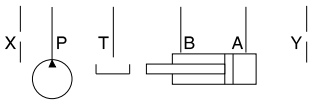
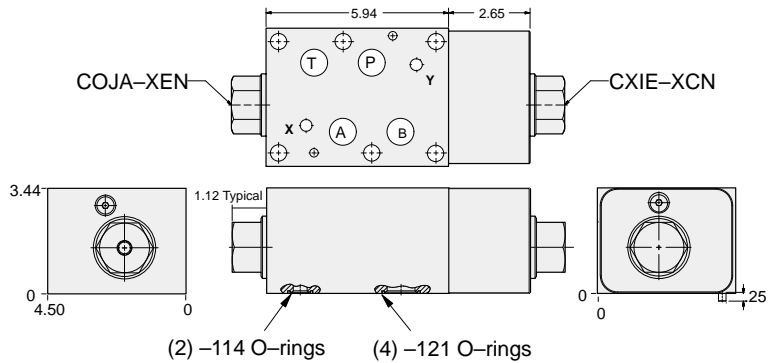
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



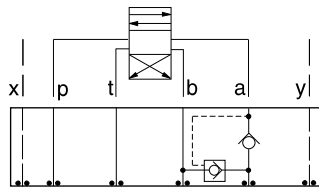
FUNCTION

**B to A
Regenerative
(Full Time)**

Circuit Savers



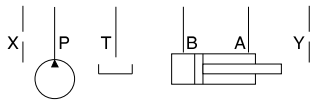
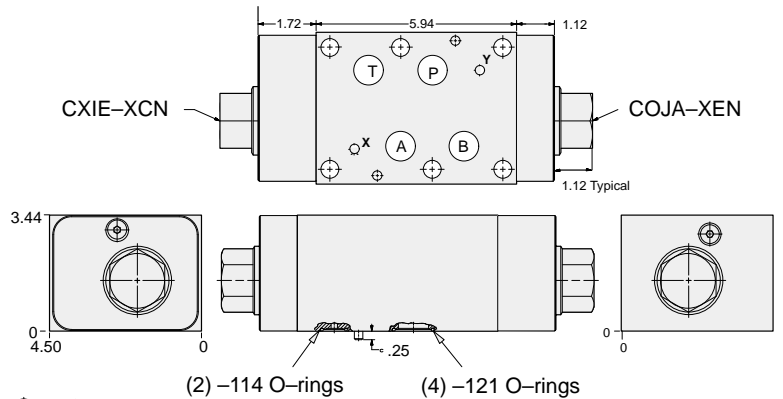
ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
YDGH-XCN-CA		YDGH-XCN-CA/S	



FUNCTION

**A to B
Regenerative
(Full Time)**

Circuit Savers



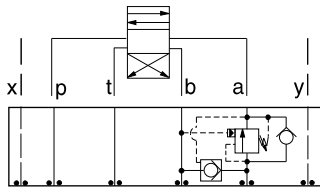
ALUMINUM		DUCTILE IRON	
<i>Model Code</i>	<i>List Price</i>	<i>Model Code</i>	<i>List Price</i>
YDGI-XCN-CA		YDGI-XCN-CA/S	



ISO 08 SANDWICH BODIES



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

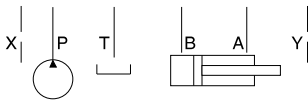
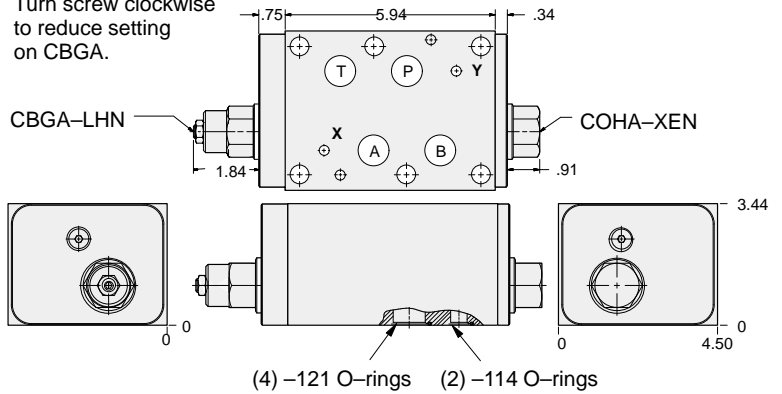


FUNCTION

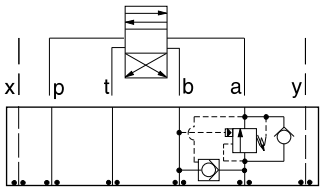
A to B
Regenerative

Circuit Savers

Turn screw clockwise to reduce setting on CBGA.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDFJ-LHN-CA		YDFJ-LHN-CA/S	

