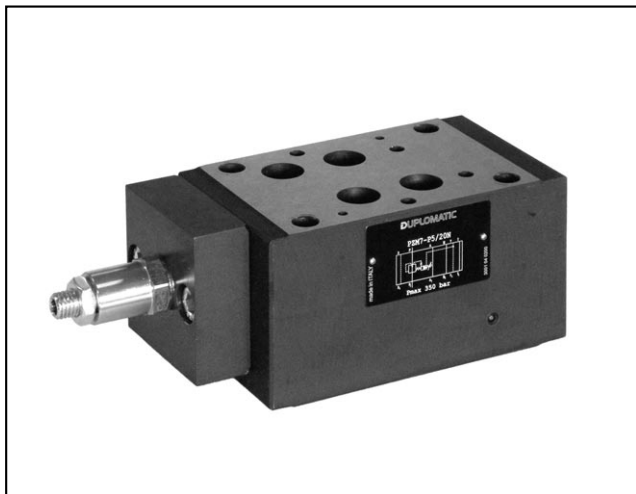


PZM7

PRESSURE REDUCING VALVE

SERIES 20

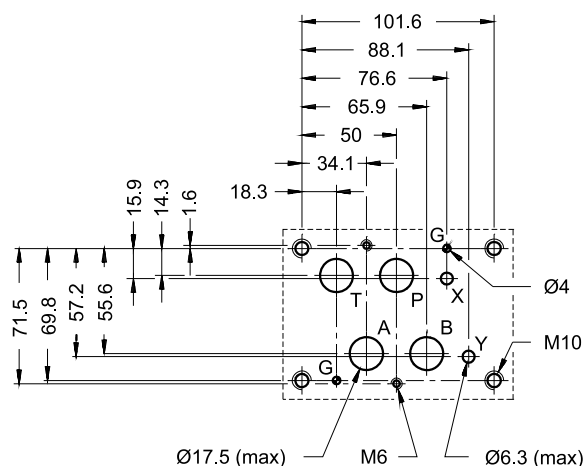


MODULAR VERSION ISO 4401-07

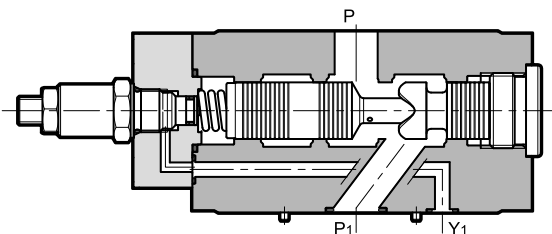
p max 350 bar
Q max 300 l/min

MOUNTING INTERFACE

ISO 4401-07-07-0-05
(CETOP 4.2-4-07)



OPERATING PRINCIPLE



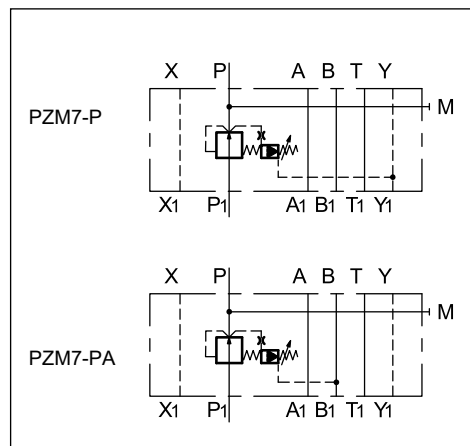
- PZM7 valves are pressure reducing valves for stack mounting, with mounting surface according to ISO 4401-07 standard.
- They are two-stage valves and are employed to assure stability of the controlled pressure, even changing the flow that passes through the valve.
- The PZM7 valves can be assembled quickly under DSP7 directional valves (see catalogue 41 420), without use of pipes, using suitable tie-rods or bolts, forming compact modular groups.
- They are supplied with adjustment screw. Knob is available as option.

PERFORMANCES

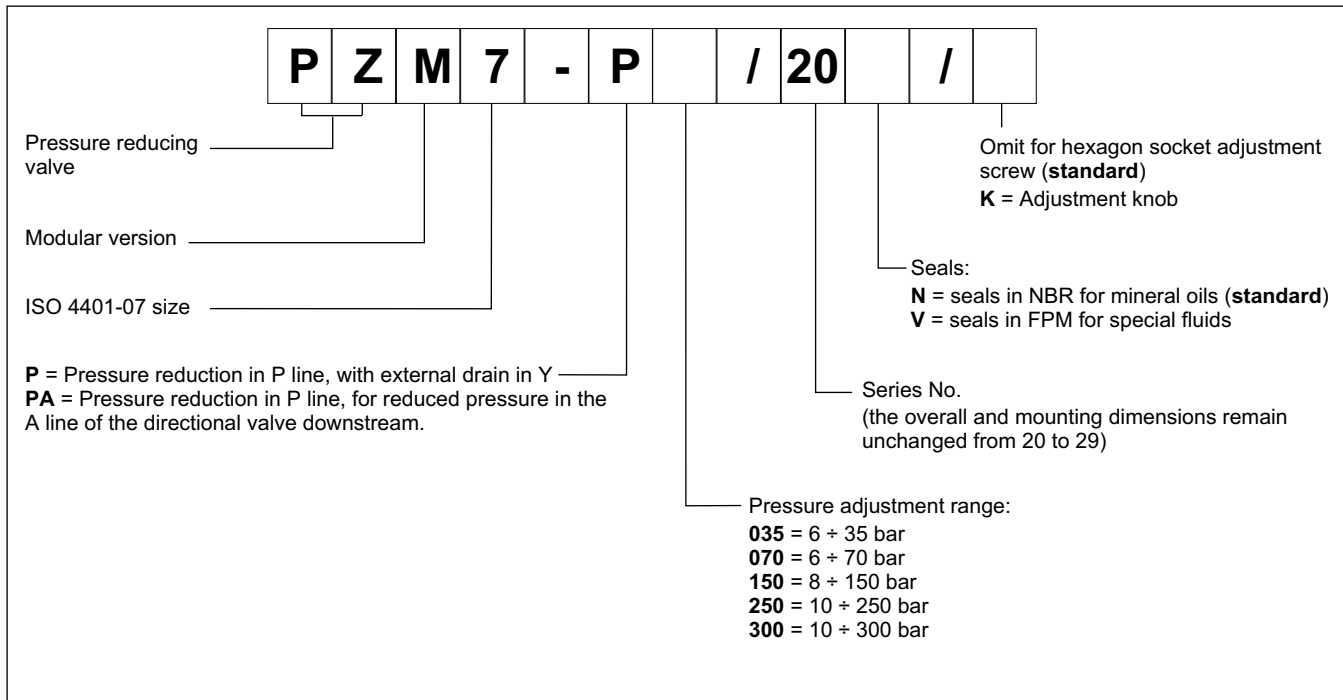
(measured with mineral oil of viscosity 36 cSt at 50 °C)

Maximum operating pressure	bar	350
Maximum flow rate	l/min	300
Drainage flow rate	l/min	≤ 0.9
Ambient temperature range	°C	-20 / +60
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 + 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass	kg	7.5

HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE



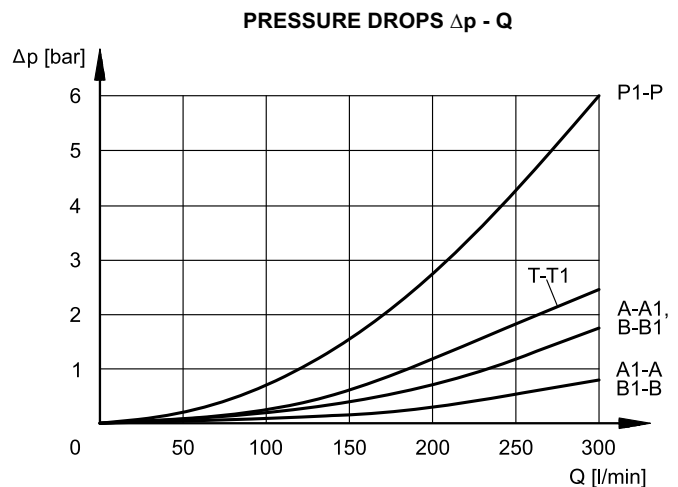
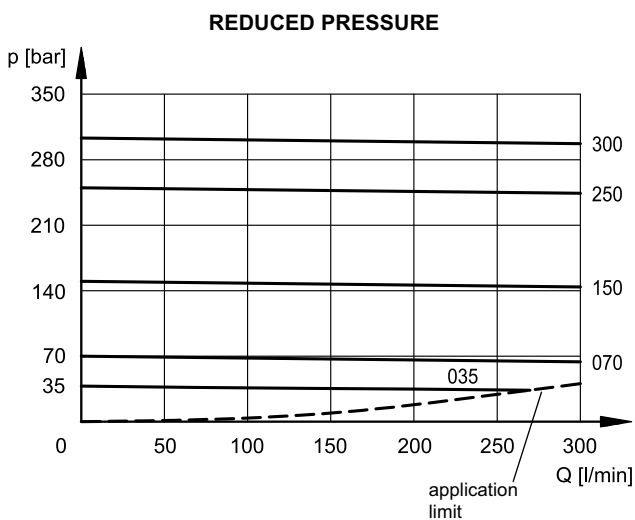
2 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department.

Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics. The fluid must be preserved in its physical and chemical characteristics.

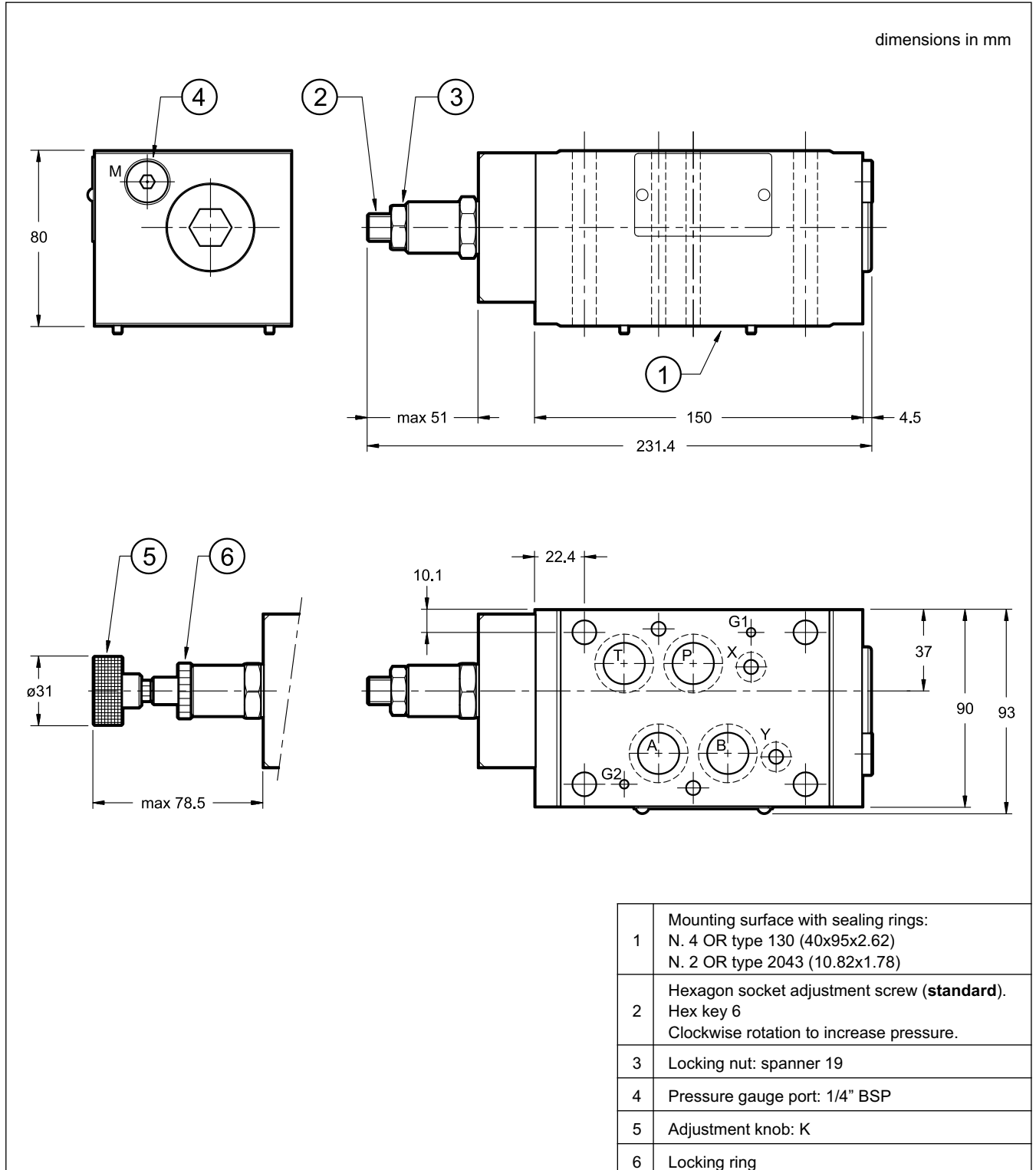
3 - CHARACTERISTIC CURVES

(values obtained with viscosity of 36 cSt at 50°C)



Reduced pressure in P obtained for each adjustment range, with inlet pressure 350 bar and inlet flow 350 l/min.

