VELJAN

VT6CBB - 022 - B09 - B02 - 1 R 00 - B 1 01 *

Series

Cam ring for "P1"
Volumetric displacement cm³/rev (in³/rev)

*003/B03	= 10.8 (0.66)	015/B15	= 50.5 (3.08)
005/B05	= 17.2 (1.05)	017/B17	= 58.3 (3.56)
006/B06	= 21.3 (1.30)	020/B20	= 63.8 (3.89)
008/B08	= 26.4 (1.61)	022/B22	= 70.3 (4.29)
010/B10	= 34.1 (2.08)	025/B25	= 79.3 (4.84)
012/B12	= 37.1 (2.26)	028/B28	= 88.8 (5.42)
014/B14	= 46.0 (2.81)	031/B31	= 100.0 (6.10)

*'0' - Uni - directional 'B' - Bi - directional

Cam ring for "P2" & "P3"
Volumetric displacement cm³/rev (in³/rev)

B02 = 5.8 (0.35)
B03 = 9.8 (0.59)
B04 = 12.8 (0.78)
B05 = 15.9 (0.97)
B06 = 19.8 (1.21)
B07 = 22.5 (1.37)
B08 = 24.9 (1.52)
B09 = 28.0 (1.71)
B10 = 31.8 (1.94)
B11 = 34.9 (2.13)
B12 = 41.0 (2.50)
B14 = 45.0 (2.75)

Type of Shaft

1 = Keyed (no SAE)
2 = Keyed (SAE BB)
3 = Splined (SAE BB)
5 = Splined (SAE B)
E = Splined

Modifications

Port connections

S = 2½" SAE 4-Bolt Pad.

CODE UNC	CODE METRIC	P1	P2	P3
01	W0	1" SAE 4 bolt Pad.	3/4" SAE 4 bolt Pad.	SAE 8,3/4" 16 UNF-2B O'ring Boss
11	W1			3/4" SAE 4 bolt Pad.
02	W2	SAE 16,1 5/16" 12 UNF-2B O'ring Boss	SAE 12,1 1/16" 12 UNF-2B O'ring Boss	SAE 8,3/4" 16 UNF-2B O'ring Boss

Seal class

1 - S1 (for mineral oil)
4 - S4 (for fire resistant fluids)
5 - S5 (for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4)
00 - standard

Direction of rotation (view on shaft end)

R - clockwise
L - counter-clockwise

TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	003	0.66	10.8	4.29	16.2	2.96	11.2	2.04	7.7	1.74	1.3	7.11	5.3	11.26	8.4
	005	1.05	17.2	6.83	25.8	5.50	20.8	4.57	17.3	1.88	1.4	10.06	7.5	16.36	12.2
	006	1.30	21.3	8.44	31.9	7.11	26.9	6.19	23.4	2.01	1.5	11.94	8.9	19.71	14.7
	008	1.61	26.4	10.48	39.6	9.15	34.6	8.22	31.1	2.15	1.6	14.35	10.7	22.93	17.7
	010	2.08	34.1	13.52	51.1	12.19	46.1	11.26	42.6	2.28	1.7	18.64	13.4	29.90	22.3
	012	2.26	37.1	14.71	55.6	13.36	50.6	12.46	47.1	2.28	1.7	19.31	14.4	32.32	24.1
	014	2.81	46.0	18.25	69.0	16.93	64.0	16.00	60.5	2.55	1.9	23.60	17.6	39.56	29.5
	015	3.08	50.5	20.00	75.6	18.73	73.2	19.02	67.5	2.68	2.0	25.61	19.1	42.91	32.0
	017	3.56	58.3	23.12	87.4	21.79	82.4	20.87	78.9	2.82	2.1	29.37	21.9	49.48	36.9
	020	3.89	63.8	25.32	95.7	23.99	90.7	23.07	87.2	2.95	2.2	31.92	23.8	53.91	40.2
	022	4.29	70.3	27.88	105.4	26.56	100.4	25.63	96.9	3.08	2.3	35.00	26.1	59.14	44.1
	025	4.84	79.3	31.46	118.9	30.13	113.9	29.21	110.4	3.35	2.5	39.16	29.2	66.38	49.5
	028 1)	5.42	88.8	35.24	133.2	33.92	128.2	33.28	125.8	3.75	2.8	43.85	32.7	65.04	48.5
	031 1)	6.10	100.0	39.68	150.0	38.35	145.0	37.72	142.6	3.75	2.8	48.95	36.5	72.95	54.4

				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 210 bar (3000 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 210 bar (3000 psi)	
		in³ /rev	cm³ /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P2 & P3	B02	0.35	5.8	2.30	8.7	1.4	5.9	--	--	0.53	0.4	2.81	2.1	--	--
	B03	0.59	9.8	3.88	14.7	2.9	11.9	--	--	0.67	0.5	3.62	2.7	--	--
	B04	0.78	12.8	5.08	19.2	4.33	16.4	3.97	15.0	0.93	0.7	5.23	3.9	10.06	7.5
	B05	0.97	15.9	6.31	23.8	5.55	21.0	5.18	19.6	1.00	0.75	6.64	4.9	11.2	8.3
	B06	1.21	19.8	7.85	29.7	7.12	26.9	6.66	25.2	1.07	0.8	8.05	6.0	12.34	9.2
	B07	1.37	22.5	8.92	33.7	8.17	30.9	7.80	29.5	1.20	0.9	9.05	6.7	14.02	10.4
	B08	1.52	24.9	9.89	37.4	9.15	34.6	8.78	33.2	1.34	1.0	10.05	7.5	15.69	11.7
	B09	1.71	28.0	11.11	42.0	10.37	39.2	10.00	37.8	1.47	1.1	11.94	8.9	23.60	17.6
	B10	1.94	31.8	12.61	47.7	11.87	44.9	11.51	43.5	1.6	1.2	13.0	9.7	26.0	19.6
	B11	2.13	34.9	13.85	52.3	13.09	49.5	12.72	48.1	1.7	1.3	14.0	10.5	28.0	21.0
	B12	2.50	41.0	16.27	61.5	15.53	58.7	*	*	1.8	1.4	15.02	11.2	*	*
	B14	2.75	45.0	17.86	67.5	17.12	64.7	**	**	2.1	1.6	15.42	11.5	**	**

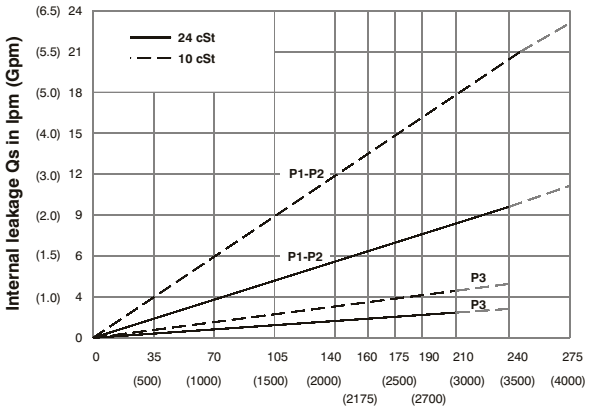
1) 028-031= 210 bar (3000 psi) max. int,

*B12 = 210bar (3000psi) Max. Int

**B14 = 175bar (2500psi) Max. Int

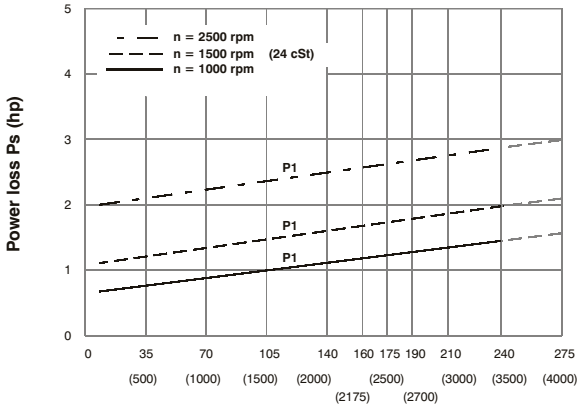
- Not to use because internal leakage greater than 50% of theoretical flow.

INTERNAL LEAKAGE (TYPICAL)



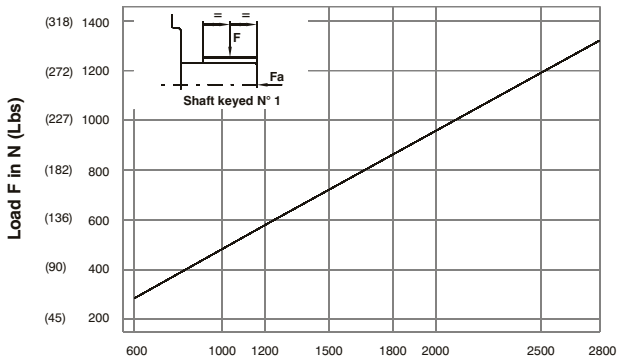
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)



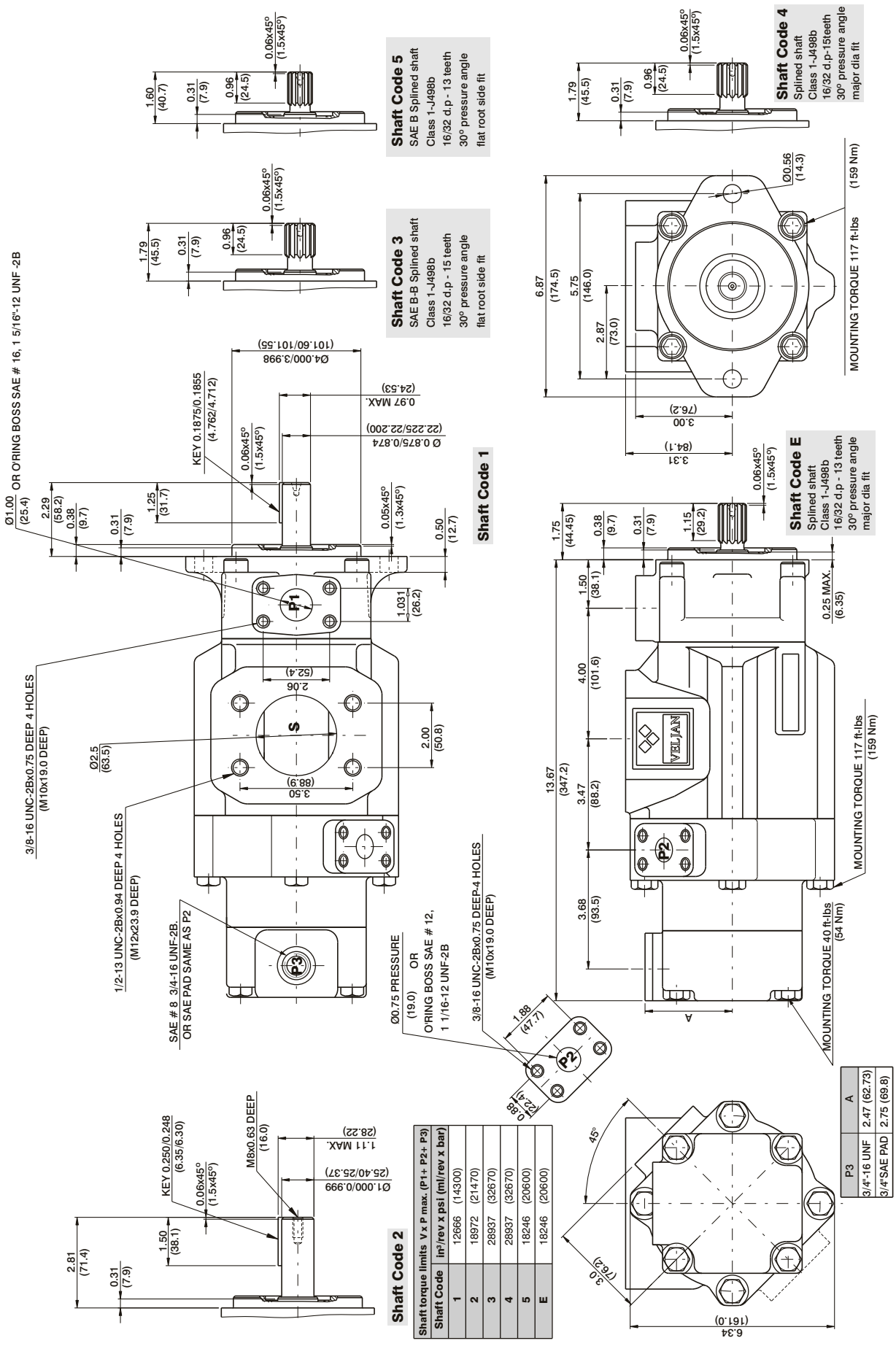
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum axial load permissable Fa = 800 N (180 Lbs)

TP



Shaft torque limits V x P max. (P1+ P2+ P3)		
Shaft Code	in³/rev x psi (ml/rev x bar)	
1	12666	(14300)
2	18972	(21470)
3	28937	(32670)
4	28937	(32670)
5	18246	(20600)
E	18246	(20600)

	P3	A
3/4"-16 UNF	2.47 (62.73)	
3/4"SAE PAD	2.75 (69.8)	

VT6CCB - 022 - 017 - B02 - 1 R 00 - B 1 01 *

Series

P1 **P2** **P3**

Cam ring for "P1" &"P2"

Volumetric displacement cm³/rev (in³/rev)

*003/B03	= 10.8 (0.66)	015/B15	= 50.5 (3.08)
005/B05	= 17.2 (1.05)	017/B17	= 58.3 (3.56)
006/B06	= 21.3 (1.30)	020/B20	= 63.8 (3.89)
008/B08	= 26.4 (1.61)	022/B22	= 70.3 (4.29)
010/B10	= 34.1 (2.08)	025/B25	= 79.3 (4.84)
012/B12	= 37.1 (2.26)	028/B28	= 88.8 (5.42)
014/B14	= 46.0 (2.81)	031/B31	= 100.0 (6.10)

*'0' - Uni - directional 'B' - Bi - directional

Cam ring for "P3"

Volumetric displacement cm³/rev (in³/rev)

B02 = 5.8 (0.35)
B03 = 9.8 (0.59)
B04 = 12.8 (0.78)
B05 = 15.9 (0.97)
B06 = 19.8 (1.21)
B07 = 22.5 (1.37)
B08 = 24.9 (1.52)
B09 = 28.0 (1.71)
B10 = 31.8 (1.94)
B11 = 34.9 (2.13)
B12 = 41.0 (2.50)
B14 = 45.0 (2.75)

Modifications

Port connections

S=3" SAE 4-Bolt Pad
P1 & P2 = 1" SAE 4-Bolt Pad

UNC	METRIC	P3
01	W0	SAE 8, ¾" 16 UNF - 2B O'Ring Boss
11	W1	¾" SAE 4 Bolt Pad

Seal class

1 - S1 (for mineral oil)
4 - S4 (for fire resistant fluids)
5 - S5 (for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-5)

00 - standard

Direction of rotation (view on shaft end)

R - clockwise
L - counter-clockwise

Type of Shaft

1 - Keyed (no SAE)
2 - Keyed (SAE BB)
3 - Splined (SAE BB)
5 - Splined (SAE B)
E - Splined

TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1 & P2	003	0.66	10.8	4.29	16.2	2.96	11.2	2.04	7.7	1.74	1.3	7.11	5.3	11.26	8.4
	005	1.05	17.2	6.83	25.8	5.50	20.8	4.57	17.3	1.88	1.4	10.06	7.5	16.36	12.2
	006	1.30	21.3	8.44	31.9	7.11	26.9	6.19	23.4	2.01	1.5	11.94	8.9	19.71	14.7
	008	1.61	26.4	10.48	39.6	9.15	34.6	8.22	31.1	2.15	1.6	14.35	10.7	22.93	17.7
	010	2.08	34.1	13.52	51.1	12.19	46.1	11.26	42.6	2.28	1.7	18.64	13.4	29.90	22.3
	012	2.26	37.1	14.71	55.6	13.36	50.6	12.46	47.1	2.28	1.7	19.31	14.4	32.32	24.1
	014	2.81	46.0	18.25	69.0	16.93	64.0	16.00	60.5	2.55	1.9	23.60	17.6	39.56	29.5
	015	3.08	50.5	20.00	75.6	18.73	73.2	19.02	67.5	2.68	2.0	25.61	19.1	42.91	32.0
	017	3.56	58.3	23.12	87.4	21.79	82.4	20.87	78.9	2.82	2.1	29.37	21.9	49.48	36.9
	020	3.89	63.8	25.32	95.7	23.99	90.7	23.07	87.2	2.95	2.2	31.92	23.8	53.91	40.2
	022	4.29	70.3	27.88	105.4	26.56	100.4	25.63	96.9	3.08	2.3	35.00	26.1	59.14	44.1
	025	4.84	79.3	31.46	118.9	30.13	113.9	29.21	110.4	3.35	2.5	39.16	29.2	66.38	49.5
	028 1)	5.42	88.8	35.24	133.2	33.92	128.2	33.28	125.8	3.75	2.8	43.85	32.7	65.04	48.5
	031 1)	6.10	100.0	39.68	150.0	38.35	145.0	37.72	142.6	3.75	2.8	48.95	36.5	72.95	54.4

				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 210 bar (3000 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 210 bar (3000 psi)	
		in³ /rev	cm³ /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P3	B02	0.35	5.8	2.30	8.7	1.4	5.9	--	--	0.53	0.4	2.81	2.1	--	--
	B03	0.59	9.8	3.88	14.7	2.9	11.9	--	--	0.67	0.5	3.62	2.7	--	--
	B04	0.78	12.8	5.08	19.2	4.33	16.4	3.97	15.0	0.93	0.7	5.23	3.9	10.06	7.5
	B05	0.97	15.9	6.31	23.8	5.55	21.0	5.18	19.6	1.00	0.75	6.64	4.9	11.2	8.3
	B06	1.21	19.8	7.85	29.7	7.12	26.9	6.66	25.2	1.07	0.8	8.05	6.0	12.34	9.2
	B07	1.37	22.5	8.92	33.7	8.17	30.9	7.80	29.5	1.20	0.9	9.05	6.7	14.02	10.4
	B08	1.52	24.9	9.89	37.4	9.15	34.6	8.78	33.2	1.34	1.0	10.05	7.5	15.69	11.7
	B09	1.71	28.0	11.11	42.0	10.37	39.2	10.00	37.8	1.47	1.1	11.94	8.9	23.60	17.6
	B10	1.94	31.8	12.61	47.7	11.87	44.9	11.51	43.5	1.6	1.2	13.0	9.7	26.0	19.6
	B11	2.13	34.9	13.85	52.3	13.09	49.5	12.72	48.1	1.7	1.3	14.0	10.5	28.0	21.0
	B12	2.50	41.0	16.27	61.5	15.53	58.7	*	*	1.8	1.4	15.02	11.2	*	*
	B14	2.75	45.0	17.86	67.5	17.12	64.7	**	**	2.1	1.6	15.42	11.5	**	**

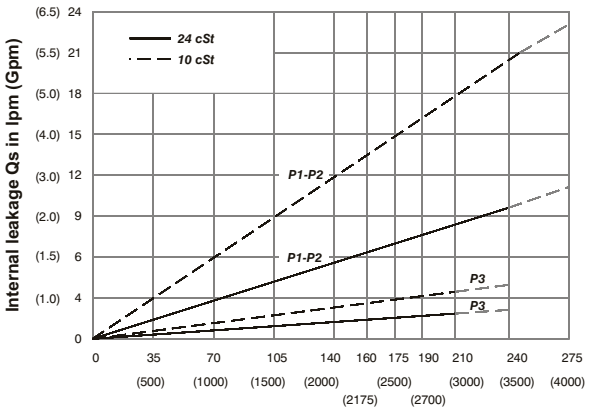
1) 028-031= 210 bar (3000 psi) max. int,

*B12 = 210bar (3000psi) Max. Int

**B14 = 175bar (2500psi) Max. Int

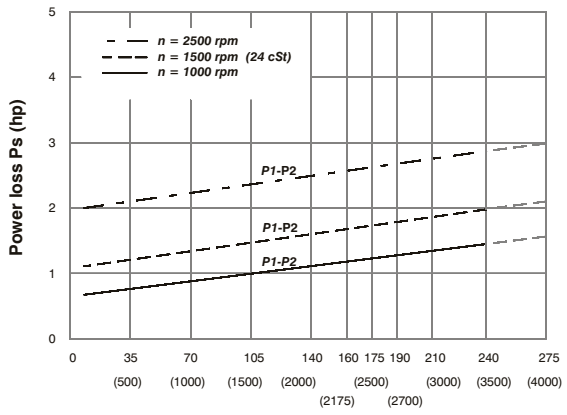
- Not to use because internal leakage greater than 50% of theoretical flow.

INTERNAL LEAKAGE (TYPICAL)



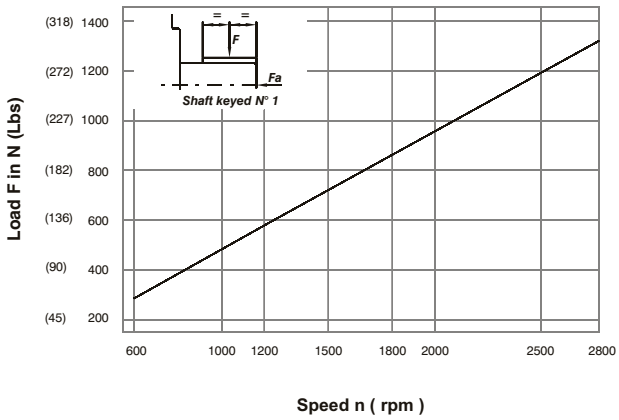
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

HYDROMECHANICAL POWER LOSS (TYPICAL)

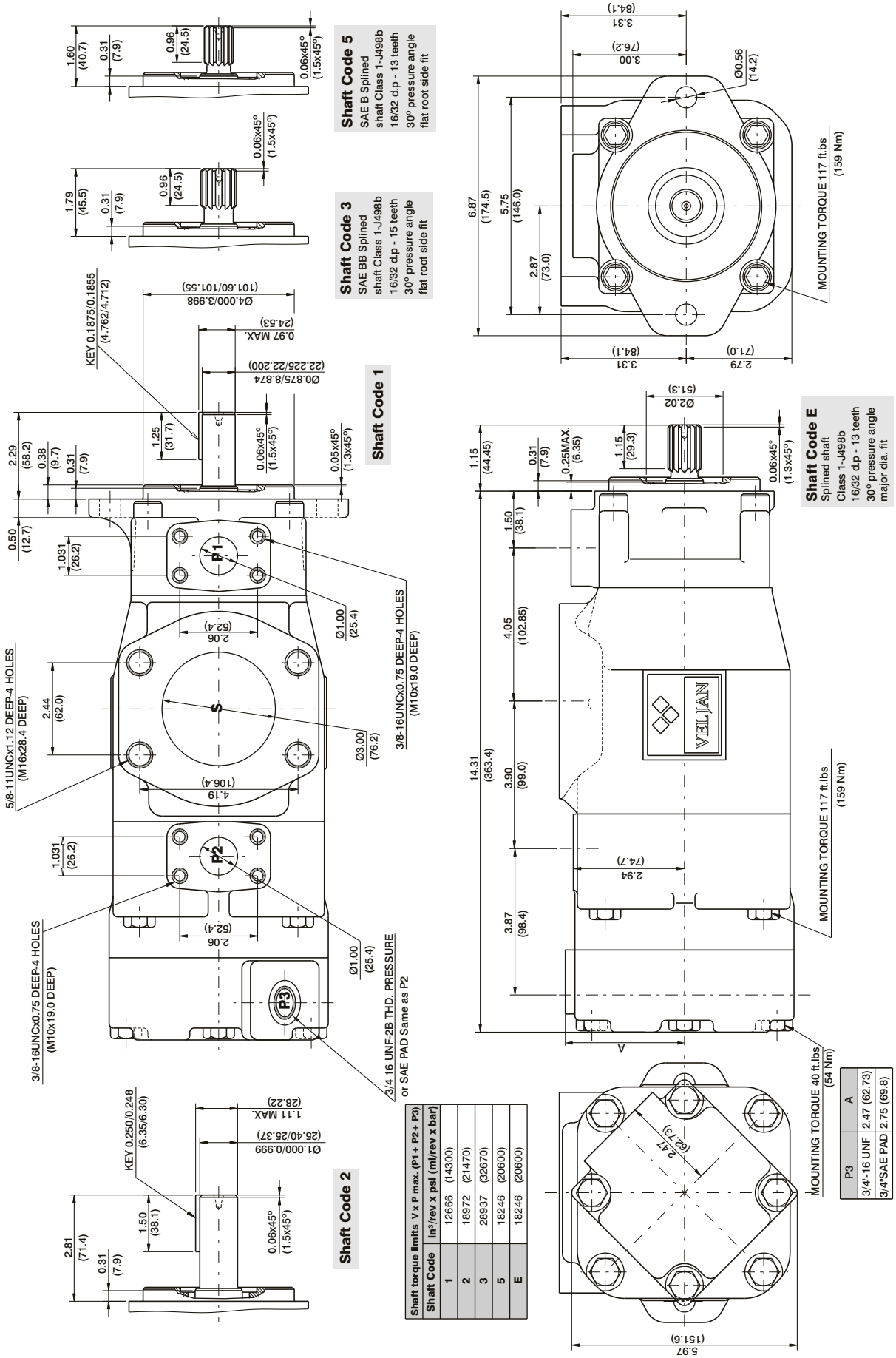


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum axial load permissable **Fa** = 800 N (180 Lbs)



Shaft torque limits V x P max. (P1+ P2+ P3)		
Shaft Code	in³/rev x psi (ml/rev x bar)	
1	12666	(14300)
2	18972	(21470)
3	28937	(32670)
5	18246	(20600)
E	18246	(20600)

P3	A
3/4"-16 UNF	2.47 (62.73)
3/4"SAE PAD	2.75 (69.8)

VT6DCB - 038 - 017 - B02 - 1 R 00 - B 1 01 *

Series

Cam ring for "P2" (P1)
Volumetric displacement cm³/rev (in³/rev)

*014/B14 = 47.6 (2.90) 035/B35 = 111.0 (6.77)
017/B17 = 58.2 (3.55) 038/B38 = 120.3 (7.34)
020/B20 = 66.0 (4.03) 042/B42 = 136.0 (8.30)
024/B24 = 79.5 (4.85) 045/B45 = 145.7 (8.89)
028/B28 = 89.7 (5.47) 050/B50 = 158.0 (9.64)
031/B31 = 98.3 (6.00) 061/B61 = 190.5 (11.62)

*'0' - Uni - directional 'B' - Bi - directional

Cam ring for "P2" (P2)
Volumetric displacement cm³/rev (in³/rev)

*003/B03 = 10.8 (0.66) 012/B12 = 37.1 (2.26) 022/B22 = 70.3 (4.29)
005/B05 = 17.2 (1.05) 014/B14 = 46.0 (2.81) 025/B25 = 79.3 (4.84)
006/B06 = 21.3 (1.30) 015/B15 = 50.5 (3.08) 028/B28 = 88.8 (5.42)
008/B08 = 26.4 (1.61) 017/B17 = 58.3 (3.56) 031/B31 = 100.0 (6.10)
010/B10 = 34.1 (2.08) 020/B20 = 63.8 (3.89)

*'0' - Uni - directional 'B' - Bi - directional

Cam ring for "P3" (P3)
Volumetric displacement cm³/rev (in³/rev)

B02 = 5.8 (0.35) B06 = 19.8 (1.21) B10 = 31.8 (1.94)
B03 = 9.8 (0.59) B07 = 22.5 (1.37) B11 = 34.9 (2.13)
B04 = 12.8 (0.78) B08 = 24.9 (1.52) B12 = 41.0 (2.50)
B05 = 15.9 (0.97) B09 = 28.0 (1.71) B14 = 45.0 (2.75)

Modifications

Port connections
S=3" SAE 4-Bolt Pad
P1= 1¼" & P2 = 1" SAE 4-Bolt Pad

UNC	METRIC	P3
01	W0	SAE 8, ¾" 16 UNF - 2B O'Ring Boss
11	W1	¾" SAE 4 Bolt Pad

Seal class
1 - S1(for mineral oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4)
00 - standard

Direction of rotation (view on shaft end)
R - clockwise
L - counter-clockwise

Type of Shaft
1 - Keyed (no SAE) 3 - Splined (SAE C)
2 - Keyed (SAE CC) E - Splined (SAE C)

TP

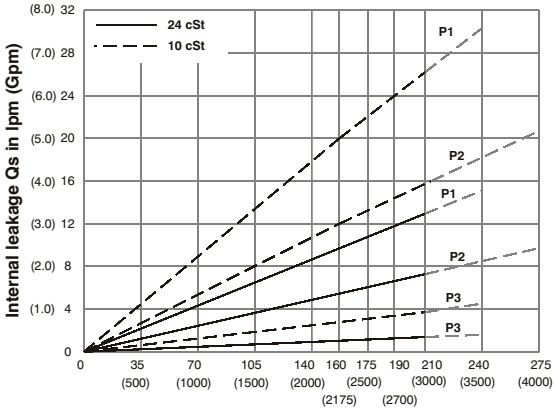
OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	014	2.90	47.6	18.88	71.4	16.42	62.1	14.78	55.9	3.08	2.3	24.81	18.5	41.03	30.6
	017	3.55	58.2	23.1	87.3	20.6	78.0	18.99	71.8	3.35	2.5	29.77	22.2	49.62	37.0
	020	4.00	66.0	26.19	99.0	23.73	89.7	22.08	83.5	3.75	2.8	33.39	24.9	55.92	41.7
	024	4.80	79.5	31.56	119.3	29.10	110.0	27.46	103.8	4.02	3.0	39.69	29.6	66.78	49.8
	028	5.50	89.7	35.58	134.5	33.12	125.2	31.48	119.0	4.29	3.2	44.52	33.2	74.96	55.9
	031	6.00	98.3	39.00	147.5	36.53	138.1	34.89	131.9	4.42	3.3	48.54	36.2	81.80	61.0
	035	6.80	111.0	44.04	166.5	41.58	157.2	39.94	151.0	4.69	3.5	54.58	40.7	92.13	68.7
	038	7.30	120.3	47.72	180.4	45.26	171.1	43.62	164.9	4.96	3.7	58.87	43.9	99.64	74.3
	042 [1)]	8.30	136.0	53.96	204.0	51.50	194.7	49.86	188.5	5.36	4.0	66.25	49.4	112.24	83.7
	045 [1)]	8.89	145.7	57.80	218.5	55.34	209.2	53.70	203.0	5.50	4.1	70.81	52.8	120.02	89.5
	050 [1, 2)]	9.64	158.0	62.69	237.0	60.23	227.7	59.25	224.0	5.90	4.4	76.44	57.0	113.98	85.0
	061 [1, 3)]	11.62	190.5	76.25	285.7	73.54	278.0	--	--	6.16	4.6	81.26	60.6	--	--
P2	003	0.66	10.8	4.29	16.2	2.96	11.2	2.04	7.7	1.74	1.3	7.11	5.3	11.22	8.4
	005	1.05	17.2	6.83	25.8	5.50	20.8	4.57	17.3	1.88	1.4	10.06	7.5	16.36	12.2
	006	1.30	21.3	8.44	31.9	7.11	26.9	6.19	23.4	2.01	1.5	11.94	8.9	19.71	14.7
	008	1.61	26.4	10.48	39.6	9.15	34.6	8.22	31.1	2.15	1.6	14.35	10.7	22.93	17.7
	010	2.08	34.1	13.52	51.1	12.19	46.1	11.26	42.6	2.28	1.7	18.64	13.4	29.90	22.3
	012	2.26	37.1	14.71	55.6	13.36	50.6	12.46	47.1	2.28	1.7	19.31	14.4	32.32	24.1
	014	2.81	46.0	18.25	69.0	16.93	64.0	16.00	60.5	2.55	1.9	23.60	17.6	39.56	29.5
	015	3.08	50.5	20.00	75.6	18.73	73.2	19.02	67.5	2.68	2.0	25.61	19.1	42.91	32.0
	017	3.56	58.3	23.12	87.4	21.79	82.4	20.87	78.9	2.82	2.1	29.37	21.9	49.48	36.9
	020	3.89	63.8	25.32	95.7	23.99	90.7	23.07	87.2	2.95	2.2	31.92	23.8	53.91	40.2
	022	4.29	70.3	27.88	105.4	26.56	100.4	25.63	96.9	3.08	2.3	35.00	26.1	59.14	44.1
	025	4.84	79.3	31.46	118.9	30.13	113.9	29.21	110.4	3.35	2.5	39.16	29.2	66.38	49.5
	028 [2)]	5.42	88.8	35.24	133.2	33.92	128.2	33.28	125.8	3.75	2.8	43.85	32.7	65.04	48.5
	031 [2)]	6.10	100.0	39.68	150.0	38.35	145.0	37.72	142.6	3.75	2.8	48.95	36.5	72.95	54.4

				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 210 bar (3000 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 210 bar (3000 psi)	
		in³ /rev	cm³ /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P3	B02	0.35	5.8	2.30	8.7	1.4	5.9	--	--	0.53	0.4	2.81	2.1	--	--
	B03	0.59	9.8	3.88	14.7	2.9	11.9	--	--	0.67	0.5	3.62	2.7	--	--
	B04	0.78	12.8	5.08	19.2	4.33	16.4	3.97	15.0	0.93	0.7	5.23	3.9	10.06	7.5
	B05	0.97	15.9	6.31	23.8	5.55	21.0	5.18	19.6	1.00	0.75	6.64	4.9	11.2	8.3
	B06	1.21	19.8	7.85	29.7	7.12	26.9	6.66	25.2	1.07	0.8	8.05	6.0	12.34	9.2
	B07	1.37	22.5	8.92	33.7	8.17	30.9	7.80	29.5	1.20	0.9	9.05	6.7	14.02	10.4
	B08	1.52	24.9	9.89	37.4	9.15	34.6	8.78	33.2	1.34	1.0	10.05	7.5	15.69	11.7
	B09	1.71	28.0	11.11	42.0	10.37	39.2	10.00	37.8	1.47	1.1	11.94	8.9	23.60	17.6
	B10	1.94	31.8	12.61	47.7	11.87	44.9	11.51	43.5	1.6	1.2	13.0	9.7	26.0	19.6
	B11	2.13	34.9	13.85	52.3	13.09	49.5	12.72	48.1	1.7	1.3	14.0	10.5	28.0	21.0
	B12	2.50	41.0	16.27	61.5	15.53	58.7	*	*	1.8	1.4	15.02	11.2	*	*
	B14	2.75	45.0	17.86	67.5	17.12	64.7	**	**	2.1	1.6	15.42	11.5	**	**

1) 042-045-050-061=2200 RPM max.
2) 028-031= 210 bar (3000 psi) max. int,
*B12 = 210bar (3000psi) Max. Int
2) 028-031- 050=210 bar (3000 psi) max. int,
3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont.
**B14 = 175bar (2500psi) Max. Int
- Not to use because internal leakage greater than 50% of theoretical flow.