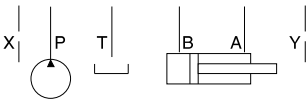
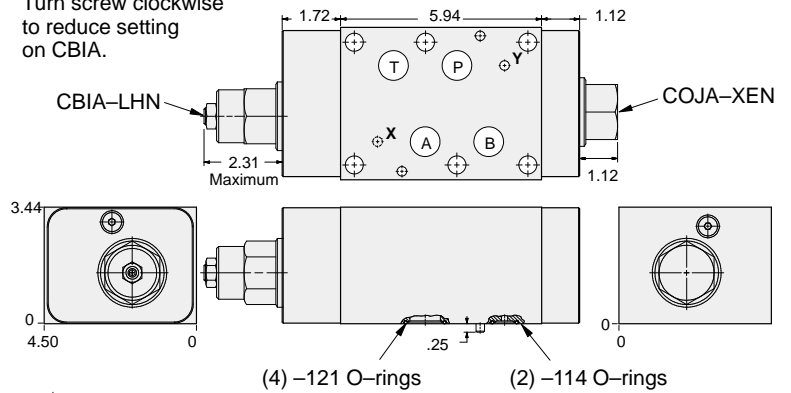


FUNCTION

A to B
Regenerative
(High Capacity)

Circuit Savers

Turn screw clockwise to reduce setting on CBIA.



ALUMINUM		DUCTILE IRON	
Model Code	List Price	Model Code	List Price
YDGE-LHN-CA		YDGE-LHN-CA/S	

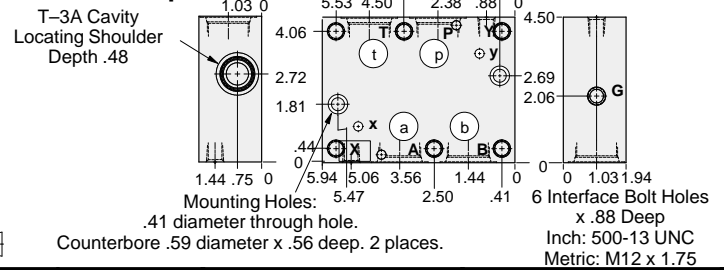
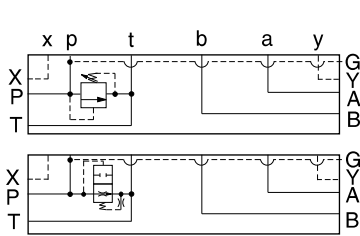


ISO 08 SANDWICH BODIES



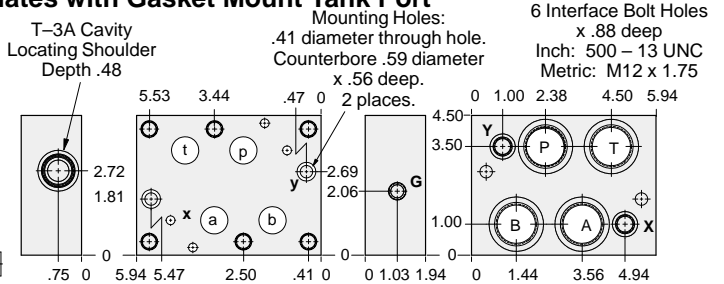
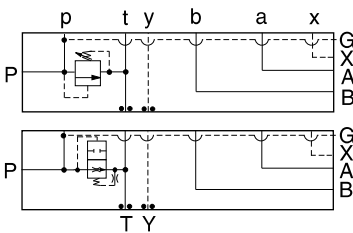
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Side Ported Subplates



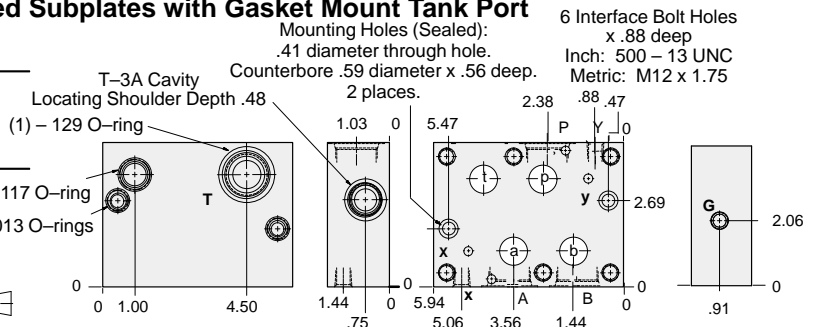
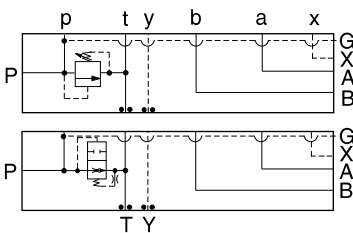
Bolt Hole Interface	Port P,T,A,B	Port X,Y	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	CSE		CSE/S	
Inch	SAE-16	SAE-6	.25 NPTF	CSM		CSM/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	CSX		CSX/S	