4 - OVERALL AND MOUNTING DIMENSIONS





PZM7

SERIES 20



DIPLOMATIC MS S.p.A.

via M. Re Depaolini 24 • 20015 PARABIAGO (MI) • ITALY
tel. +39 0331.895.111 • www.diplomatic.com • e-mail: sales.exp@diplomatic.com

MZD

DIRECT OPERATED THREE-WAY PRESSURE REDUCING VALVE WITH FIXED OR VARIABLE ADJUSTMENT

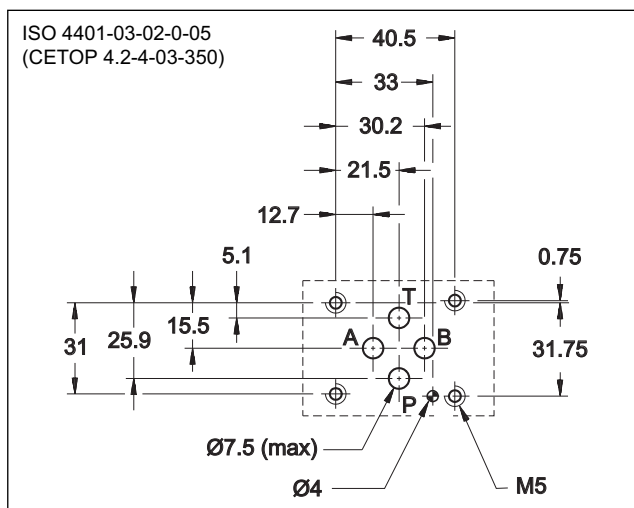


MODULAR VERSION ISO 4401-03

p max **350** bar

Q max (see table of performances)

MOUNTING INTERFACE



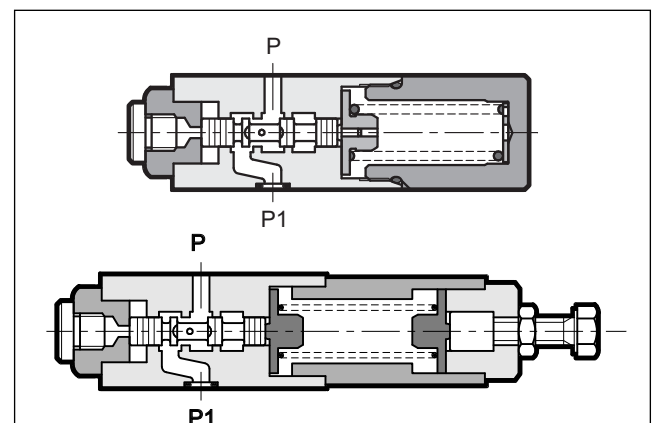
CONFIGURATIONS (see hydraulic symbols at par.1)

- MZD*: pressure reduction on line P, drainage connected with line T.
- MZD*/A and MZD*/RA: pressure reduction on line A toward the actuator and maximum pressure in line B, drainage connected with line T.
- MZD*/B and MZD*/RB: pressure reduction on line B toward the actuator and maximum pressure in line A, drainage connected with line T.

PERFORMANCES (measured with mineral oil of viscosity 36cSt at 50°C)

Maximum operating pressure	bar	350
Maximum pressure on port T		10
Maximum flow rate in the controlled lines	l/min	50
Maximum flow rate in the free lines		75
Drainage flow rate		≤ 0,08
Ambient temperature range	°C	-20 / +60
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass	kg	1,4

OPERATING PRINCIPLE



— The MZD valve is a three-way spool type direct operated pressure reducing valve. It is normally open in the rest position and the hydraulic fluid passes freely from the P1 line to the P line.

The spool is subjected to the line P pressure on one side, and on the other side by the adjustment spring. When the pressure in line P exceeds the value set by the spring, the valve closes until the pressure in P (reduced) equals the calibrated value.

— The valve construction provides good adjustment sensitivity with reduced drainage flow. The drainage is connected to line T inside the valve.

— The three-way design provides protection of the secondary circuit from pressure surges since it allows a reverse flow from the actuator to the T discharge line.

— It is made as a modular version with ports according to the ISO 4401 standards and can be assembled quickly, without use of pipes, under the ISO 4401-03 solenoid valves.

— The variable adjustment version is supplied with a hexagonal head adjustment screw. Upon request, it can be equipped with a SICBLOC adjustment knob.

— The fixed adjustment version is available set at value 20, 25 or 30 bar pressure.

1 - IDENTIFICATION CODE OF MZD VARIABLE ADJUSTMENT VERSION

M	Z	D	/	/	/	/
----------	----------	----------	----------	----------	----------	----------

Size: ISO 4401-03 modular version

Direct operated pressure reducing valve

Pressure adjustment range:

2 = 3 ÷ 35 bar **4** = 30 ÷ 140 bar
3 = 10 ÷ 70 bar **5** = 50 ÷ 280 bar

Configurations (omit for MZD with pressure reduction on line P and regulation unit on side B)

- A:** pressure reduction on line A and full pressure on line B with regulation unit on side B
- B:** pressure reduction on line B and full pressure on line A with regulation unit on side B
- RP:** pressure reduction on line P with regulation unit on side A
- RA:** pressure reduction on line A and full pressure on line B with regulation unit on side A
- RB:** pressure reduction on line B and full pressure on line A with regulation unit on side A

Seals:
omit for mineral oils
V = viton for special fluids

Series No.:
50 - for MZD*, MZD*/RP, MZD*/A, MZD*/RA, MZD*/B valves
51 - for MZD*/RB valves
(the overall and mounting dimensions remain unchanged from 50 to 59)

M = Adjustment with SICBLOC knob
(omit for adjustment with hexagonal head screw)

Hydraulic symbols

MZD*
MZD*/RP

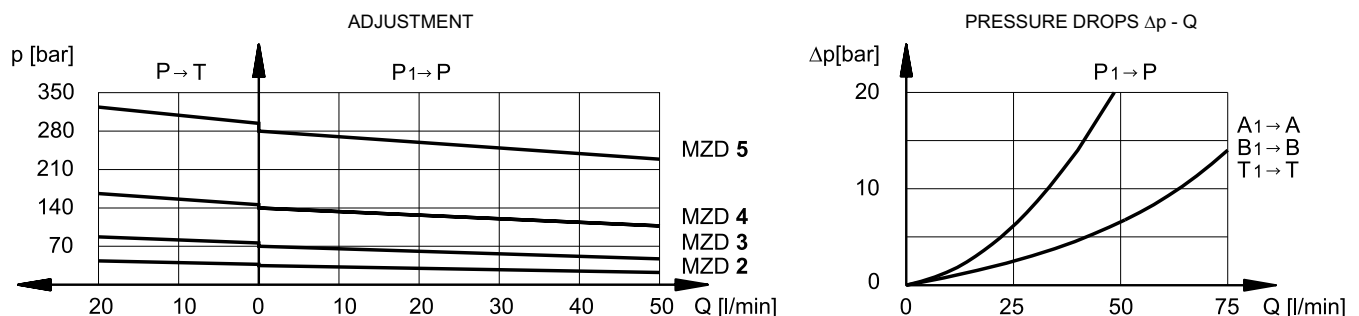
MZD*/A
MZD*/RA

MZD*/B
MZD*/RB

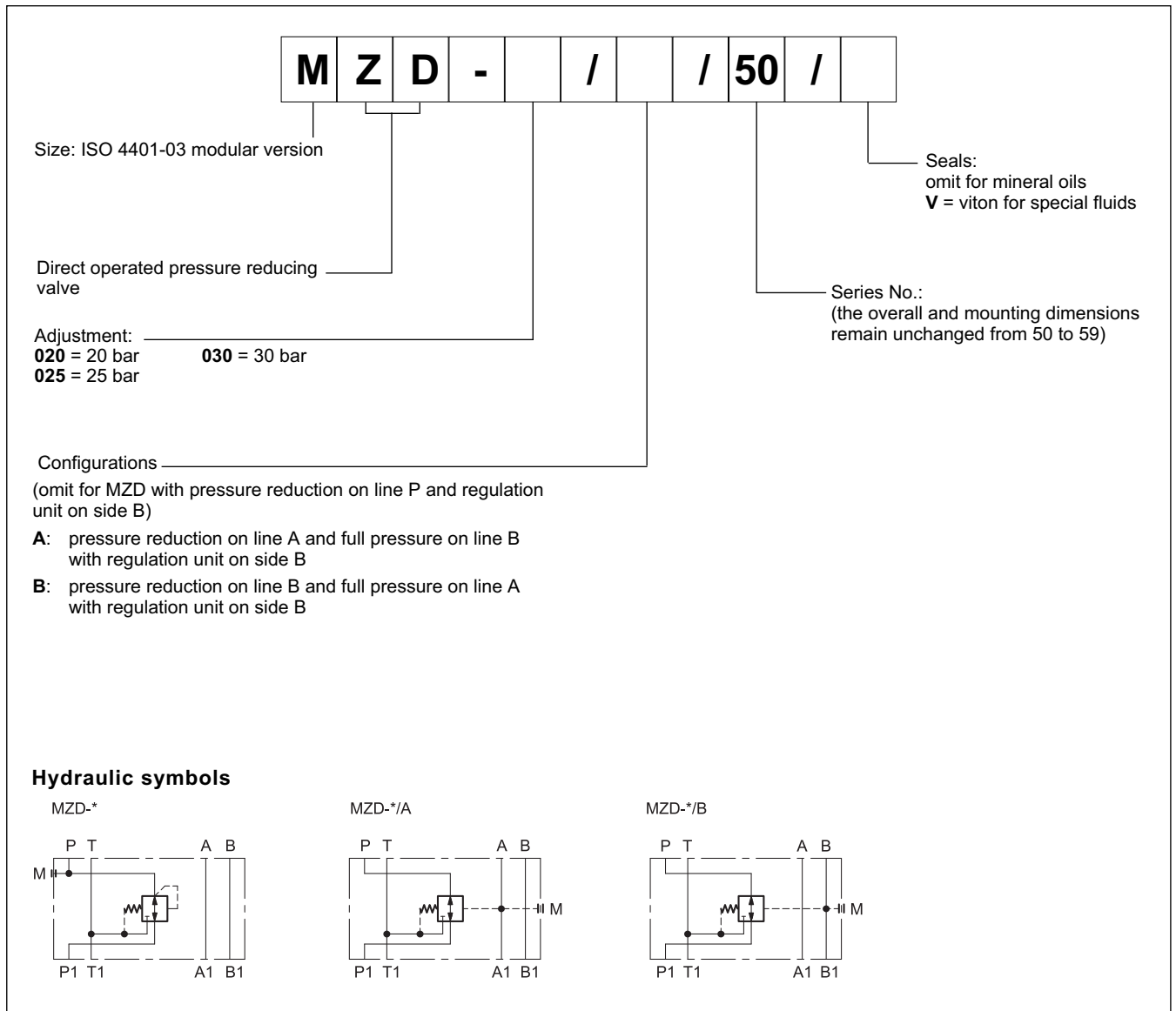
NOTE: the versions RP, RA and RB have been realised with regulation unit on side A, so as to be interchangeable with valves produced by other companies.
The standard version is equipped with regulation unit on side B.