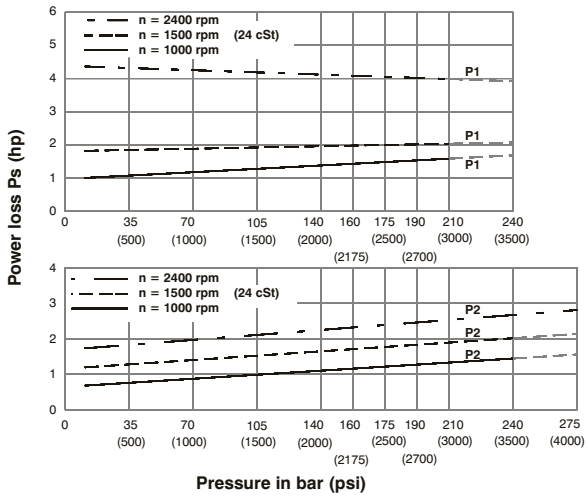
INTERNAL LEAKAGE (TYPICAL)



Pressure in bar (psi)

Don not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

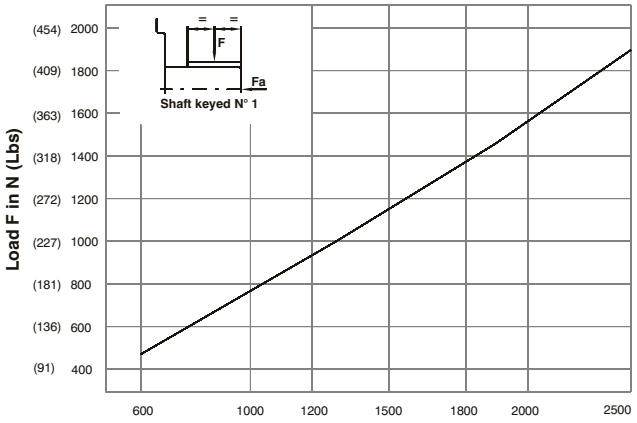
HYDROMECAHNICAL POWER LOSS (TYPICAL)



Pressure in bar (psi)

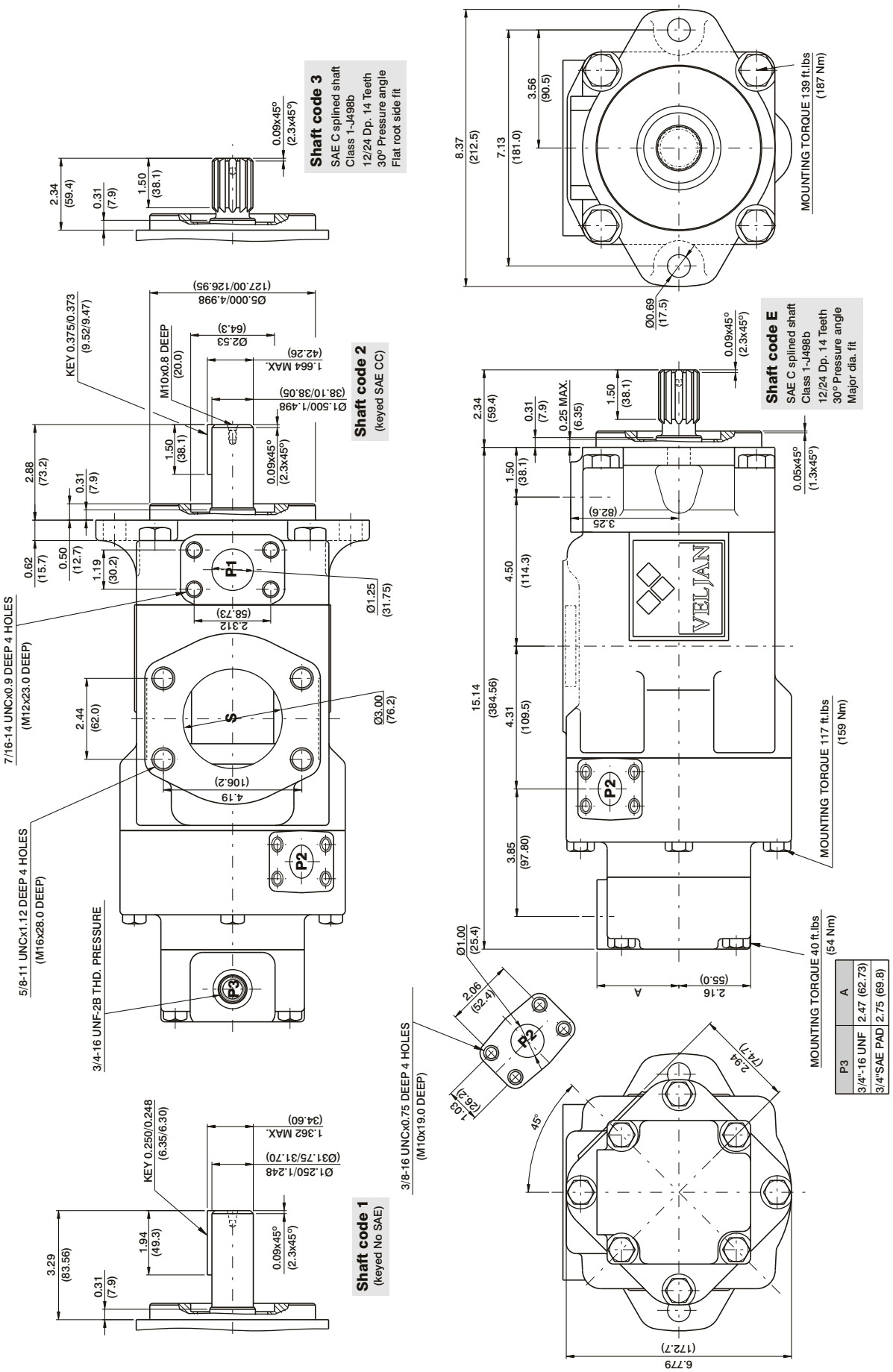
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Speed n (rpm)

Maximum permissible axial load **Fa** = 1200 N (270 Lbs)



P3	A
3/4"-16 UNF	2.47 (62.73)
3/4"SAE PAD	2.75 (69.8)

VT6DCC - 038 - 028 - 008 - 1 R 00 - A 1 - 00 - *

Series VT6DCC

Cam ring for "P1" (P1)

Volumetric displacement cm³/rev (in³/rev)

*014/B14 = 47.6 (2.90)	035/B35 = 111.0 (6.77)
017/B17 = 58.2 (3.55)	038/B38 = 120.3 (7.34)
020/B20 = 66.0 (4.03)	042/B42 = 136.0 (8.30)
024/B24 = 79.5 (4.85)	045/B45 = 145.7 (8.89)
028/B28 = 89.7 (5.47)	050/B50 = 158.0 (9.64)
031/B31 = 98.3 (6.00)	061/B61 = 190.5 (11.62)

*'0' - Uni - directional 'B' - Bi - directional

Cam ring for "P2" & "P3" (P2, P3)

Volumetric displacement cm³/rev (in³/rev)

*003/B03 = 10.8 (0.66)	015/B15 = 50.5 (3.08)
005/B05 = 17.2 (1.05)	017/B17 = 58.3 (3.56)
006/B06 = 21.3 (1.30)	020/B20 = 63.8 (3.89)
008/B08 = 26.4 (1.61)	022/B22 = 70.3 (4.29)
010/B10 = 34.1 (2.08)	025/B25 = 79.3 (4.84)
012/B12 = 37.1 (2.26)	028/B28 = 88.8 (5.42)
014/B14 = 46.0 (2.81)	031/B31 = 100.0 (6.10)

* '0' - Uni - directional 'B' - Bi - directional

Type of Shaft (1)
1 - Keyed (no SAE)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)
6 - Splined (no SAE)

Direction of rotation (view on shaft end) (R)
R - Clockwise
L - Counter - clockwise

Design letter (A)

Porting combination (see page CI-1-4,5) (00)
00 = Standard

Seal class (1)
1 - S1 (for minreal oil)
4 - S4 (for fire resistant fluids)
5 - S5 (for mineral oil and fire resistant fluids)

Mounting w/connection variables (00)

SAE	P1 = 1¼" S = 4" P2 = 1"			
	UNC		Metric	
P3	1"	3/4"	1"	3/4"
Code	00	01	M0	M1

Modifications (*)

TP

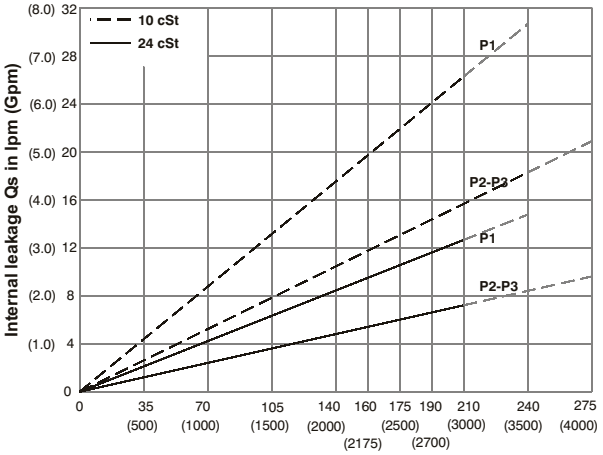
OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	014	2.90	47.6	18.88	71.4	16.42	62.1	14.78	55.9	3.08	2.3	24.81	18.5	41.03	30.6
	017	3.55	58.2	23.1	87.3	20.6	78.0	18.99	71.8	3.35	2.5	29.77	22.2	49.62	37.0
	020	4.00	66.0	26.19	99.0	23.73	89.7	22.08	83.5	3.75	2.8	33.39	24.9	55.92	41.7
	024	4.80	79.5	31.56	119.3	29.10	110.0	27.46	103.8	4.02	3.0	39.69	29.6	66.78	49.8
	028	5.50	89.7	35.58	134.5	33.12	125.2	31.48	119.0	4.29	3.2	44.52	33.2	74.96	55.9
	031	6.00	98.3	39.00	147.5	36.53	138.1	34.89	131.9	4.42	3.3	48.54	36.2	81.80	61.0
	035	6.80	111.0	44.04	166.5	41.58	157.2	39.94	151.0	4.69	3.5	54.58	40.7	92.13	68.7
	038	7.30	120.3	47.72	180.4	45.26	171.1	43.62	164.9	4.96	3.7	58.87	43.9	99.64	74.3
	042 [1)]	8.30	136.0	53.96	204.0	51.50	194.7	49.86	188.5	5.36	4.0	66.25	49.4	112.24	83.7
	045 [1)]	8.89	145.7	57.80	218.5	55.34	209.2	53.70	203.0	5.50	4.1	70.81	52.8	120.02	89.5
	050 [1, 2)]	9.64	158.0	62.69	237.0	60.23	227.7	59.25	224.0	5.90	4.4	76.44	57.0	113.98	85.0
	061 [1, 3)]	11.62	190.5	76.25	285.7	73.54	278.0	--	--	6.16	4.6	81.26	60.6	--	--
P2 & P3	003	0.66	10.8	4.29	16.2	2.96	11.2	2.04	7.7	1.74	1.3	7.11	5.3	11.22	8.4
	005	1.05	17.2	6.83	25.8	5.50	20.8	4.57	17.3	1.88	1.4	10.06	7.5	16.36	12.2
	006	1.30	21.3	8.44	31.9	7.11	26.9	6.19	23.4	2.01	1.5	11.94	8.9	19.71	14.7
	008	1.61	26.4	10.48	39.6	9.15	34.6	8.22	31.1	2.15	1.6	14.35	10.7	22.93	17.7
	010	2.08	34.1	13.52	51.1	12.19	46.1	11.26	42.6	2.28	1.7	18.64	13.4	29.90	22.3
	012	2.26	37.1	14.71	55.6	13.36	50.6	12.46	47.1	2.28	1.7	19.31	14.4	32.32	24.1
	014	2.81	46.0	18.25	69.0	16.93	64.0	16.00	60.5	2.55	1.9	23.60	17.6	39.56	29.5
	015	3.08	50.5	20.00	75.6	18.73	73.2	19.02	67.5	2.68	2.0	25.61	19.1	42.91	32.0
	017	3.56	58.3	23.12	87.4	21.79	82.4	20.87	78.9	2.82	2.1	29.37	21.9	49.48	36.9
	020	3.89	63.8	25.32	95.7	23.99	90.7	23.07	87.2	2.95	2.2	31.92	23.8	53.91	40.2
	022	4.29	70.3	27.88	105.4	26.56	100.4	25.63	96.9	3.08	2.3	35.00	26.1	59.14	44.1
	025	4.84	79.3	31.46	118.9	30.13	113.9	29.21	110.4	3.35	2.5	39.16	29.2	66.38	49.5
	028 [2)]	5.42	88.8	35.24	133.2	33.92	128.2	33.28	125.8	3.75	2.8	43.85	32.7	65.04	48.5
	031 [2)]	6.10	100.0	39.68	150.0	38.35	145.0	37.72	142.6	3.75	2.8	48.95	36.5	72.95	54.4

1) 042-045-050-061=2200 RPM max. 2) 028-031- 050=210 bar (3000 psi) max. int, 3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont.

TP

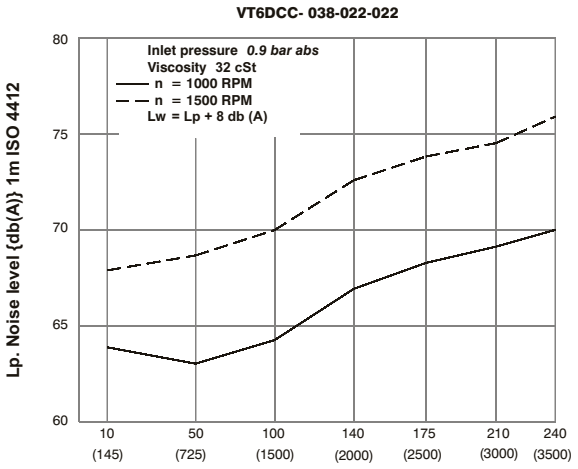
INTERNAL LEAKAGE (TYPICAL)



Pressure in bar (psi)

Total leakage is the sum of each section loss at its operating conditions.

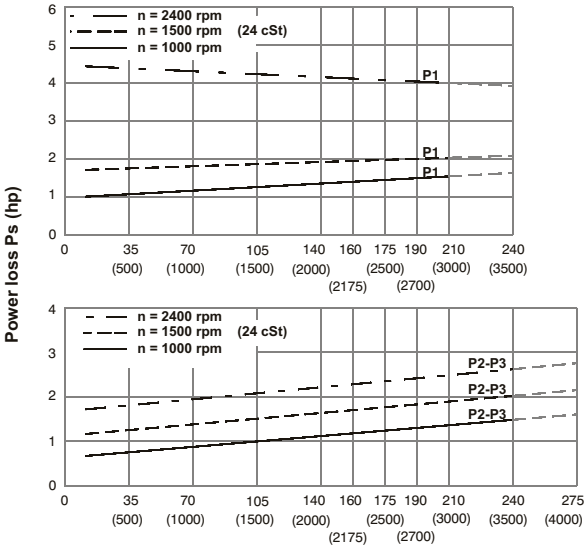
NOISE LEVEL (TYPICAL)



Pressure in bar (psi)

Triple pump noise level is given with each section discharging at the pressure noted on the curve.

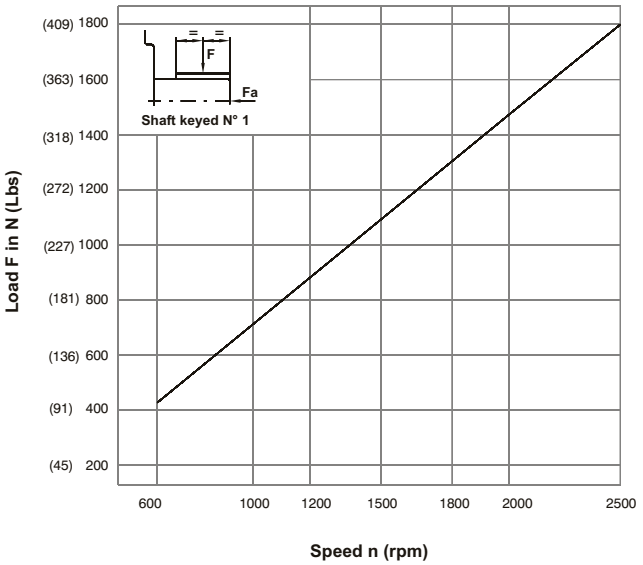
HYDROMECAHNICAL POWER LOSS (TYPICAL)



Pressure in bar (psi)

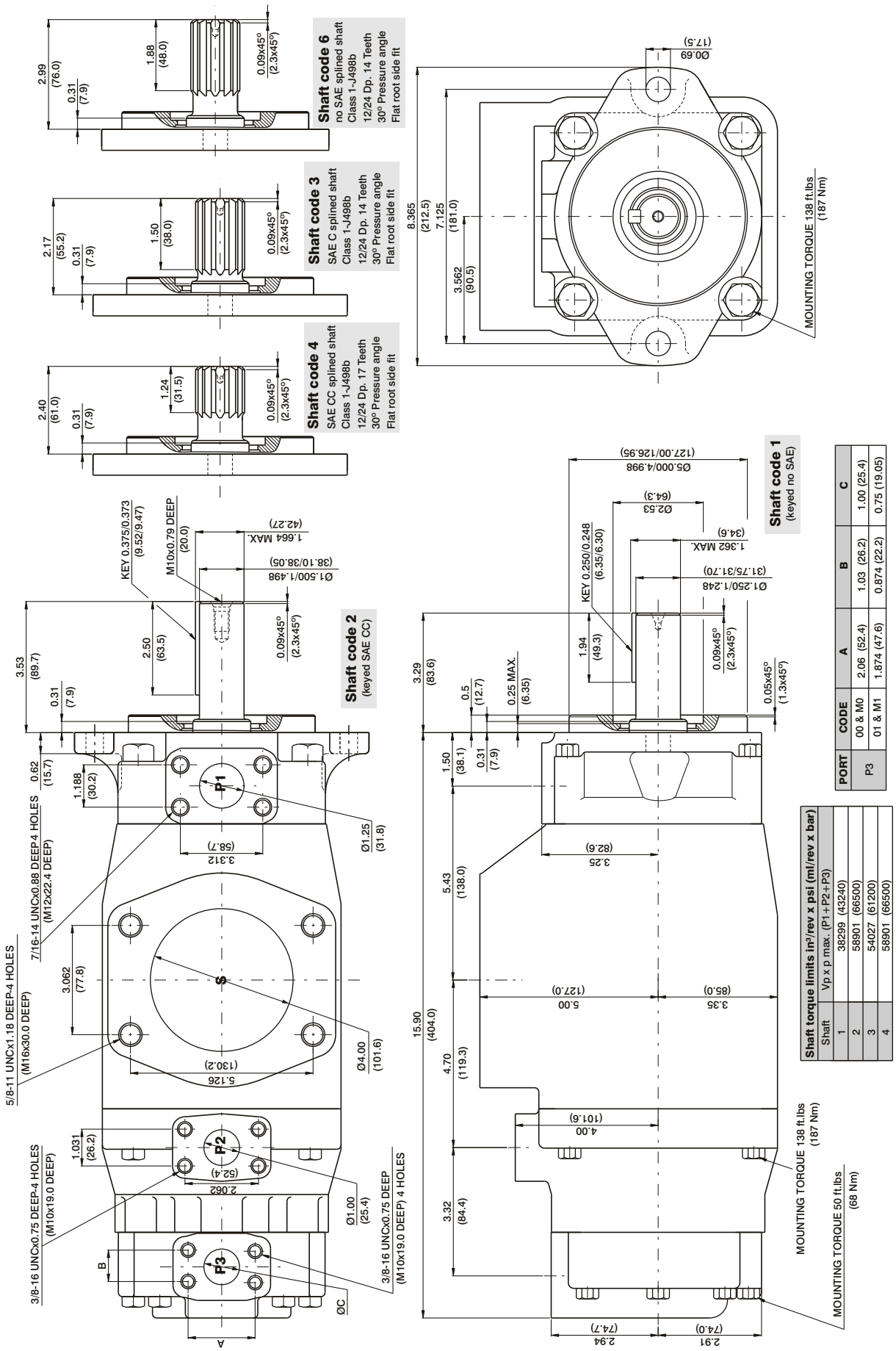
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Speed n (rpm)

Maximum axial load permissible Fa=1200 N (270 Lbs)



PORT	CODE	A	B	C
P3	00 & M0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	01 & M1	1.874 (47.6)	0.874 (22.2)	0.75 (19.05)

Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	58901 (66500)
3	54027 (61200)
4	58901 (66500)

TP

VT6DDCS - 038 - 038 - 028 - 1 R 00 - B 1 - 00 -

(P1 = 038, P2 = 038, P3 = 028)

Series
SAE C 6 bolts
Mounting flange J744 SAE C

Cam ring for "P1" & "P2"
Volumetric displacement cm³/rev (in³/rev)

*014/B14 = 47.6 (2.90)	035/B35 = 111.0 (6.77)
017/B17 = 58.2 (3.55)	038/B38 = 120.3 (7.34)
020/B20 = 66.0 (4.03)	042/B42 = 136.0 (8.30)
024/B24 = 79.5 (4.85)	045/B45 = 145.7 (8.89)
028/B28 = 89.7 (5.47)	050/B50 = 158.0 (9.64)
031/B31 = 98.3 (6.00)	061/B61 = 190.5 (11.62)

*'0' - Uni - directional 'B' - Bi - directional

Cam ring for "P3"
Volumetric displacement cm³/rev (in³/rev)

*003/B03 = 10.8 (0.66)	015/B15 = 50.5 (3.08)
005/B05 = 17.2 (1.05)	017/B17 = 58.3 (3.56)
006/B06 = 21.3 (1.30)	020/B20 = 63.8 (3.89)
008/B08 = 26.4 (1.61)	022/B22 = 70.3 (4.29)
010/B10 = 34.1 (2.08)	025/B25 = 79.3 (4.84)
012/B12 = 37.1 (2.26)	028/B28 = 88.8 (5.42)
014/B14 = 46.0 (2.81)	031/B31 = 100.0 (6.10)

*'0' - Uni - directional 'B' - Bi - directional

Modifications

Port connection variables
SAE 4 bolt flange (J518c)

P1 & P2 = 1"1/4 S=4"				
Type	UNC		METRIC	
P3	1"	3/4"	1"	3/4"
CODE	00	01	M0	M1

Seal class
1 - S1 (for mineral oil)
4 - S4 (for fire resistant fluids)
5 - S5 (for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4,5)
00 = Standard

Direction of rotation (view on shaft end)
R - Clockwise
L - Counter - clockwise

Type of Shaft
1 - Keyed (SAE C)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)
5 - Keyed (non SAE)

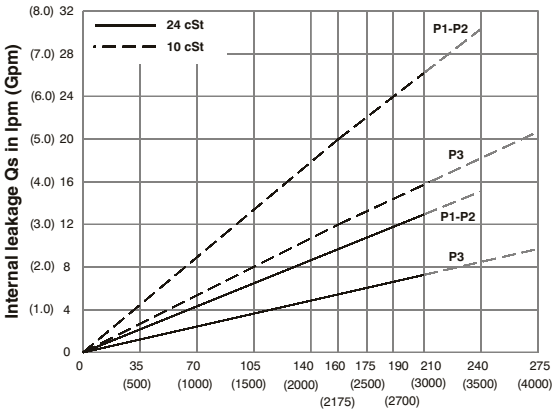
TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1 & P2	014	2.90	47.6	18.88	71.4	16.42	62.1	14.78	55.9	3.08	2.3	24.81	18.5	41.03	30.6
	017	3.55	58.2	23.10	87.3	20.6	78.0	18.99	71.8	3.35	2.5	29.77	22.2	49.62	37.0
	020	4.00	66.0	26.19	99.0	23.73	89.7	22.08	83.5	3.75	2.8	33.39	24.9	55.92	41.7
	024	4.80	79.5	31.56	119.3	29.10	110.0	27.46	103.8	4.02	3.0	39.69	29.6	66.78	49.8
	028	5.50	89.7	35.58	134.5	33.12	125.2	31.48	119.0	4.29	3.2	44.52	33.2	74.96	55.9
	031	6.00	98.3	39.00	147.5	36.53	138.1	34.89	131.9	4.42	3.3	48.54	36.2	81.80	61.0
	035	6.80	111.0	44.04	166.5	41.58	157.2	39.94	151.0	4.69	3.5	54.58	40.7	92.13	68.7
	038	7.30	120.3	47.72	180.4	45.26	171.1	43.62	164.9	4.96	3.7	58.87	43.9	99.64	74.3
	042 [1)]	8.30	136.0	53.96	204.0	51.50	194.7	49.86	188.5	5.36	4.0	66.25	49.4	112.24	83.7
	045 [1)]	8.89	145.7	57.80	218.5	55.34	209.2	53.70	203.0	5.50	4.1	70.81	52.8	120.02	89.5
	050 [1, 2)]	9.64	158.0	62.69	237.0	60.23	227.7	59.25	224.0	5.90	4.4	76.44	57.0	113.98	85.0
	061 [1, 3)]	11.62	190.5	76.25	285.7	73.54	278.0	--	--	6.16	4.6	81.26	60.6	--	--
P3	003	0.66	10.8	4.29	16.2	2.96	11.2	2.04	7.7	1.74	1.3	7.11	5.3	11.22	8.4
	005	1.05	17.2	6.83	25.8	5.50	20.8	4.57	17.3	1.88	1.4	10.06	7.5	16.36	12.2
	006	1.30	21.3	8.44	31.9	7.11	26.9	6.19	23.4	2.01	1.5	11.94	8.9	19.71	14.7
	008	1.61	26.4	10.48	39.6	9.15	34.6	8.22	31.1	2.15	1.6	14.35	10.7	22.93	17.7
	010	2.08	34.1	13.52	51.1	12.19	46.1	11.26	42.6	2.28	1.7	18.64	13.4	29.90	22.3
	012	2.26	37.1	14.71	55.6	13.36	50.6	12.46	47.1	2.28	1.7	19.31	14.4	32.32	24.1
	014	2.81	46.0	18.25	69.0	16.93	64.0	16.00	60.5	2.55	1.9	23.60	17.6	39.56	29.5
	015	3.08	50.5	20.00	75.6	18.73	73.2	19.02	67.5	2.68	2.0	25.61	19.1	42.91	32.0
	017	3.56	58.3	23.12	87.4	21.79	82.4	20.87	78.9	2.82	2.1	29.37	21.9	49.48	36.9
	020	3.89	63.8	25.32	95.7	23.99	90.7	23.07	87.2	2.95	2.2	31.92	23.8	53.91	40.2
	022	4.29	70.3	27.88	105.4	26.56	100.4	25.63	96.9	3.08	2.3	35.00	26.1	59.14	44.1
	025	4.84	79.3	31.46	118.9	30.13	113.9	29.21	110.4	3.35	2.5	39.16	29.2	66.38	49.5
	028 [2)]	5.42	88.8	35.24	133.2	33.92	128.2	33.28	125.8	3.75	2.8	43.85	32.7	65.04	48.5
	031 [2)]	6.10	100.0	39.68	150.0	38.35	145.0	37.72	142.6	3.75	2.8	48.95	36.5	72.95	54.4

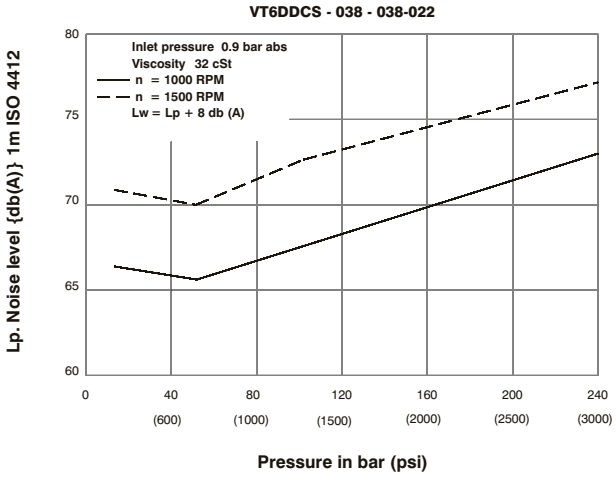
1) 042-045-050-061=2200 RPM max. 2) 028-031- 050=210 bar (3000 psi) max. int, 3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont.

INTERNAL LEAKAGE (TYPICAL)



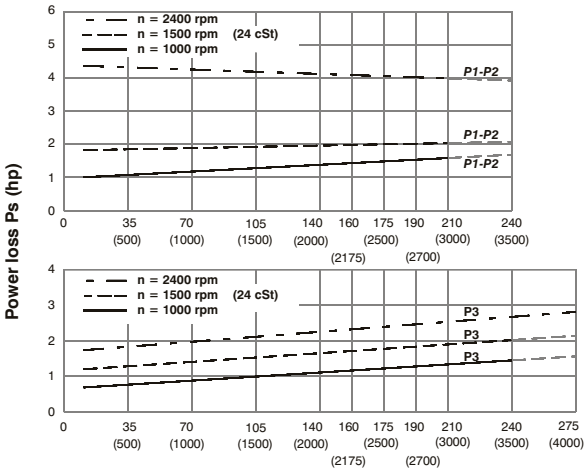
Don not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)



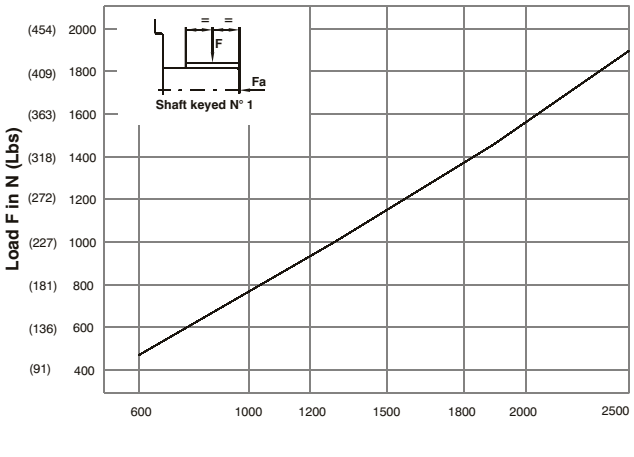
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



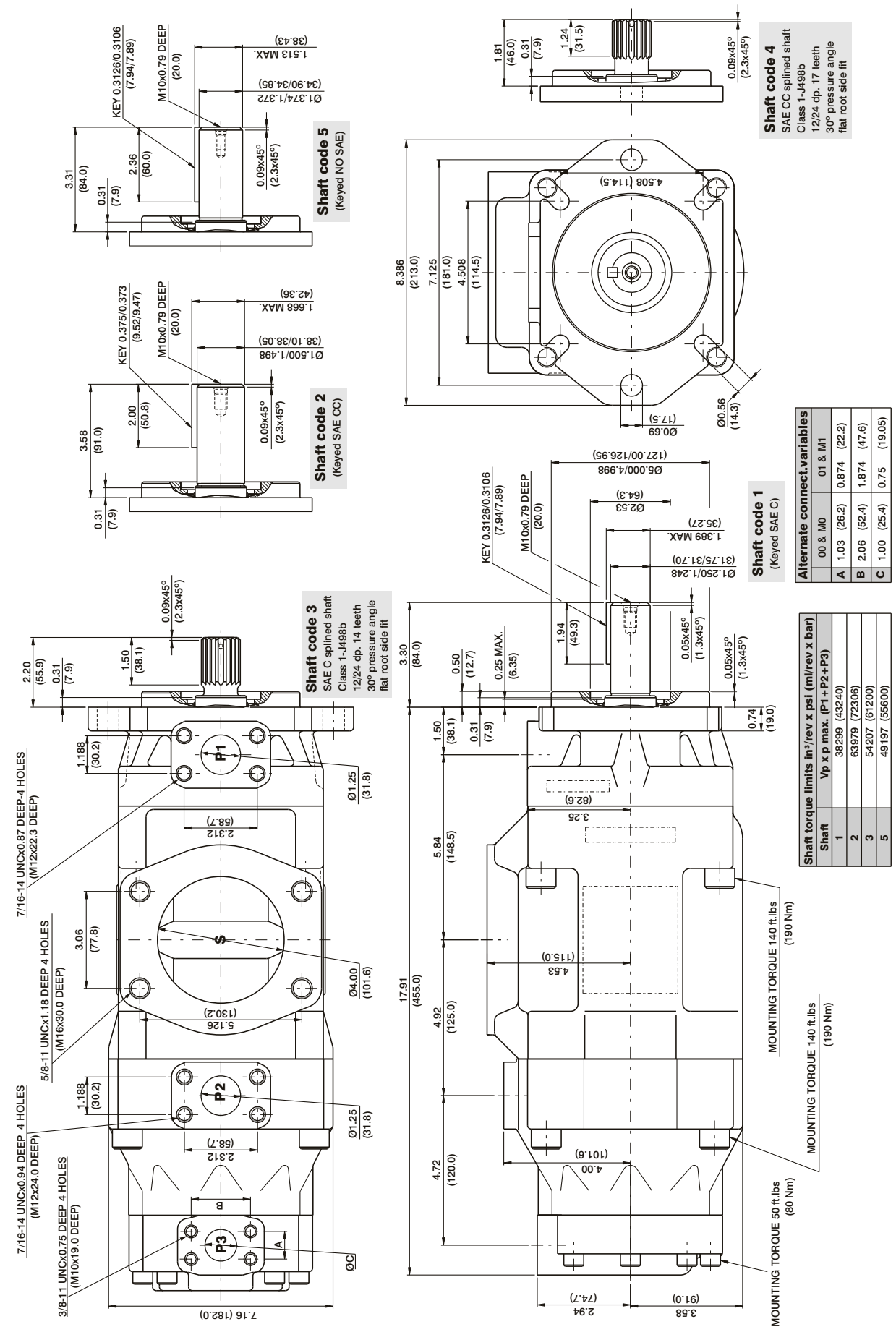
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum axial load permissible **Fa**=1200 N (270 Lbs)

TP



Alternate connect.variables

	00 & M0		01 & M1	
A	1.03	(26.2)	0.874	(22.2)
B	2.06	(52.4)	1.874	(47.6)
C	1.00	(25.4)	0.75	(19.05)

Shaft torque limits in³/rev x psi (ml/rev x bar)

Shaft	Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	63979 (72306)
3	54207 (61200)
5	49197 (55600)

VT6DCCM - 038 - 028 - 008 - 1 R 00 - B 1 - 00 - *

Series

P1 **P2** **P3**

Cam ring for "P1"

Volumetric displacement cm³/rev (in³/rev)