Side Ported Subplates with Gasket Mount Tank Port



Bolt Hole Interface	Port P,T,A,B	Port X,Y	Gage Port	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	.25 NPTF	.25 NPTF	CRE		CRE/S	
Inch	SAE-16	SAE-6	.25 NPTF	CRM		CRM/S	
Metric	1.00 BSPP	.25 BSPP	.25 BSPP	CRX		CRX/S	

Side Ported Subplates with Gasket Mount Tank Port



Bolt Hole Interface	Ports A, B, P	Port T	Port X, Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
Inch	1.00 NPTF	1.00 NPTF	.25 NPTF	.25 NPTF	CTE		CTE/S	
Inch	SAE-16	1.00 NPTF	SAE-6	.25 NPTF	CTM		CTM/S	
Metric	1.00 BSPP	1.00 BSPP	.25 BSPP	.25 BSPP	CTS		CTS/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
	Pilot Operated, Rapid Response Relief Valve		Air Bleed and Start-up Valve
	RPGE Page 1.08		NQEB Page 10.16
OTHER VALVES:			

08 SUBPLATE

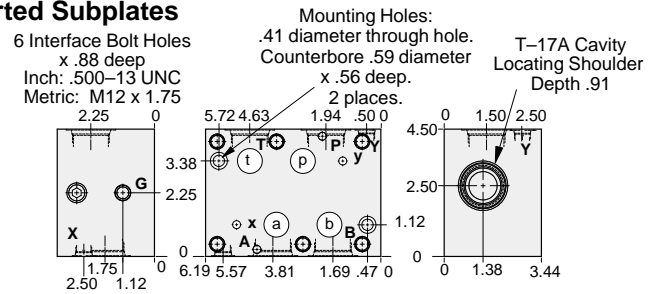
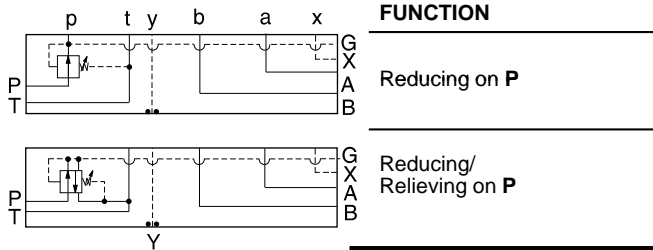


ISO 08 SANDWICH BODIES



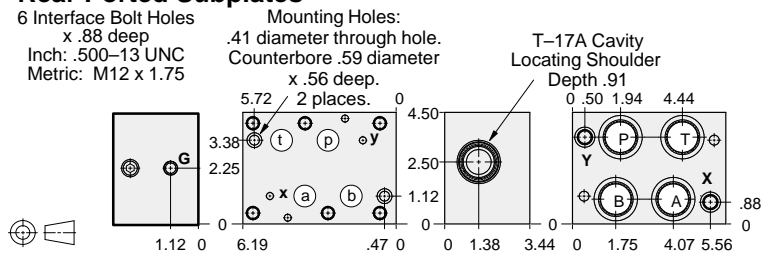
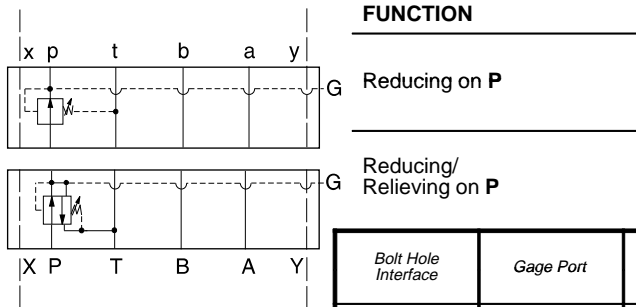
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