2 - MZD VARIABLE ADJUSTMENT VERSION CHARACTERISTIC CURVES

(values obtained with viscosity of 36 cSt at 50°C)



3 - IDENTIFICATION CODE OF MZD FIXED ADJUSTMENT VERSION



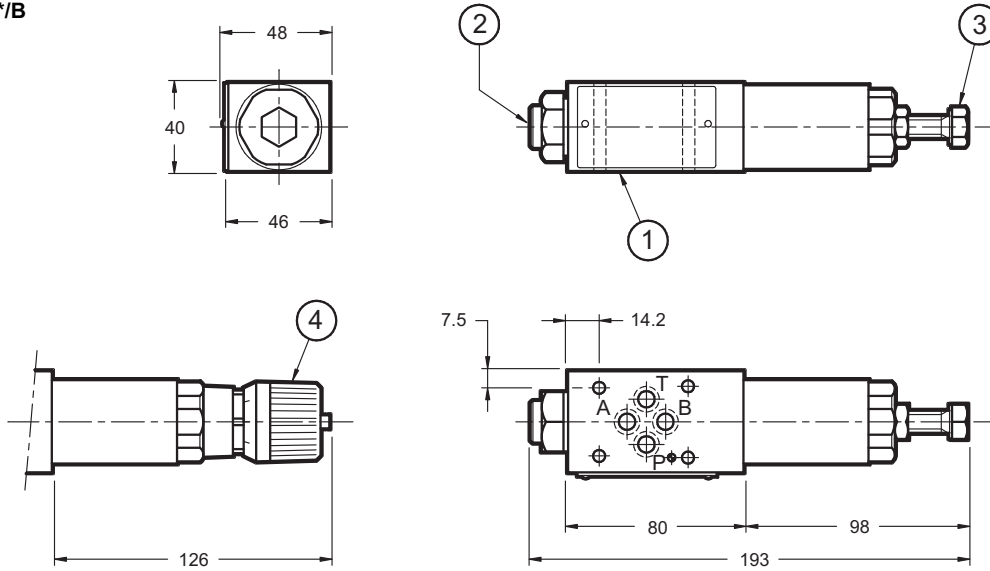
4 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department.

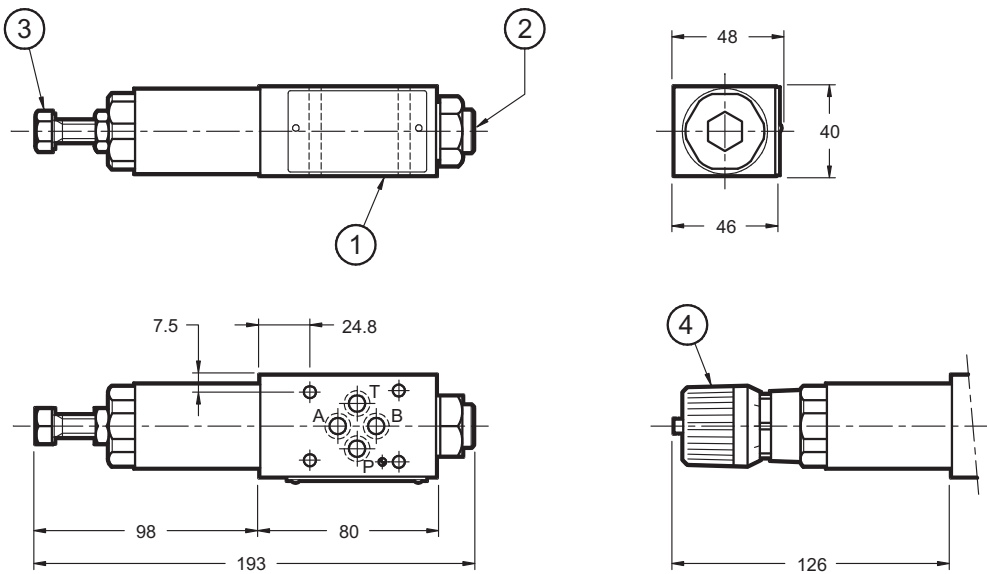
Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics. The fluid must be preserved in its physical and chemical characteristics.

5 - OVERALL AND MOUNTING DIMENSIONS VARIABLE ADJUSTMENT VERSION

MZD*
MZD*/A
MZD*/B



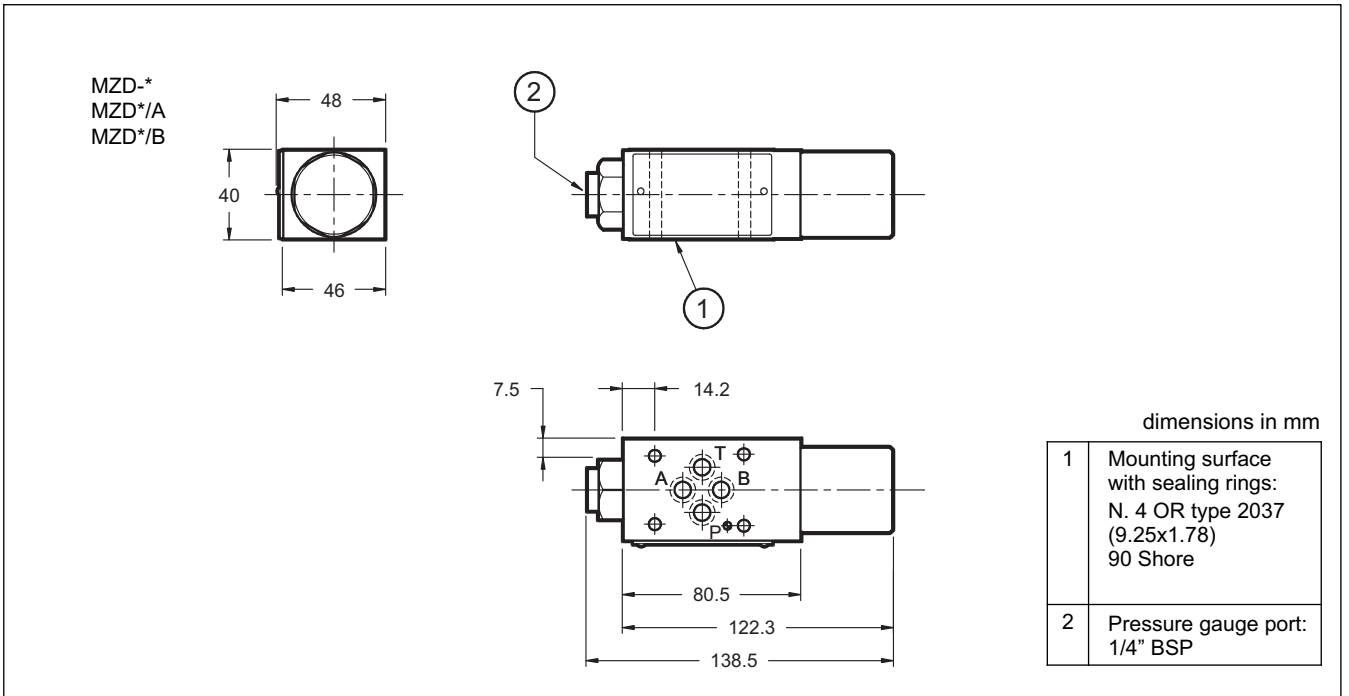
MZD*/RP
MZD*/RA
MZD*/RB



dimensions in mm

1	Mounting surface with sealing rings: 4 OR type 2037 (9.25x1.78) 90 Shore
2	Pressure gauge port 1/4" BSP
3	Hexagonal head adjustment screw. Spanner 17. Rotate clockwise to increase pressure
4	SICBLOC knob. To operate, push and rotate at the same time.

6 - OVERALL AND MOUNTING DIMENSIONS FIXED ADJUSTMENT VERSION



PZM2

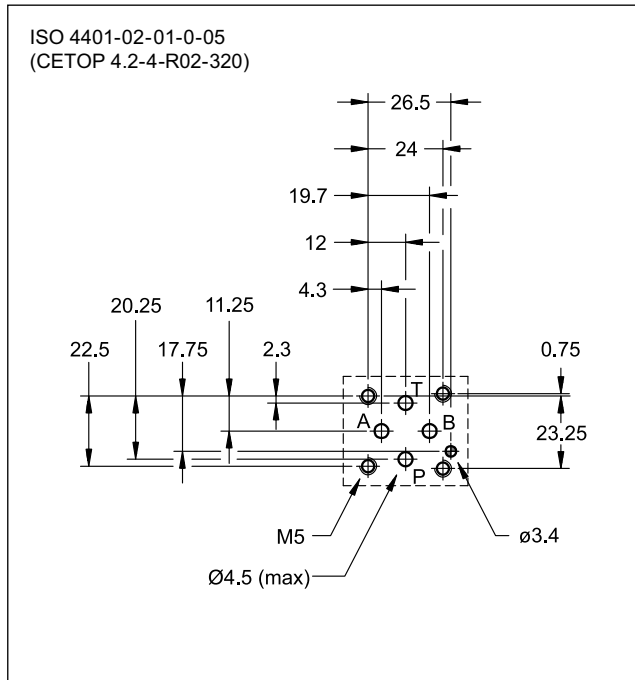
PRESSURE REDUCING VALVE DIRECT OPERATED WITH VARIABLE ADJUSTMENT SERIES 21



MODULAR VERSION ISO 4401-02

p max 320 bar
Q max 20 l/min

MOUNTING SURFACE



OPERATING PRINCIPLE

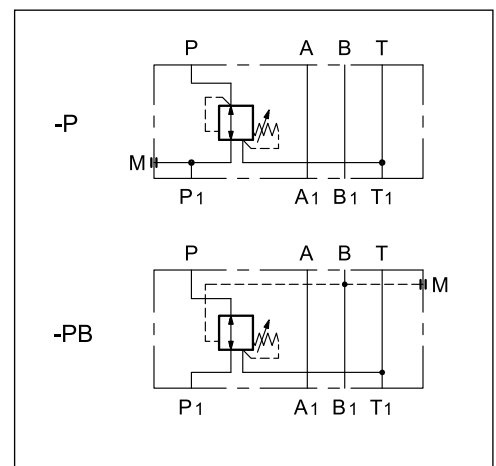
- The PZM2 valve is a three-ports pressure reducing valve, direct operated, spool type, made as modular version, with ports according to the ISO 4401 standards and can be assembled quickly, without use of pipes, under the ISO 4401-02 solenoid valves.
- The PZM2 is a normally open valve. The hydraulic fluid flows freely in the pressure line. When the inlet pressure in P exceeds the value set by the spring, the valve opens the outlet port to the tank line until the outlet pressure has been reduced to the set value.
- The valve construction provides good adjustment sensitivity with reduced drainage flow. The drainage to the tank line is internal.
- The three-ports design provides protection of the secondary circuit from pressure surges since it allows a reverse flow from the actuator to the tank line.