*B14/R14 =	47.6 (2.90)	B35/R35 =	110.0 (6.77)
B17/R17 =	58.2 (3.55)	B38/R38 =	120.3 (7.34)
B20/R20 =	66.0 (4.03)	B42/R42 =	136.0 (8.30)
B24/R24 =	79.5 (4.85)	B45/R45 =	145.7 (8.80)
B28/R28 =	89.7 (5.47)	B50/R50 =	158.0 (9.64)
B31/R31 =	98.3 (6.00)	B61/R61 =	190.5 (11.62)

***'B' - for Mobile 'R' - for Mobile - spring assisted**

Cam ring for "P2" & "P3"

Volumetric displacement cm³/rev (in³/rev)

*B03/R03 =	10.8 (0.66)	B15/R15 =	50.5 (3.08)
B05/R05 =	17.2 (1.05)	B17/R17 =	58.3 (3.56)
B06/R06 =	21.3 (1.30)	B20/R20 =	63.8 (3.89)
B08/R08 =	26.4 (1.61)	B22/R22 =	70.3 (4.29)
B10/R10 =	34.1 (2.08)	B25/R25 =	79.3 (4.84)
B12/R12 =	37.1 (2.26)	B28/R28 =	88.8 (5.42)
B14/R14 =	46.0 (2.81)	B31/R31 =	100.0 (6.10)

***'B' - for Mobile**
'R' - for Mobile - spring assisted

Modification

Mounting w/connection variables

SAE	P1 = 1¼" S = 4" P2 = 1"			
	UNC		Metric	
P3	1"	3/4"	1"	3/4"
Code	00	01	M0	M1

Seal class

1 - S1 (for mineral oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4,5)

00 = Standard

Direction of rotation (view on shaft end)

R - Clockwise
L - Counter - clockwise

Type of Shaft

1 - Keyed (no SAE)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)
6 - Splined (no SAE)

TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

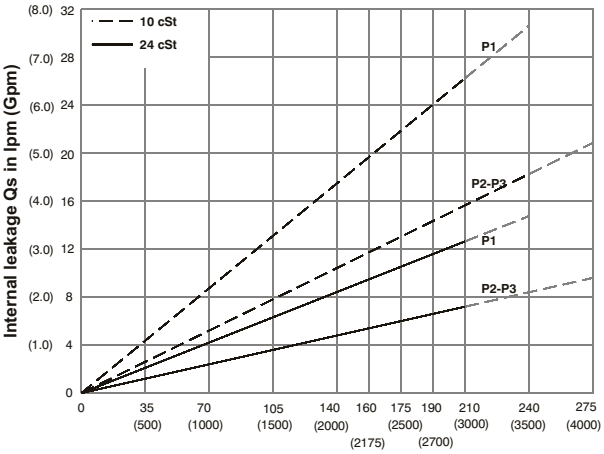
Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	B14	2.90	47.6	18.88	71.4	16.42	62.1	14.78	55.9	3.08	2.3	24.81	18.5	41.03	30.6
	B17	3.55	58.2	23.1	87.3	20.6	78.0	18.99	71.8	3.35	2.5	29.77	22.2	49.62	37.0
	B20	4.00	66.0	26.19	99.0	23.73	89.7	22.08	83.5	3.75	2.8	33.39	24.9	55.92	41.7
	B24	4.80	79.5	31.56	119.3	29.10	110.0	27.46	103.8	4.02	3.0	39.69	29.6	66.78	49.8
	B28	5.50	89.7	35.58	134.5	33.12	125.2	31.48	119.0	4.29	3.2	44.52	33.2	74.96	55.9
	B31	6.00	98.3	39.00	147.5	36.53	138.1	34.89	131.9	4.42	3.3	48.54	36.2	81.80	61.0
	B35	6.80	111.0	44.04	166.5	41.58	157.2	39.94	151.0	4.69	3.5	54.58	40.7	92.13	68.7
	B38	7.30	120.3	47.72	180.4	45.26	171.1	43.62	164.9	4.96	3.7	58.87	43.9	99.64	74.3
	B42 [1]	8.30	136.0	53.96	204.0	51.50	194.7	49.86	188.5	5.36	4.0	66.25	49.4	112.24	83.7
	B45 [1]	8.89	145.7	57.80	218.5	55.34	209.2	53.70	203.0	5.50	4.1	70.81	52.8	120.02	89.5
	B50 [1, 2]	9.64	158.0	62.69	237.0	60.23	227.7	59.25	224.0	5.90	4.4	76.44	57.0	113.98	85.0
	B61 [1, 3]	11.62	190.5	76.25	285.7	73.54	278.0	--	--	6.16	4.6	81.26	60.6	--	--
P2 & P3	B03	0.66	10.8	4.29	16.2	2.83	10.7	--	--	1.74	1.3	7.11	5.3		--
	B05	1.05	17.2	6.83	25.8	5.37	20.3	4.17	15.8	1.88	1.4	10.06	7.5	16.36	12.2
	B06	1.30	21.3	8.44	31.9	7.01	26.5	5.82	22.0	2.01	1.5	11.94	8.9	19.71	14.7
	B08	1.61	26.4	10.48	39.6	9.02	34.1	7.83	29.6	2.15	1.6	14.35	10.7	22.93	17.7
	B10	2.08	34.1	13.52	51.1	12.08	45.7	10.89	41.2	2.28	1.7	18.64	13.4	29.90	22.3
	B12	2.26	37.1	14.71	55.6	13.28	50.2	12.08	45.7	2.28	1.7	19.31	14.4	32.32	24.1
	B14	2.81	46.0	18.25	69.0	16.79	63.5	15.60	59.0	2.55	1.9	23.60	17.6	39.56	29.5
	B15	3.08	50.5	20.00	75.6	18.62	70.4	17.46	66.0	2.68	2.0	25.61	19.1	42.91	32.0
	B17	3.56	58.3	23.12	87.4	21.69	82.0	20.50	77.5	2.82	2.1	29.37	21.9	49.48	36.9
	B20	3.89	63.8	25.32	95.7	23.86	90.2	22.67	85.7	2.95	2.2	31.92	23.8	53.91	40.2
	B22	4.29	70.3	27.88	105.4	26.45	100.0	25.26	95.5	3.08	2.3	35.00	26.1	59.14	44.1
	B25	4.84	79.3	31.46	118.9	30.02	113.5	28.83	109.0	3.35	2.5	39.16	29.2	66.38	49.5
	B28 [2]	5.42	88.8	35.24	133.2	33.78	127.7	32.93	124.5	3.75	2.8	43.85	32.7	65.04	48.5
	B31 [2]	6.10	100.0	39.68	150.0	38.22	144.5	37.38	141.3	3.75	2.8	48.95	36.5	72.95	54.4

1) B42-B45-B50-B61=2200 RPM max. 2) B28-B31- B50=210 bar (3000 psi) max. int, 3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont.

-- Not to use because internal leakage greater than 50% theoretical flow.

TP

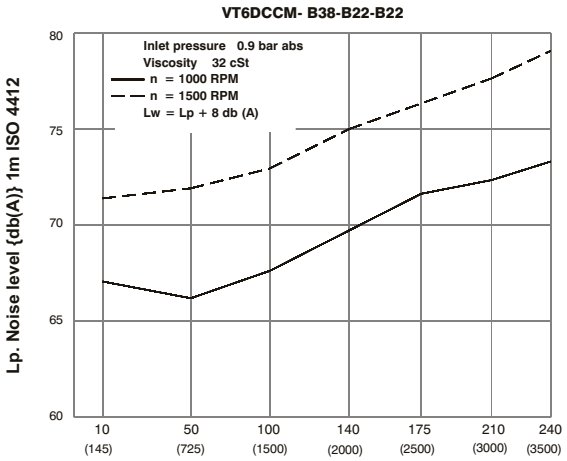
INTERNAL LEAKAGE (TYPICAL)



Pressure in bar (psi)

Total leakage is the sum of each section loss at its operating conditions.

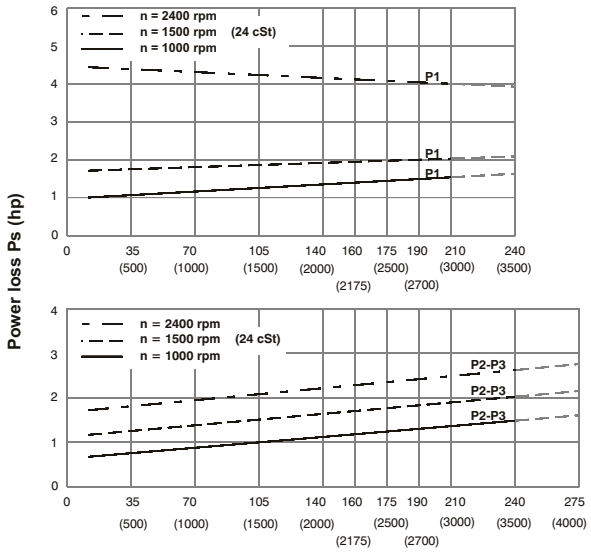
NOISE LEVEL (TYPICAL)



Pressure in bar (psi)

Triple pump noise level is given with each section discharging at the pressure noted on the curve.

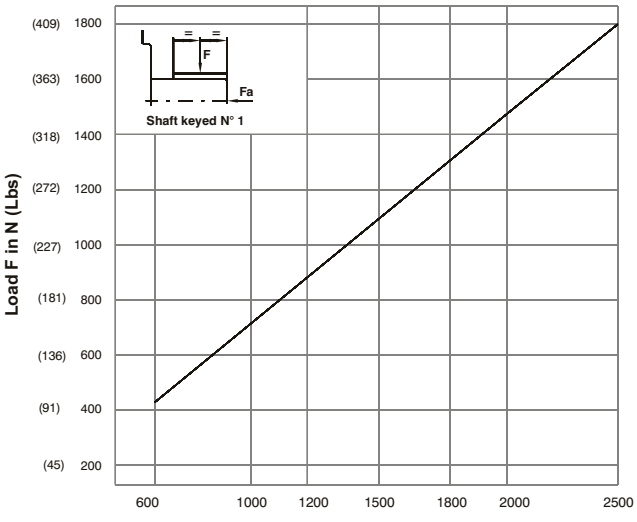
HYDROMECHANICAL POWER LOSS (TYPICAL)



Pressure in bar (psi)

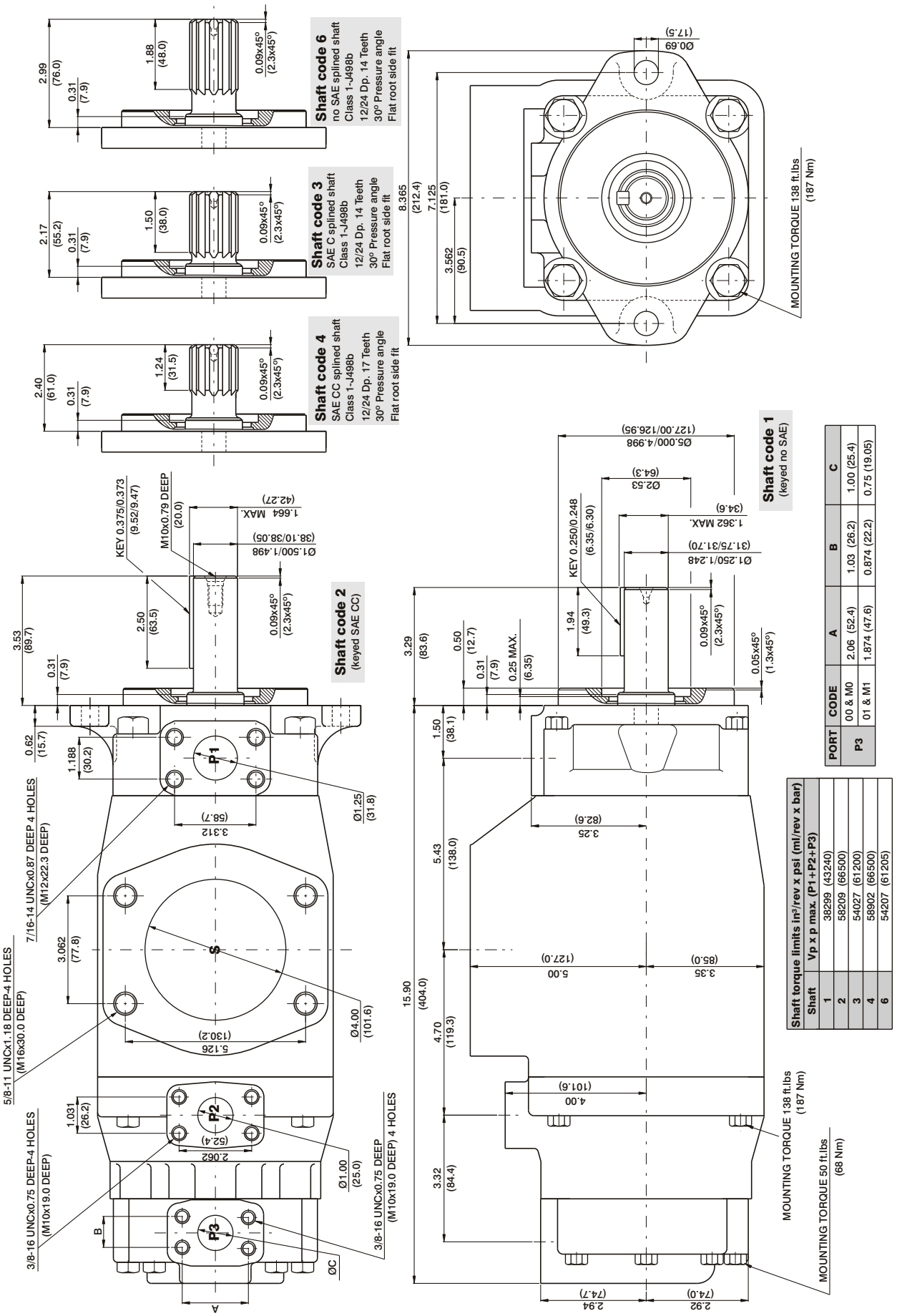
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Speed n (rpm)

Maximum axial load permissible **Fa**=1200N (270 Lbs)



PORT	CODE	A	B	C
P3	00 & M0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	01 & M1	1.874 (47.6)	0.874 (22.2)	0.75 (19.05)

Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	58209 (66500)
3	54027 (61200)
4	58902 (66500)
6	54207 (61205)

TP

VT6EDC* - 062 - 035 - 017 - 1 R 00 - C 1 - P - 0 - *

Series
* = S for SAE Mtg. Flange

Cam ring for "P1" (P1)
Volumetric displacement cm³/rev (in³/rev)

042 = 132.3 (8.07)
045 = 142.4 (8.69)
050 = 158.5 (9.67)
052 = 164.8 (10.06)
057 = 180.7 (11.02)
062 = 196.7 (12.00)
066 = 213.3 (13.02)
072 = 227.1 (13.86)
085 = 269.8 (16.46)

Cam ring for "P2" (P2)
Volumetric displacement cm³/rev (in³/rev)

*B14/R14 = 47.6 (2.90)
B17/R17 = 58.2 (3.55)
B20/R20 = 66.0 (4.03)
B24/R24 = 79.5 (4.85)
B28/R28 = 89.7 (5.47)
B31/R31 = 98.3 (6.00)
B35/R35 = 110.0 (6.77)
B38/R38 = 120.3 (7.34)
B42/R42 = 136.0 (8.30)
B45/R45 = 145.7 (8.80)
B50/R50 = 158.0 (9.64)
B61/R61 = 190.5 (11.62)

* **'B' - for Mobile 'R' - for Mobile - spring assisted**

Cam ring for "P3" (P3)
Volumetric displacement cm³/rev (in³/rev)

*B03/R03 = 10.8 (0.66)
B05/R05 = 17.2 (1.05)
B06/R06 = 21.3 (1.30)
B08/R08 = 26.4 (1.61)
B10/R10 = 34.1 (2.08)
B12/R12 = 37.1 (2.26)
B14/R14 = 46.0 (2.81)
B15/R15 = 50.5 (3.08)
B17/R17 = 58.3 (3.56)
B20/R20 = 63.8 (3.89)
B22/R22 = 70.3 (4.29)
B25/R25 = 79.3 (4.84)
B28/R28 = 88.8 (5.42)
B31/R31 = 100.0 (6.10)

* **'B' - for Mobile 'R' - for Mobile - spring assisted**

Type of Shaft (1)
1 - Keyed (G45N-ISO 3019-2) (VT6EDC)
3 - Splined (SAE D&E) (VT6EDC & VT6EDCS)
2 - Keyed (SAE D&E) (VT6EDCS)

Direction of rotation (view on shaft end) (R)
R - Clockwise
L - Counter - clockwise

Porting combination (see page CI-1-4,5) (00)
00 = Standard

Design letter (C)

Seal class (1)
1 - S1 (for minreal oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Mounting (pump) (P)
P= Pedestal mounting
F= Face mounting

Mounting w/connection variables (0)
0 = P3 = 1" SAE
1 = P3 = 3/4" SAE

Modifications (*)

TP

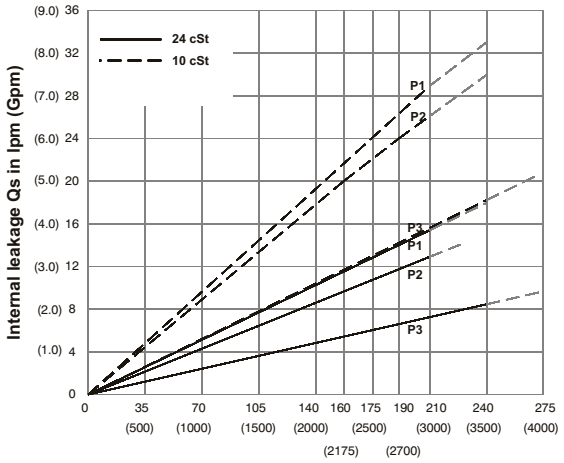
OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1500 rpm						Input power p & n = 1500 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	042	8.07	132.3	52.50	198.5	49.87	188.5	47.96	181.3	6.97	5.2	66.25	49.4	110.77	82.6
	045	8.70	142.4	56.51	213.6	53.86	203.6	51.98	196.5	7.24	5.4	70.94	52.9	118.95	88.7
	050	9.67	158.5	62.88	237.7	60.24	227.7	58.36	220.6	7.64	5.7	78.45	58.5	131.82	98.3
	052	10.00	164.8	65.40	247.2	62.75	237.2	60.87	230.1	7.78	5.8	81.53	60.8	136.92	102.1
	057	11.02	180.7	71.71	271.1	69.07	261.1	67.19	254.0	8.18	6.1	89.04	66.4	143.35	106.9
	062	12.00	196.7	78.04	295.0	75.40	285.0	73.52	277.9	8.58	6.4	96.42	71.9	162.67	121.3
	066	13.00	213.3	84.63	319.9	81.98	309.9	80.11	302.8	8.98	6.7	104.20	77.7	175.94	131.2
	072	13.86	227.1	90.11	340.6	87.46	330.6	85.58	323.5	9.25	6.9	110.77	82.6	187.07	139.5
	085[1, 2]	16.40	269.8	107.00	404.7	105.21	397.7	--	--	9.78	7.3	87.56	65.3	--	--
P2	B14	2.90	47.6	18.88	71.4	16.42	62.1	14.78	55.9	3.08	2.3	24.81	18.5	41.03	30.6
	B17	3.55	58.2	23.1	87.3	20.6	78.0	18.99	71.8	3.35	2.5	29.77	22.2	49.62	37.0
	B20	4.00	66.0	26.19	99.0	23.73	89.7	22.08	83.5	3.75	2.8	33.39	24.9	55.92	41.7
	B24	4.80	79.5	31.56	119.3	29.10	110.0	27.46	103.8	4.02	3.0	39.69	29.6	66.78	49.8
	B28	5.50	89.7	35.58	134.5	33.12	125.2	31.48	119.0	4.29	3.2	44.52	33.2	74.96	55.9
	B31	6.00	98.3	39.00	147.5	36.53	138.1	34.89	131.9	4.42	3.3	48.54	36.2	81.80	61.0
	B35	6.80	111.0	44.04	166.5	41.58	157.2	39.94	151.0	4.69	3.5	54.58	40.7	92.13	68.7
	B38	7.30	120.3	47.72	180.4	45.26	171.1	43.62	164.9	4.96	3.7	58.87	43.9	99.64	74.3
	B42[3]	8.30	136.0	53.96	204.0	51.50	194.7	49.86	188.5	5.36	4.0	66.25	49.4	112.24	83.7
	B45[3]	8.89	145.7	57.80	218.5	55.34	209.2	53.70	203.0	5.50	4.1	70.81	52.8	120.02	89.5
	B50[3, 4]	9.64	158.0	62.69	237.0	60.23	227.7	59.25	224.0	5.90	4.4	76.44	57.0	113.98	85.0
	B61[3, 5]	11.62	190.5	76.25	285.7	73.54	278.0	--	--	6.16	4.6	81.26	60.6	--	--
P3	B03	0.66	10.8	4.29	16.2	2.83	10.7	--	--	1.74	1.3	7.11	5.3	--	--
	B05	1.05	17.2	6.83	25.8	5.37	20.3	4.17	15.8	1.88	1.4	10.06	7.5	16.36	12.2
	B06	1.30	21.3	8.44	31.9	7.01	26.5	5.82	22.0	2.01	1.5	11.94	8.9	19.71	14.7
	B08	1.61	26.4	10.48	39.6	9.02	34.1	7.83	29.6	2.15	1.6	14.35	10.7	22.93	17.7
	B10	2.08	34.1	13.52	51.1	12.08	45.7	10.89	41.2	2.28	1.7	18.64	13.4	29.90	22.3
	B12	2.26	37.1	14.71	55.6	13.28	50.2	12.08	45.7	2.28	1.7	19.31	14.4	32.32	24.1
	B14	2.81	46.0	18.25	69.0	16.79	63.5	15.60	59.0	2.55	1.9	23.60	17.6	39.56	29.5
	B15	3.08	50.5	20.00	75.6	18.62	70.4	17.46	66.0	2.68	2.0	25.61	19.1	42.91	32.0
	B17	3.56	58.3	23.12	87.4	21.69	82.0	20.50	77.5	2.82	2.1	29.37	21.9	49.48	36.9
	B20	3.89	63.8	25.32	95.7	23.86	90.2	22.67	85.7	2.95	2.2	31.92	23.8	53.91	40.2
	B22	4.29	70.3	27.88	105.4	26.45	100.0	25.26	95.5	3.08	2.3	35.00	26.1	59.14	44.1
	B25	4.84	79.3	31.46	118.9	30.02	113.5	28.83	109.0	3.35	2.5	39.16	29.2	66.38	49.5
	B28[4]	5.42	88.8	35.24	133.2	33.78	127.7	32.93	124.5	3.75	2.8	43.85	32.7	65.04	48.5
	B31[4]	6.10	100.0	39.68	150.0	38.22	144.5	37.38	141.3	3.75	2.8	48.95	36.5	72.95	54.4

1) 085 = 2000 RPM max. 2) 085 = 75 bar (1100 psi) cont. & 085 = 90 bar (1300 psi) max. int. 3) B42-B45-B50-B61=2200 RPM max. 4) B28-B31-B50=210 bar (3000 psi) max. int, 5) B61 = 120 bar(1740 psi) max. int, B61 = 80 bar (1160 psi) cont.

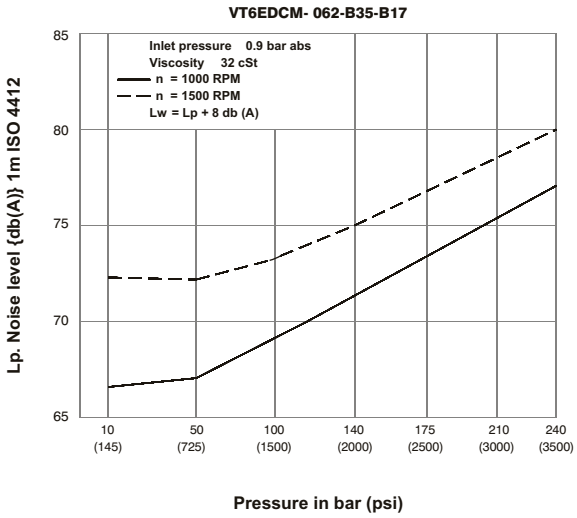
-- Not to use because internal leakage greater than 50% theoretical flow

INTERNAL LEAKAGE (TYPICAL)



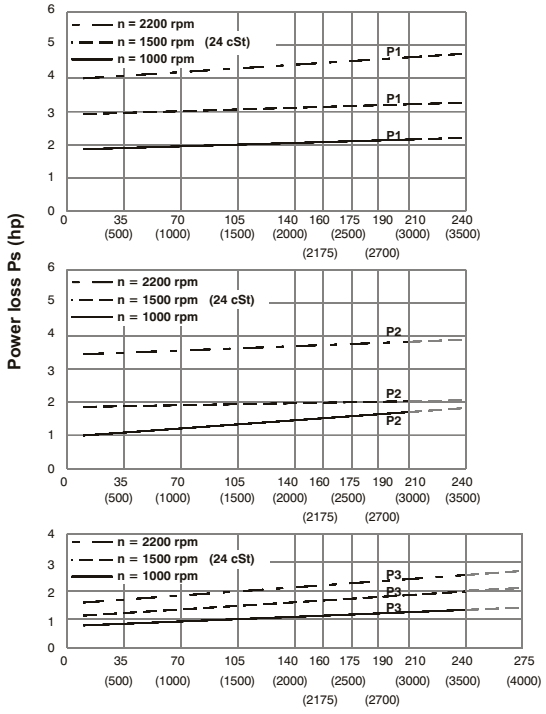
Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)



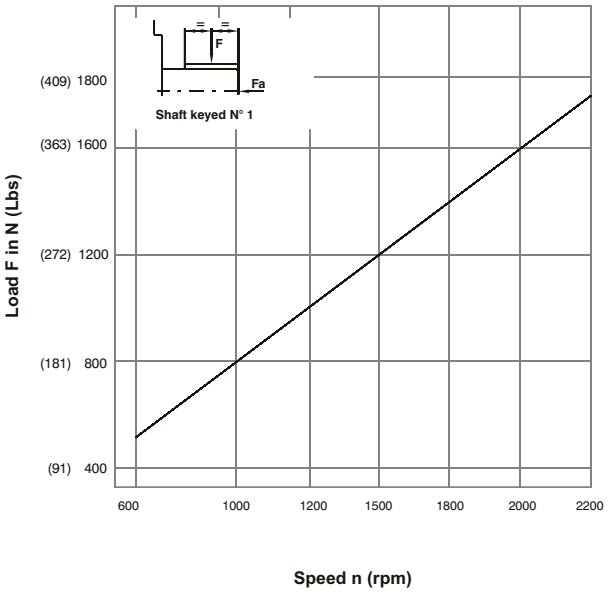
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



Total hydromechanical power loss is the sum of each section at its operating conditions

PERMISSIBLE RADIAL LOAD

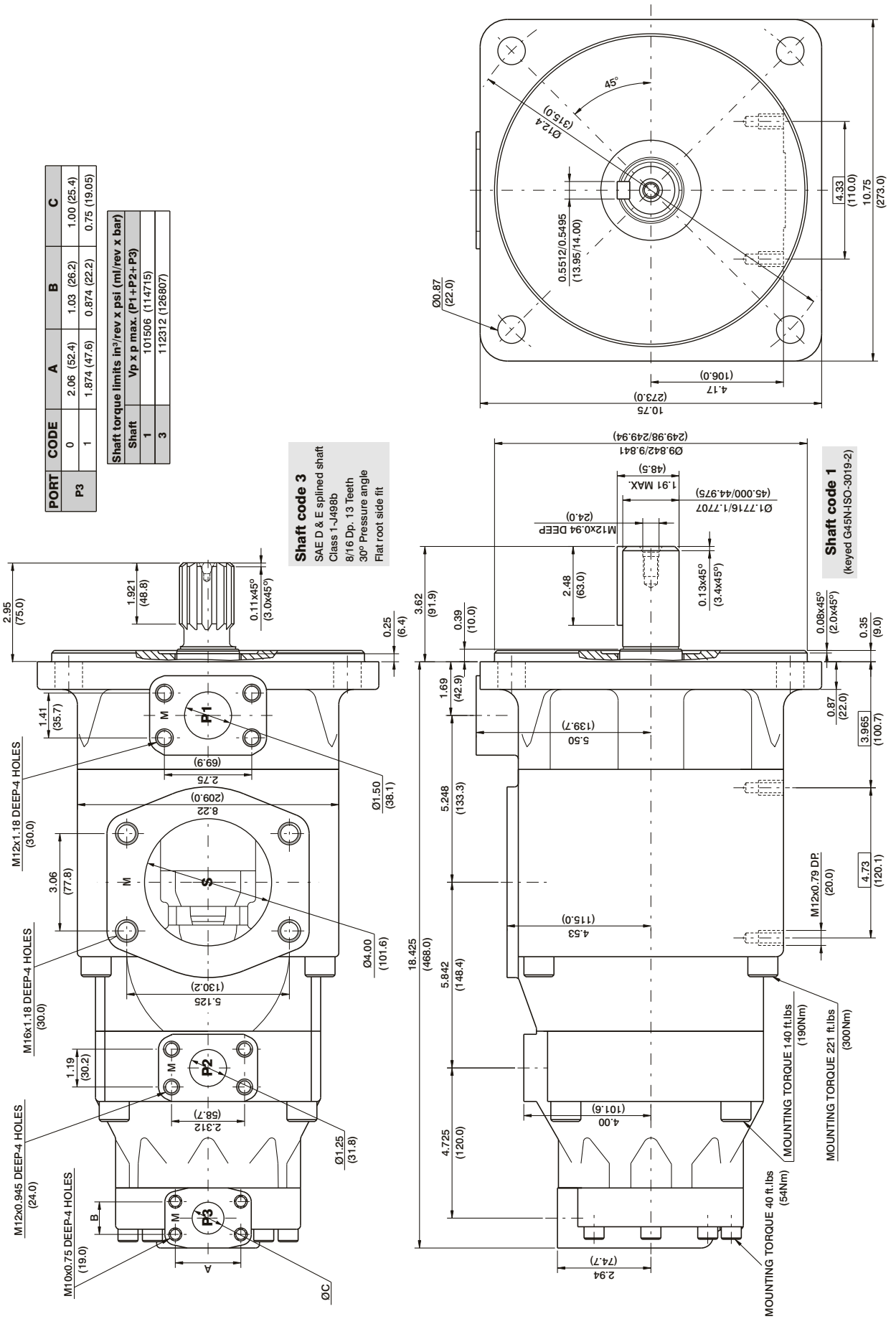


Maximum axial load permissible Fa=2000N (449 lbs)

TP

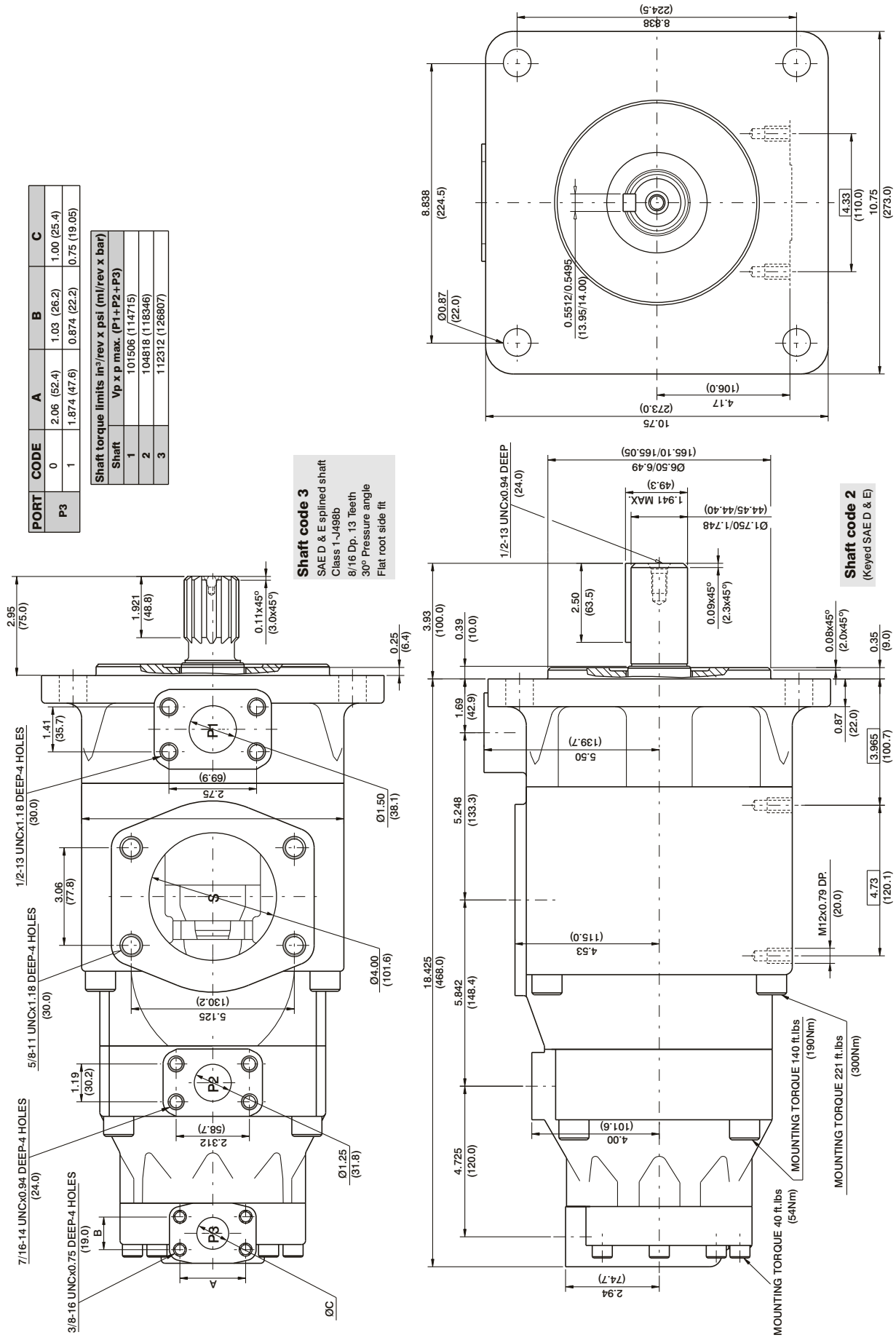
PORT	CODE	A	B	C
P3	0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	1	1.874 (47.6)	0.874 (22.2)	0.75 (19.05)

Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	101506 (114715)
3	112312 (126807)



PORT	CODE	A	B	C
P3	0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	1	1.874 (47.6)	0.874 (22.2)	0.75 (19.05)

Shaft torque limits in^3/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	101506 (114715)
2	104818 (118346)
3	112312 (126807)



VT7DBB - B38 - B14 - B08 - 1 R 00 - A 1 - M1- *

Series- SAE C 2 bolts
Mounting flange J744c

Cam ring for "P1" (P1)

Volumetric displacement cm³/rev (in³/rev)