Side Ported Subplates



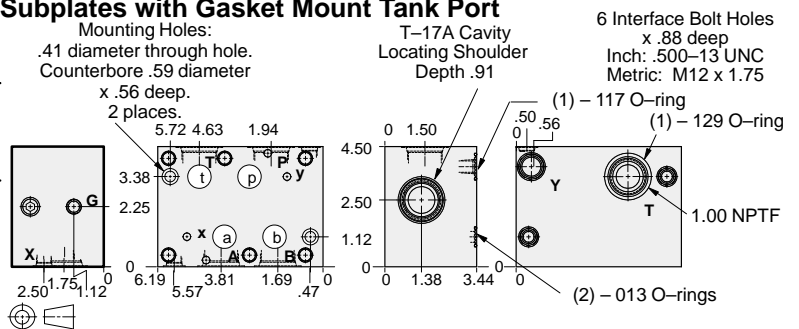
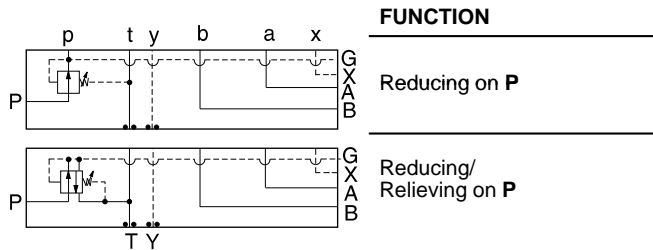
Bolt Hole Interface	Gage Port	Ports A,B,P,T	Ports X,Y	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	1.00 NPTF	.25 NPTF	HSE		HSE/S	
Inch	.25 NPTF	SAE-16	SAE-6	HSM		HSM/S	
Metric	.25 BSPP	1.00 BSPP	.25 BSPP	HSX		HSX/S	

Rear Ported Subplates



Bolt Hole Interface	Gage Port	Ports A,B,P,T	Ports X,Y	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	1.00 NPTF	.25 NPTF	HRE		HRM/S	
Inch	.25 NPTF	SAE-16	SAE-6	HRM		HRM/S	
Metric	.25 BSPP	1.00 BSPP	.25 BSPP	HRX		HRX/S	

Side Ported Subplates with Gasket Mount Tank Port



Bolt Hole Interface	Gage Port	Ports A,B,P	Ports X, Y	ALUMINUM		DUCTILE IRON	
				Model Code	List Price	Model Code	List Price
Inch	.25 NPTF	1.00 NPTF	.25 NPTF	HTE		HTE/S	
Inch	.25 NPTF	SAE-16	SAE-6	HTM		HTM/S	
Metric	.25 BSPP	1.00 BSPP	.25 BSPP	HTX		HTX/S	

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

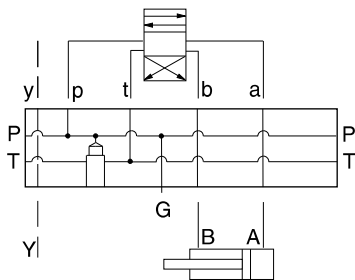
	Pilot Operated Reducing Valve PBHB Page 3.07		Pilot Operated Reducing/Relieving Valve PPHB Page 3.11
	Air Controlled, Pilot Operated Reducing Valve PBHC Page 3.09		Air Controlled, Pilot Operated Reducing/Relieving Valve PPHC Page 3.13



BAR MANIFOLDS



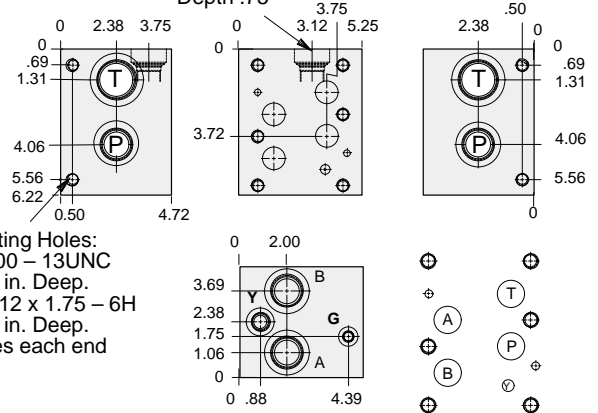
- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.