PERFORMANCES

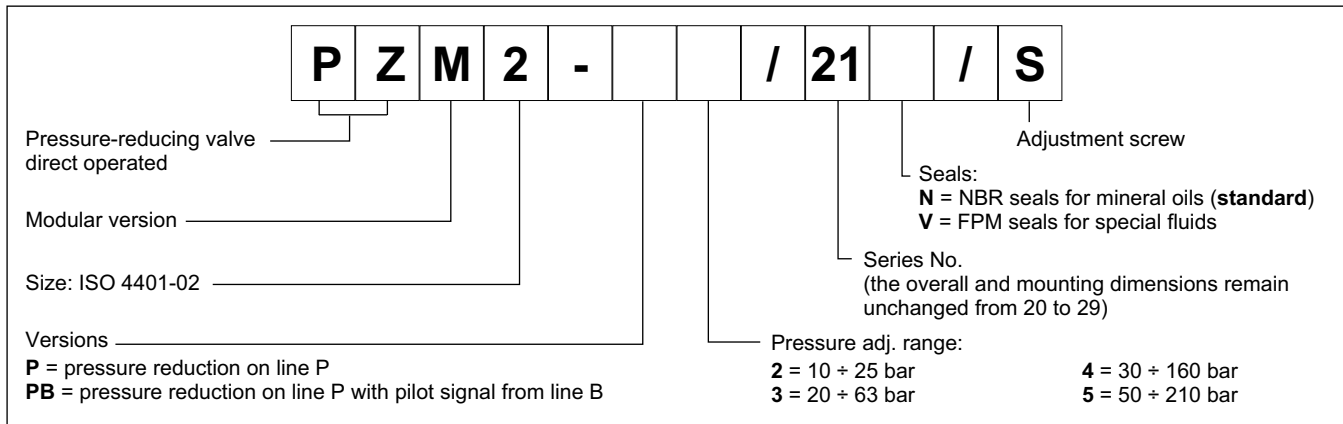
(measured with mineral oil of viscosity 36cSt at 50°C)

Maximum operating pressure	bar	320
Maximum pressure on port T		210
Maximum flow rate in the controlled lines	l/min	20
Maximum flow rate in the free lines		30
Ambient temperature range	°C	-20 / +60
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 + 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass	kg	0,6

HYDRAULIC SYMBOL



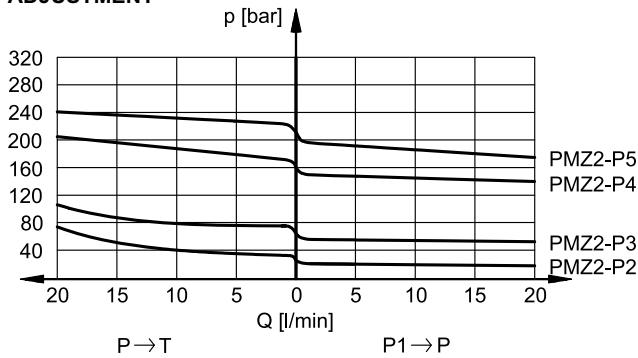
1 - IDENTIFICATION CODE



2 - CHARACTERISTIC CURVES

(values obtained with viscosity of 36 cSt at 50°C)

ADJUSTMENT



3 - HYDRAULIC FLUIDS

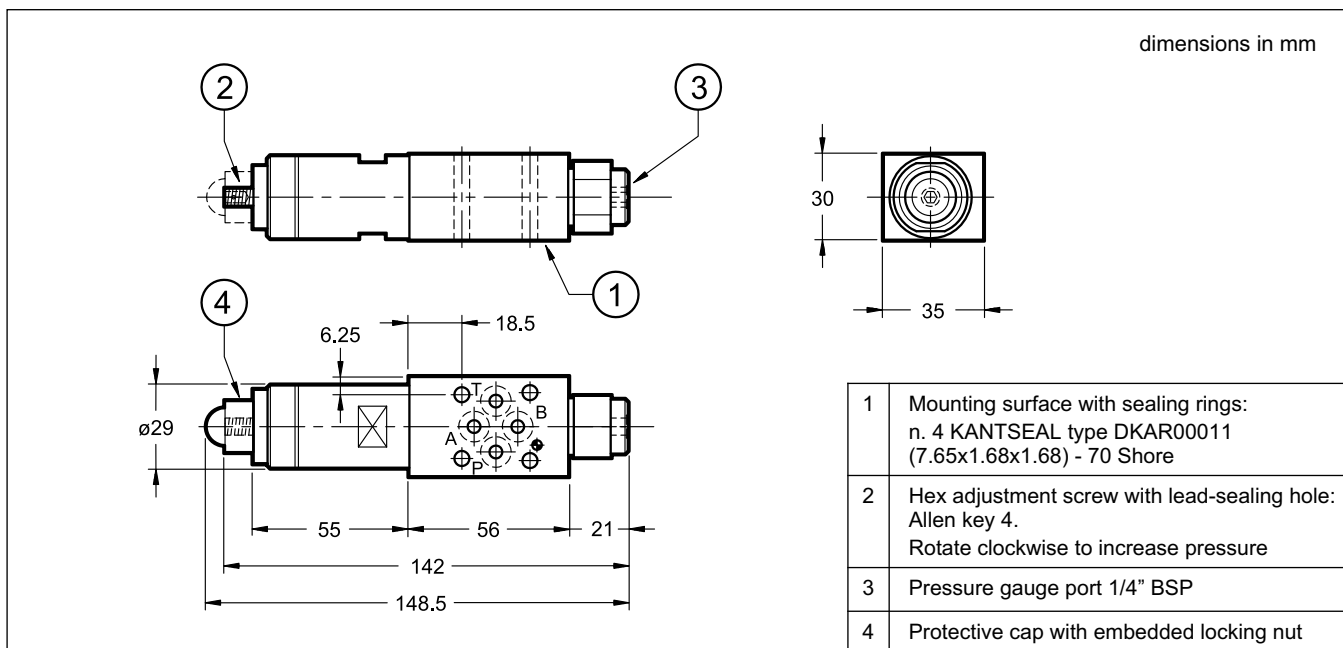
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code N).

For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department.

Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics.

The fluid must be preserved in its physical and chemical characteristics.

4 - OVERALL AND MOUNTING DIMENSIONS



DZC*

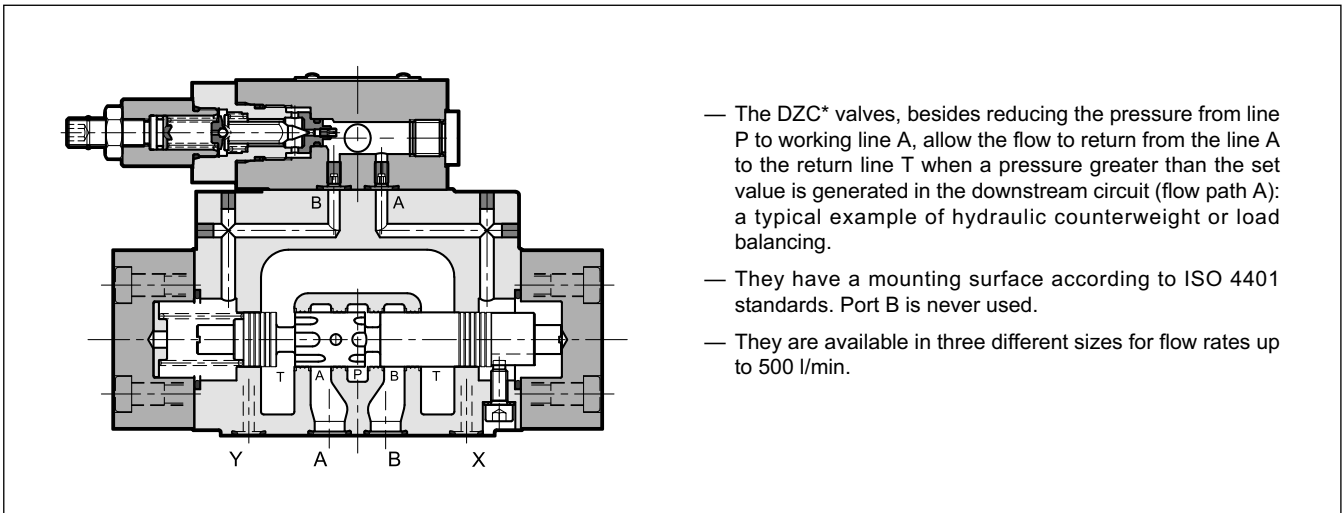
PRESSURE REDUCING VALVES SERIES 12



DZC5 **CETOP P05**
DZC5R **ISO 4401-05**
DZC7 **ISO 4401-07**
DZC8 **ISO 4401-08**

p max **350** bar
Q max (see table of performances)

OPERATING PRINCIPLE

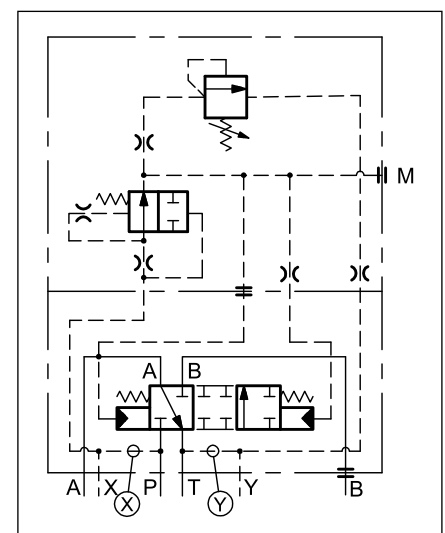


PERFORMANCES

(obtained with mineral oil with viscosity of 36 cSt at 50°C)

		DZC5 DZC5R	DZC7	DZC8
Maximum operating pressure	bar	350		
Maximum flow	l/min	150	300	500
Ambient temperature range	°C	-20 / +60		
Fluid temperature range	°C	-20 / +80		
Fluid viscosity range	cSt	10 ÷ 400		
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15			
Recommended viscosity	cSt	25		
Mass	kg	6,3	8,6	15

HYDRAULIC SYMBOL



1 - IDENTIFICATION CODE

D	Z	C	-	/ 12	-	/	
----------	----------	----------	----------	-------------	----------	----------	--

Pressure reducing valve

Nominal size:
5 = CETOP P05 (**NOTE**)
5R = ISO 4401-05
7 = ISO 4401-07
8 = ISO 4401-08

Pressure control range
070 = 5 + 70 bar
140 = 5 + 140 bar
210 = 5 + 210 bar

Series No. _____
 (the overall and mounting dimensions remain unchanged from 10 to 19)

K1 = Adjustment knob (omit for adjustment with socket hex screw)

Drainage: **I** = internal
E = external

Piloting: **I** = internal
E = external

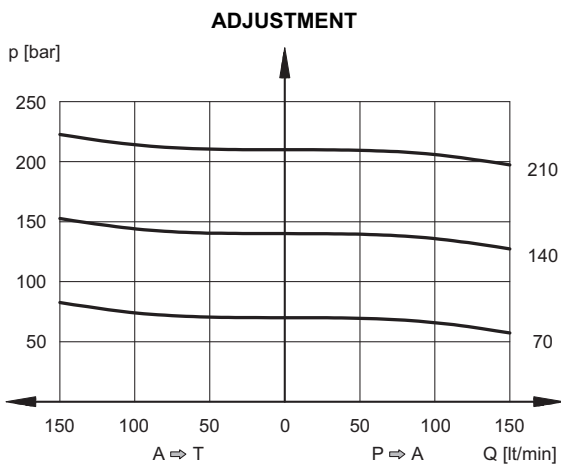
Seals:
N = NBR seals for mineral oil (**standard**)
V = FPM seals for special fluids