B14 = 43.9 (2.68)	B31 = 99.1 (6.05)
B17 = 55.0 (3.36)	B35 = 113.4 (6.92)
B20 = 66.0 (4.03)	B38 = 120.6 (7.36)
B22 = 70.3 (4.29)	B42 = 137.5 (8.39)
B24 = 81.1 (4.95)	045 = 145.7 (8.89)
B28 = 89.9 (5.49)	050 = 157.9 (9.64)

Cam ring for "P2" & P3 (P2, P3)

Volumetric displacement cm³/rev (in³/rev)

B02 = 5.7 (0.35)	B09 = 28.0 (1.71)
B03 = 9.8 (0.60)	B10 = 31.8 (1.94)
B04 = 12.8 (0.78)	B11 = 34.9 (2.13)
B05 = 15.9 (0.97)	B12 = 40.9 (2.50)
B06 = 19.8 (1.21)	B14 = 45.1 (2.75)
B07 = 22.5 (1.37)	B15 = 50.0 (3.05)
B08 = 24.9 (1.52)	

Type of Shaft (1)
1 - Keyed (no SAE)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)

Direction of rotation (view on shaft end) (R)
R - Clockwise
L - Counter - clockwise

Porting combination (see page CI-1-4,5) (00)
00 = Standard

Design letter (A)

Seal class (1)
1 = S1 (for minreal oil)
4 = S4(for fire resistant fluids)
5 = S5(for mineral oil and fire resistant fluids)

Mounting w/connection variables (M1)

P1=1¼" P2=1" P3=¾" S=4"	
UNC	METRIC
01	M1

Modifications (*)

TP

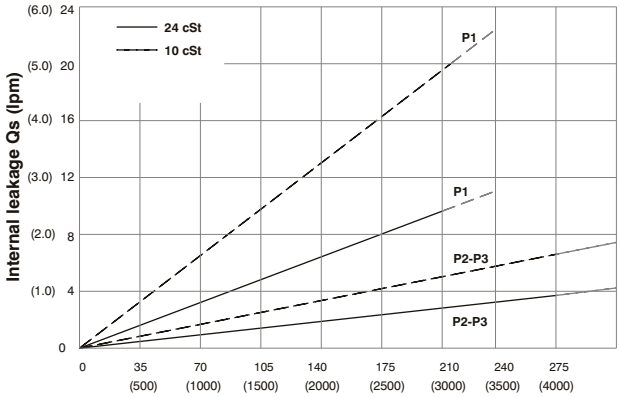
OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	B14	2.68	43.9	20.92	79.1	19.18	72.5	17.81	67.3	3.46	2.6	27.77	20.7	47.03	35.0
	B17	3.36	55.0	26.16	98.8	24.41	92.3	23.04	87.0	3.77	2.8	33.88	25.3	57.71	43.0
	B20	4.03	66.0	31.39	118.6	29.64	112.0	28.27	106.8	4.07	3.0	39.98	29.8	68.39	50.9
	B22	4.29	70.3	33.43	126.4	31.69	119.8	30.32	104.6	4.19	3.1	42.37	31.6	72.57	54.0
	B24	4.95	81.1	38.57	145.8	36.82	139.2	35.45	134.0	4.49	3.4	48.36	36.1	83.06	61.9
	B28	5.49	89.9	42.80	161.8	41.06	155.2	39.69	150.0	4.74	3.5	53.30	39.7	91.70	68.3
	B31	6.05	99.1	47.18	178.3	45.43	171.7	44.06	166.5	4.99	3.7	58.41	43.6	100.63	75.0
	B35 [1]	6.92	113.4	53.93	203.9	52.18	197.2	50.81	192.0	5.39	4.0	66.29	49.4	114.42	85.3
	B38 [1]	7.36	120.6	57.35	216.8	55.61	210.2	54.24	204.9	5.59	4.2	70.28	52.4	121.42	90.5
	B42 [2]	8.39	137.5	65.39	247.2	63.65	240.6	62.28	235.4	6.05	4.5	79.66	59.4	137.83	102.7
	045 [3]	8.89	145.7	69.29	262.0	67.11	253.6	65.31	246.8	6.74	5.0	83.75	62.4	145.79	108.7
	050 [4]	9.64	157.9	75.14	284.0	72.96	275.8	71.78	271.3	7.08	5.3	90.58	67.5	134.50	100.3
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)	
P2 & P3	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.80	6.8	0.74	0.55	4.02	2.99	8.10	6.04
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.63	14.0	0.85	0.63	6.24	4.65	12.93	9.64
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.13	19.4	0.94	0.70	7.90	5.89	16.55	12.34
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.60	25.0	1.02	0.76	9.62	7.17	20.29	15.13
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.46	32.0	1.13	0.84	11.79	8.79	25.00	18.64
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.74	36.8	1.20	0.89	13.29	9.91	28.26	21.07
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.88	41.1	1.27	0.95	14.62	10.90	31.15	23.23
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.35	47.0	1.36	1.01	16.35	12.19	34.92	26.04
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.16	53.5	1.46	1.09	18.45	13.75	39.48	29.44
	B11 [5]	2.13	34.9	16.64	62.9	16.19	61.2	15.68	59.3	1.55	1.16	20.17	15.04	43.22	32.23
	B12 [5]	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.56	50.58	37.71
	B14 [5]	2.75	45.1	21.40	80.8	20.95	79.2	20.44	77.0	1.83	1.36	25.80	19.24	55.48	41.37
	B15 [5]	3.05	50.0	23.78	89.8	23.35	88.3	22.88	86.5	1.97	1.47	28.55	21.28	57.35	42.76

1) B35-B38 = 280 bar (4060 psi) max.int. 2) B42 = 260 bar (3770 psi) max.int. 3) 045 = 240 bar (3500 psi) max. int. 4) 050 = 210 bar (3000 psi) max. int

5) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm

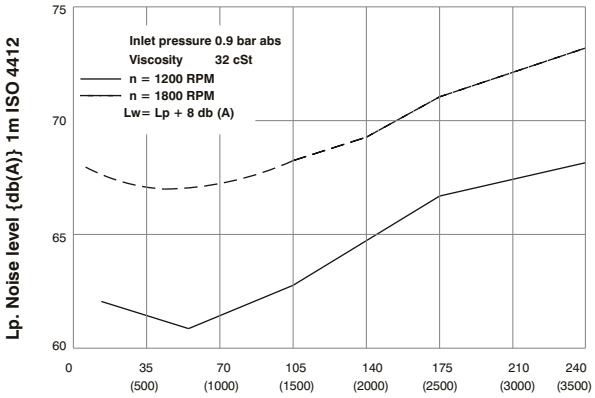
INTERNAL LEAKAGE (TYPICAL)



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

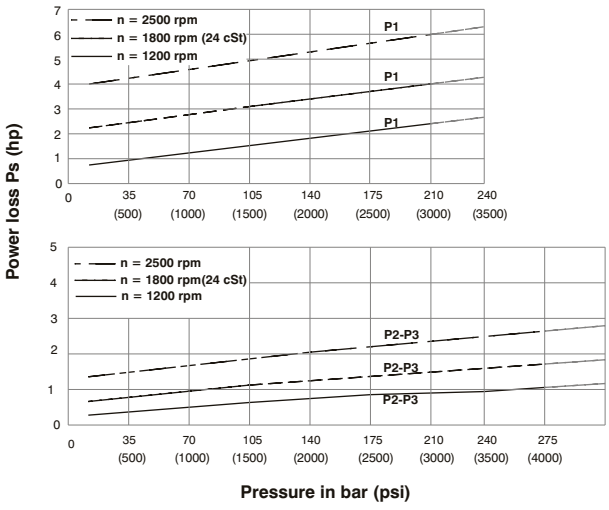
NOISE LEVEL (TYPICAL)

VT7DBB- B38-B06-B04



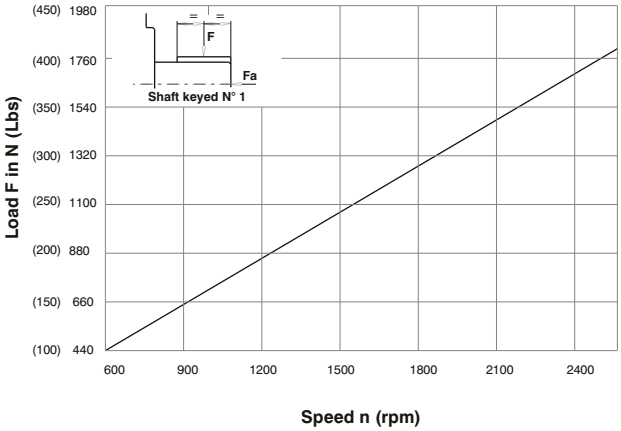
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load **Fa** = 1200 N (270 Lbs)

TP

VT7QDCB - B38 - 028 - B10 - 1 R 00 - A 1 - M1 - *

Series- SAE C 2 bolts
Mounting flange J744c

Cam ring for "P1" (P1)
Volumetric displacement cm³/rev (in³/rev)

B14 = 43.9 (2.68)	B31 = 99.1 (6.05)
B17 = 55.0 (3.36)	B35 = 113.4 (6.92)
B20 = 66.0 (4.03)	B38 = 120.6 (7.36)
B22 = 70.3 (4.29)	B42 = 137.5 (8.39)
B24 = 81.1 (4.95)	045 = 145.7 (8.89)
B28 = 89.9 (5.49)	050 = 157.9 (9.64)

Cam ring for "P2" (P2)
Volumetric displacement cm³/rev (in³/rev)

*003/B03/Y03 = 10.8 (0.66)	015/B15/Y15 = 50.5 (3.08)
005/B05/Y05 = 17.2 (1.05)	017/B17/Y17 = 58.3 (3.56)
006/B06/Y06 = 21.3 (1.30)	020/B20/Y20 = 63.8 (3.89)
008/B08/Y08 = 26.4 (1.61)	022/B22/Y22 = 70.3 (4.29)
010/B10/Y10 = 34.1 (2.08)	025/B25/Y25 = 79.3 (4.84)
012/B12/Y12 = 37.1 (2.26)	028/B28/Y28 = 88.8 (5.42)
014/B14/Y14 = 46.0 (2.81)	031/B31/Y31 = 100.0 (6.10)

*'0' - Uni - directional 'B' - Bi - directional 'Y' - Bi - directional for cold start

Cam ring for "P3" (P3)
Volumetric displacement cm³/rev (in³/rev)

B02 = 5.7 (0.35)	B07 = 22.5 (1.37)	B12 = 40.9 (2.50)
B03 = 9.8 (0.60)	B08 = 24.9 (1.52)	B14 = 45.1 (2.75)
B04 = 12.8 (0.78)	B09 = 28.0 (1.71)	B15 = 50.0 (3.05)
B05 = 15.9 (0.97)	B10 = 31.8 (1.94)	
B06 = 19.8 (1.21)	B11 = 34.9 (2.13)	

Modifications

Mounting w/connection variables

P1=1 ¼" P2=1" P3=¾ " S=4"	
UNC	METRIC
01	M1

Seal class
1 - S1 (for minreal oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4,5)
00 = Standard

Direction of rotation (view on shaft end)
R - Clockwise
L - Counter - clockwise

Type of Shaft
1 - Keyed (no SAE)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)

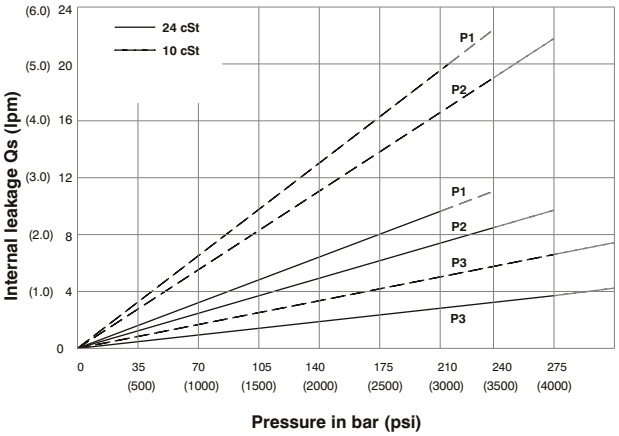
TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p =140 bar (2000 psi)		p =250 bar (3630 psi)		p =7 bar (100 psi)		p =140 bar (2000 psi)		p =250 bar (3630 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	B14	2.68	43.9	20.92	79.1	19.18	72.5	17.81	67.3	3.46	2.6	27.77	20.7	47.03	35.0
	B17	3.36	55.0	26.16	98.8	24.41	92.3	23.04	87.0	3.77	2.8	33.88	25.3	57.71	43.0
	B20	4.03	66.0	31.39	118.6	29.64	112.0	28.27	106.8	4.07	3.0	39.98	29.8	68.39	50.9
	B22	4.29	70.3	33.43	126.4	31.69	119.8	30.32	104.6	4.19	3.1	42.37	31.6	72.57	54.0
	B24	4.95	81.1	38.57	145.8	36.82	139.2	35.45	134.0	4.49	3.4	48.36	36.1	83.06	61.9
	B28	5.49	89.9	42.80	161.8	41.06	155.2	39.69	150.0	4.74	3.5	53.30	39.7	91.70	68.3
	B31	6.05	99.1	47.18	178.3	45.43	171.7	44.06	166.5	4.99	3.7	58.41	43.6	100.63	75.0
	B35 [1]	6.92	113.4	53.93	203.9	52.18	197.2	50.81	192.0	5.39	4.0	66.29	49.4	114.42	85.3
	B38 [1]	7.36	120.6	57.35	216.8	55.61	210.2	54.24	204.9	5.59	4.2	70.28	52.4	121.42	90.5
	B42 [2]	8.39	137.5	65.39	247.2	63.65	240.6	62.28	235.4	6.05	4.5	79.66	59.4	137.83	102.7
	045 [3]	8.89	145.7	69.29	262.0	67.11	253.6	65.31	246.8	6.74	5.0	83.75	62.4	145.79	108.7
	050 [4]	9.64	157.9	75.14	284.0	72.96	275.8	71.78	271.3	7.08	5.3	90.58	67.5	134.50	100.3
				p = 0 bar (0 psi)		p =140 bar (2000 psi)		p =300 bar (4350 psi)		p =7 bar (100 psi)		p =140 bar (2000 psi)		p =300 bar (4350 psi)	
P2	003	0.66	10.8	5.14	19.6	3.85	14.6	--	--	2.11	1.57	8.45	6.30	--	--
	005	1.05	17.2	8.18	30.9	6.89	26.0	4.34	16.44	2.29	1.70	12.00	8.94	23.97	17.88
	006	1.30	21.3	10.13	38.3	8.84	33.4	5.71	21.6	2.40	1.78	14.28	10.64	28.96	21.60
	008	1.61	26.4	12.55	47.4	11.26	42.6	8.12	30.72	2.54	1.89	17.11	12.75	35.08	26.16
	010	2.08	34.1	16.22	61.3	14.93	56.4	11.81	44.64	2.76	2.06	21.38	15.94	44.25	33.00
	012	2.26	37.1	17.64	66.7	16.35	61.8	13.24	50.04	2.84	2.11	23.05	17.18	47.47	35.40
	014	2.81	46.0	21.88	82.7	20.59	77.8	17.46	66.00	3.09	2.30	27.99	20.87	58.73	43.80
	015	3.08	50.5	23.99	90.7	22.83	86.3	19.39	73.32	3.21	2.40	30.30	22.60	63.56	47.40
	017	3.56	58.3	27.73	104.8	26.44	99.9	23.33	88.2	3.43	2.55	34.81	25.95	73.54	54.84
	020	3.89	63.8	30.34	114.7	29.05	109.8	25.93	98.04	3.58	2.66	37.86	28.23	80.14	59.76
	022 [6]	4.29	70.3	33.43	126.4	32.14	121.5	29.05	109.8	3.76	2.80	41.47	30.92	80.94	60.36
	025 [5, 7]	4.84	79.3	37.71	142.5	36.42	137.6	---	---	4.01	2.99	46.46	34.64	---	---
	028 [5, 8]	5.42	88.8	42.23	159.6	40.94	154.7	---	---	4.27	3.18	51.74	38.58	---	---
	031 [5, 8]	6.10	100.0	47.56	179.7	46.27	174.9	---	---	4.58	3.41	57.95	43.21	---	---
P3	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.80	6.8	0.74	0.55	4.02	2.99	8.10	6.40
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.70	14.0	0.85	0.63	6.24	4.65	12.93	10.25
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.13	19.4	0.94	0.70	7.90	5.89	16.55	13.13
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.60	25.0	1.02	0.76	9.62	7.17	20.29	16.12
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.46	32.0	1.13	0.84	11.79	8.79	25.00	19.88
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.74	36.8	1.20	0.89	13.29	9.91	28.26	22.47
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.88	41.1	1.27	0.94	14.62	10.90	31.15	24.78
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.35	47.0	1.36	1.01	16.35	12.19	34.92	27.77
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.16	53.5	1.46	1.11	18.45	13.75	39.48	31.42
	B11 [9]	2.13	34.9	16.64	62.9	16.19	61.2	15.68	59.3	1.55	1.15	20.17	15.04	43.22	32.22
	B12 [9]	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.56	50.58	37.71
	B14 [9]	2.75	45.1	21.40	80.8	20.95	79.2	20.44	77.0	1.83	1.36	25.80	19.23	55.48	41.37
	B15 [9]	3.05	50.0	23.78	89.8	23.35	88.3	22.88	86.5	1.97	1.47	28.55	21.28	57.35	42.76

1) B35-B38 = 280 bar (4060 psi) max.int. 2) B42 = 260 bar (3770 psi) max.int. 3) 045 = 240 bar (3500 psi) max. int. 4) 050 = 210 bar (3000 psi) max. int
5) 025-028-031 = 2500 R.P.M. max. 6) 022= 275 bar max. int, 7) 025 = 240 bar max. Int, 8) 028-031 = 210 bar max. int.
9) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm *-- Not to use because internal leakage greater than 50% of theoretical flow*

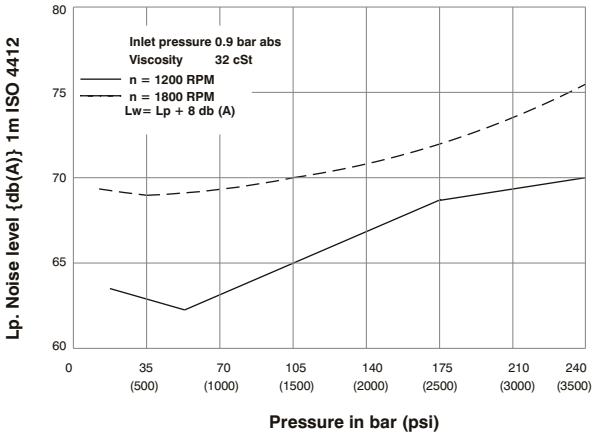
INTERNAL LEAKAGE (TYPICAL)



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

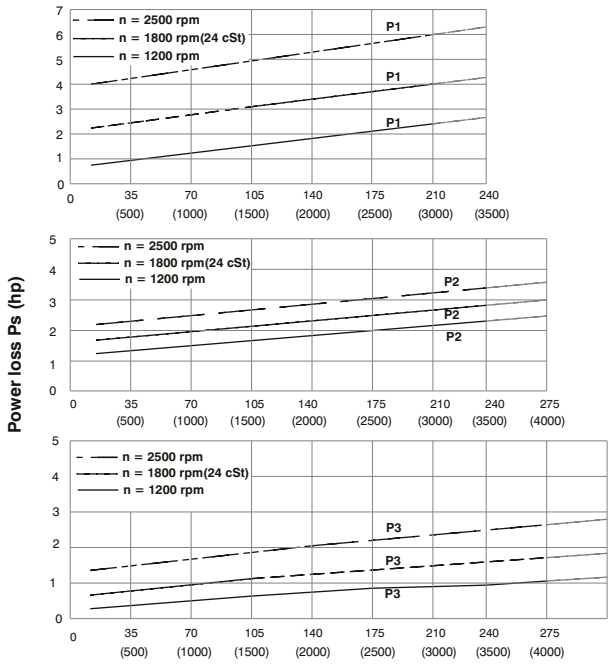
NOISE LEVEL (TYPICAL)

VT7QDCB- B38-022-B10



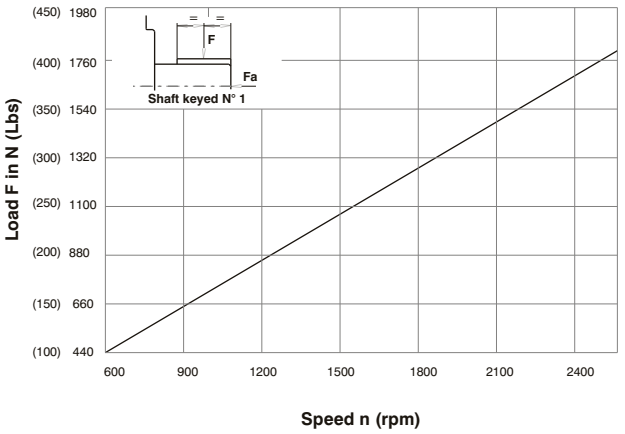
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load **Fa** = 1200 N (270 Lbs)

TP

VELJAN

VT7QDCC - 038 - 028 - 008 - 1 R 00 - A 1 - 00 - *

Series

P1 **P2** **P3**

Cam ring for "P1"

Volumetric displacement cm³/rev (in³/rev)

B14 = 43.9 (2.68) B31 = 99.1 (6.05)
B17 = 55.0 (3.36) B35 = 113.4 (6.92)
B20 = 66.0 (4.03) B38 = 120.6 (7.36)
B22 = 70.3 (4.29) B42 = 137.5 (8.39)
B24 = 81.1 (4.95) 045 = 145.7 (8.89)
B28 = 89.9 (5.49) 050 = 157.9 (9.64)

Cam ring for "P2" & "P3"

Volumetric displacement cm³/rev (in³/rev)

*003/B03/Y03 = 10.8 (0.66) 015/B15/Y15 = 50.5 (3.08)
005/B05/Y05 = 17.2 (1.05) 017/B17/Y17 = 58.3 (3.56)
006/B06/Y06 = 21.3 (1.30) 020/B20/Y20 = 63.8 (3.89)
008/B08/Y08 = 26.4 (1.61) 022/B22/Y22 = 70.3 (4.29)
010/B10/Y10 = 34.1 (2.08) 025/B25/Y25 = 79.3 (4.84)
012/B12/Y12 = 37.1 (2.26) 028/B28/Y28 = 88.8 (5.42)
014/B14/Y14 = 46.0 (2.81) 031/B31/Y31 = 100.0 (6.10)

*'0' - Uni - directional 'B' - Bi - directional 'Y' - Bi - directional for cold start

Type of Shaft

1 - Keyed (no SAE)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)

Modifications

Mounting w/connection variables

	UNC		METRIC	
	00	01	M0	M1
P3	1"	3/4"	1"	3/4"

Seal class

1 - S1 (for minreal oil)
4 - S4 (for fire resistant fluids)
5 - S5 (for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4,5)

00 = Standard

Direction of rotation (view on shaft end)

R - Clockwise
L - Counter - clockwise

TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

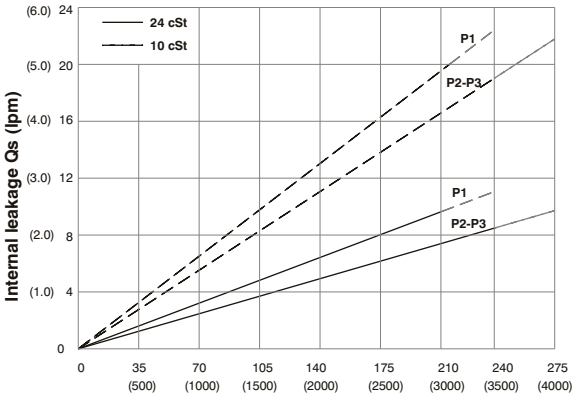
Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	B14	2.68	43.9	20.92	79.1	19.18	72.5	17.81	67.3	3.46	2.60	27.77	20.70	47.03	35.00
	B17	3.36	55.0	26.16	98.8	24.41	92.3	23.04	87.0	3.77	2.80	33.88	25.30	57.71	43.00
	B20	4.03	66.0	31.39	118.6	29.64	112.0	28.27	106.8	4.07	3.00	39.98	29.80	68.39	50.90
	B22	4.29	70.3	33.43	126.4	31.69	119.8	30.32	104.6	4.19	3.10	42.37	31.60	72.57	54.00
	B24	4.95	81.1	38.57	145.8	36.82	139.2	35.45	134.0	4.49	3.40	48.36	36.10	83.06	61.90
	B28	5.49	89.9	42.80	161.8	41.06	155.2	39.69	150.0	4.74	3.50	53.30	39.70	91.70	68.30
	B31	6.05	99.1	47.18	178.3	45.43	171.7	44.06	166.5	4.99	3.70	58.41	43.60	100.63	75.00
	B35 [1)]	6.92	113.4	53.93	203.9	52.18	197.2	50.81	192.0	5.39	4.00	66.29	49.40	114.42	85.30
	B38 [1)]	7.36	120.6	57.35	216.8	55.61	210.2	54.24	204.9	5.59	4.20	70.28	52.40	121.42	90.50
	B42 [2)]	8.39	137.5	65.39	247.2	63.65	240.6	62.28	235.4	6.05	4.50	79.66	59.40	137.83	102.70
	045 [3)]	8.89	145.7	69.29	262.0	67.11	253.6	65.31	246.8	6.74	5.00	83.75	62.40	145.79	108.70
	050 [4)]	9.64	157.9	75.14	284.0	72.96	275.8	71.78	271.3	7.08	5.30	90.58	67.50	134.50	100.30
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)	
P2 & P3	003	0.66	10.8	5.14	19.6	3.85	14.6	--	--	2.11	1.57	8.45	6.30	--	--
	005	1.05	17.2	8.18	30.9	6.89	26.0	4.34	16.44	2.29	1.70	12.00	8.94	23.97	17.88
	006	1.30	21.3	10.13	38.3	8.84	33.4	5.71	21.6	2.40	1.78	14.28	10.64	28.96	21.60
	008	1.61	26.4	12.55	47.4	11.26	42.6	8.12	30.72	2.54	1.89	17.11	12.75	35.08	26.16
	010	2.08	34.1	16.22	61.3	14.93	56.4	11.81	44.64	2.76	2.06	21.38	15.94	44.25	33.00
	012	2.26	37.1	17.64	66.7	16.35	61.8	13.24	50.04	2.84	2.11	23.05	17.18	47.47	35.40
	014	2.81	46.0	21.88	82.7	20.59	77.8	17.46	66.00	3.09	2.30	27.99	20.87	58.73	43.80
	015	3.08	50.5	23.99	90.7	22.83	86.3	19.39	73.32	3.21	2.40	30.30	22.60	63.56	47.40
	017	3.56	58.3	27.73	104.8	26.44	99.9	23.33	88.2	3.43	2.55	34.81	25.95	73.54	54.84
	020	3.89	63.8	30.34	114.7	29.05	109.8	25.93	98.04	3.58	2.66	37.86	28.23	80.14	59.76
	022 [6)]	4.29	70.3	33.43	126.4	32.14	121.5	29.05	109.8	3.76	2.80	41.47	30.92	80.94	60.36
	025 [5, 7)]	4.84	79.3	37.71	142.5	36.42	137.6	---	---	4.01	2.99	46.46	34.64	---	---
	028 [5, 8)]	5.42	88.8	42.23	159.6	40.94	154.7	---	---	4.27	3.18	51.74	38.58	---	---
	031 [5, 8)]	6.10	100.0	47.56	179.7	46.27	174.9	---	---	4.58	3.41	57.95	43.21	---	---

1) B35-B38 = 280 bar (4060 psi) max.int. 2) B42 = 260 bar (3770 psi) max.int. 3) 045 = 240 bar (3500 psi) max. int. 4) 050 = 210 bar (3000 psi) max. int
5) 025-028-031 = 2500 R.P.M. max. 6) 022= 275 bar max. int, 7) 025 = 240 bar max. Int, 8) 028-031 = 210 bar (3000 psi) max. int.

-- Not to use because internal leakage greater than 50% of theoretical flow

TP

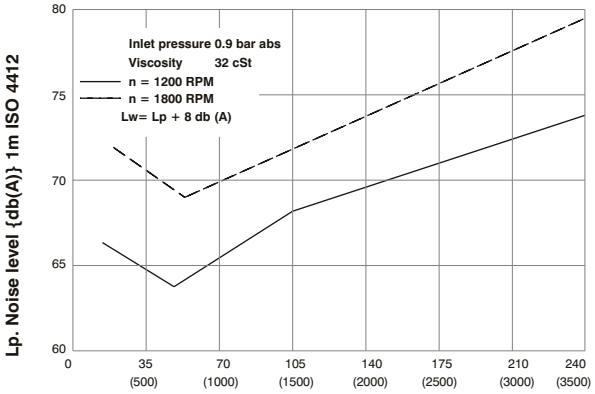
INTERNAL LEAKAGE (TYPICAL)



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

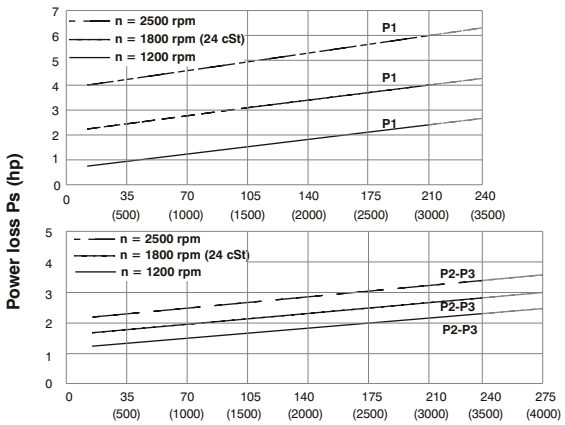
NOISE LEVEL (TYPICAL)

VT7QDCC- B31-022-022



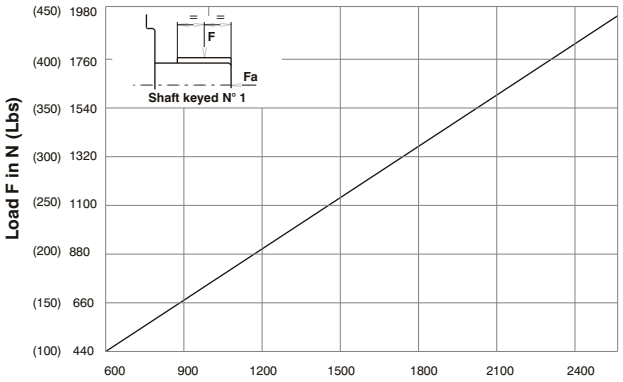
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECAHNICAL POWER LOSS (TYPICAL)

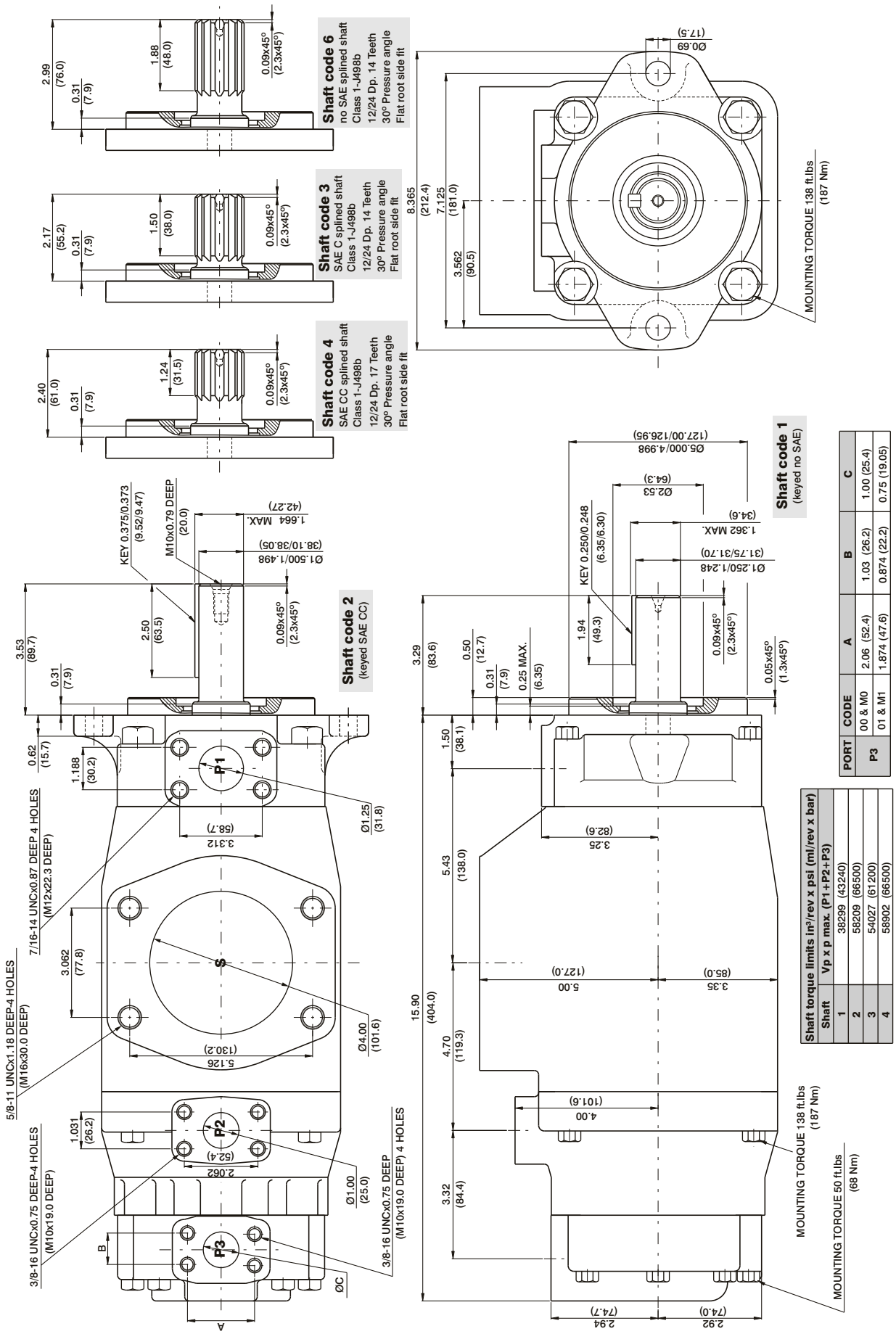


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum axial load permissible Fa=1200 N (270 Lbs)



PORT	CODE	A	B	C
P3	00 & M0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	01 & M1	1.874 (47.6)	0.874 (22.2)	0.75 (19.05)

Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	58209 (66500)
3	54027 (61200)
4	58902 (66500)

VT7DDB or VT7DDBS - 050 - B28 - B10 - 1 R 00 - A 1 - 00 *

VT7DDB series - ISO 4 bolts 3019-2 mounting flange 125 B4 HW

VT7DDBS series- SAE C 6 bolts Mounting flange J744c

P1 P2 P3

Cam ring for "P1" & "P2"