ISO 08 Parallel Circuit with Relief Cavity and Y Port

FUNCTION _____
 One Station _____

T-3A Cavity
 Locating Shoulder
 Depth .75



Mounting Holes:
 Inch: 500 – 13UNC
 x .88 in. Deep.
 Metric: M12 x 1.75 – 6H
 x .88 in. Deep.
 2 places each end



Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.25 NPTF	1.00 NPTF	.375 NPTF	.25 NPTF	VLN		VLN/S	
inch	SAE-20	SAE-16	SAE-8	SAE-4	VLT		VLT/S	
metric	1.25 BSPP	1.00 BSPP	.375 BSPP	.25 BSPP	VLX		VLX/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			

BAR MANIFOLDS

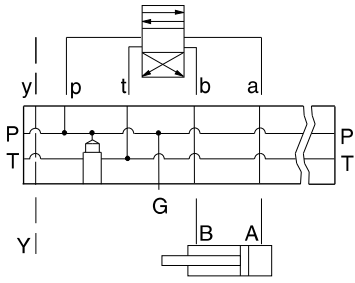


BAR MANIFOLDS



- Aluminum rated to 3000 psi and Ductile Iron rated to 5000 psi.
- See page viii for ordering cartridge/body and seals. Pressure ratings, material specifications on page xiv.

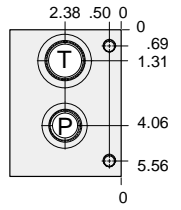
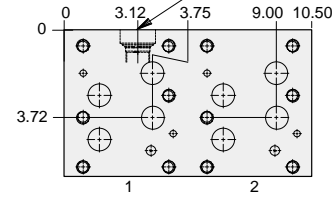
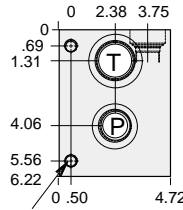
ISO 08 Parallel Circuit with Relief Cavity and Y Port



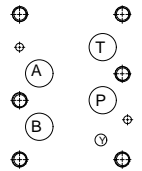
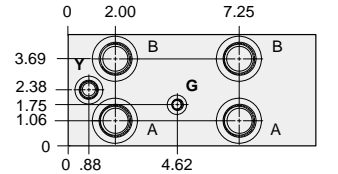
FUNCTION

Two Station

T-3A Cavity
Locating Shoulder
Depth .75



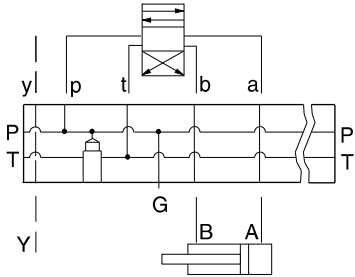
Mounting Holes:
Inch: .500 – 13UNC
x .88 in. deep
Metric: M12 x 1.75–6H
x .88 in. deep.
2 places each end



Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.25 NPTF	1.00 NPTF	.375 NPTF	.25 NPTF	VLP		VLP/S	
inch	SAE-20	SAE-16	SAE-8	SAE-4	VLV		VLV/S	
metric	1.25 BSPP	1.00 BSPP	.375 BSPP	.25 BSPP	VLY		VLY/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

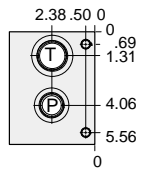
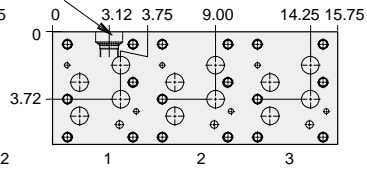
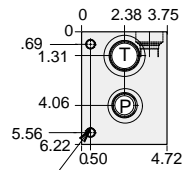
ISO 08 Parallel Circuit with Relief Cavity and Y Port



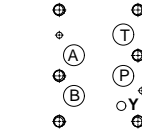
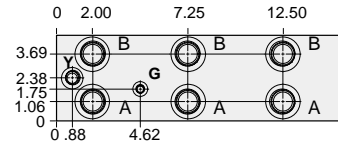
FUNCTION

Three Station

T-3A Cavity
Locating Shoulder
Depth .75



Mounting Holes:
Inch: .500 – 13UNC
x .88 in. deep
Metric: M12 x 1.75–6H
x .88 in. deep.
2 places each end



Mounting Holes	Port T	Ports A, B, P	Port Y	Gage Port	ALUMINUM		DUCTILE IRON	
					Model Code	List Price	Model Code	List Price
inch	1.25 NPTF	1.00 NPTF	.375 NPTF	.25 NPTF	VLR		VLR/S	
inch	SAE-20	SAE-16	SAE-8	SAE-4	VLW		VLW/S	
metric	1.25 BSPP	1.00 BSPP	.375 BSPP	.25 BSPP	VLZ		VLZ/S	

Bar Manifold Mounting Kits to be ordered separately. See page 12.087.

TYPICAL CARTRIDGES USED WITH BODIES SHOWN ABOVE

	Pilot Operated Relief Valve		Direct Acting Relief Valve
	RPGC Page 1.06		RDFA Page 1.10
OTHER VALVES:			

BAR MANIFOLDS