NOTE: This version is interchangeable with the previous model ZC4 Diplomatic

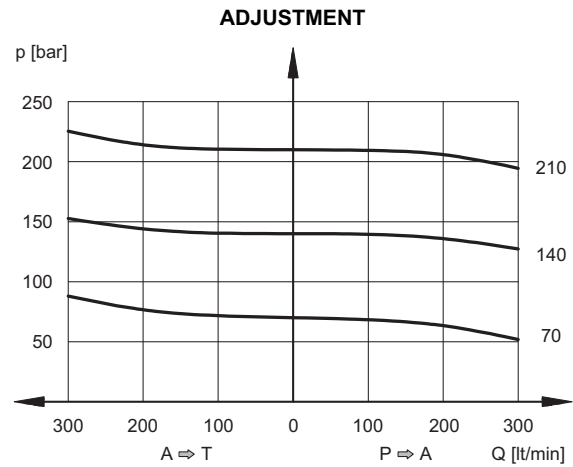
2 - CHARACTERISTIC CURVES

(obtained with mineral oil with viscosity of 36 cSt at 50°C)

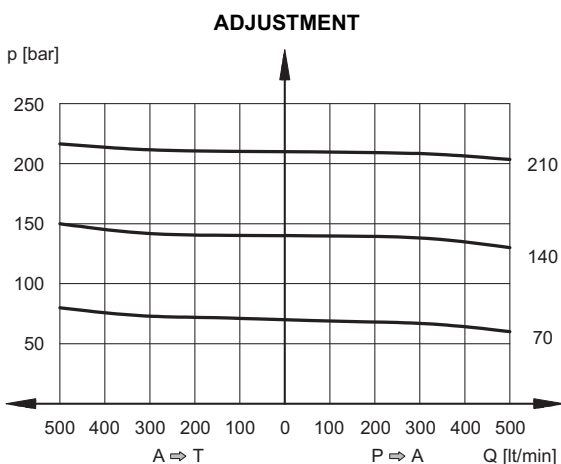
2.1 - Characteristic curves DZC5 and DZC5R



2.2 - Characteristic curves DZC7



2.3 - Characteristic curves DZC8



3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code N). For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics.

The fluid must be preserved in its physical and chemical characteristics.

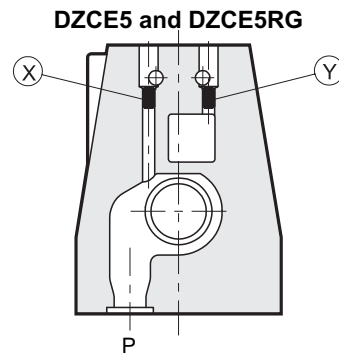
4 - PILOTING AND DRAINAGE

The valves are available with piloting and drainage, both internal and external. The version with external drainage allows a higher backpressure on the unloading.

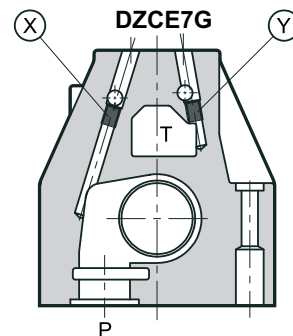
TYPE OF VALVE	Plug assembly	
	X	Y
IE INTERNAL PILOT AND EXTERNAL DRAIN	NO	YES
II INTERNAL PILOT AND INTERNAL DRAIN	NO	NO
EE EXTERNAL PILOT AND EXTERNAL DRAIN	YES	YES
EI EXTERNAL PILOT AND INTERNAL DRAIN	YES	NO

PRESSURES (bar)

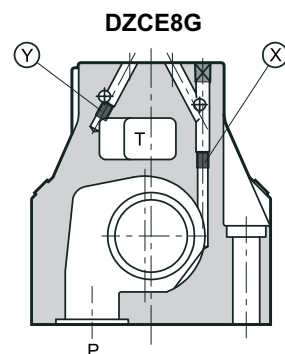
Pressure	MIN	MAX
Pilot pressure on port X	30	210
Pressure on T port with internal drain	-	2
Pressure on T port with external drain	-	250



X: M5x6 plug for external pilot
Y: M5x6 plug for external drain



X: M6x8 plug for external pilot
Y: M6x8 plug for external drain



X: M6x8 plug for external pilot
Y: M6x8 plug for external drain

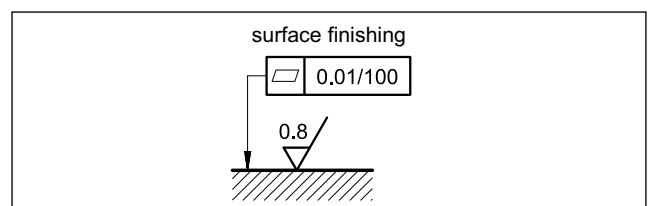
5 - INSTALLATION

The DZC* valves can be installed in any position without impairing correct operation.

Connect the valve T port directly to the tank. Add any backpressure value detected in the T line to the controlled pressure value.

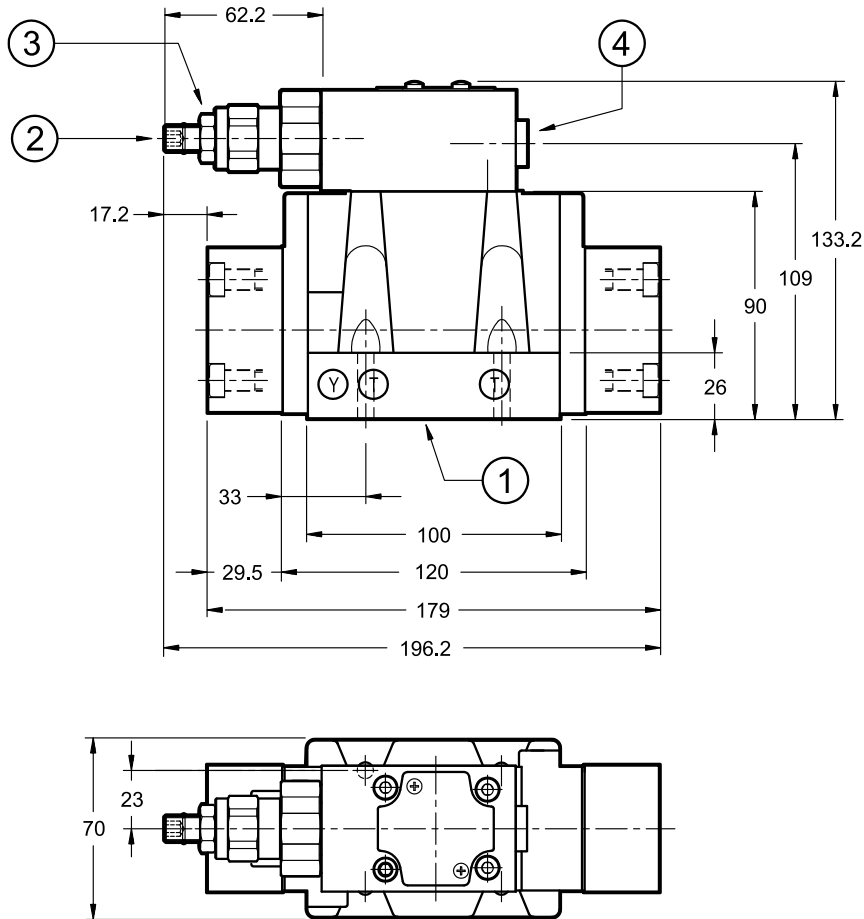
Maximum admissible backpressure in the T line, in operating conditions, is 2 bar.

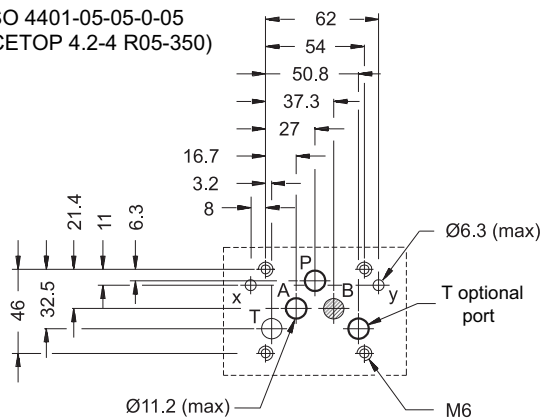
Valves are fixed by means of screws or tie rods on a flat surface with planarity and roughness equal to or better than those indicated in the relative symbols. If minimum values are not observed, fluid can easily leak between the valve and support surface.



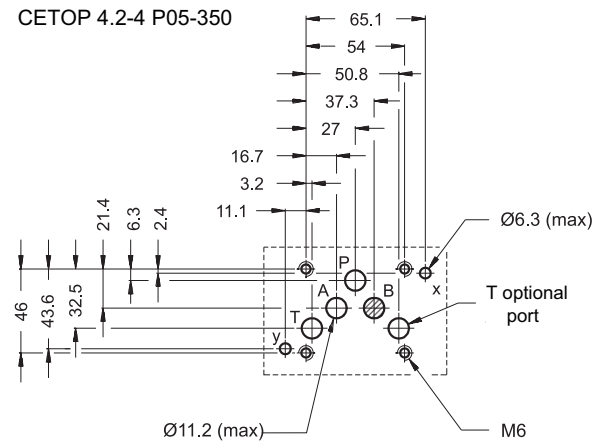
6 - DZC5 AND DZC5R OVERALL AND MOUNTING DIMENSIONS

dimensions in mm


DZC5R MOUNTING SURFACE

 ISO 4401-05-05-0-05
 (CETOP 4.2-4 R05-350)

DZC5 MOUNTING SURFACE

CETOP 4.2-4 P05-350



Valve fastening: N. 4 bolts SHC ISO 4762 M6x35

Tightening torque: 8 Nm (A 8.8 bolts)

Thread of mounting holes: M6x10

1	Mounting surface with sealing rings: N. 5 OR type 2050 (12.42x1.78) - 90 Shore N. 2 OR type 2037 (9.25x1.78) - 90 Shore
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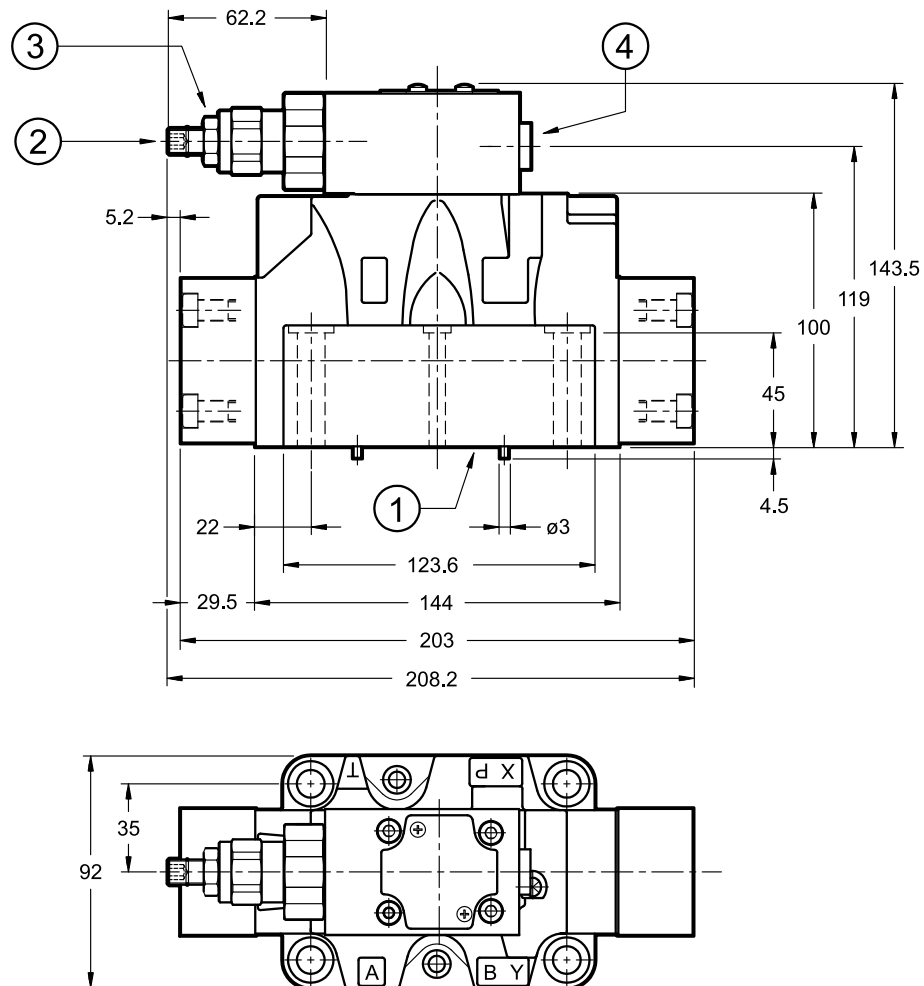
2	Socket hex adjustment screw: Allen key 5. Clockwise rotation to increase pressure
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3	Locking nut: spanner 17
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4	Pressure gauge port 1/4" BSP
---	------------------------------