Volumetric displacement cm³/rev (in³/rev)

B14 = 43.9 (2.68)	B31 = 99.1 (6.05)
B17 = 55.0 (3.36)	B35 = 113.4 (6.92)
B20 = 66.0 (4.03)	B38 = 120.6 (7.36)
B22 = 70.3 (4.29)	B42 = 137.5 (8.39)
B24 = 81.1 (4.95)	045 = 145.7 (8.89)
B28 = 89.9 (5.49)	050 = 157.9 (9.64)

Cam ring for "P3"

Volumetric displacement cm³/rev (in³/rev)

B02 = 5.7 (0.35)	B09 = 28.0 (1.71)
B03 = 9.8 (0.60)	B10 = 31.8 (1.94)
B04 = 12.8 (0.78)	B11 = 34.9 (2.13)
B05 = 15.9 (0.97)	B12 = 40.9 (2.50)
B06 = 19.8 (1.21)	B14 = 45.1 (2.75)
B07 = 22.5 (1.37)	B15 = 50.0 (3.05)
B08 = 24.9 (1.52)	

Type of Shaft VT7DDBS

1 - Keyed (SAE C)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)

Type of Shaft VT7DDB-VT7DDBS

5 - Keyed (ISO R775-G38M)

Modifications

Mounting w/connection variables

4 bolts SAE flange (J518)

P1 & P2= 1"1/4 S = 4"			
	P3	UNC	METRIC
VT7DDB	1"		M0
VT7DDB	3/4"		M1
VT7DDBS	1"	00	M0
VT7DDBS	3/4"	01	M1

Seal class

1 - S1 (for minreal oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4,5)

00 = Standard

Direction of rotation (view on shaft end)

R - Clockwise
L - Counter - clockwise

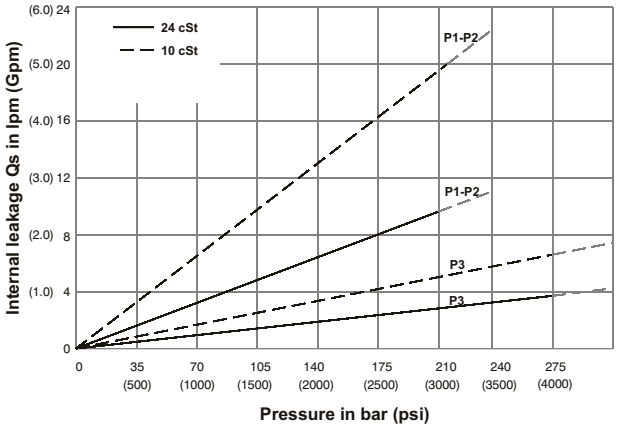
TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1 & P2	B14	2.68	43.9	20.92	79.1	19.18	72.5	17.81	67.3	3.46	2.6	27.77	20.7	47.03	35.1
	B17	3.36	55.0	26.16	98.8	24.41	92.3	23.04	87.0	3.77	2.8	33.88	25.3	57.71	43.0
	B20	4.03	66.0	31.39	118.6	29.64	112.0	28.27	106.8	4.07	3.0	39.98	29.8	68.39	51.0
	B22	4.29	70.3	33.43	126.4	31.69	119.8	30.32	104.6	4.19	3.1	42.37	31.6	72.57	54.1
	B24	4.95	81.1	38.57	145.8	36.82	139.2	35.45	134.0	4.49	3.4	48.36	36.1	83.06	61.9
	B28	5.49	89.9	42.80	161.8	41.06	155.2	39.69	150.0	4.74	3.5	53.30	39.7	91.70	68.4
	B31	6.05	99.1	47.18	178.3	45.43	171.7	44.06	166.5	4.99	3.7	58.41	43.6	100.63	75.0
	B35 [1]	6.92	113.4	53.93	203.9	52.18	197.2	50.81	192.0	5.39	4.0	66.29	49.4	114.42	85.3
	B38 [1]	7.36	120.6	57.35	216.8	55.61	210.2	54.24	204.9	5.59	4.2	70.28	52.4	121.42	90.5
	B42 [2]	8.39	137.5	65.39	247.2	63.65	240.6	62.28	235.4	6.05	4.5	79.66	59.4	137.83	102.8
	045 [3]	8.89	145.7	69.29	262.0	67.11	253.6	65.31	246.8	6.74	5.0	83.75	62.4	145.79	108.7
	050 [4]	9.64	157.9	75.14	284.0	72.96	275.8	71.78	271.3	7.08	5.3	90.58	67.5	134.50	100.3
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)	
P3	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.80	6.8	0.74	0.55	4.02	3.0	8.10	6.0
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.70	14.0	0.85	0.63	6.24	4.7	12.93	9.6
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.13	19.4	0.94	0.70	7.90	5.9	16.55	12.3
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.60	25.0	1.02	0.76	9.62	7.2	20.29	15.1
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.46	32.0	1.13	0.84	11.79	8.8	25.00	18.6
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.74	36.8	1.20	0.89	13.29	9.9	28.26	21.1
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.88	41.1	1.27	0.95	14.62	10.9	31.15	23.2
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.35	47.0	1.36	1.01	16.35	12.2	34.92	26.1
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.16	53.5	1.46	1.10	18.45	13.8	39.48	29.4
	B11 [5]	2.13	34.9	16.64	62.9	16.19	61.2	15.68	59.3	1.55	1.16	20.17	15.0	43.22	32.2
	B12 [5]	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.6	50.58	37.7
	B14 [5]	2.75	45.1	21.40	80.8	20.95	79.2	20.44	77.0	1.83	1.36	25.80	19.2	55.48	41.4
	B15 [5]	3.05	50.0	23.78	89.8	23.35	88.3	22.88	86.5	1.97	1.45	28.55	21.3	57.35	42.7

1) B35-B38 = 280 bar (4060 psi) max.int. 2) B42 = 260 bar (3770 psi) max.int. 3) 045 = 240 bar (3500 psi) max. int. 4) 050 = 210 bar (3000 psi) max. int
5) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm

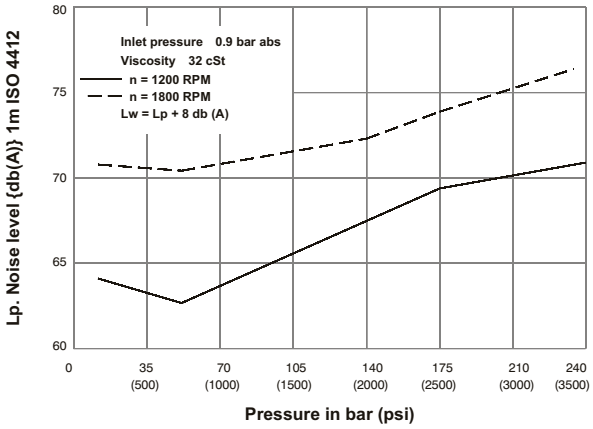
INTERNAL LEAKAGE (TYPICAL)



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

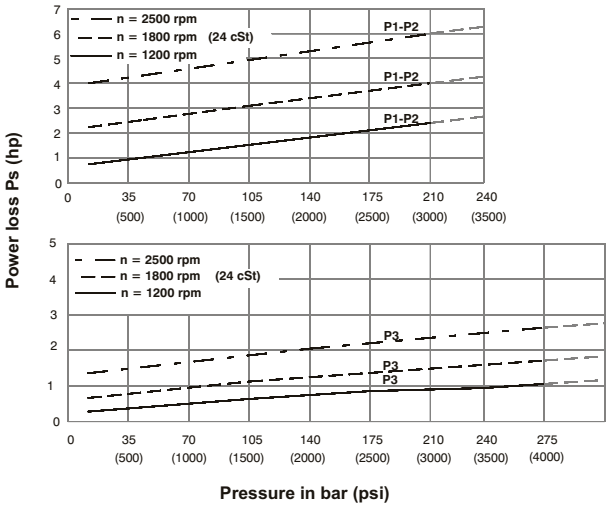
NOISE LEVEL (TYPICAL)

VT7DDB- B31-B31-B10



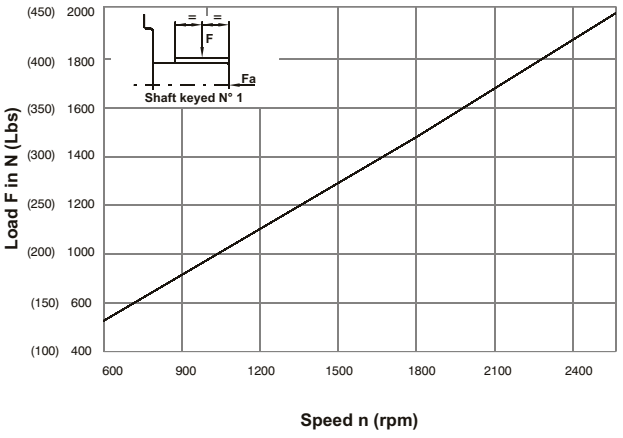
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



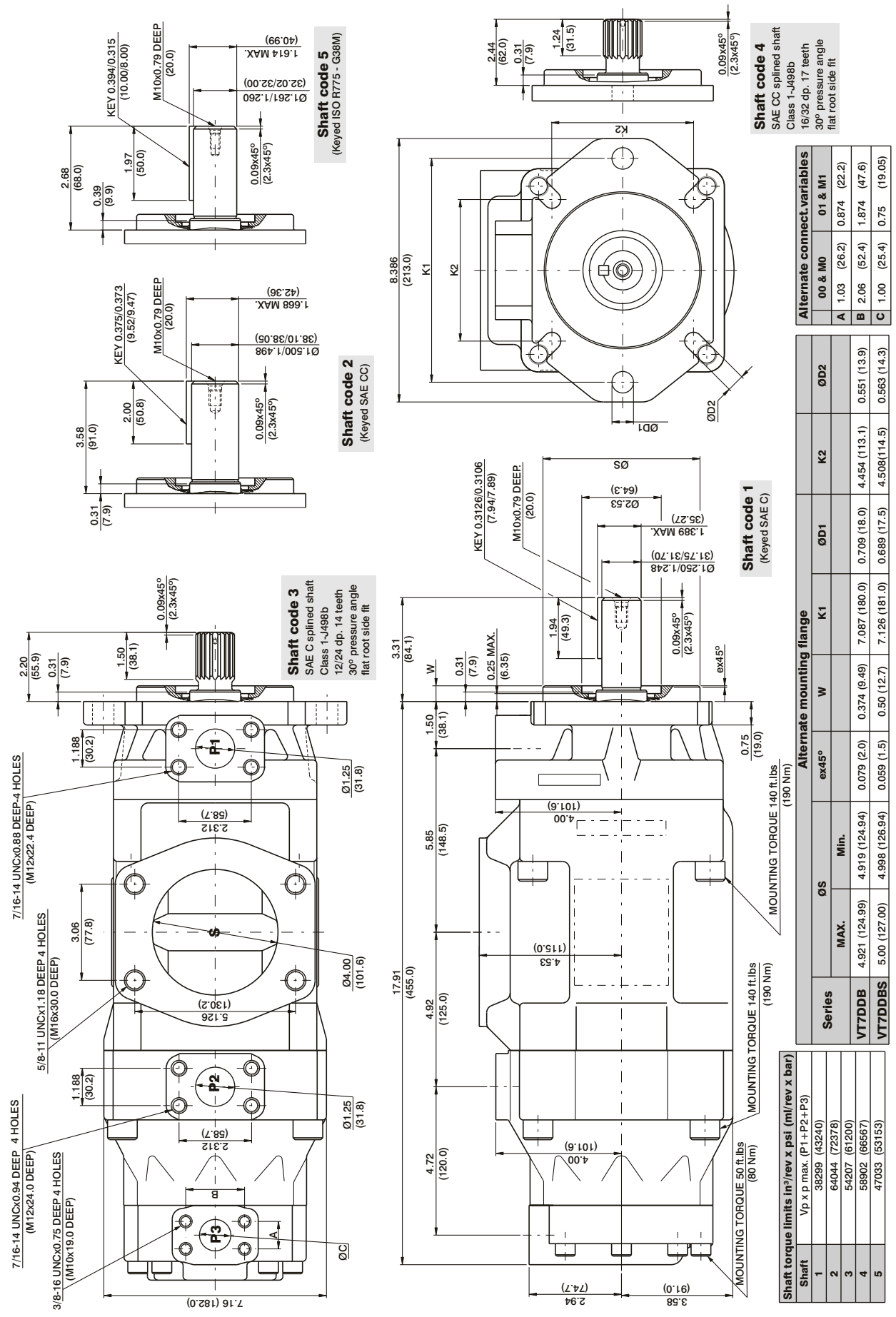
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 1200 N (270 Lbs)

TP



Alternate mounting flange

Series	ØS MAX.	ØS Min.	ex45°	W	K1	ØD1	K2	ØD2
VT7DDB	4.921 (124.99)	4.919 (124.94)	0.079 (2.0)	0.374 (9.49)	7.087 (180.0)	0.709 (18.0)	4.454 (113.1)	0.551 (13.9)
VT7DDBS	5.00 (127.00)	4.998 (126.94)	0.059 (1.5)	0.50 (12.7)	7.126 (181.0)	0.689 (17.5)	4.508(114.5)	0.563 (14.3)

Alternate connect.variables

	00 & M0		01 & M1	
A	1.03	(26.2)	0.874	(22.2)
B	2.06	(52.4)	1.874	(47.6)
C	1.00	(25.4)	0.75	(19.05)

Shaft torque limits in³/rev x psi (ml/rev x bar)

Shaft	Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	64044 (72378)
3	54207 (61200)
4	58902 (66567)
5	47033 (53153)

VT7EDB or VT7EDBS - 062 - B28 - B10 - 1 R 00 - A 1 - 00 *

VT7EDB series-ISO 4 bolts 3019-2 mounting flange 250 B4 HW

VT7EDBS series- SAE E 4 bolts Mounting flange J744c

P1

Cam ring for "P1"

Volumetric displacement cm³/rev (in³/rev)

042 = 132.2 (8.07)
045 = 142.5 (8.70)
050 = 158.5 (9.67)
052 = 163.8 (10.0)
054 = 170.9 (10.43)
057 = 183.2 (11.18)
062 = 196.6 (12.0)
066 = 213.0 (13.0)
072 = 227.1 (13.86)
085 = 268.7 (16.40)

P2

Cam ring for "P2"

Volumetric displacement cm³/rev (in³/rev)

B14 = 43.9 (2.68)
B17 = 55.0 (3.36)
B20 = 66.0 (4.03)
B22 = 70.3 (4.29)
B24 = 81.1 (4.95)
B28 = 89.9 (5.49)
B31 = 99.1 (6.05)
B35 = 113.4 (6.92)
B38 = 120.6 (7.36)
B42 = 137.5 (8.39)
045 = 145.7 (8.89)
050 = 157.9 (9.64)

P3

Cam ring for "P3"

Volumetric displacement cm³/rev (in³/rev)

B02 = 5.7 (0.35)
B03 = 9.8 (0.60)
B04 = 12.8 (0.78)
B05 = 15.9 (0.97)
B06 = 19.8 (1.21)
B08 = 24.9 (1.52)
B07 = 22.5 (1.37)
B09 = 28.0 (1.71)
B10 = 31.8 (1.94)
B11 = 34.9 (2.13)
B12 = 40.9 (2.50)
B14 = 45.1 (2.75)
B15 = 50.0 (3.05)

Modifications

Mounting w/connection variables

4 bolts SAE flange (J518)

P1=1-1/2" P2=1-1/4" S = 4"			
	P3	UNC	METRIC
VT7EDB	1"		M0
VT7EDB	3/4"		M1
VT7EDBS	1"	00	M0
VT7EDBS	3/4"	01	M1

Seal class

1 - S1(for minreal oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination **(see page CI-1-4,5)**

00 = Standard

Direction of rotation (view on shaft end)

R - Clockwise
L - Counter - clockwise

Type of Shaft VT7EDB

1 - Keyed (G45N-ISO 3019-2)

Type of Shaft VT7EDBS

2 - Keyed (SAE D & E)
3 - Splined (SAE D & E)

TP

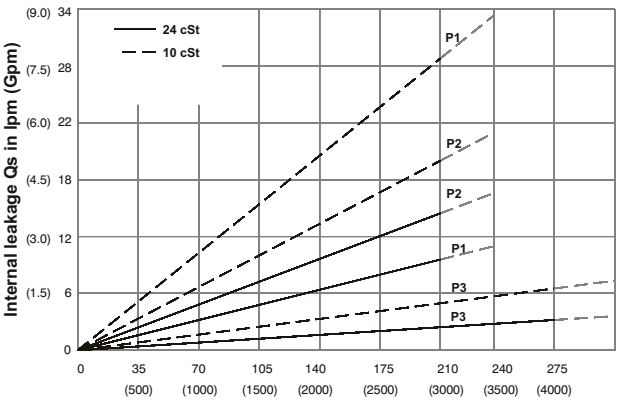
OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	042	8.07	132.2	62.92	237.8	60.37	228.2	58.52	221.2	8.09	6.03	78.44	58.49	133.80	99.77
	045	8.70	142.5	67.72	255.9	65.17	246.3	63.32	239.3	8.37	6.24	84.04	62.66	143.60	107.08
	050	9.67	158.5	75.38	284.9	72.83	275.3	70.98	268.3	8.82	6.58	92.97	69.32	159.24	118.75
	052	10.00	163.8	78.37	296.2	75.82	286.6	73.97	279.6	8.99	6.70	96.47	71.93	165.36	123.31
	054	10.43	170.9	81.27	307.2	78.72	297.6	76.87	290.6	9.17	6.83	99.75	74.38	177.46	132.33
	057	11.18	183.2	87.12	329.3	84.57	319.7	82.72	312.7	9.51	7.09	106.57	79.46	189.84	141.56
	062	12.00	196.6	93.54	353.6	90.99	343.9	89.14	336.9	9.88	7.36	114.17	85.13	196.34	146.41
	066	13.00	213.0	101.44	383.4	98.89	373.8	97.04	366.8	10.34	7.71	123.38	92.00	212.46	158.43
	072	13.86	227.1	108.00	408.2	105.45	398.6	103.60	391.6	10.72	7.99	131.04	97.71	225.86	168.42
	085 [1]	16.40	268.7	127.79	483.0	126.13	476.7	--	--	11.88	8.85	101.66	75.80	--	--
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)	
P2	B14	2.68	43.9	20.92	79.1	19.18	72.5	17.81	67.3	3.46	2.6	27.77	20.7	47.03	35.07
	B17	3.36	55.0	26.16	98.8	24.41	92.3	23.04	87.0	3.77	2.8	33.88	25.3	57.71	43.03
	B20	4.03	66.0	31.39	118.6	29.64	112.0	28.27	106.8	4.07	3.0	39.98	29.8	68.39	50.99
	B22	4.29	70.3	33.43	126.4	31.69	119.8	30.32	104.6	4.19	3.1	42.37	31.6	72.57	54.12
	B24	4.95	81.1	38.57	145.8	36.82	139.2	35.45	134.0	4.49	3.4	48.36	36.1	83.06	61.93
	B28	5.49	89.9	42.80	161.8	41.06	155.2	39.69	150.0	4.74	3.5	53.30	39.7	91.70	68.38
	B31	6.05	99.1	47.18	178.3	45.43	171.7	44.06	166.5	4.99	3.7	58.41	43.6	100.63	75.03
	B35 [2]	6.92	113.4	53.93	203.9	52.18	197.2	50.81	192.0	5.39	4.0	66.29	49.4	114.42	85.32
	B38 [2]	7.36	120.6	57.35	216.8	55.61	210.2	54.24	204.9	5.59	4.2	70.28	52.4	121.42	90.54
	B42 [3]	8.39	137.5	65.39	247.2	63.65	240.6	62.28	235.4	6.05	4.5	79.66	59.4	137.83	102.77
	045 [4]	8.89	145.7	69.29	262.0	67.11	253.6	65.31	246.8	6.74	5.0	83.75	62.4	145.79	108.71
	050 [5]	9.64	157.9	75.14	284.0	72.96	275.8	71.78	271.3	7.08	5.3	90.58	67.5	134.50	100.3
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)	
P3	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.80	6.8	0.74	0.55	4.02	2.99	8.10	6.04
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.70	14.0	0.85	0.63	6.24	4.65	12.93	9.64
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.13	19.4	0.94	0.70	7.90	5.89	16.55	12.34
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.60	25.0	1.02	0.76	9.62	7.17	20.29	15.13
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.46	32.0	1.13	0.84	11.79	8.79	25.00	18.64
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.74	36.8	1.20	0.89	13.29	9.91	28.26	21.07
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.88	41.1	1.27	0.95	14.62	10.90	31.15	23.23
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.35	47.0	1.36	1.02	16.35	12.19	34.92	26.03
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.16	53.5	1.46	1.09	18.45	13.76	39.48	29.44
	B11 [6]	2.13	34.9	16.64	62.9	16.19	61.2	15.68	59.3	1.55	1.16	20.17	15.04	43.22	32.22
	B12 [6]	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.56	50.58	37.71
	B14 [6]	2.75	45.1	21.40	80.8	20.95	79.2	20.44	77.0	1.83	1.36	25.80	19.23	55.48	41.37
	B15 [6]	3.05	50.0	23.78	89.8	23.35	88.3	22.88	86.5	1.97	1.47	28.55	21.28	57.35	42.76

1) 085 = 90 bar (1300 psi) max.int. & 085 = 2000 rpm max. 2) B35-B38 = 280 bar (4060 psi) max.int. 3) B42 = 260 bar (3770 psi) max.int. 4) 045 = 240 bar (3500 psi) max. int.
5) 050 = 210 bar (3000 psi) max. int 6) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm

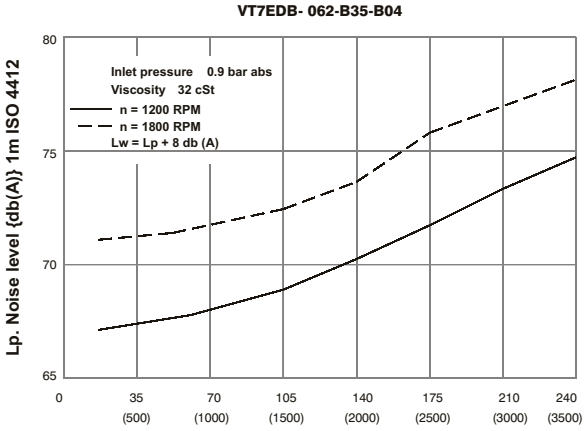
TP

INTERNAL LEAKAGE (TYPICAL)



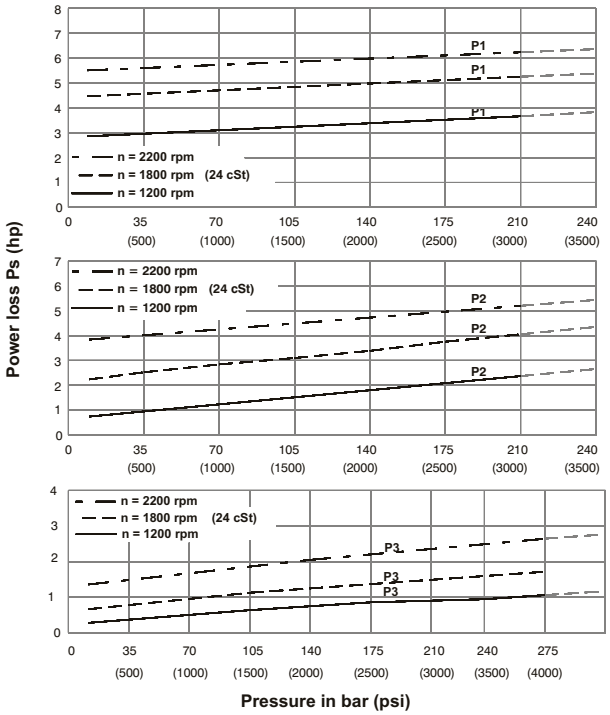
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)



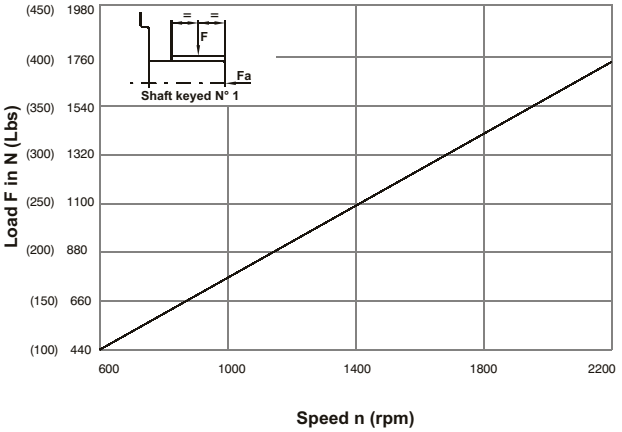
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)

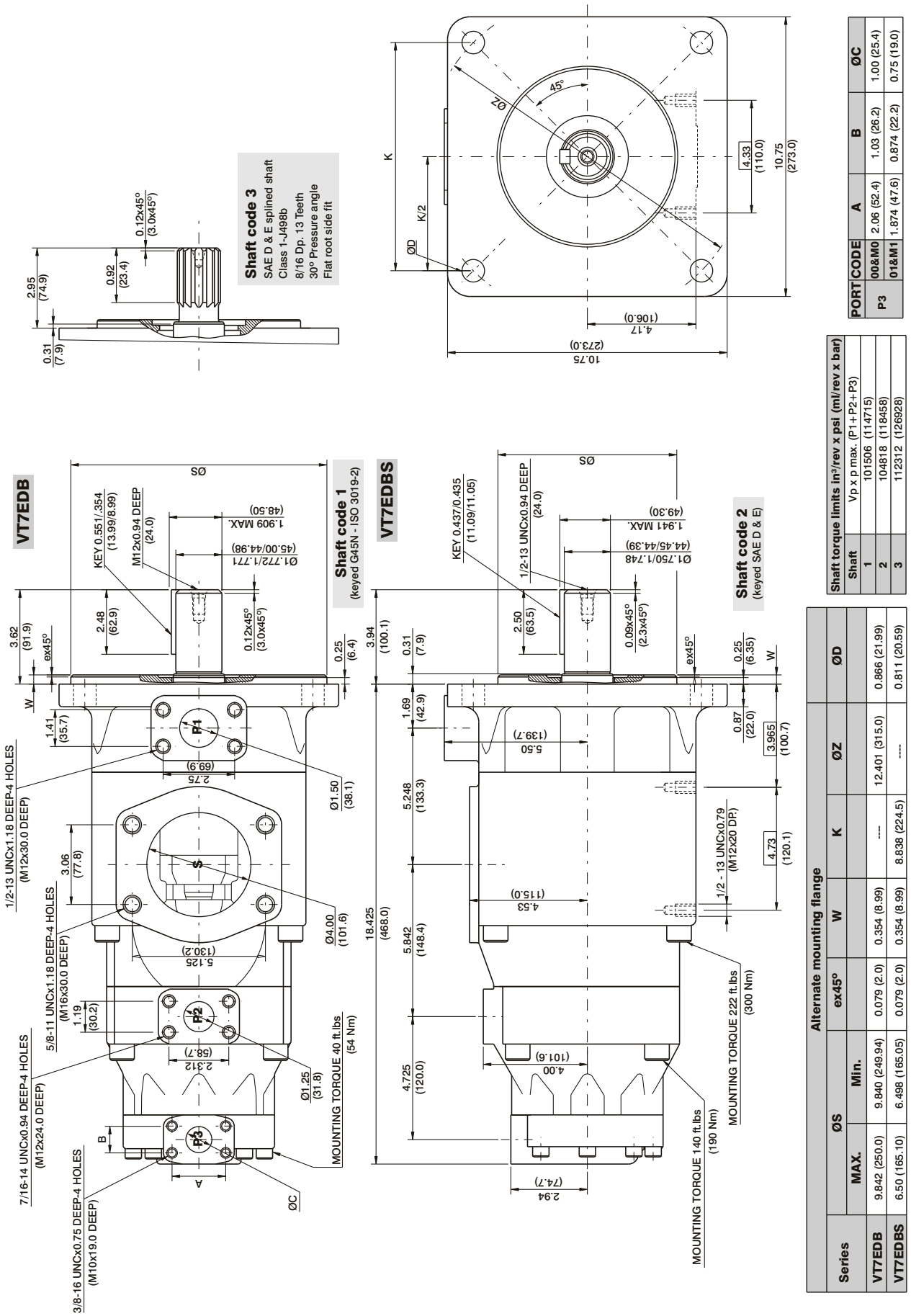


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load ***Fa*** = 2000 N (449 Lbs)



PORT	CODE	A	B	ØC
P3	00&M0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	01&M1	1.874 (47.6)	0.874 (22.2)	0.75 (19.0)

Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	101506 (114715)
2	104818 (118458)
3	112312 (126928)

Series	ØS		Alternate mounting flange				
	MAX.	Min.	ex45°	W	K	ØZ	ØD
VT7EDB	9.842 (250.0)	9.840 (249.94)	0.079 (2.0)	0.354 (8.99)	---	12.401 (315.0)	0.866 (21.99)
VT7EDBS	6.50 (165.10)	6.498 (165.05)	0.079 (2.0)	0.354 (8.99)	8.838 (224.5)	----	0.811 (20.59)

VT7QEDC or VT7QEDCS - 062 - B28 - B10 - 1 R 00-A 1 - 00 *

VT7QEDC series-ISO 2 bolts 3019-2 mounting flange 250 B4 HW

VT7QEDCS series- SAE E 4 bolts Mounting flange J744c

P1 **P2** **P3**

Cam ring for "P2"

Volumetric displacement cm³/rev (in³/rev)

042 = 132.2 (8.07) 057 = 183.2 (11.18)
045 = 142.5 (8.77) 062 = 196.6 (12.00)
050 = 158.5 (9.67) 066 = 213.0 (13.00)
052 = 163.8 (10.00) 072 = 226.1 (13.86)
054 = 170.9 (10.43) 085 = 268.7 (16.40)

Cam ring for "P2"

Volumetric displacement cm³/rev (in³/rev)

B14 = 43.9 (2.68) B31 = 99.1 (6.05)
B17 = 55.0 (3.36) B35 = 113.4 (6.92)
B20 = 66.0 (4.03) B38 = 120.6 (7.36)
B22 = 70.3 (4.29) B42 = 137.5 (8.39)
B24 = 81.1 (4.95) 045 = 145.7 (8.89)
B28 = 89.9 (5.49) 050 = 157.9 (9.64)

Cam ring for "P3"

Volumetric displacement cm³/rev (in³/rev)

*003/B03/Y03 = 10.8 (0.66) 015/B15/Y15 = 50.5 (3.08)
005/B05/Y05 = 17.2 (1.05) 017/B17/Y17 = 58.3 (3.56)
006/B06/Y06 = 21.3 (1.30) 020/B20/Y20 = 63.8 (3.89)
008/B08/Y08 = 26.4 (1.61) 022/B22/Y22 = 70.3 (4.29)
010/B10/Y10 = 34.1 (2.08) 025/B25/Y25 = 79.3 (4.84)
012/B12/Y12 = 37.1 (2.26) 028/B28/Y28 = 88.8 (5.42)
014/B14/Y14 = 46.0 (2.81) 031/B31/Y31 = 100.0 (6.10)

***'0' - Uni - directional 'B' - Bi - directional 'Y' - Bi - directional for cold start**

Modifications

Mounting w/connection variables

4 bolts SAE flange (J518)

P1 = 1½"	P2 = 1¼"	S = 4"	
	P3	UNC	METRIC
VT7QEDC	1"		M0
VT7QEDC	3/4"		M1
VT7QEDCS	1"	00	M0
VT7QEDCS	3/4"	01	M1

Seal class

1 - S1(for minreal oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4,5)

00 = Standard

Direction of rotation (view on shaft end)

R - Clockwise
L - Counter - clockwise

Type of Shaft VT7QEDC

1 - Keyed (G45N-ISO 3019-2)

Type of Shaft VT7QEDCS

2 - Keyed (SAE D & E)
3 - Splined (SAE D & E)

TP

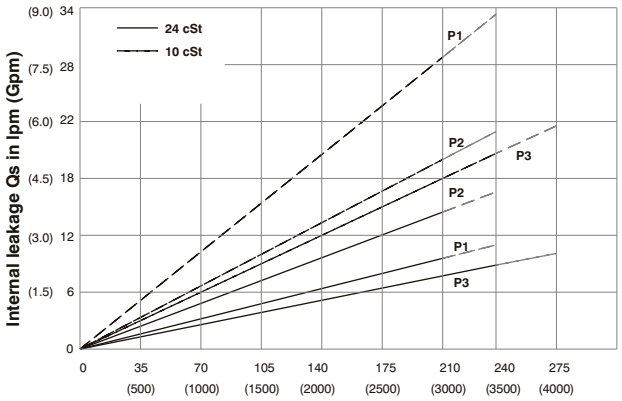
OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	042	8.07	132.2	62.92	237.8	60.37	228.2	58.52	221.2	8.09	6.03	78.44	58.49	133.80	99.77
	045	8.70	142.5	67.72	255.9	65.17	246.3	63.32	239.3	8.37	6.24	84.04	62.66	143.60	107.08
	050	9.67	158.5	75.38	284.9	72.83	275.3	70.98	268.3	8.82	6.58	92.97	69.32	159.24	118.75
	052	10.00	163.8	78.37	296.2	75.82	286.6	73.97	279.6	8.99	6.70	96.47	71.93	165.36	123.31
	054	10.43	170.9	81.27	307.2	78.72	297.6	76.87	290.6	9.17	6.83	99.75	74.38	177.46	132.33
	057	11.18	183.2	87.12	329.3	84.57	319.7	82.72	312.7	9.51	7.09	106.57	79.46	189.84	141.56
	062	12.00	196.6	93.54	353.6	90.99	343.9	89.14	336.9	9.88	7.36	114.17	85.13	196.34	146.41
	066	13.00	213.0	101.44	383.4	98.89	373.8	97.04	366.8	10.34	7.71	123.38	92.00	212.46	158.43
	072	13.86	227.1	108.00	408.2	105.45	398.6	103.60	391.6	10.72	7.99	131.04	97.71	225.86	168.42
	085 [1]	16.40	268.7	127.79	483.0	126.13	476.7	-	-	11.88	8.85	101.66	75.80	-	-
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)	
P2	B14	2.68	43.9	20.92	79.1	19.18	72.5	17.81	67.3	3.46	2.60	27.77	20.7	47.03	35.07
	B17	3.36	55.0	26.16	98.8	24.41	92.3	23.04	87.0	3.77	2.80	33.88	25.3	57.71	43.03
	B20	4.03	66.0	31.39	118.6	29.64	112.0	28.27	106.8	4.07	3.00	39.98	29.8	68.39	50.99
	B22	4.29	70.3	33.43	126.4	31.69	119.8	30.32	104.6	4.19	3.10	42.37	31.6	72.57	54.12
	B24	4.95	81.1	38.57	145.8	36.82	139.2	35.45	134.0	4.49	3.40	48.36	36.1	83.06	61.93
	B28	5.49	89.9	42.80	161.8	41.06	155.2	39.69	150.0	4.74	3.50	53.30	39.7	91.70	68.38
	B31	6.05	99.1	47.18	178.3	45.43	171.7	44.06	166.5	4.99	3.70	58.41	43.6	100.63	75.03
	B35 [2]	6.92	113.4	53.93	203.9	52.18	197.2	50.81	192.0	5.39	4.00	66.29	49.4	114.42	85.32
	B38 [2]	7.36	120.6	57.35	216.8	55.61	210.2	54.24	204.9	5.59	4.20	70.28	52.4	121.42	90.54
	B42 [3]	8.39	137.5	65.39	247.2	63.65	240.6	62.28	235.4	6.05	4.50	79.66	59.4	137.83	102.77
	045 [4]	8.89	145.7	69.29	262.0	67.11	253.6	65.31	246.8	6.74	5.00	83.75	62.4	145.79	108.71
	050 [5]	9.64	157.9	75.14	284.0	72.96	275.8	71.78	271.3	7.08	5.30	90.58	67.5	134.50	100.30
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)	
P3	003	0.66	10.8	5.14	19.6	3.85	14.6	--	--	2.11	1.57	8.45	6.30	--	--
	005	1.05	17.2	8.18	30.9	6.89	26.0	4.34	16.44	2.29	1.70	12.00	8.94	23.97	17.88
	006	1.30	21.3	10.13	38.3	8.84	33.4	5.71	21.6	2.40	1.78	14.28	10.64	28.96	21.60
	008	1.61	26.4	12.55	47.4	11.26	42.6	8.12	30.72	2.54	1.89	17.11	12.75	35.08	26.16
	010	2.08	34.1	16.22	61.3	14.93	56.4	11.81	44.64	2.76	2.06	21.38	15.94	44.25	33.00
	012	2.26	37.1	17.64	66.7	16.35	61.8	13.24	50.04	2.84	2.11	23.05	17.18	47.47	35.40
	014	2.81	46.0	21.88	82.7	20.59	77.8	17.46	66.00	3.09	2.30	27.99	20.87	58.73	43.80
	015	3.08	50.5	23.99	90.7	22.83	86.3	19.39	73.32	3.21	2.40	30.30	22.60	63.56	47.40
	017	3.56	58.3	27.73	104.8	26.44	99.9	23.33	88.2	3.43	2.55	34.81	25.95	73.54	54.84
	020	3.89	63.8	30.34	114.7	29.05	109.8	25.93	98.04	3.58	2.66	37.86	28.23	80.14	59.76
	022 [7]	4.29	70.3	33.43	126.4	32.14	121.5	29.05	109.8	3.76	2.80	41.47	30.92	80.94	60.36
	025 [6, 8]	4.84	79.3	37.71	142.5	36.42	137.6	---	---	4.01	2.99	46.46	34.64	---	---
	028 [6, 9]	5.42	88.8	42.23	159.6	40.94	154.7	---	---	4.27	3.18	51.74	38.58	---	---
	031 [6, 9]	6.10	100.0	47.56	179.7	46.27	174.9	---	---	4.58	3.41	57.95	43.21	---	---

1) 085 = 90 bar (1300 psi) max.int. & 085 = 2000 rpm max. 2) B35-B38 = 280 bar (4060 psi) max.int. 3) B42 = 260 bar (3770 psi) max.int. 4) 045 = 240 bar (3500 psi) max. int.
5) 050 = 210 bar (3000 psi) max. int 6) 025-028-031 = 2500 R.P.M. max. 7) 022= 275 bar max. int, 8) 025 = 240 bar max. Int, 9) 028-031 = 210 bar (3000 psi) max. int.