7 - DZC7 OVERALL AND MOUNTING DIMENSIONS

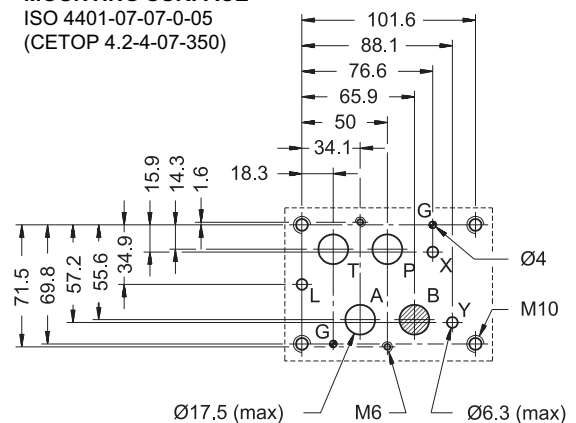
dimensions in mm



1	Mounting surface with sealing rings: N. 4 OR type 130 (22.22x2.62) - 90 Shore N. 2 OR type 2043 (10.82x1.78) - 90 Shore
2	Socket hex adjustment screw: Allen key 5. Clockwise rotation to increase pressure
3	Locking nut: spanner 17
4	Pressure gauge port 1/4" BSP

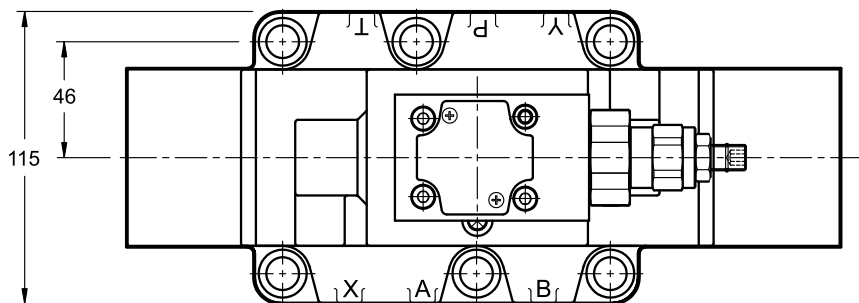
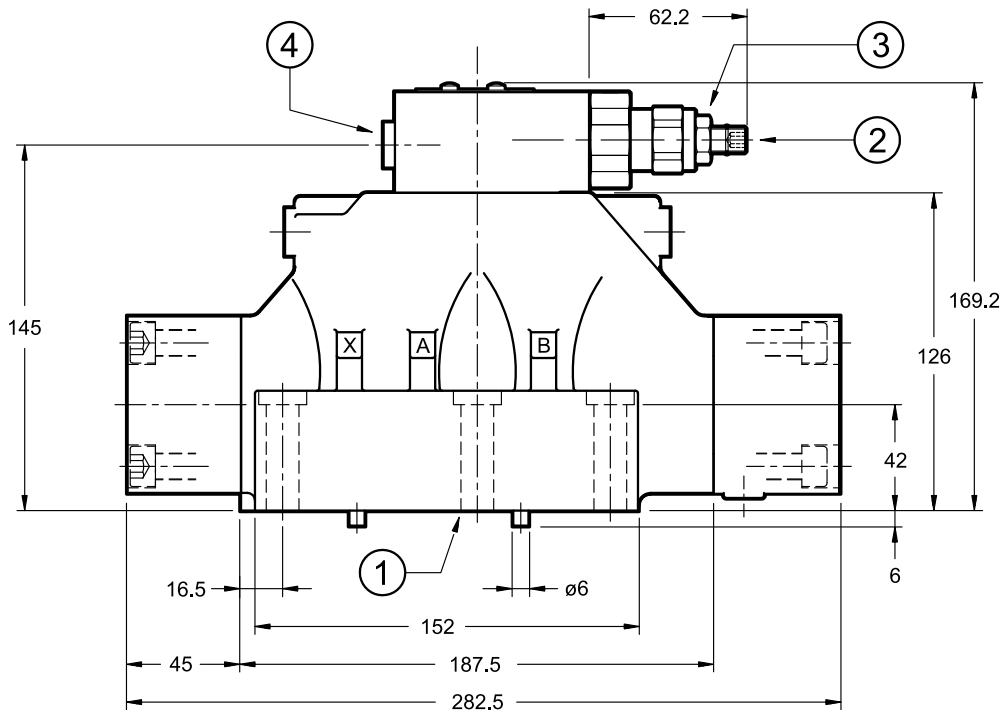
Single valve fastening:	N. 4 SHC bolts ISO 4762 M10x60 N. 2 SHC bolts ISO 4762 M6x60
Tightening torque M10x60:	40 Nm (A 8.8 bolts)
M6x60:	8 Nm (A 8.8 bolts)
Thread of mounting holes:	M6x18; M10x18

MOUNTING SURFACE

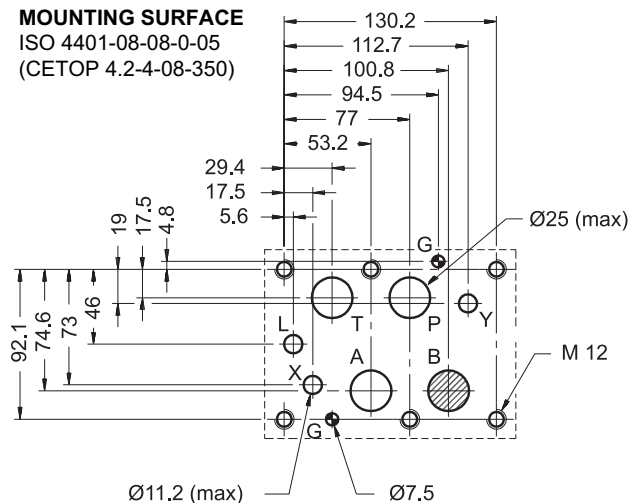
 ISO 4401-07-07-0-05
 (GETOP 4.2-4-07-350)


8 - DZC8 OVERALL AND MOUNTING DIMENSIONS

dimensions in mm



MOUNTING SURFACE
ISO 4401-08-08-0-05
(CETOP 4.2-4-08-350)



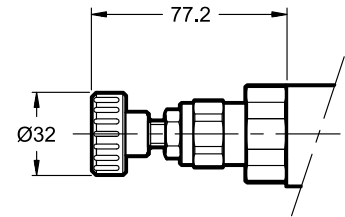
1	Mounting surface with sealing rings: N. 4 OR type 3118 (29.82x2.62) - 90 Shore N: 2 OR type 3081 (20.24x2.62) - 90 Shore
2	Socket hex adjustment screw: Allen key 5. Clockwise rotation to increase pressure
3	Locking nut: spanner 17
5	Pressure gauge port 1/4" BSP

Valve fastening: N. 6 SHC bolts ISO 4762 M12x60
Tightening torque: 69 Nm (A 8.8 bolts)
Thread of mounting holes: M12x20



9 - OPTIONS

The valves can be equipped with adjustment knob instead of the standard socket head screw.
Add **K1** at the identification code end (see par.1).



10 - SUBPLATES

(See catalogue 51 000)

	DZC5	DZC7	DZC8
Model with rear ports	PME4-AI5G	PME07-AI6G	-
Model with side ports	PME4-AL5G	PME07-AL6G	PME5-AL8G
Thread of ports:	P - T - A - B X - Y	3/4" BSP 1/4" BSP	1 1/2" BSP 1/4" BSP



DZC*
SERIES 12

DUPLOMATIC
MOTION SOLUTIONS

DUPLOMATIC MS S.p.A.

via M. Re Depaolini 24 ▪ 20015 PARABIAGO (MI) ▪ ITALY
tel. +39 0331.895.111 ▪ www.diplomatic.com ▪ e-mail: sales.exp@diplomatic.com



ZC2

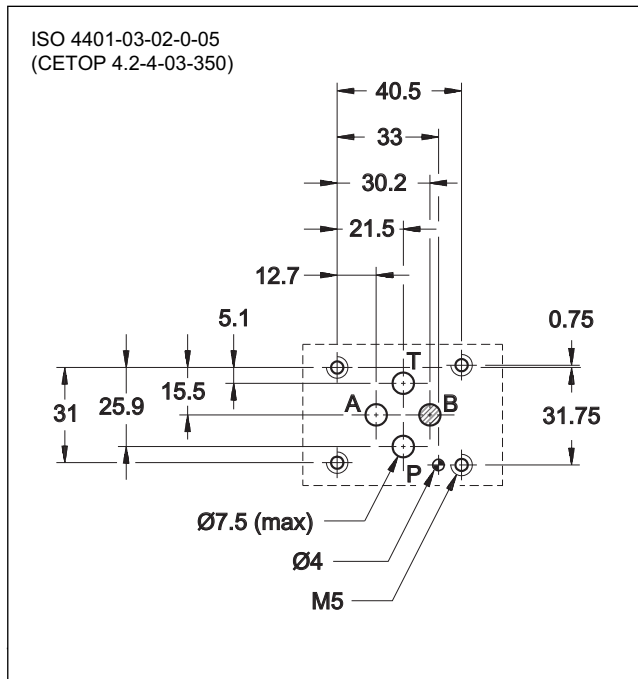
BALANCING VALVES

SERIES 51

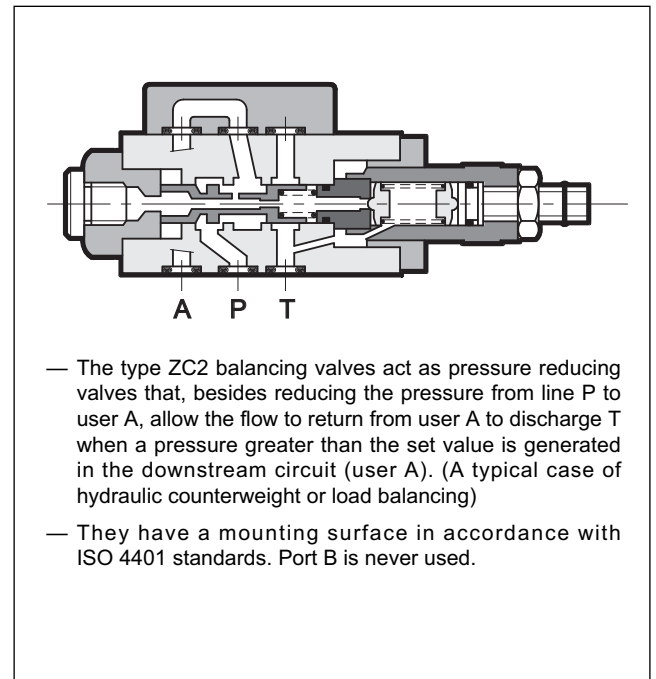
SUBPLATE MOUNTING ISO 4401-03

p max 350 bar
Q max 25 l/min

MOUNTING INTERFACES



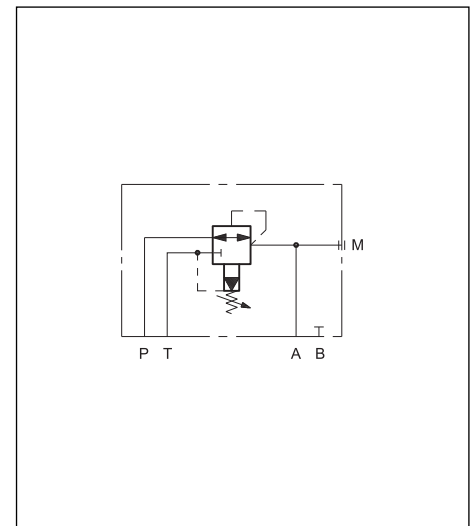
OPERATING PRINCIPLE



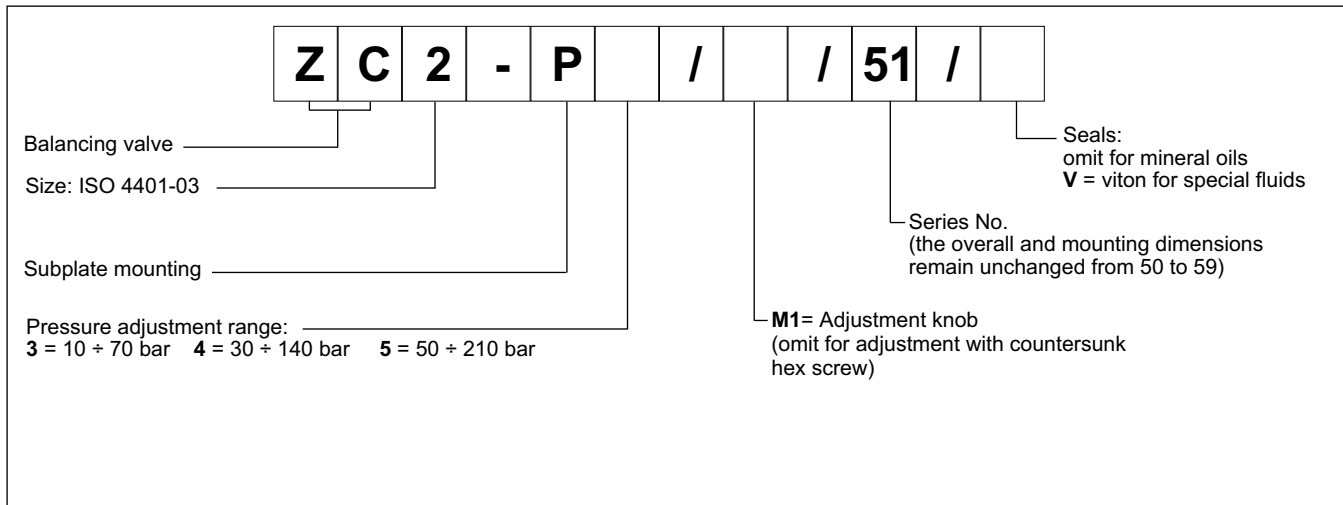
PERFORMANCES (measured with mineral oil of viscosity 36 cSt at 50°C)

Maximum operating pressure	bar	350
Maximum flow rate	l/min	25
Ambient temperature range	°C	-20 / +60
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass	kg	1,3

HYDRAULIC SYMBOL

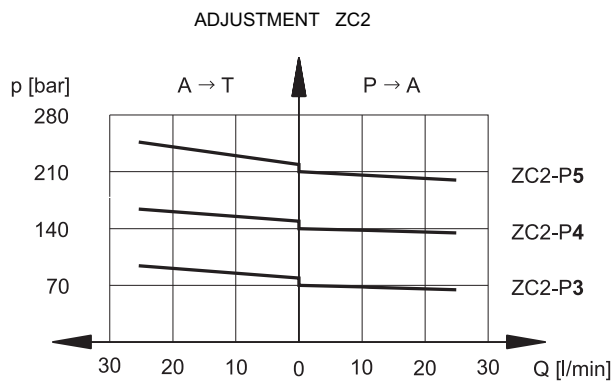


1 - IDENTIFICATION CODE



2 - CHARACTERISTIC CURVES

(values obtained with viscosity of 36 cSt at 50°C)

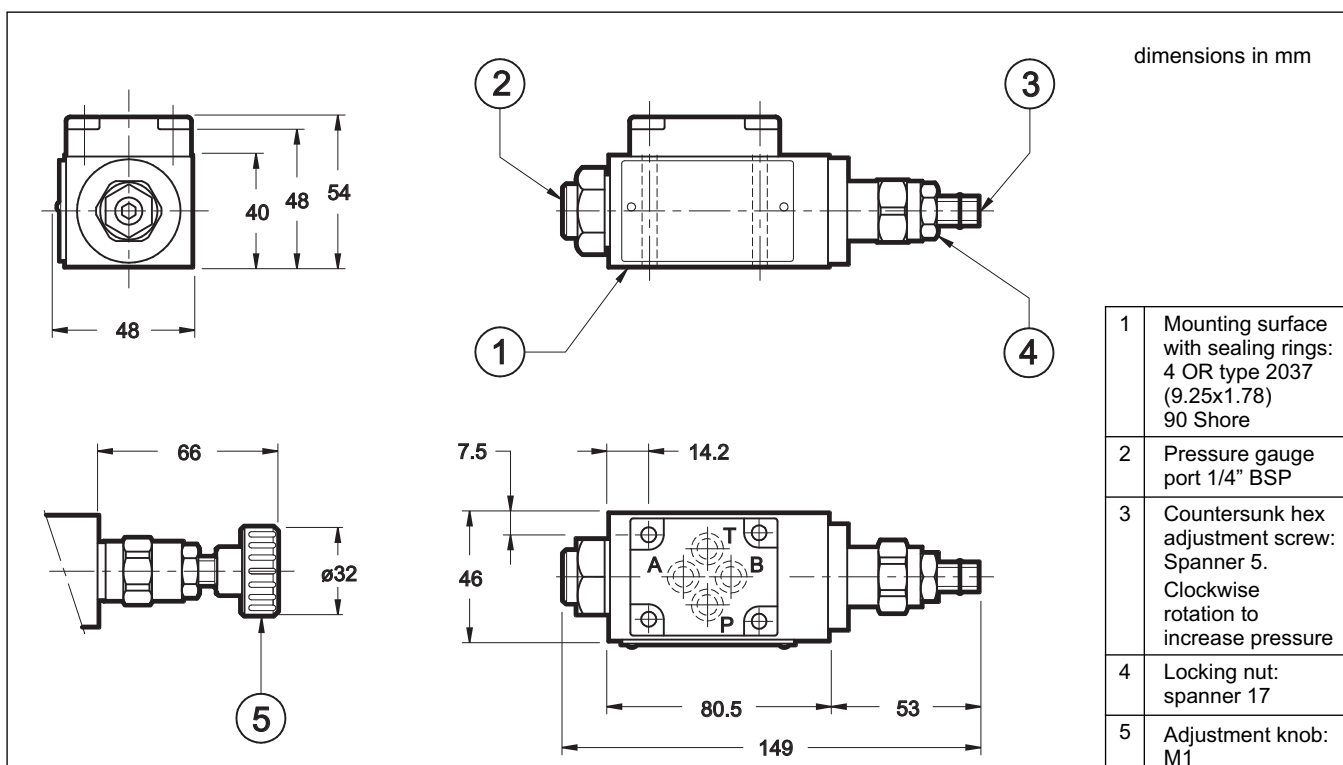


3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department.

Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics. The fluid must be preserved in its physical and chemical characteristics.

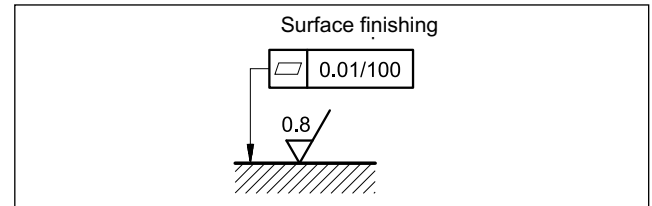
4 - ZC2 OVERALL AND MOUNTING DIMENSIONS



9 - INSTALLATION

The ZC2 valves can be installed in any position without impairing correct operation.

Valves are fixed by means of screws or tie rods on a flat surface with planarity and roughness equal to or better than those indicated in the relative symbols. If minimum values are not observed, fluid can easily leak between the valve and support surface.



6 - FASTENING BOLTS

Fastening bolts are delivered with the valve.

N. 4 bolts M5x55
Tightening torque: 5 Nm (A 8.8 screws)

7 - SUBPLATES (see cat. 51 000)

Type PMMD-AL3G ports on rear 3/8" BSP
Type PMMD-AL3G side ports 3/8" BSP



ZC2
SERIES 51



DIPLOMATIC MS S.p.A.

via M. Re Depaolini 24 ▪ 20015 PARABIAGO (MI) ▪ ITALY
tel. +39 0331.895.111 ▪ www.diplomatic.com ▪ e-mail: sales.exp@diplomatic.com



Z4M

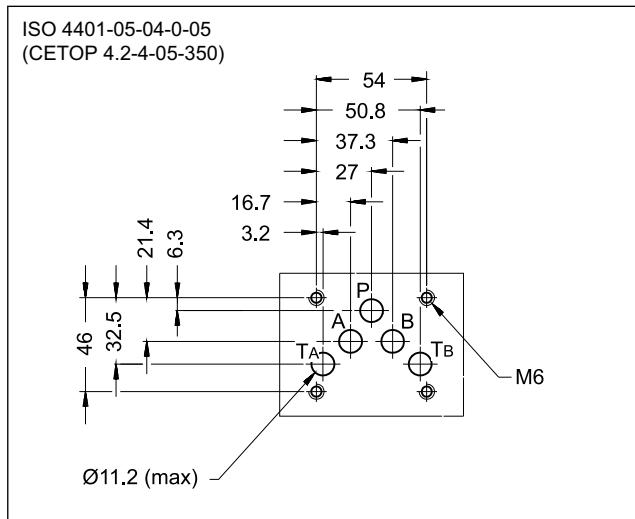
PILOT OPERATED PRESSURE REDUCING VALVE

SERIES 50

MODULAR VERSION ISO 4401-05

p max **350** bar
Q max (see table of performances)

MOUNTING INTERFACE



OPERATING PRINCIPLE

- The Z4M valve is a pilot operated pressure reducing valve shaped as modular version with mounting surface according to ISO 4401 standards.
- It reduces pressure on secondary circuit branches, assuring stability of the controlled pressure and even changing the flow that passes through the valve.
- It can be assembled quickly under ISO 4401-05 directional solenoid valves without the use of pipes.
- It is supplied with a hex socket adjustment screw, locking nut and a travel limiting device for maximum adjustment.
- It is available in four different pressure adjustment ranges, up to 320 bar.