-- Not to use because internal leakage greater than 50% of theoretical flow

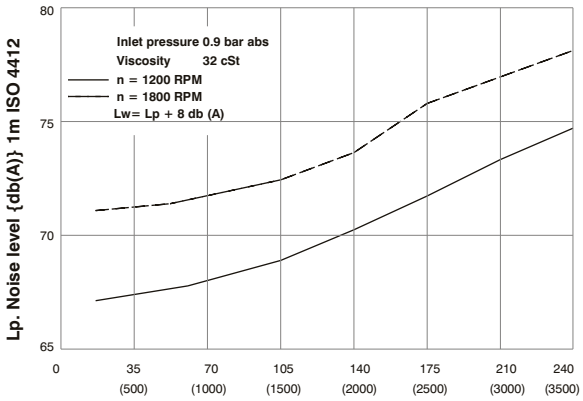
INTERNAL LEAKAGE (TYPICAL)



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)

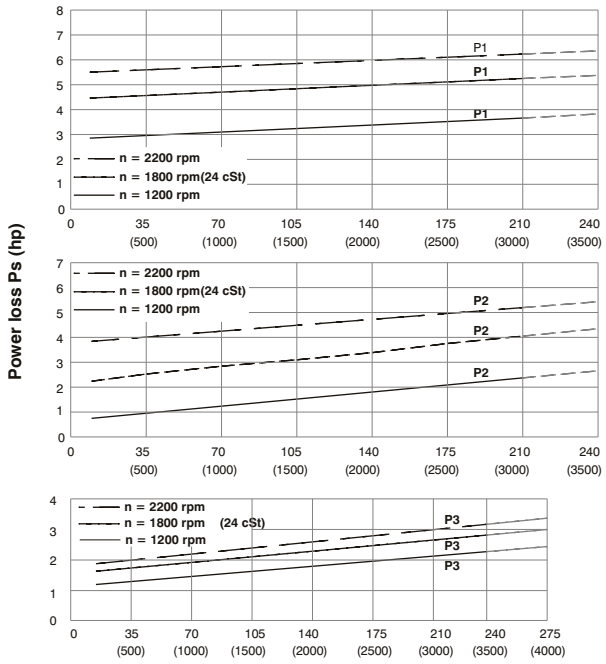
VT7QEDC- 062-B35-022



Triple pump noise level is given with each section discharging at the pressure noted on the curve.

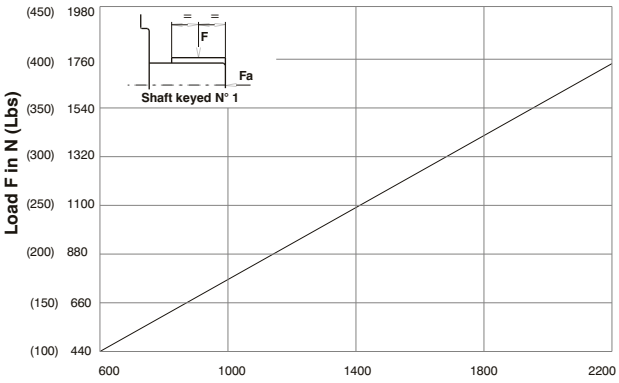
TP

HYDROMECHANICAL POWER LOSS (TYPICAL)

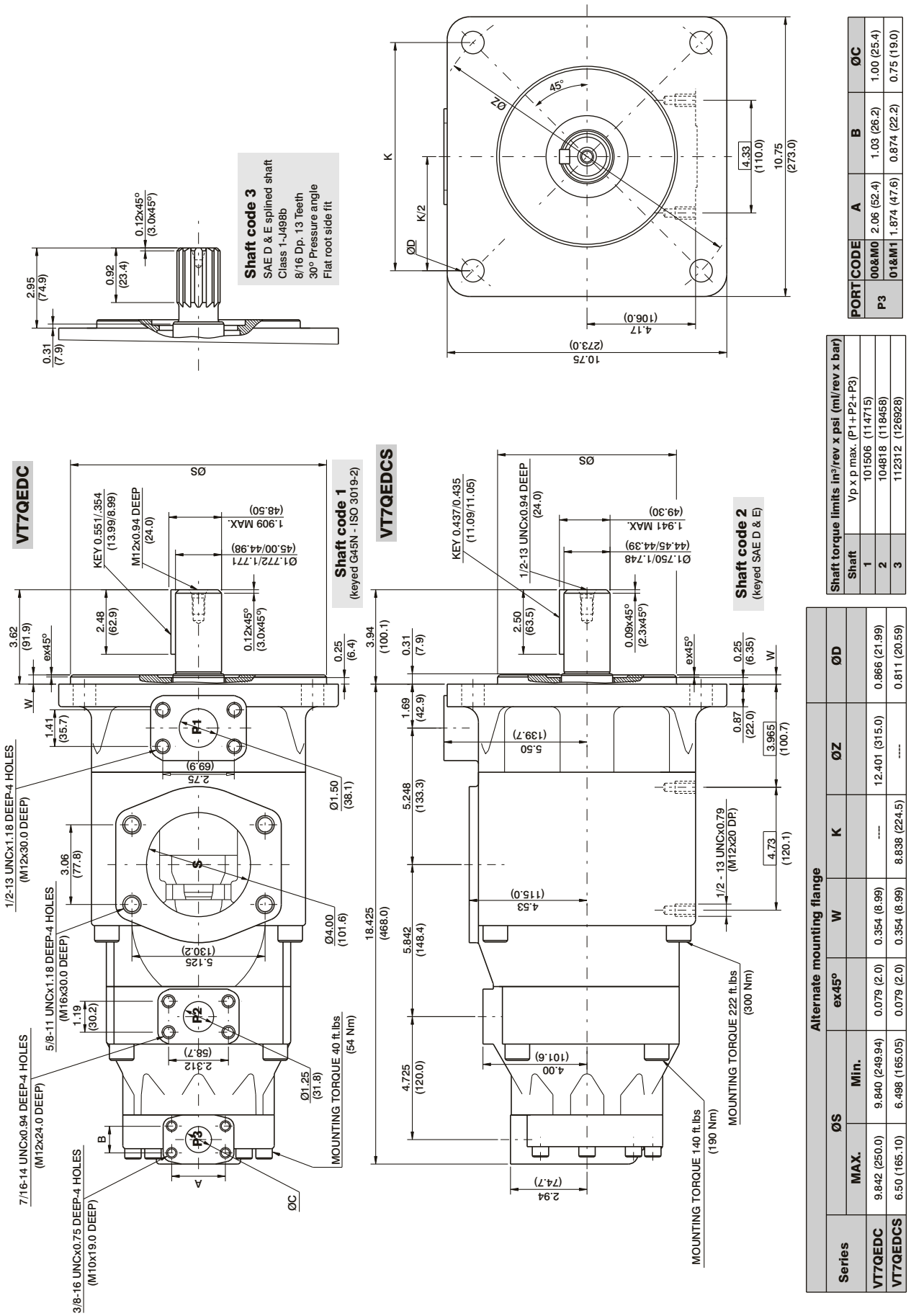


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load **Fa** = 2000 N (449 Lbs)



Series	ØS MAX.	ØS Min.	ex45°	W	K	ØZ	ØD
VT7QEDC	9.842 (250.0)	9.840 (249.94)	0.079 (2.0)	0.354 (8.99)	---	12.401 (315.0)	0.866 (21.99)
VT7QEDCS	6.50 (165.10)	6.498 (165.05)	0.079 (2.0)	0.354 (8.99)	8.838 (224.5)	----	0.811 (20.59)

Alternate mounting flange

Shaft	Vp x p max. (P1+P2+P3)
1	101506 (114715)
2	104818 (118458)
3	112312 (126928)

Shaft torque limits in³/rev x psi (ml/rev x bar)

PORT	CODE	A	B	ØC
P3	00&M0	2.06 (52.4)	1.03 (26.2)	1.00 (25.4)
	01&M1	1.874 (47.6)	0.874 (22.2)	0.75 (19.0)

VT67DBB - 038 - B10 - B10 - 1 R 00 - A 1 - M1 - *

Series- SAE C 2 bolts
Mounting flange J744c

Cam ring for "P1" (P1)

Volumetric displacement cm³/rev (in³/rev)

*014/B14 = 47.6 (2.90)
017/B17 = 58.2 (3.55)
020/B20 = 66.0 (4.03)
024/B24 = 79.5 (4.85)
028/B28 = 89.7 (5.47)
031/B31 = 98.3 (6.00)
035/B35 = 111.0 (6.77)
038/B38 = 120.3 (7.34)
042/B42 = 136.0 (8.30)
045/B45 = 145.7 (8.89)
050/B50 = 158.0 (9.64)
061/B61 = 190.5 (11.62)

*'0' - Uni - directional 'B' - Bi - directional

Cam ring for "P2" & P3 (P2, P3)

Volumetric displacement cm³/rev (in³/rev)

B02 = 5.7 (0.35)
B03 = 9.8 (0.60)
B04 = 12.8 (0.78)
B05 = 15.9 (0.97)
B06 = 19.8 (1.21)
B07 = 22.5 (1.37)
B08 = 24.9 (1.52)
B09 = 28.0 (1.71)
B10 = 31.8 (1.94)
B11 = 34.9 (2.13)
B12 = 40.9 (2.50)
B14 = 45.1 (2.75)
B15 = 50.0 (3.05)

Type of Shaft (1)

1 - Keyed (no SAE)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)

Direction of rotation (view on shaft end) (R)

R - Clockwise
L - Counter - clockwise

Porting combination (see page CI-1-4,5) (00)

00 = Standard

Design letter (A)

Seal class (1)

1 - S1 (for minreal oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Mounting w/connection variables (M1)

P1=1¼" P2=1" P3=¾" S=4"	
UNC	METRIC
01	M1

Modifications (*)

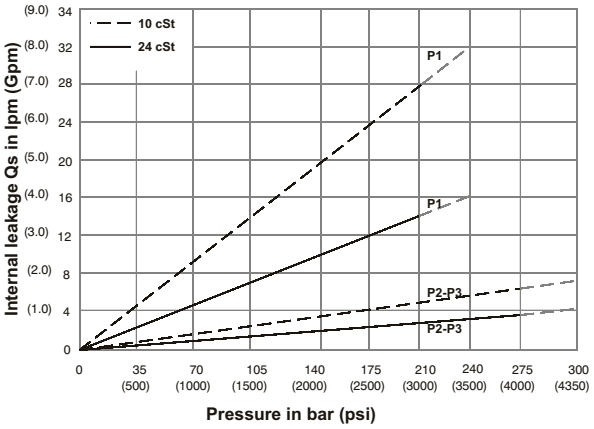
TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	014	2.90	47.6	22.64	85.0	20.46	77.4	18.8	71.1	4.02	2.99	29.31	21.85	49.34	36.79
	017	3.55	58.2	23.1	87.3	20.6	78.0	18.99	71.8	3.35	2.5	29.77	22.20	49.62	37.0
	020	4.03	66.0	31.39	11.8.6	29.29	101.4	27.57	104.2	4.53	3.38	39.52	29.47	67.21	50.11
	024	4.85	79.5	37.81	142.8	35.63	134.6	33.99	128.5	4.91	3.66	47.02	35.06	80.32	59.89
	028	5.47	89.7	42.66	161.3	40.48	153.0	38.84	146.8	5.19	3.87	52.68	39.28	90.23	67.28
	031	6.00	98.3	46.75	176.7	44.57	168.5	42.93	162.3	5.43	4.09	57.45	42.84	98.58	73.51
	035	6.77	111.0	52.79	199.6	50.61	191.3	48.97	184.1	5.78	4.31	64.50	48.09	110.91	82.70
	038	7.34	120.3	57.21	216.3	55.03	208.1	53.39	201.8	6.04	4.50	69.66	51.94	111.94	83.47
	042 [1)]	8.30	136.0	64.68	244.5	62.50	236.3	60.86	230.1	6.47	4.83	78.37	58.44	135.19	100.81
	045 [1)]	8.89	145.7	69.29	261.9	67.11	253.7	65.47	247.5	6.74	5.02	83.75	62.45	144.61	107.83
	050 [1, 2)]	9.64	158.0	75.14	284.1	72.96	275.8	71.78	271.3	7.08	5.27	90.58	67.54	134.54	100.32
	061 [1, 3)]	11.62	190.5	75.6	285.8	73.54	278.0	--	--	7.37	5.50	97.49	72.69	--	--
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)	
P2 & P3	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.80	6.8	0.74	0.55	4.02	2.99	8.10	6.40
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.70	14.0	0.85	0.63	6.24	4.65	12.93	10.25
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.13	19.4	0.94	0.70	7.90	5.89	16.55	13.13
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.60	25.0	1.02	0.76	9.62	7.17	20.29	16.12
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.46	32.0	1.13	0.84	11.79	8.79	25.00	19.88
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.74	36.8	1.20	0.89	13.29	9.91	28.26	22.47
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.88	41.1	1.27	0.94	14.62	10.90	31.15	24.78
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.35	47.0	1.36	1.01	16.35	12.19	34.92	27.77
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.16	53.5	1.46	1.11	18.45	13.75	39.48	31.42
	B11 [4)]	2.13	34.9	16.64	62.9	16.19	61.2	15.68	59.3	1.55	1.15	20.17	15.04	43.22	32.22
	B12 [4)]	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.56	50.58	37.71
	B14 [4)]	2.75	45.1	21.40	80.8	20.95	79.2	20.44	77.0	1.83	1.36	25.80	19.23	55.48	41.37
	B15 [4)]	3.05	50.0	23.78	89.8	23.35	88.3	22.88	86.5	1.97	1.47	28.55	21.28	57.35	42.76

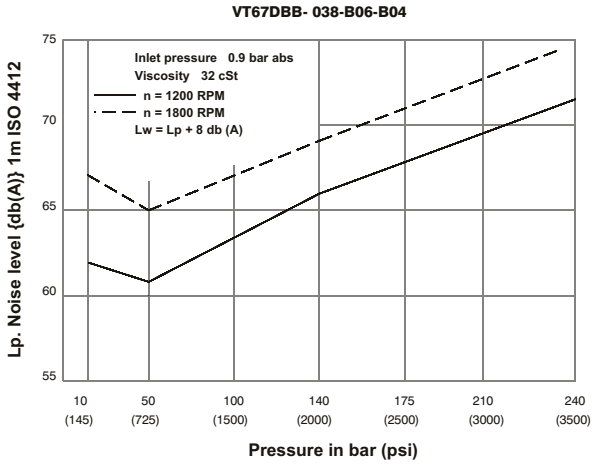
1) 042-045-050-061=2200 RPM max. 2) 050=210 bar (3000 psi) max. int, 3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont.
4) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm

INTERNAL LEAKAGE (TYPICAL)



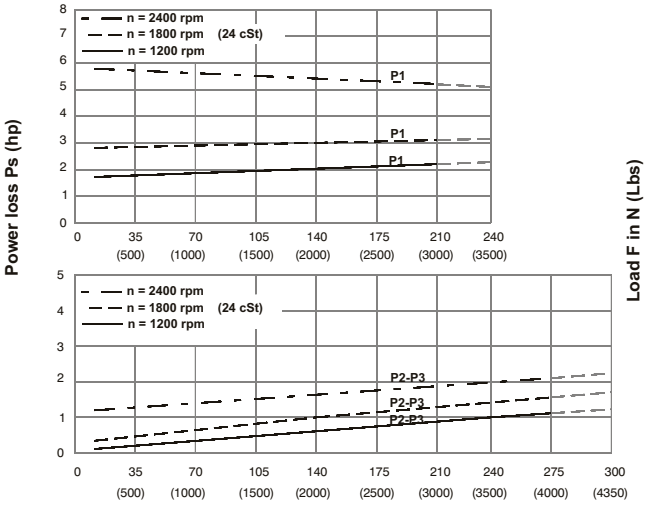
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)



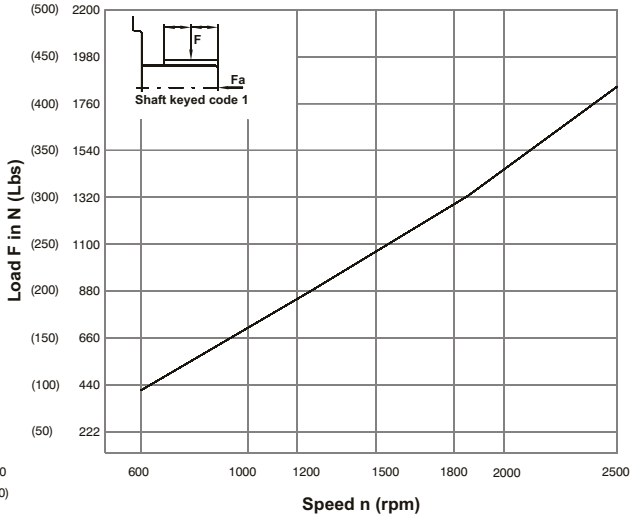
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



Total hydromechanical power loss is the sum of each section at its operating conditions.

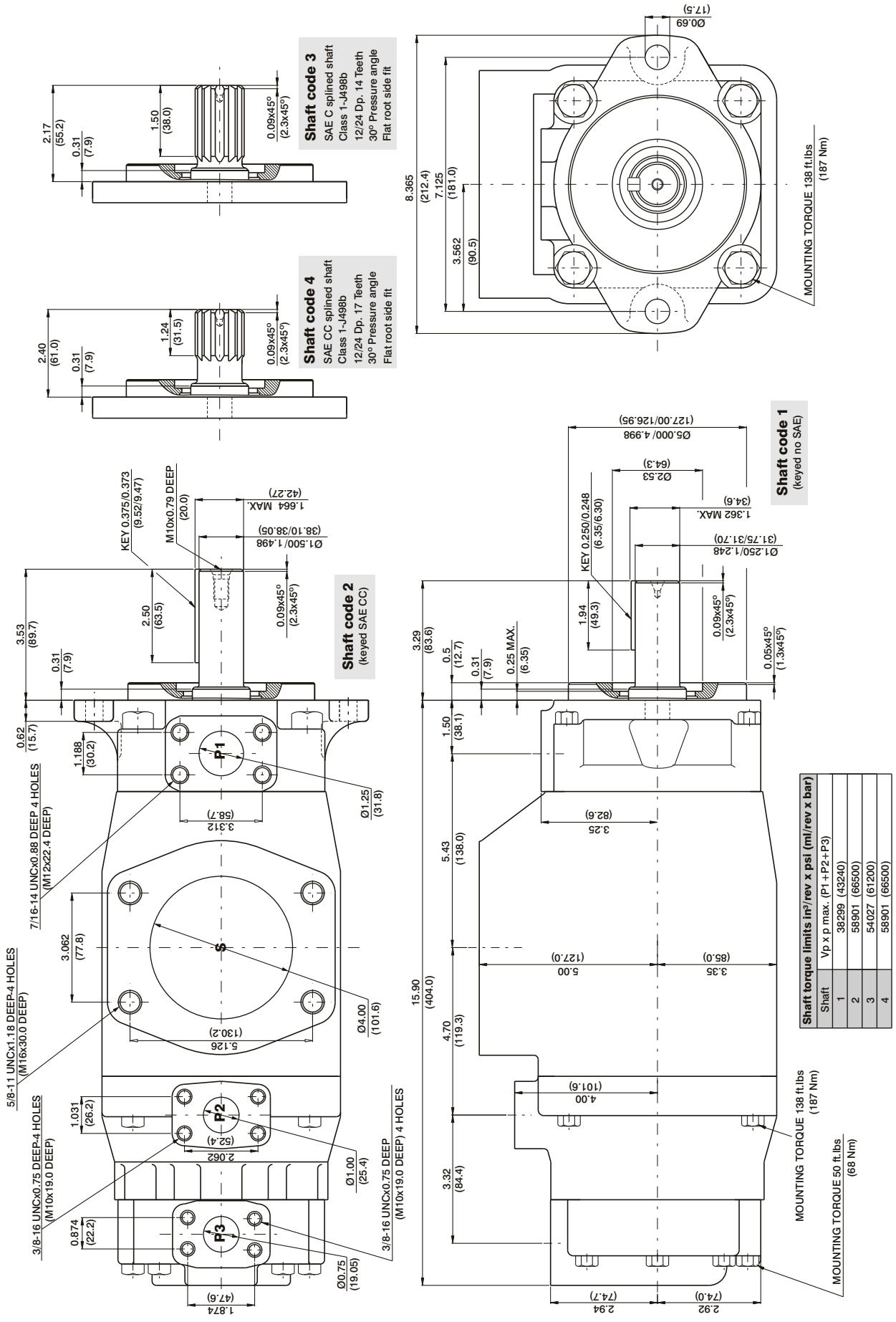
PERMISSIBLE RADIAL LOAD



Maximum axial load permissible **Fa**=800N (180 Lbs)

TP

TP



Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	58901 (66500)
3	54027 (61200)
4	58901 (66500)

VT67DCB - 038 - 028 - B10 - 1 R 00 - A 1 - M1 - *

Series- SAE C 2 bolts
Mounting flange J744c

Cam ring for "P1" (P1)
Volumetric displacement cm³/rev (in³/rev)

*014/B14 = 47.6 (2.90)	035/B35 = 111.0 (6.77)
017/B17 = 58.2 (3.55)	038/B38 = 120.3 (7.34)
020/B20 = 66.0 (4.03)	042/B42 = 136.0 (8.30)
024/B24 = 79.5 (4.85)	045/B45 = 145.7 (8.89)
028/B28 = 89.7 (5.47)	050/B50 = 158.0 (9.64)
031/B31 = 98.3 (6.00)	061/B61 = 190.5 (11.62)

***'0' - Uni - directional 'B' - Bi - directional**

Cam ring for "P2" (P2)
Volumetric displacement cm³/rev (in³/rev)

*003/B03 = 10.8 (0.66)	015/B15 = 50.5 (3.08)
005/B05 = 17.2 (1.05)	017/B17 = 58.3 (3.56)
006/B06 = 21.3 (1.30)	020/B20 = 63.8 (3.89)
008/B08 = 26.4 (1.61)	022/B22 = 70.3 (4.29)
010/B10 = 34.1 (2.08)	025/B25 = 79.3 (4.84)
012/B12 = 37.1 (2.26)	028/B28 = 88.8 (5.42)
014/B14 = 46.0 (2.81)	031/B31 = 100.0 (6.10)

***'0' - Uni - directional 'B' - Bi - directional**

Cam ring for "P3" (P3)
Volumetric displacement cm³/rev (in³/rev)

B02 = 5.7 (0.35)	B08 = 24.9 (1.52)	B12 = 40.9 (2.50)
B03 = 9.8 (0.60)	B07 = 22.5 (1.37)	B14 = 45.1 (2.75)
B04 = 12.8 (0.78)	B09 = 28.0 (1.71)	B15 = 50.0 (3.05)
B05 = 15.9 (0.97)	B10 = 31.8 (1.94)	
B06 = 19.8 (1.21)	B11 = 34.9 (2.13)	

Modifications

Mounting w/connection variables

P1=1¼" P2=1" P3=¾" S=4"	
UNC	METRIC
01	M1

Seal class
1 - S1 (for minreal oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4,5)
00 = Standard

Direction of rotation (view on shaft end)
R - Clockwise
L - Counter - clockwise

Type of Shaft
1 - Keyed (no SAE)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)

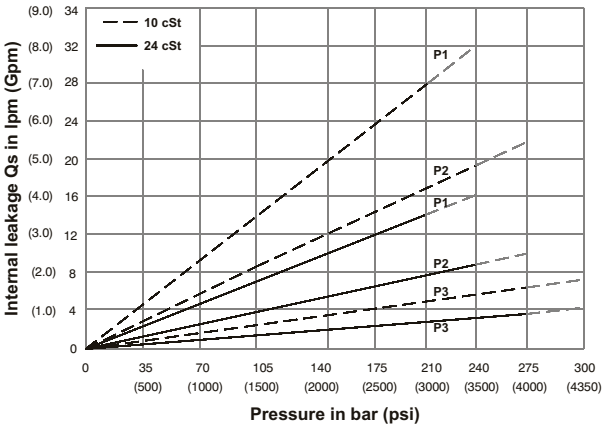
TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				P=0bar(0 psi)		P=140bar(2000psi)		P=240bar(3500 psi)		P=7bar(100psi)		P=140bar(2000psi)		P=240bar(3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	014	2.90	47.6	22.64	85.0	20.46	77.4	18.8	71.1	4.02	2.99	29.31	21.85	49.34	36.79
	017	3.55	58.2	23.1	87.3	20.6	78.0	18.99	71.8	3.35	2.50	29.77	22.2	49.62	37.0
	020	4.03	66.0	31.39	11.8.6	29.29	101.4	27.57	104.2	4.53	3.38	39.52	29.47	67.21	50.11
	024	4.85	79.5	37.81	142.8	35.63	134.6	33.99	128.5	4.91	3.66	47.02	35.06	80.32	59.89
	028	5.47	89.7	42.66	161.3	40.48	153.0	38.84	146.8	5.19	3.87	52.68	39.28	90.23	67.28
	031	6.00	98.3	46.75	176.7	44.57	168.5	42.93	162.3	5.43	4.09	57.45	42.84	98.58	73.51
	035	6.77	111.0	52.79	199.6	50.61	191.3	48.97	184.1	5.78	4.31	64.50	48.09	110.91	82.70
	038	7.34	120.3	57.21	216.3	55.03	208.1	53.39	201.8	6.04	4.50	69.66	51.94	111.94	83.47
	042 1)	8.30	136.0	64.68	244.5	62.50	236.3	60.86	230.1	6.47	4.83	78.37	58.44	135.19	100.81
	045 1)	8.89	145.7	69.29	261.9	67.11	253.7	65.47	247.5	6.74	5.02	83.75	62.45	144.61	107.83
	050 1, 2)	9.64	158.0	75.14	284.1	72.96	275.8	71.78	271.3	7.08	5.27	90.58	67.54	134.54	100.32
	061 1, 3)	11.62	190.5	75.6	285.8	73.54	278.0	--	--	7.37	5.50	97.49	72.69	--	--
				P=0bar(0 psi)		P=140bar(2000psi)		P=275bar(4000 psi)		P=7bar(100psi)		P=140bar(2000psi)		P=275bar(4000 psi)	
P2	003	0.66	10.8	5.14	19.6	3.85	14.6	--	--	2.11	1.57	8.45	6.30	--	--
	005	1.05	17.2	8.18	30.9	6.89	26.0	5.68	21.5	2.29	1.70	12.00	8.94	19.81	14.77
	006	1.30	21.3	10.13	38.3	8.84	33.4	7.63	28.8	2.40	1.78	14.28	10.64	23.79	17.74
	008	1.61	26.4	12.55	47.4	11.26	42.6	10.05	37.9	2.54	1.89	17.11	12.75	28.75	21.43
	010	2.08	34.1	16.22	61.3	14.93	56.4	13.71	51.8	2.76	2.06	21.38	15.94	36.22	27.00
	012	2.26	37.1	17.64	66.7	16.35	61.8	15.14	57.2	2.84	2.11	23.05	17.18	39.14	29.18
	014	2.81	46.0	21.88	82.7	20.59	77.8	19.37	73.2	3.09	2.30	27.99	20.87	47.78	35.62
	015	3.08	50.5	23.99	90.7	22.83	86.3	21.56	81.5	3.21	2.40	30.30	22.60	51.36	38.30
	017	3.56	58.3	27.73	104.8	26.44	99.9	25.22	95.3	3.43	2.55	34.81	25.95	59.73	44.54
	020	3.89	63.8	30.34	114.7	29.05	109.8	27.84	105.2	3.58	2.66	37.86	28.23	65.07	48.52
	022 5)	4.29	70.3	33.43	126.4	32.14	121.5	30.93	116.9	3.76	2.80	41.47	30.92	71.38	53.22
	025 4, 6)	4.84	79.3	37.71	142.5	36.42	137.6	35.21	133.1	4.01	2.99	46.46	34.64	80.12	59.74
	028 4, 7)	5.42	88.8	42.23	159.6	40.94	154.7	40.32	152.4	4.27	3.18	51.74	38.58	76.73	57.22
	031 4, 7)	6.10	100.0	47.56	179.7	46.27	174.9	45.65	172.5	4.58	3.41	57.95	43.21	86.06	64.17
				P=0bar(0 psi)		P=140bar(2000psi)		P=300bar(4350 psi)		P=7bar(100psi)		P=140bar(2000psi)		P=300bar(4350 psi)	
P3	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.80	6.8	0.74	0.55	4.02	2.99	8.10	6.40
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.70	14.0	0.85	0.63	6.24	4.65	12.93	10.25
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.13	19.4	0.94	0.70	7.90	5.89	16.55	13.13
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.60	25.0	1.02	0.76	9.62	7.17	20.29	16.12
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.46	32.0	1.13	0.84	11.79	8.79	25.00	19.88
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.74	36.8	1.20	0.89	13.29	9.91	28.26	22.47
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.88	41.1	1.27	0.94	14.62	10.90	31.15	24.78
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.35	47.0	1.36	1.01	16.35	12.19	34.92	27.77
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.16	53.5	1.46	1.11	18.45	13.75	39.48	31.42
	B11 8)	2.13	34.9	16.64	62.9	16.19	61.2	15.68	59.3	1.55	1.15	20.17	15.04	43.22	32.22
	B12 8)	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.56	50.58	37.71
	B14 8)	2.75	45.1	21.40	80.8	20.95	79.2	20.44	77.0	1.83	1.36	25.80	19.23	55.48	41.37
	B15 8)	3.05	50.0	23.78	89.8	23.35	88.3	22.88	86.5	1.97	1.47	28.55	21.28	57.35	42.76

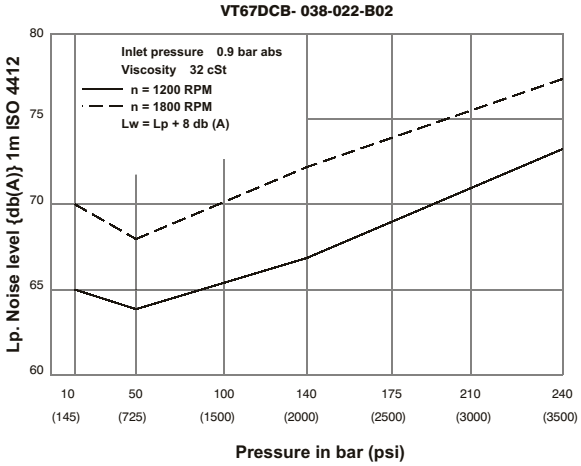
1) 042-045-050-061=2200 RPM max. 2) 050=210 bar (3000 psi) max. int, 3) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont. 4) 025-028-031 = 2500 R.P.M. max.
5) 022= 275 bar max. int, 6) 025 = 240 bar max. Int, 7) 028-031 = 210 bar (3000 psi) max. int.
8) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm

INTERNAL LEAKAGE (TYPICAL)



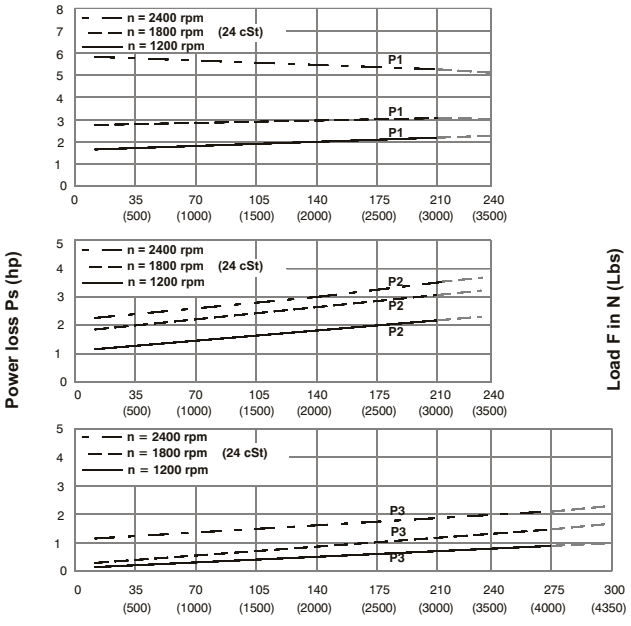
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)



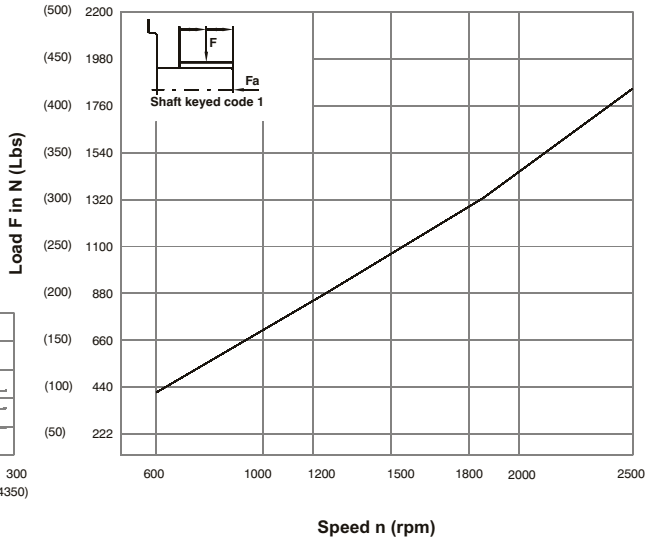
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



Total hydromechanical power loss is the sum of each section at its operating conditions.