CONFIGURATIONS

(see hydraulic symbols table)

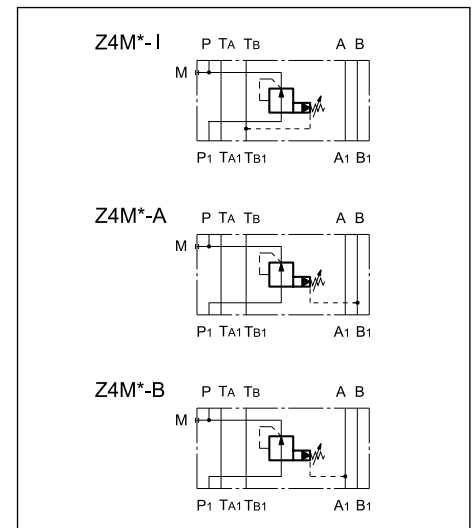
- Z4M*-I: pressure reduction on line P - drainage connected to line T_B.
- Z4M*-A: pressure reduction on line A and full pressure on line B.
- Z4M*-B: pressure reduction on line B and full pressure on line A.

PERFORMANCES

(measured with mineral oil of viscosity 36cSt at 50°C)

Maximum operating pressure: Z4M*-I Z4M*-A, Z4M*-B	bar	350 210
Maximum flow rate in the controlled line P Maximum flow rate in the free lines Drain flow rate	l/min	80 100 < 0,7
Ambient temperature range	°C	-20 / +60
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Recommended effective viscosity	cSt	25
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Mass	kg	2,7

HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE

	Z	4	M	-	/	/	50	/	
--	----------	----------	----------	----------	----------	----------	-----------	----------	--

Pressure reducing valve ————

Size: ISO 4401-05 ————

Modular version ————

Pressure adjustment range: ————

3 = 5 ÷ 70 bar
4 = 8 ÷ 140 bar
5 = 10 ÷ 210 bar
6 = 15 ÷ 320 bar (available only for I version)

Seals: omit for mineral oils
V = viton for special fluids

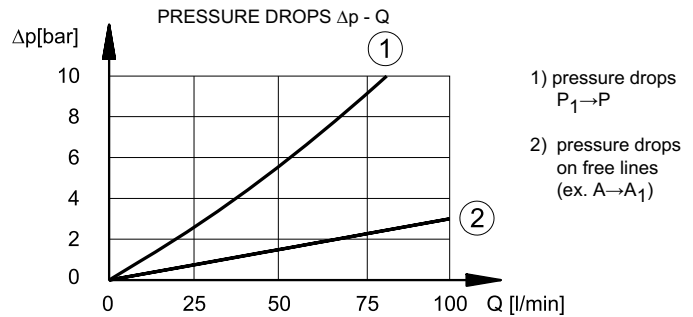
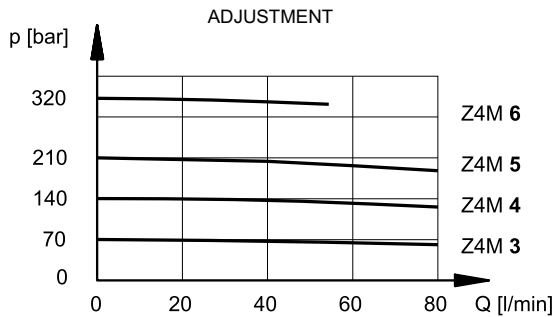
Series No. (the overall and mounting dimensions remain unchanged from 50 to 59)

M1 = Adjustment knob.
Omit for adjustment by socket hex screw.

Versions: I: pressure reduction on line P. Internal drain connected to line T_B
A: pressure reduction on line A and full pressure on line B
B: pressure reduction on line B and full pressure on line A

2 - CHARACTERISTIC CURVES

(values obtained with viscosity of 36 cSt at 50°C)



3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics. The fluid must be preserved in its physical and chemical characteristics.

4 - OVERALL AND MOUNTING DIMENSIONS

dimensions in mm

1	Locking nut spanner 17
2	Socket hex adjustment screw: Allen key 5. Rotate clockwise to increase pressure
3	Mounting surface with sealing rings: 5 OR type 2050 (12.42x1.78) 90 Shore
4	Pressure gauge port 1/4" BSP
5	Adjustment knob M1



Z*-P

PRESSURE REDUCING VALVES

SERIES 22

SUBPLATE MOUNTING

Z3-P ISO 5781-06

Z5-P ISO 5781-08

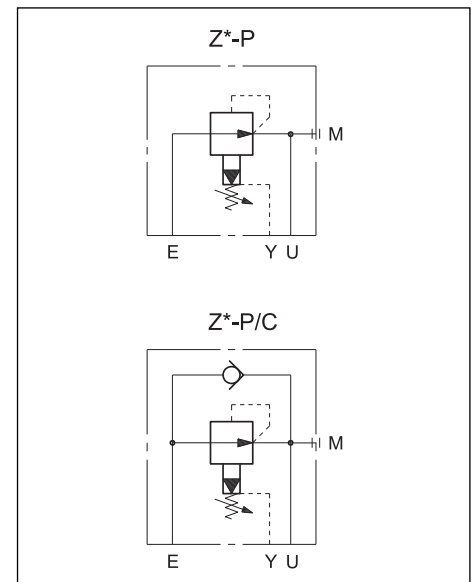
OPERATING PRINCIPLE

- The Z*-P type valves are used when a branch with a lower pressure than the main one is desired in the hydraulic circuits.
- Being normally open, they allow passage of oil up to the point when the outlet pressure is less than that set on the valve; the valve closes and keeps the outlet pressure constant when it reaches the set value. The intake pressure fluctuation, for values greater than the set values, does not affect the reduced outlet pressure, and furthermore the particular design of the valve prevents exceeding the set value even in transients.
- The drainage, to be connected directly to the tank, discharges about 0,8 l/min. The valves are available, upon request, with reduced drainage (0,4 l/min).
- Available even with incorporated check valve upon request, with cracking pressure of 0,5 bar.

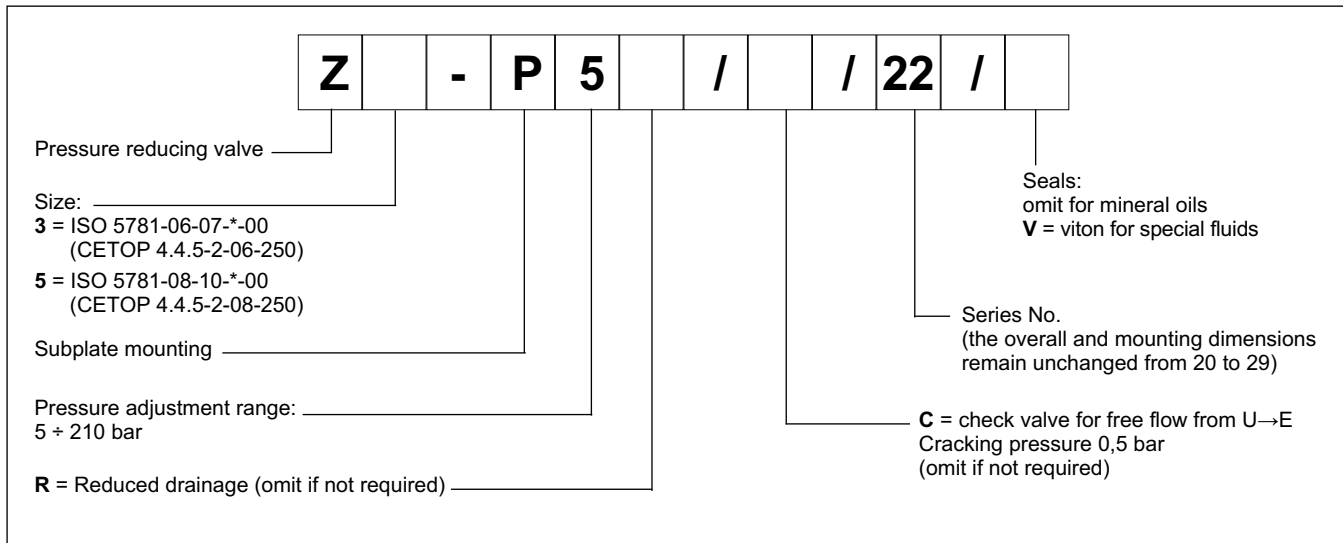
PERFORMANCES (measured with mineral oil of viscosity 36 cSt at 50°C)

		Z3-P	Z5-P
Maximum operating pressure	bar	250	
Maximum flow rate	l/min	40	110
Drain flow rate: for Z*-P for Z*-P*R	l/min	0,8 0,4	
Ambient temperature range	°C	-20 / +60	
Fluid temperature range	°C	-20 / +80	
Fluid viscosity range	cSt	10 + 400	
Fluid contamination degree	According to ISO 4406:1999 classe 20/18/15		
Recommended viscosity	cSt	25	
Mass	kg	3,9	6,1

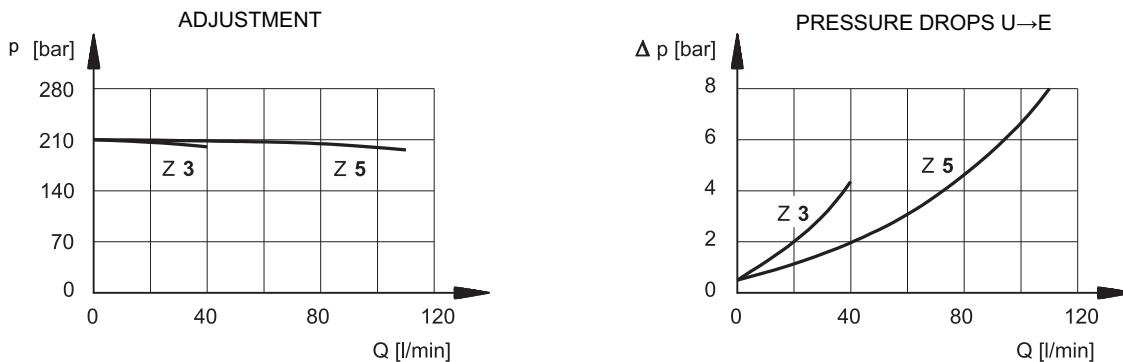
HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE



2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)



3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V).

For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics.

The fluid must be preserved in its physical and chemical characteristics.

4 - Z3-P OVERALL AND MOUNTING DIMENSIONS

dimensions in mm

MOUNTING SURFACE:
ISO 5781-06-07-*00 (CETOP 4.4.5-2-06-250)

NOTE: the position of the Y port corresponds to the position of the X port provided by the ISO Standard

1	SICBLOC adjustment knob. To operate, push and rotate at the same time.
2	Intake
3	Outlet port
4	Drainage port
5	Pressure gauge port 1/4" NPT
6	Supplementary tube port for drainage 1/4" BSP
7	Mounting surface with sealing rings: N. 2 OR type 3068 (17.13x2.62) N. 2 OR type 2021 (5.28x1.78) 90 Shore

FASTENING BOLTS:
4 bolts M10x70
Tightening torque: 40 Nm

5 - Z5-P OVERALL AND MOUNTING DIMENSIONS

dimensions in mm

MOUNTING SURFACE:
ISO 5781-08-10-*00 (CETOP 4.4.5-2-08-250)

NOTE: the position of the Y port corresponds to the position of the X port provided by the ISO Standard

1	SICBLOC adjustment knob. To operate, push and rotate at the same time.
2	Intake
3	Outlet port
4	Drainage port
5	Pressure gauge port 1/4" NPT
6	Supplementary plug for drainage 1/4" BSP
7	Mounting surface with sealing rings: N. 2 OR type 3100 (25.07x2.62) 90 Shore N. 2 OR type 2021 (5.28x1.78) 90 Shore

FASTENING BOLTS:
4 bolts M10x70
Tightening torque: 40 Nm



6 - SUBPLATES (see catalogue 51 000)

	Z3-P	Z5-P
Type	PMSZ3-Al4G with rear ports	PMSZ5-Al6G with rear ports
Port dimensions: - E, U - X, Y	1/2" BSP 1/4" BSP	1" BSP 1/4" BSP