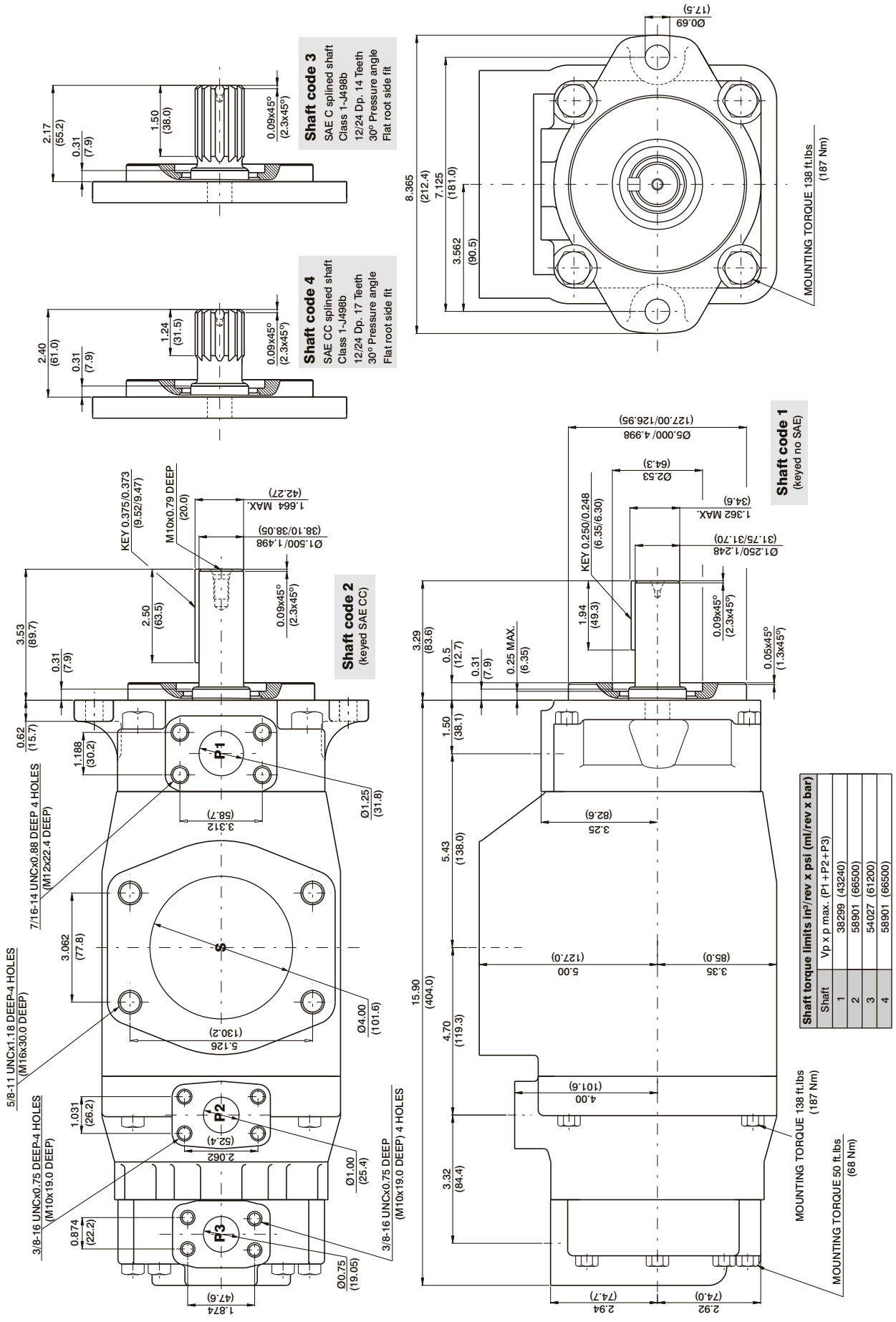
PERMISSIBLE RADIAL LOAD



Maximum axial load permissible Fa=800N (180 Lbs)

TP

TP



Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	58901 (66500)
3	54027 (61200)
4	58901 (66500)

VT67DCC - B35 - 025 - 008 - 1 R 00 - A 1 - M1 - *

Series - SAE C 2 bolts Mounting flange J744c

P1 **P2** **P3**

Cam ring for "P1"

Volumetric displacement cm^3 /rev (in^3 /rev)

B14 = 43.9 (2.68) B31 = 99.1 (6.05)
B17 = 55.0(3.36) B35 = 113.4 (6.92)
B20 = 66.0 (4.03) B38 = 120.6 (7.36)
B22 = 70.3 (4.29) B42 = 137.5 (8.39)
B24 = 81.1 (4.95) 045 = 145.7 (8.89)
B28 = 89.9 (5.49) 050 = 158.0 (9.64)

Cam ring for "P2" & "P3"

Volumetric displacement cm^3 /rev (in^3 /rev)

003 = 10.8(0.66) 015 = 50.5 (3.08)
005 = 17.2(1.05) 017 = 58.3 (3.56)
006 = 21.3 (1.30) 020 = 63.7 (3.89)
008 = 26.4 (1.61) 022 = 70.3 (4.29)
010 = 34.1 (2.08) 025 = 79.3 (4.84)
012 = 37.1 (2.26) 028 = 88.8 (5.42)
014 = 46.0 (2.81) 031 = 100 (6.10)

Type of Shaft

1 - Keyed (no SAE)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)

Modifications

Mounting w/connection variables

4 bolts SAE flange J518

P1=1 1/4" - P2=1" -S=4"		
	UNC	METRIC
P3 =1"	00	M0
P3 =3/4"	01	M1

Seal class

1 = S1 (for minreal oil)
4 = S4(for fire resistant fluids)
5 = S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination **(see page CI-1-4,5)**

00 = Standard

Direction of rotation (view on shaft end)

R - Clockwise
L - Counter - clockwise

TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

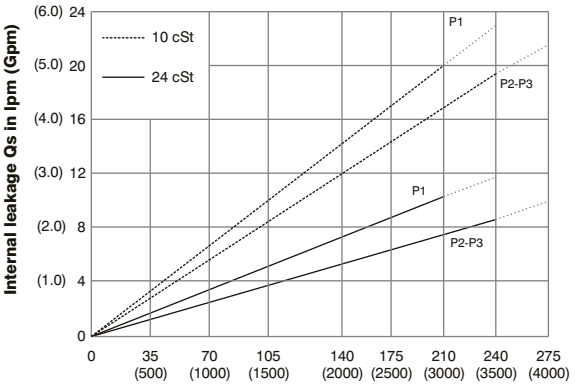
Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)	
		in^3 /rev	cm^3 /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	B14	2.68	43.93	20.92	79.50	19.18	72.9	17.81	67.7	3.46	2.6	27.77	20.7	47.03	35.1
	B17	3.36	55.07	26.16	99.4	24.41	92.8	23.04	87.6	3.77	2.8	33.88	25.3	57.71	43.1
	B20	4.03	66.05	31.39	119.3	29.64	112.6	28.27	107.4	4.07	3.0	39.98	29.8	68.39	51.0
	B22	4.29	70.31	33.43	127	31.69	120.4	30.32	115.2	4.19	3.1	42.37	31.6	72.57	54.1
	B24	4.95	81.13	38.57	146.6	36.82	139.9	35.45	134.7	4.49	3.3	48.36	36.1	83.06	62
	B28	5.49	89.98	42.8	162.6	41.06	156	39.69	150.8	4.74	3.5	53.30	39.8	91.7	68.4
	B31	6.05	99.16	47.18	179.3	45.43	172.6	42.06	167.4	4.99	3.7	58.41	43.6	100.63	75.1
	B35	6.92	113.42	53.93	204.9	52.18	198.3	50.81	193.1	5.39	4.0	66.29	49.5	114.42	85.4
	B38	7.36	120.63	57.35	217.9	55.61	211.3	54.24	206.1	5.59	4.2	70.28	52.4	121.42	90.6
	B42 [1)]	8.39	137.51	65.39	248.5	63.65	241.9	62.28	236.7	6.05	4.5	79.66	59.4	137.83	102.8
	045 [1)]	8.89	145.71	69.29	263.3	67.11	255.0	65.31	248.2	6.74	5.0	83.75	62.5	145.79	108.8
	050 [1, 2)]	9.64	158.00	75.14	285.5	72.96	277.2	71.78	272.8	7.08	5.3	90.58	67.6	134.5	100.3
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 275 bar (4000 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 275 bar (4000 psi)	
P2 & P3	003	0.66	10.82	5.14	19.53	3.85	14.63	--	--	2.11	1.6	8.45	6.3	--	--
	005	1.05	17.21	8.18	31.08	6.89	26.18	5.68	21.6	2.29	1.7	12.0	9.0	19.81	14.8
	006	1.30	21.31	10.13	38.49	8.84	33.59	7.63	29.0	2.4	1.8	14.28	10.7	23.79	17.7
	008	1.61	26.39	12.55	47.69	11.26	42.79	10.05	38.2	2.54	1.9	17.11	12.8	28.75	21.4
	010	2.08	34.09	16.22	61.64	14.93	56.73	13.71	52.1	2.76	2.1	21.38	15.9	36.22	27.0
	012	2.26	37.04	17.64	67.03	16.35	62.13	15.14	57.5	2.84	2.1	23.05	17.2	39.14	29.2
	014	2.81	46.06	21.88	83.14	20.59	78.24	19.37	73.6	3.09	2.3	27.99	20.9	47.78	35.6
	015	3.08	50.5	23.99	90.7	22.83	86.3	21.56	81.5	3.21	2.40	30.30	22.60	51.36	38.30
	017	3.56	58.35	27.73	105.37	26.44	100.47	25.22	95.8	3.43	2.6	34.81	26.0	59.73	44.6
	020	3.89	63.76	30.34	115.29	29.05	110.39	27.84	105.8	3.58	2.7	37.86	28.2	65.07	48.5
	022 [4)]	4.29	70.31	33.43	127.03	32.14	122.13	30.93	117.5	3.76	2.8	41.47	30.9	71.38	53.2
	025 [3, 5)]	4.84	79.33	37.71	143.3	36.42	138.40	35.21	133.8	4.01	3.0	46.46	34.7	80.12	59.8
	028 [3, 6)]	5.42	88.83	42.23	160.47	40.94	155.60	40.32	153.2	4.27	3.2	51.74	38.6	76.73	57.2
	031 [3, 6)]	6.10	99.98	47.56	180.73	46.27	175.83	45.65	173.5	4.58	3.4	57.95	43.2	86.06	64.2

-- We do not recommend to use this 003 at 275 bar (4000 psi) and 1500 rpm since internal leakage is over 50 of theoritical flow.

1) 042-045-050 = 2200 RPM max. 2) 050=210 bar (3000 psi) max. int,
3) 025-028-031 = 2500 R.P.M. max. 4) 022= 275 bar max. int, 5) 025 = 240 bar max. int, 6) 028-031 = 210 bar (3000 psi) max. int.

TP

INTERNAL LEAKAGE (TYPICAL)

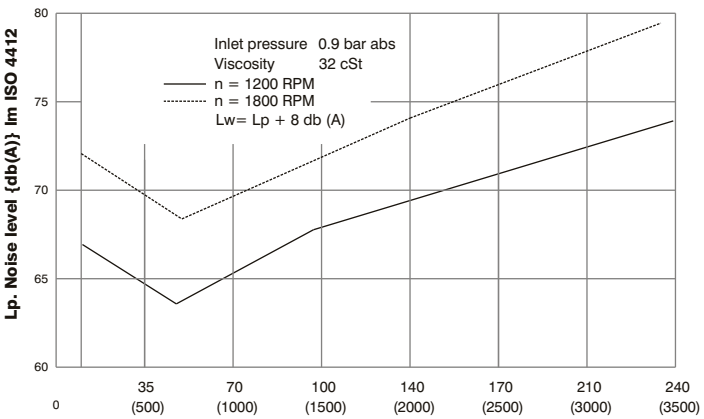


Pressure in bar (psi)

Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)

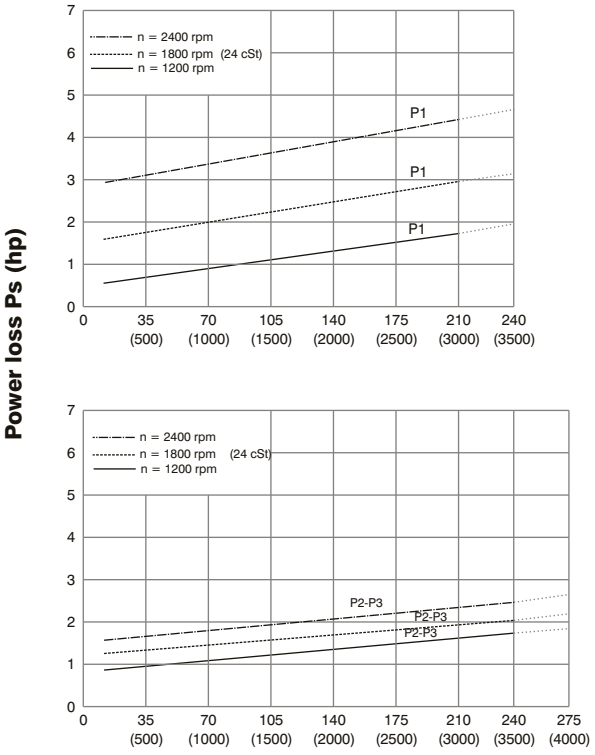
VT67DCC- B31-022-022



Pressure in bar (psi)

Triple pump noise level is given with each section discharging at the pressure noted on the curve.

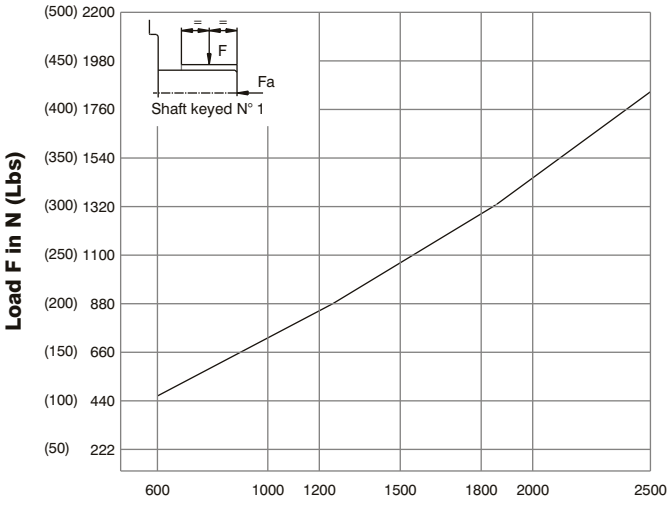
HYDROMECHANICAL POWER LOSS (TYPICAL)



Pressure in bar (psi)

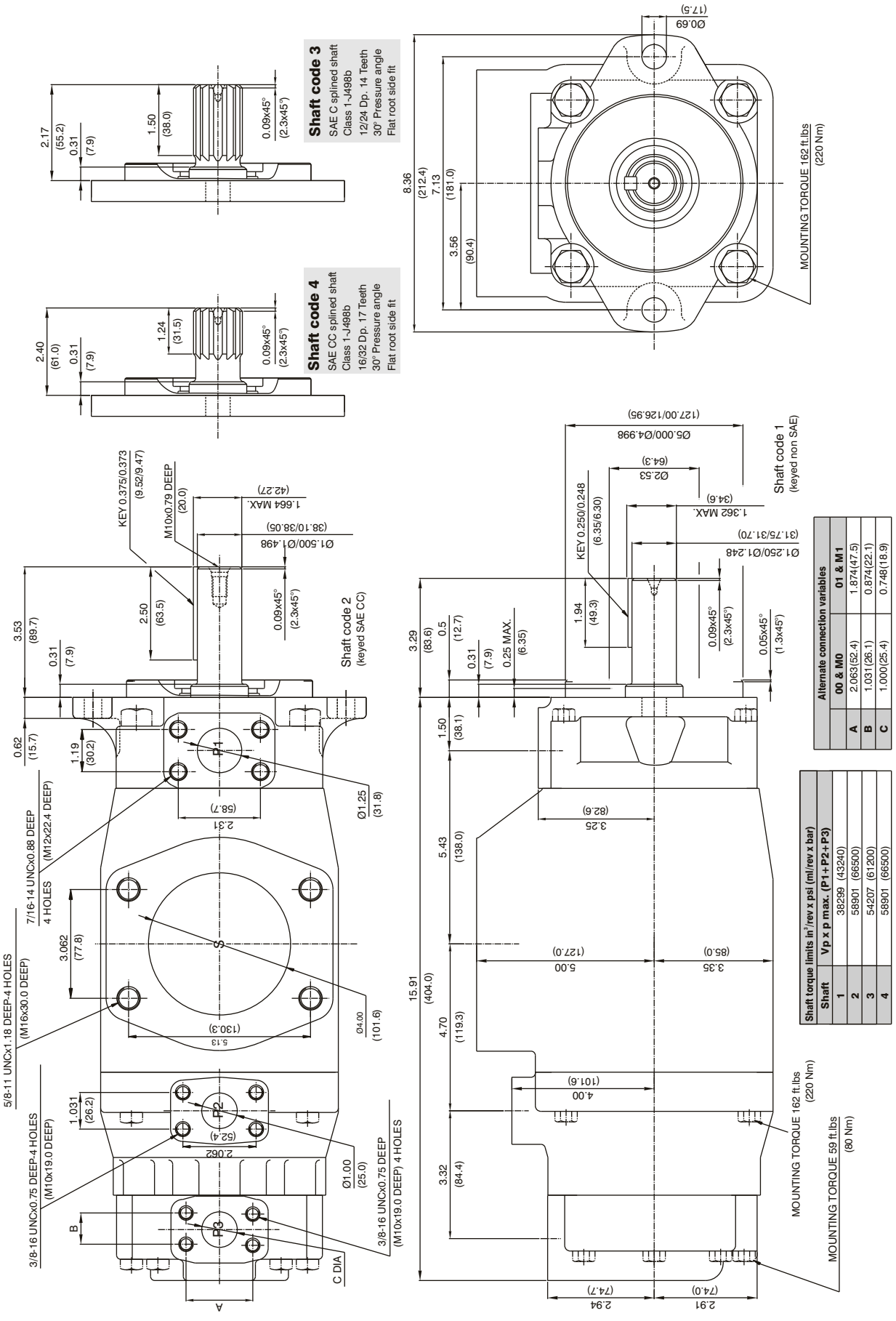
Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Speed n (rpm)

Maximum axial load permissible Fa=800N (180 Lbs)



Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	58901 (66500)
3	54207 (61200)
4	58901 (66500)

Alternate connection variables		
	00 & M0	01 & M1
A	2.063(52.4)	1.874(47.5)
B	1.031(26.1)	0.874(22.1)
C	1.000(25.4)	0.748(18.9)

TP

VT67DDCS - 045 - B31 - 012 - 1 R 00 - A 1 - M0 *

Series -SAE C 6 bolts
Mounting flange J744

Cam ring for "P1" & "P2"
Volumetric displacement cm^3 /rev (in^3 /rev)

B14 = 43.9 (2.68)	B31 = 99.1 (6.05)
B17 = 55.0 (3.36)	B35 = 113.4 (6.92)
B20 = 66.0 (4.03)	B38 = 120.6 (7.36)
B22 = 70.3 (4.29)	B42 = 137.5 (8.39)
B24 = 81.1 (4.95)	045 = 145.7 (8.89)
B28 = 89.9 (5.49)	050 = 157.9 (9.64)

Cam ring for "P3"
Volumetric displacement cm^3 /rev (in^3 /rev)

003 = 10.8 (0.66)	017 = 58.3 (3.56)
005 = 17.2 (1.05)	020 = 63.8 (3.89)
006 = 21.3 (1.30)	022 = 70.3 (4.29)
008 = 26.4 (1.61)	025 = 79.3 (4.84)
010 = 34.1 (2.08)	028 = 88.8 (5.42)
012 = 37.1 (2.26)	031 = 100.0 (6.10)
014 = 46.0 (2.81)	

Type of Shaft
1 - Keyed (SAE C)
2 - Keyed (SAE CC)
3 - Splined (SAE C)
4 - Splined (SAE CC)
5 - Keyed (non SAE)

P1 P2 P3

Modifications

Mounting w/connection variables
4 bolts SAE flange J518

	P1 & P2= 1-1/4" S = 4"			
Type	UNC		METRIC	
P3	1"	3/4"	1"	3/4"
Code	00	01	M0	M1

Seal class
1 = S1 (for minreal oil)
4 = S4(for fire resistant fluids)
5 = S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4,5)
00 = Standard

Direction of rotation (view on shaft end)
R - Clockwise
L - Counter - clockwise

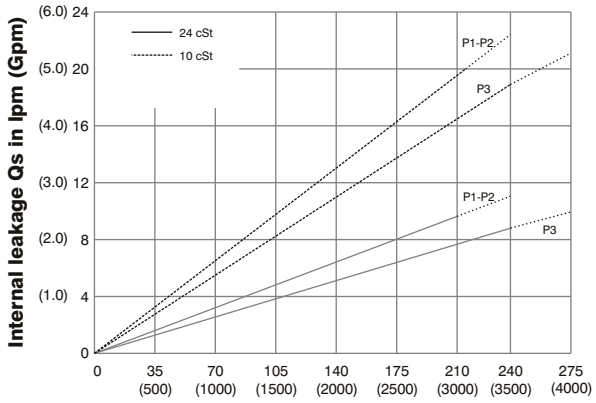
TP

OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)	
		in^3/rev	cm^3 /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1 & P2	B14	2.68	43.9	20.92	79.50	19.18	72.9	17.81	67.7	3.46	2.6	27.77	20.7	47.03	35.1
	B17	3.36	55.0	26.16	99.4	24.41	92.8	23.04	87.6	3.77	2.8	33.88	25.3	57.71	43.1
	B20	4.03	66.0	31.39	119.3	29.64	112.6	28.27	107.4	4.07	3.0	39.98	29.8	68.39	51.0
	B22	4.29	70.3	33.43	127	31.69	120.4	30.32	115.2	4.19	3.1	42.37	31.6	72.57	54.1
	B24	4.95	81.1	38.57	146.6	36.82	139.9	35.45	134.7	4.49	3.3	48.36	36.1	83.06	62
	B28	5.49	89.9	42.8	162.6	41.06	156	39.69	150.8	4.74	3.5	53.30	39.8	91.7	68.4
	B31	6.05	99.1	47.18	179.3	45.43	172.6	42.06	167.4	4.99	3.7	58.41	43.6	100.63	75.1
	B35	6.92	113.4	53.93	204.9	52.18	198.3	50.81	193.1	5.39	4.0	66.29	49.5	114.42	85.4
	B38	7.36	120.6	57.35	217.9	55.61	211.3	54.24	206.1	5.59	4.2	70.28	52.4	121.42	90.6
	B42 [1]	8.39	137.5	65.39	248.5	63.65	241.9	62.28	236.7	6.05	4.5	79.66	59.4	137.83	102.8
	045 [1]	8.89	145.7	69.29	263.3	67.11	255.0	65.31	248.2	6.74	5.0	83.75	62.5	145.79	108.8
	050 [1, 2]	9.64	157.9	75.14	285.5	72.96	277.2	71.78	272.8	7.08	5.3	90.58	67.6	134.5	100.3
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 275 bar (4000 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 275 bar (4000 psi)	
P3	003	0.66	10.8	5.14	19.53	3.85	14.63	--	--	2.11	1.6	8.45	6.3	--	--
	005	1.05	17.2	8.18	31.08	6.89	26.18	5.68	21.6	2.29	1.7	12.0	9.0	19.81	14.8
	006	1.30	21.3	10.13	38.49	8.84	33.59	7.63	29.0	2.4	1.8	14.28	10.7	23.79	17.7
	008	1.61	26.4	12.55	47.69	11.26	42.79	10.05	38.2	2.54	1.9	17.11	12.8	28.75	21.4
	010	2.08	34.1	16.22	61.64	14.93	56.73	13.71	52.1	2.76	2.1	21.38	15.9	36.22	27.0
	012	2.26	37.1	17.64	67.03	16.35	62.13	15.14	57.5	2.84	2.1	23.05	17.2	39.14	29.2
	014	2.81	46.0	21.88	83.14	20.59	78.24	19.37	73.6	3.09	2.3	27.99	20.9	47.78	35.6
	017	3.56	58.3	27.73	105.37	26.44	100.47	25.22	95.8	3.43	2.6	34.81	26.0	59.73	44.6
	020	3.89	63.8	30.34	115.29	29.05	110.39	27.84	105.8	3.58	2.7	37.86	28.2	65.07	48.5
	022 [4]	4.29	70.3	33.43	127.03	32.14	122.13	30.93	117.5	3.76	2.8	41.47	30.9	71.38	53.2
	025 [3, 5]	4.84	79.3	37.71	143.3	36.42	138.40	35.21	133.8	4.01	3.0	46.46	34.7	80.12	59.8
	028 [3, 6]	5.42	88.8	42.23	160.47	40.94	155.60	40.32	153.2	4.27	3.2	51.74	38.6	76.73	57.2
	031 [3, 6]	6.10	100.0	47.56	180.73	46.27	175.83	45.65	173.5	4.58	3.4	57.95	43.2	86.06	64.2

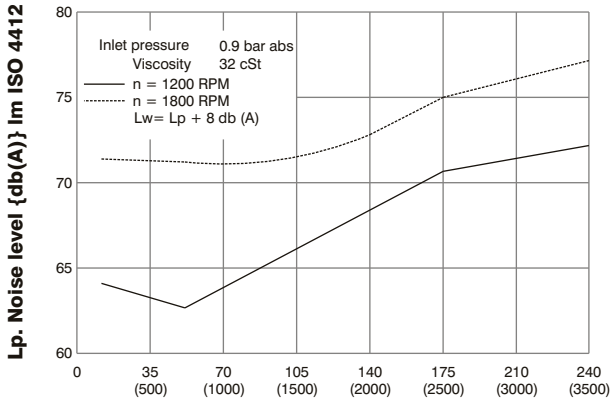
-- We do not recommend to use this 003 at 275 bar (4000 psi) and 1500 rpm since internal leakage is over 50 of theoritical flow.
1) 042-045-050 = 2200 RPM max. 2) 050=210 bar (3000 psi) max. int, 3) 025-028-031 = 2500 R.P.M. max. 4) 022= 275 bar max. int,
5) 025 = 240 bar max. int, 6) 028-031 = 210 bar (3000 psi) max. int.

INTERNAL LEAKAGE (TYPICAL)



Do not operate pump for more than 5 seconds at any speed or viscosity if internal leakage is more than 50 of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

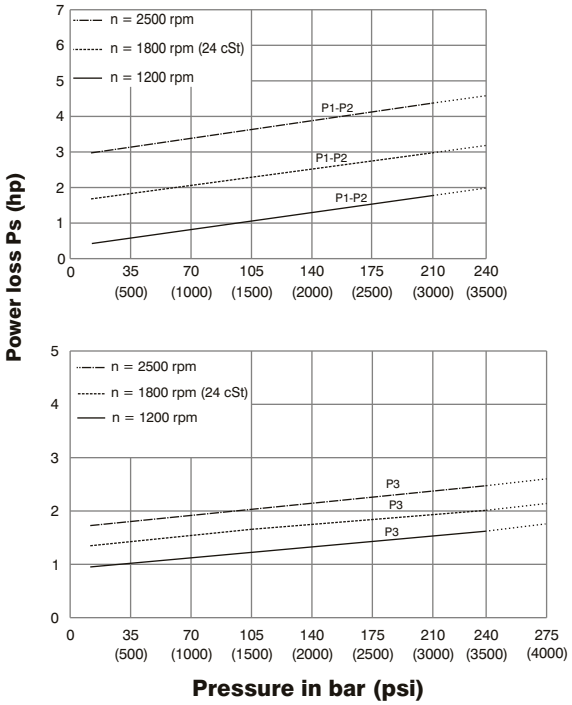
NOISE LEVEL (TYPICAL)
VT67DDCS- B31-B31-022



Triple pump noise level is given with each section discharging at the pressure noted on the curve.

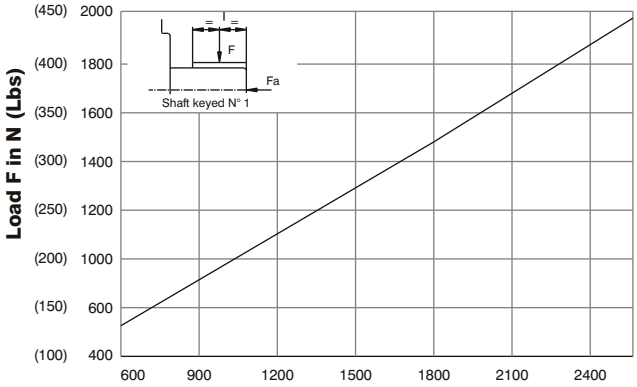
TP

HYDROMECHANICAL POWER LOSS (TYPICAL)

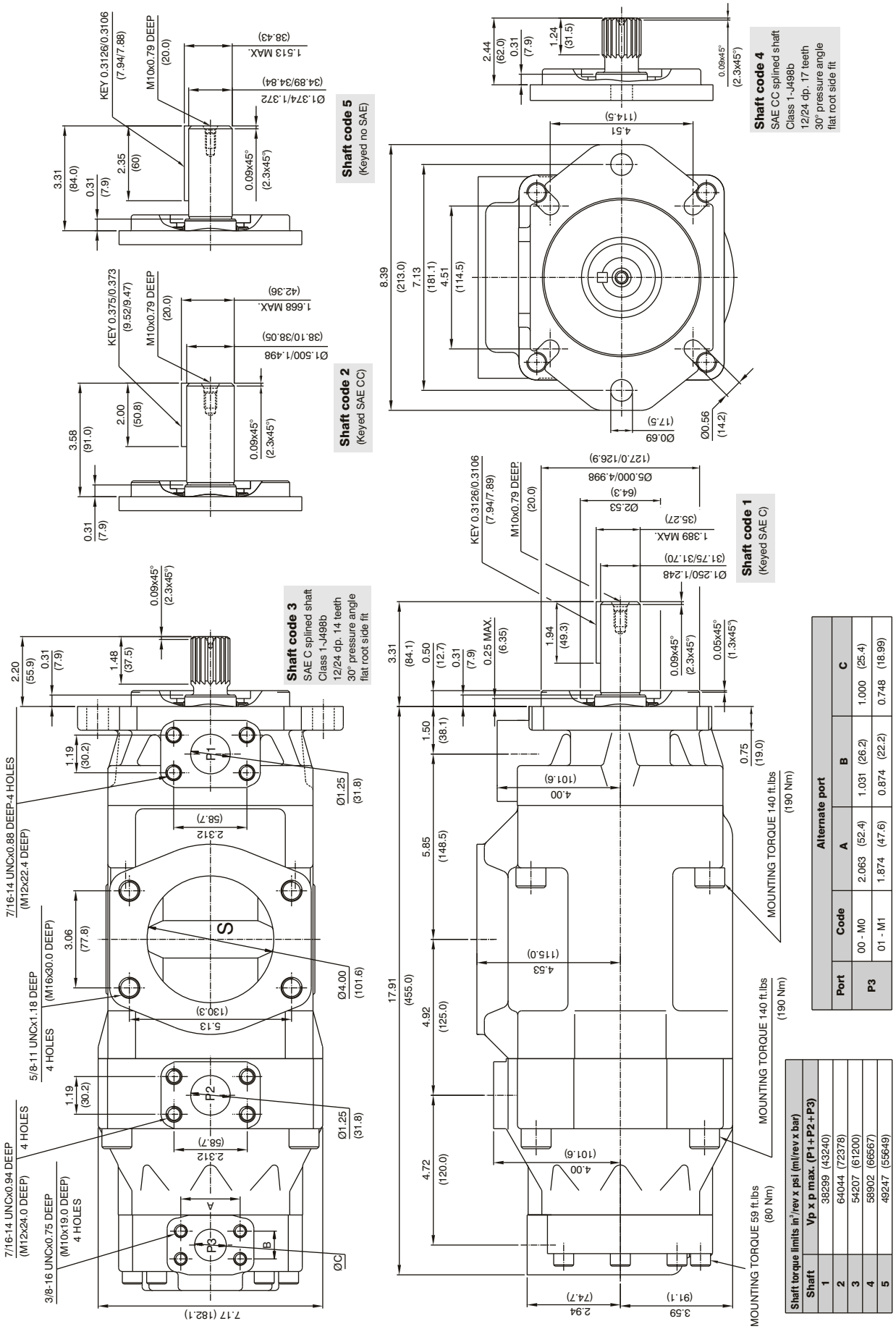


Total hydromechanical power loss is the sum of each section at its operating conditions.

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa = 1200 N (270 Lbs)



Port	Code	Alternate port A	B	C
P3	00 - M0	2.063 (52.4)	1.031 (26.2)	1.000 (25.4)
	01 - M1	1.874 (47.6)	0.874 (22.2)	0.748 (18.99)

Shaft	Shaft torque limits in³/rev x psi (ml/rev x bar) Vp x p max. (P1+P2+P3)
1	38299 (43240)
2	64044 (72378)
3	54207 (61200)
4	58902 (66567)
5	49247 (55649)

VT67EDB - 062 - 035 - B10 - 1 R 00 - A 1 - P - 1 - *

Series - ISO 3019-2
Mounting flange 250 B4HW

Cam ring for "P1" (062)
Volumetric displacement cm³/rev (in³/rev)

042 = 132.3 (8.07)
045 = 142.4 (8.69)
050 = 158.5 (9.67)
052 = 164.8 (10.06)
057 = 180.7 (11.02)
062 = 196.7 (12.00)
066 = 213.3 (13.02)
072 = 227.1 (13.86)
085 = 269.8 (16.46)

Cam ring for "P2" (035)
Volumetric displacement cm³/rev (in³/rev)

*014/B14 = 47.6 (2.90)
017/B17 = 58.2 (3.55)
020/B20 = 66.0 (4.03)
024/B24 = 79.5 (4.85)
028/B28 = 89.7 (5.47)
031/B31 = 98.3 (6.00)
035/B35 = 111.0 (6.77)
038/B38 = 120.3 (7.34)
042/B42 = 136.0 (8.30)
045/B45 = 145.7 (8.89)
050/B50 = 158.0 (9.64)
061/B61 = 190.5 (11.62)

***'0' - Uni - directional 'B' - Bi - directional**

Cam ring for "P3" (B10)
Volumetric displacement cm³/rev (in³/rev)

B02 = 5.7 (0.35)
B03 = 9.8 (0.60)
B04 = 12.8 (0.78)
B05 = 15.9 (0.97)
B06 = 19.8 (1.21)
B07 = 22.5 (1.37)
B08 = 24.9 (1.52)
B09 = 28.0 (1.71)
B10 = 31.8 (1.94)
B11 = 34.9 (2.13)
B12 = 40.9 (2.50)
B14 = 45.1 (2.75)
B15 = 50.0 (3.05)

Type of Shaft (1)
1 - Keyed (G45N-ISO 3019-2)

Direction of rotation (view on the shaft) (R)
R - Clockwise
L - Counter - clockwise

Porting combination (see page CI-1-4,5) (00)
00 = Standard

Design letter (A)

Seal class (1)
1 - S1 (for minreal oil)
4 - S4(for fire resistant fluids)
5 - S5(for mineral oil and fire resistant fluids)

Mounting (pump) (P)
P= Pedestal mounting
F= Face mounting

Mounting w/connection variables (1)
4 bolts SAE flange
(J518c) Metric thread
1 = P3 = 3/4" SAE

Modifications (*)

TP

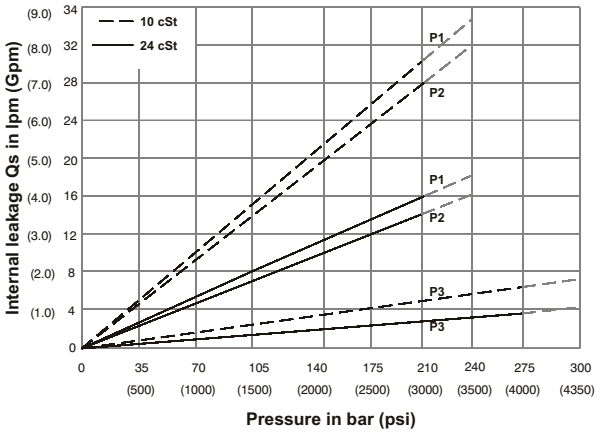
OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in³/rev	cm³/rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	042	8.07	132.3	62.92	237.8	60.37	228.2	58.52	221.2	8.09	6.03	78.44	58.49	133.80	99.78
	045	8.69	142.4	67.72	256.0	65.17	246.3	63.32	239.4	8.37	6.24	84.04	62.67	143.60	107.08
	050	9.67	158.5	75.38	285.0	72.83	275.3	70.98	268.3	8.82	6.58	92.97	69.30	159.24	118.7
	052	10.06	164.8	78.37	296.2	75.82	286.3	73.97	279.6	8.99	6.70	96.47	71.94	165.36	121.31
	057	11.02	180.7	71.70	325.3	69.07	261.1	80.63	304.8	9.40	7.00	114.30	85.14	172.10	128.30
	062	12.00	196.7	93.54	353.6	90.99	344.0	89.14	337.0	9.88	7.36	114.17	84.00	196.34	146.41
	066	13.02	213.3	101.44	383.4	98.89	373.8	97.04	366.8	10.34	7.71	123.38	92.01	212.46	158.43
	072	13.86	227.1	108.00	408.2	105.45	400.0	103.60	391.6	10.72	8.00	131.04	97.72	225.86	168.42
	085 [1, 2]	16.40	268.7	127.79	483.0	126.13	467.7	--	--	11.66	8.70	87.56	65.30	--	--
P2	014	2.90	47.6	22.64	85.0	20.46	77.4	18.8	71.1	4.02	2.99	29.31	21.85	49.34	36.79
	017	3.55	58.2	23.1	87.3	20.6	78.0	18.99	71.8	3.35	2.5	29.77	22.2	49.62	37.0
	020	4.03	66.0	31.39	11.8.6	29.29	101.4	27.57	104.2	4.53	3.38	39.52	29.47	67.21	50.11
	024	4.85	79.5	37.81	142.8	35.63	134.6	33.99	128.5	4.91	3.66	47.02	35.06	80.32	59.89
	028	5.47	89.7	42.66	161.3	40.48	153.0	38.84	146.8	5.19	3.87	52.68	39.28	90.23	67.28
	031	6.00	98.3	46.75	176.7	44.57	168.5	42.93	162.3	5.43	4.09	57.45	42.84	98.58	73.51
	035	6.77	111.0	52.79	199.6	50.61	191.3	48.97	184.1	5.78	4.31	64.50	48.09	110.91	82.70
	038	7.34	120.3	57.21	216.3	55.03	208.1	53.39	201.8	6.04	4.50	69.66	51.94	111.94	83.47
	042 [3]	8.30	136.0	64.68	244.5	62.50	236.3	60.86	230.1	6.47	4.83	78.37	58.44	135.19	100.81
	045 [3]	8.89	145.7	69.29	261.9	67.11	253.7	65.47	247.5	6.74	5.02	83.75	62.45	144.61	107.83
	050 [3, 4]	9.64	158.0	75.14	284.1	72.96	275.8	71.78	271.3	7.08	5.27	90.58	67.54	134.54	100.32
	061 [3, 5]	11.62	190.5	75.6	285.8	73.54	278.0	--	--	7.37	5.50	97.49	72.69	--	--
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 300 bar (4350 psi)	
P3	B02	0.35	5.7	2.76	10.4	2.33	8.8	1.80	6.8	0.74	0.55	4.02	2.99	8.10	6.40
	B03	0.60	9.8	4.66	17.6	4.23	15.9	3.70	14.0	0.85	0.63	6.24	4.65	12.93	10.25
	B04	0.78	12.8	6.09	23.0	5.66	21.4	5.13	19.4	0.94	0.70	7.90	5.89	16.55	13.13
	B05	0.97	15.9	7.56	28.6	7.13	26.9	6.60	25.0	1.02	0.76	9.62	7.17	20.29	16.12
	B06	1.21	19.8	9.42	35.6	8.99	33.9	8.46	32.0	1.13	0.84	11.79	8.79	25.00	19.88
	B07	1.37	22.5	10.70	40.4	10.27	38.8	9.74	36.8	1.20	0.89	13.29	9.91	28.26	22.47
	B08	1.52	24.9	11.84	44.7	11.41	43.1	10.88	41.1	1.27	0.94	14.62	10.90	31.15	24.78
	B09	1.71	28.0	13.31	50.3	12.87	48.6	12.35	47.0	1.36	1.01	16.35	12.19	34.92	27.77
	B10	1.94	31.8	15.12	57.2	14.69	55.5	14.16	53.5	1.46	1.11	18.45	13.75	39.48	31.42
	B11 [6]	2.13	34.9	16.64	62.9	16.19	61.2	15.68	59.3	1.55	1.15	20.17	15.04	43.22	32.22
	B12 [6]	2.50	40.9	19.50	73.7	19.07	72.1	18.54	70.1	1.72	1.28	23.55	17.56	50.58	37.71
	B14 [6]	2.75	45.1	21.40	80.8	20.95	79.2	20.44	77.0	1.83	1.36	25.80	19.23	55.48	41.37
	B15 [6]	3.05	50.0	23.78	89.8	23.35	88.3	22.88	86.5	1.97	1.47	28.55	21.28	57.35	42.76

1) 085 = 75 bar (1087 psi)cont. 2) 085 = 90 bar (1300 psi) max. int. 3) 042-045-050-061-085 = 2000 RPM max. 4) 050=210 bar (3000 psi) max. int,
5) 061 = 120 bar (1740 psi) max. int, 061 = 80 bar (1160 psi) cont. 6) B11-B12-B14 = 300 bar (4350 psi) & B15 = 280 bar (4060 psi) max. int. And Max. Speed = 3000 rpm

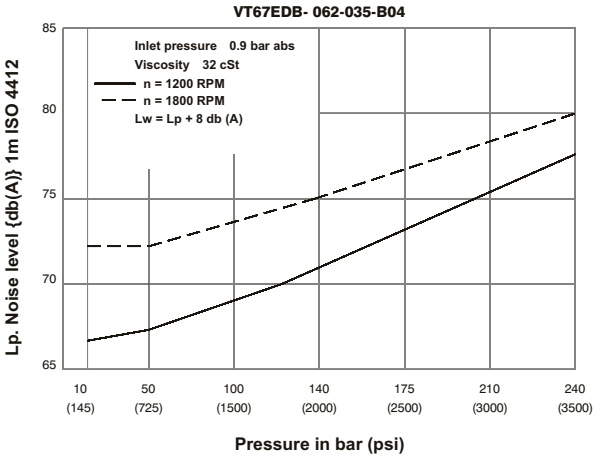
TP

INTERNAL LEAKAGE (TYPICAL)



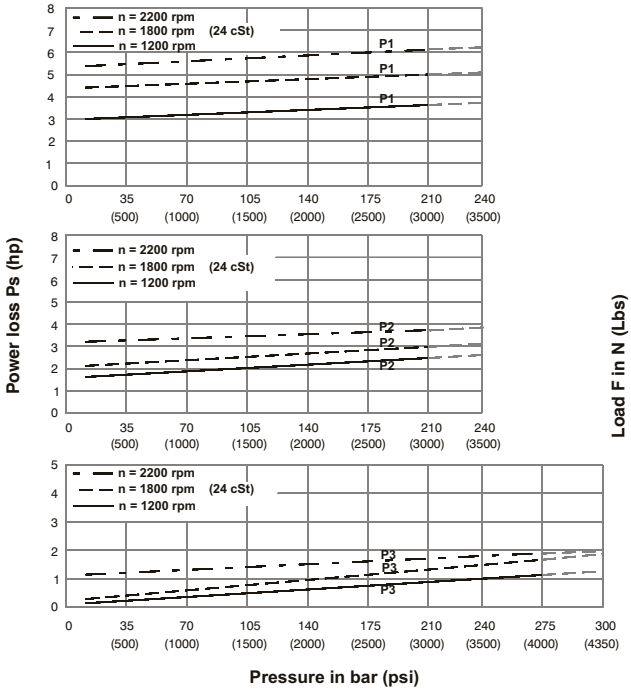
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

NOISE LEVEL (TYPICAL)



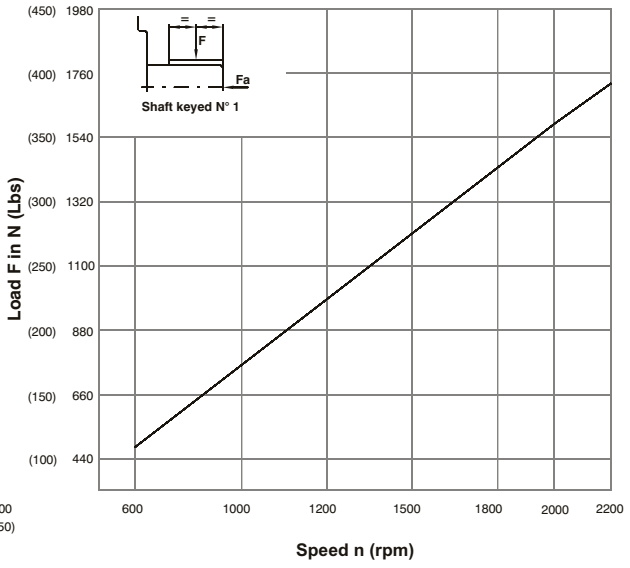
Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



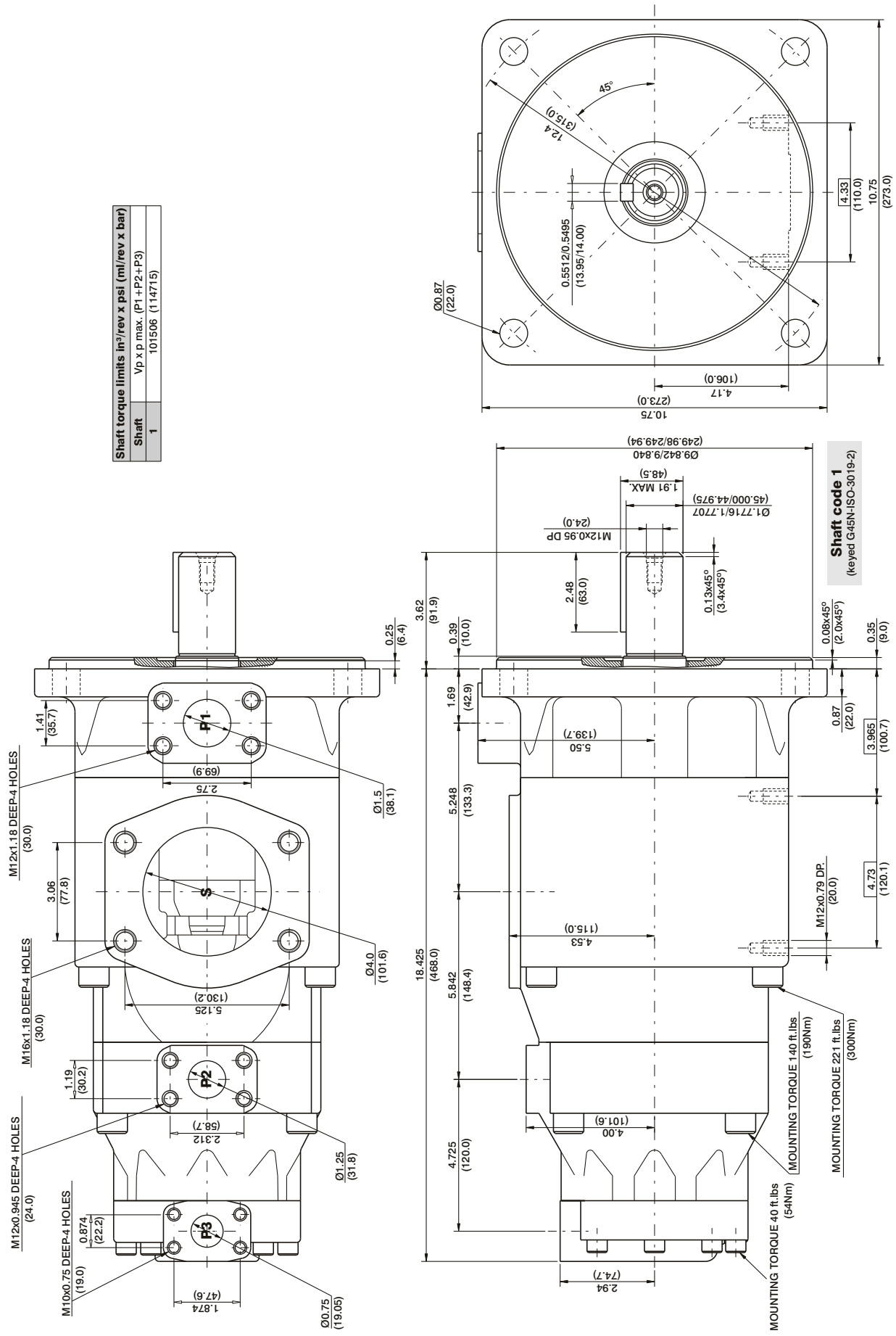
Total hydromechanical power loss is the sum of each section at its operating conditions

PERMISSIBLE RADIAL LOAD



Maximum axial load permissible Fa=2000 N (449 Lbs)

Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	101506 (114715)



VT67EDC or T67EDCS - 062 - B35 - 010 - 1 R 00 - A 1 - M1 - *

T67EDC Series-ISO 4 bolts 3019-2
Mounting flange 250 B4HW
T67EDCS Series - SAE E
Mounting flange J744c

P1 **P2** **P3**

Cam ring for "P1"

Volumetric displacement cm^3 /rev (in^3 /rev)

042 = 132.3 (8.07) 057 = 183.2 (11.18)
045 = 142.6 (8.70) 062 = 196.6 (12.00)
050 = 158.5 (9.67) 066 = 213.0 (13.00)
052 = 163.9 (10.00) 072 = 227.2 (13.86)
054 = 170.9 (10.43) 085 = 269.8 (16.40)

Cam ring for "P2"

Volumetric displacement cm^3 /rev (in^3 /rev)

B14 = 43.9 (2.68) B31 = 99.1 (6.05)
B17 = 55.0 (3.36) B35 = 113.4 (6.92)
B20 = 66.0 (4.03) B38 = 120.6 (7.36)
B22 = 70.3 (4.29) B42 = 137.5 (8.39)
B24 = 81.1 (4.95) 045 = 145.7 (8.89)
B28 = 89.9 (5.49) 050 = 158.0 (9.64)

Cam ring for "P3"

Volumetric displacement cm^3 /rev (in^3 /rev)

003 = 10.8 (0.66) 017 = 58.3 (3.56)
005 = 17.2 (1.05) 020 = 63.7 (3.89)
006 = 21.3 (1.30) 022 = 70.3 (4.29)
008 = 26.3 (1.61) 025 = 79.3 (4.84)
010 = 34.0 (2.08) 028 = 88.8 (5.42)
012 = 37.0(2.26) 031 = 100 (6.10)
014 = 46.0 (2.81)

Modifications

Mounting w/connection variables

4 bolts SAE flanges J518

P1=1-1/2" P2=1-1/4" S=4"			
Type	P3	UNC	Metric
T67EDC	1"		M0
T67EDC	3/4"		M1
T67EDCS	1"	00	M0
T67EDCS	3/4"	01	M1

Seal class

1 = S1 (for minreal oil)
4 = S4(for fire resistant fluids)
5 = S5(for mineral oil and fire resistant fluids)

Design letter

Porting combination (see page CI-1-4,5)

00 = Standard

Direction of rotation (view on the shaft)
R - Clockwise
L - Counter - clockwise

Type of Shaft T67EDC

1 - Keyed (G45N-ISO 3019-2)

Type of Shaft T67EDCS

2 - Keyed (SAE D&E)
3 - Splined (SAE D&E)

TP

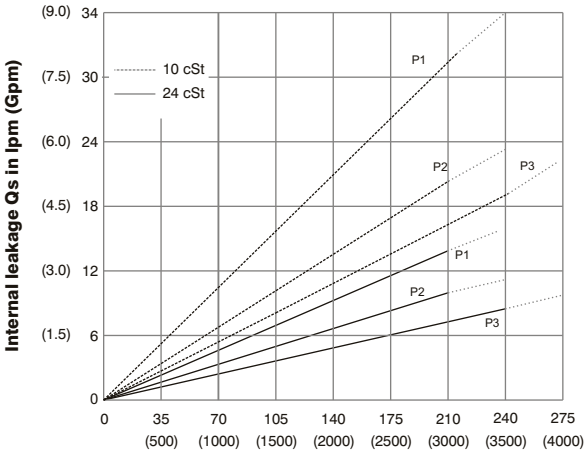
OPERATING CHARACTERISTICS - TYPICAL (24 cST) (Input power p (KW) for one cartridge only)

Pressure port	Series	Volumetric Displacement Vp		Flow q & n = 1800 rpm						Input power p & n = 1800 rpm					
				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 240 bar (3500 psi)	
		in^3 /rev	cm^3 /rev	gpm	lpm	gpm	lpm	gpm	lpm	hp	kw	hp	kw	hp	kw
P1	042	8.07	132.3	62.92	239.1	60.37	229.4	58.52	222.4	8.09	6.03	78.44	58.49	133.80	99.8
	045	8.70	142.5	67.72	257.3	65.17	247.6	63.32	240.6	8.37	6.24	84.04	62.67	143.60	107.1
	050	9.67	158.5	75.38	286.3	72.83	276.8	70.98	269.7	8.82	6.58	92.97	69.30	159.24	118.8
	052	10.00	163.9	78.37	297.8	75.82	288.1	73.97	281.1	8.99	6.70	96.47	71.94	165.36	123.4
	054	10.43	170.9	81.27	308.8	78.72	299.1	76.87	292.1	9.17	6.84	99.75	74.40	177.46	132.4
	057	11.18	183.2	87.12	331.1	84.57	321.4	82.72	314.3	9.51	7.09	106.57	79.5	189.84	141.6
	062	12.00	196.7	93.54	355.5	90.99	345.8	89.14	338.7	9.88	7.37	114.17	85.2	196.34	146.5
	066	13.00	213.0	101.44	385.5	98.89	375.8	97.04	368.8	10.34	7.71	123.38	92.01	212.46	158.5
	072	13.86	227.1	108.00	410.4	105.45	400.7	103.60	393.7	10.72	8.00	131.04	97.8	225.86	168.5
	085 [1]	16.40	268.7	127.79	485.6	126.13	479.3	--	--	11.88	8.86	101.66	75.8	--	--
P2				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 250 bar (3630 psi)	
	B14	2.68	43.93	20.92	79.50	19.18	72.88	17.81	67.7	3.46	2.6	27.77	20.7	47.03	35.1
	B17	3.36	55.07	26.16	99.41	24.41	92.76	23.04	87.6	3.77	2.8	33.88	25.3	57.71	43.1
	B20	4.03	66.05	31.39	119.28	29.64	112.63	28.27	107.4	4.07	3.0	39.98	29.8	68.39	51.0
	B22	4.29	70.31	33.43	127.03	31.69	120.42	30.32	115.2	4.19	3.1	42.37	31.6	72.57	54.1
	B24	4.95	81.13	38.50	146.30	36.82	139.92	35.45	134.7	4.49	3.3	48.36	36.1	83.06	62.0
	B28	5.49	89.98	42.80	162.64	41.06	156.03	39.69	150.8	4.74	3.5	53.3	39.8	91.7	68.4
	B31	6.05	99.16	47.18	179.28	45.43	172.63	44.06	167.4	4.99	3.7	58.41	43.6	100.63	75.1
	B35	6.92	113.42	53.93	204.93	52.18	198.28	50.81	193.1	5.39	4.0	66.29	49.5	114.42	85.4
	B38	7.36	120.63	57.30	217.74	55.61	211.32	54.24	206.1	5.59	4.2	70.28	52.4	121.42	90.6
	B42 [2]	8.39	137.51	65.30	248.14	63.35	240.73	62.28	236.7	6.05	4.5	79.66	59.4	137.83	102.8
	045 [2]	8.89	145.71	69.20	262.96	67.11	255.02	65.31	248.2	6.74	5.0	83.75	62.5	145.79	108.8
	050 [2, 3]	9.64	158	75.14	285.53	72.96	277.2	71.78	272.8	7.08	5.3	90.58	67.6	134.5	100.3
P3				p = 0 bar (0 psi)		p = 140 bar (2000 psi)		p = 275 bar (4000 psi)		p = 7 bar (100 psi)		p = 140 bar (2000 psi)		p = 275 bar (4000 psi)	
	003	0.66	10.82	5.14	19.53	3.85	14.6	--	--	2.11	1.6	8.45	6.3	--	--
	005	1.05	17.21	8.18	31.08	6.89	26.2	5.68	21.6	2.29	1.7	12.0	9.0	19.81	14.8
	006	1.30	21.31	10.13	38.49	8.84	33.6	7.63	29.0	2.4	1.8	14.28	10.7	23.79	17.7
	008	1.61	26.39	12.55	47.69	11.26	42.8	10.05	38.2	2.54	1.9	17.11	12.8	28.75	21.4
	010	2.08	34.09	16.22	61.64	14.93	56.7	13.71	52.1	2.76	2.1	21.38	15.9	36.22	27.0
	012	2.26	37.04	17.64	67.03	16.35	62.1	15.14	57.5	2.84	2.1	23.05	17.2	39.14	29.2
	014	2.81	46.06	21.88	83.14	20.59	78.2	19.37	73.6	3.09	2.3	27.99	20.9	47.78	35.6
	017	3.56	58.35	27.73	105.37	26.44	100.5	25.22	95.8	3.43	2.6	34.81	26.0	59.73	44.6
	020	3.89	63.76	30.34	115.29	29.05	110.4	27.84	105.8	3.58	2.7	37.86	28.2	65.07	48.5
	022 [5]	4.29	70.31	33.43	127.03	32.14	122.1	30.93	117.5	3.76	2.8	41.47	30.9	71.38	53.2
	025 [4, 6]	4.84	79.33	37.71	143.30	36.42	138.4	35.21	133.8	4.01	3.0	46.46	34.7	80.12	59.8
	028 [4, 7]	5.42	88.83	42.23	160.47	40.94	155.6	40.32	153.2	4.27	3.2	51.74	38.6	76.73	57.2
	031 [4, 7]	6.10	99.98	47.56	180.73	46.27	175.8	45.65	173.5	4.58	3.4	57.95	43.2	86.06	64.2

-- We do not recommend to use this 003 at 275 bar (4000 psi) and 1500 rpm since internal leakage is over 50 of theoritical flow.

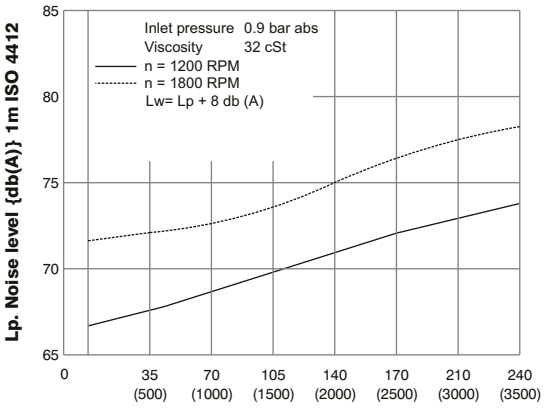
1) 085 = 90 bar (1300 psi) max. int 2) 042-045-050 = 2200 RPM max. 3) 050=210 bar (3000 psi) max. int,
4) 025-028-031 = 2500 R.P.M. max. 5) 022= 275 bar max. int, 6) 025 = 240 bar max. int, 7) 028-031 = 210 bar (3000 psi) max. int.

INTERNAL LEAKAGE (TYPICAL)



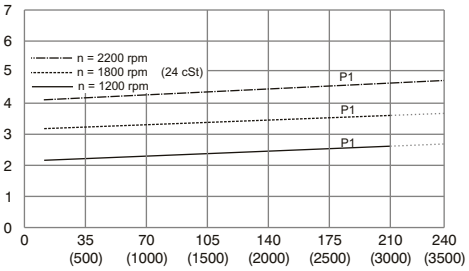
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50 of theoretical flow.
Total leakage is the sum of each section loss at its operating conditions.

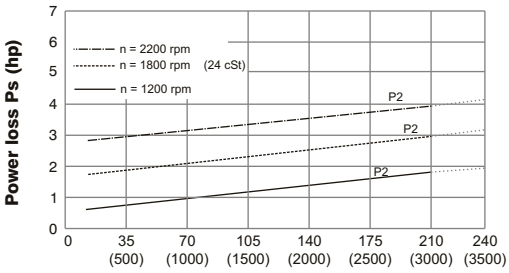
NOISE LEVEL (TYPICAL)
VT67EDCS- 062-B35-022

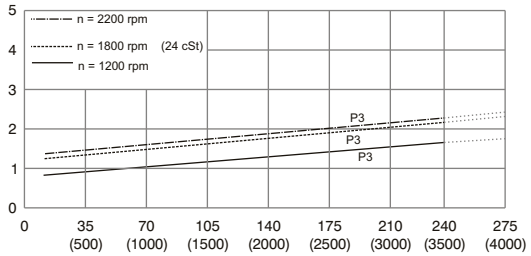


Triple pump noise level is given with each section discharging at the pressure noted on the curve.

HYDROMECHANICAL POWER LOSS (TYPICAL)



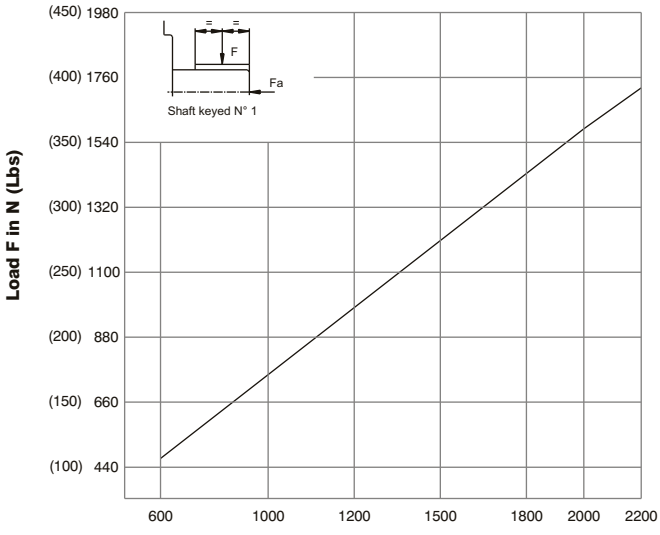




Pressure in bar (psi)

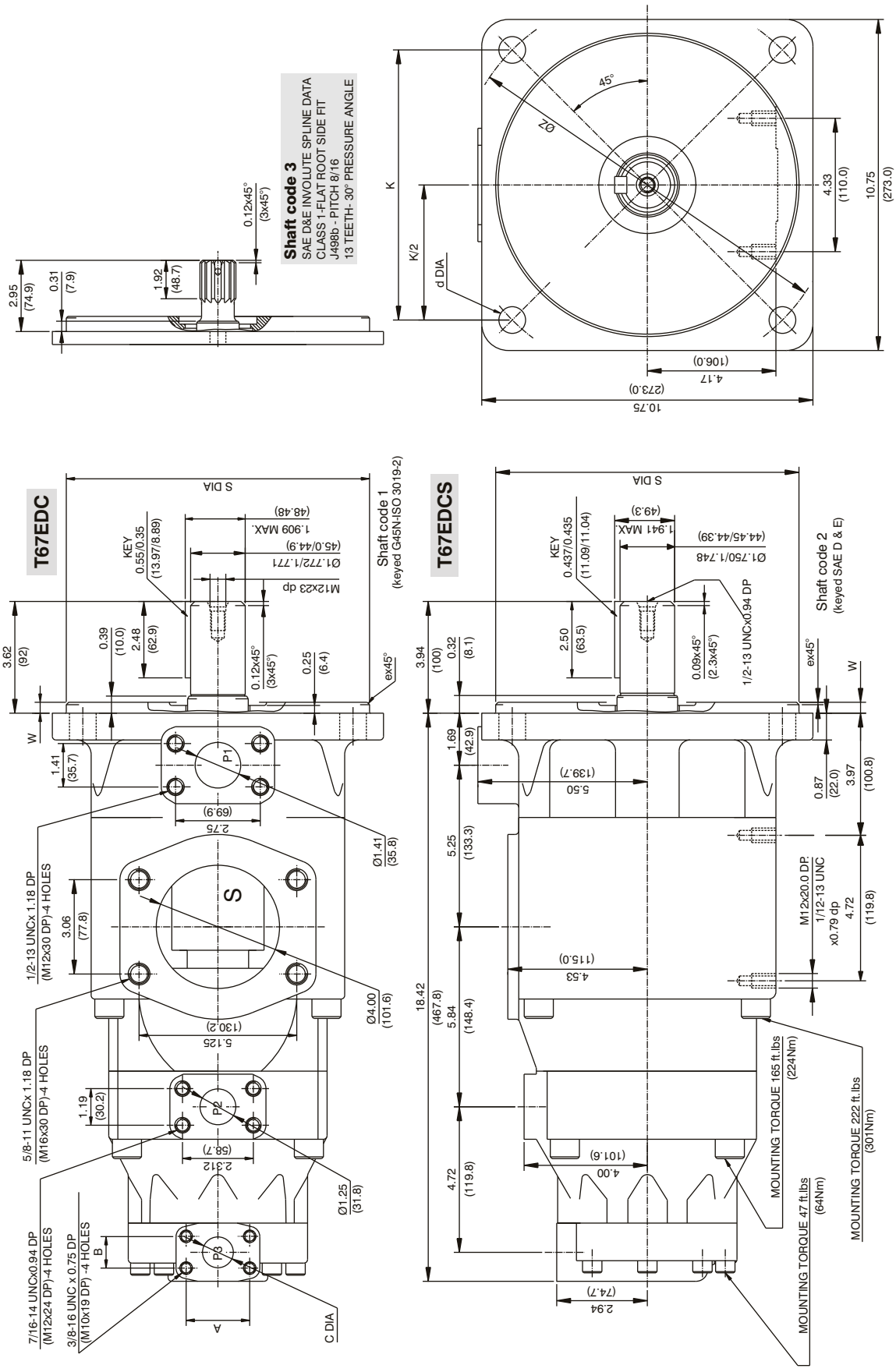
Total hydromechanical power loss is the sum of each section at its operating conditions

PERMISSIBLE RADIAL LOAD



Maximum permissible axial load Fa=2000 N (449 Lbs)

TP



Alternate connect. variables		
	00 & M0	01 & M1
A	2.063(52.4)	1.874(47.5)
B	1.031(26.1)	0.874(22.1)
C	1.000(25.4)	0.748(18.9)

Alternate mounting flange							
Series	S Dia		e x 45°	W	K	Z Dia	d Dia
	Max.	Min.					
T67EDC	9.842(249.98)	9.840(249.93)	0.079(2)	0.354(8.9)	-	12.401(314.9)	0.866(21.9)
T67EDCS	6.500(165.1)	6.498(165.04)	0.079(2)	0.354(8.9)	8.838(224.4)	-	0.811(20.5)

Shaft torque limits in³/rev x psi (ml/rev x bar)	
Shaft	Vp x p max. (P1+P2+P3)
1	101506 (114715)
2	104818 (118457)
3	112312 (126927)