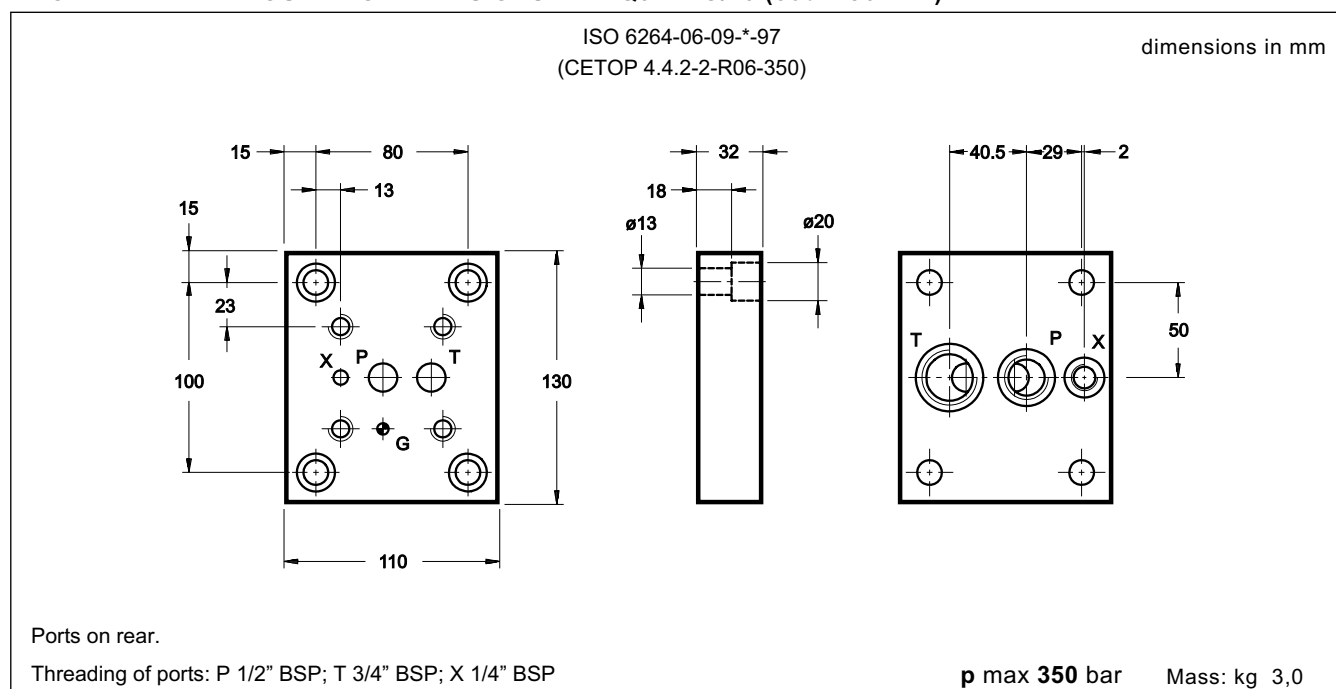


SUBPLATES

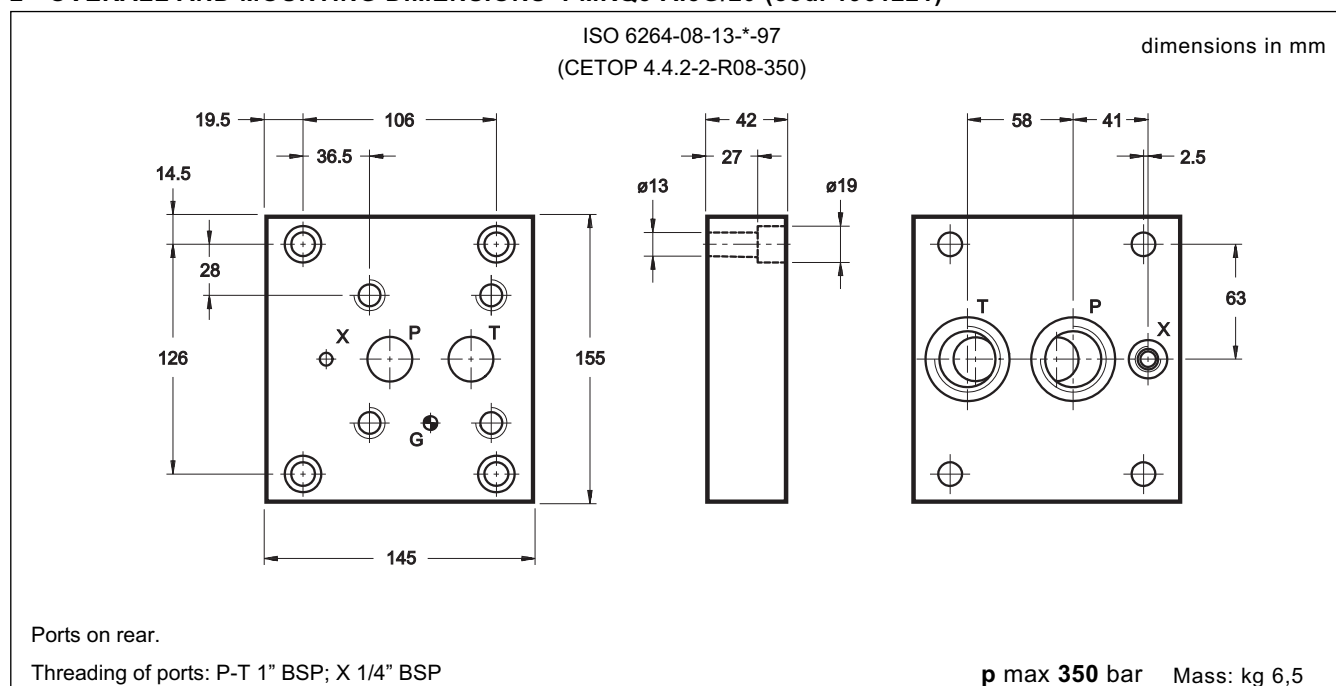
PMRQ*

SUBPLATES FOR PRESSURE CONTROL VALVES

1 - OVERALL AND MOUNTING DIMENSIONS PMRQ3-A14G/20 (cod. 1961211)



2 - OVERALL AND MOUNTING DIMENSIONS PMRQ5-A15G/20 (cod. 1961221)

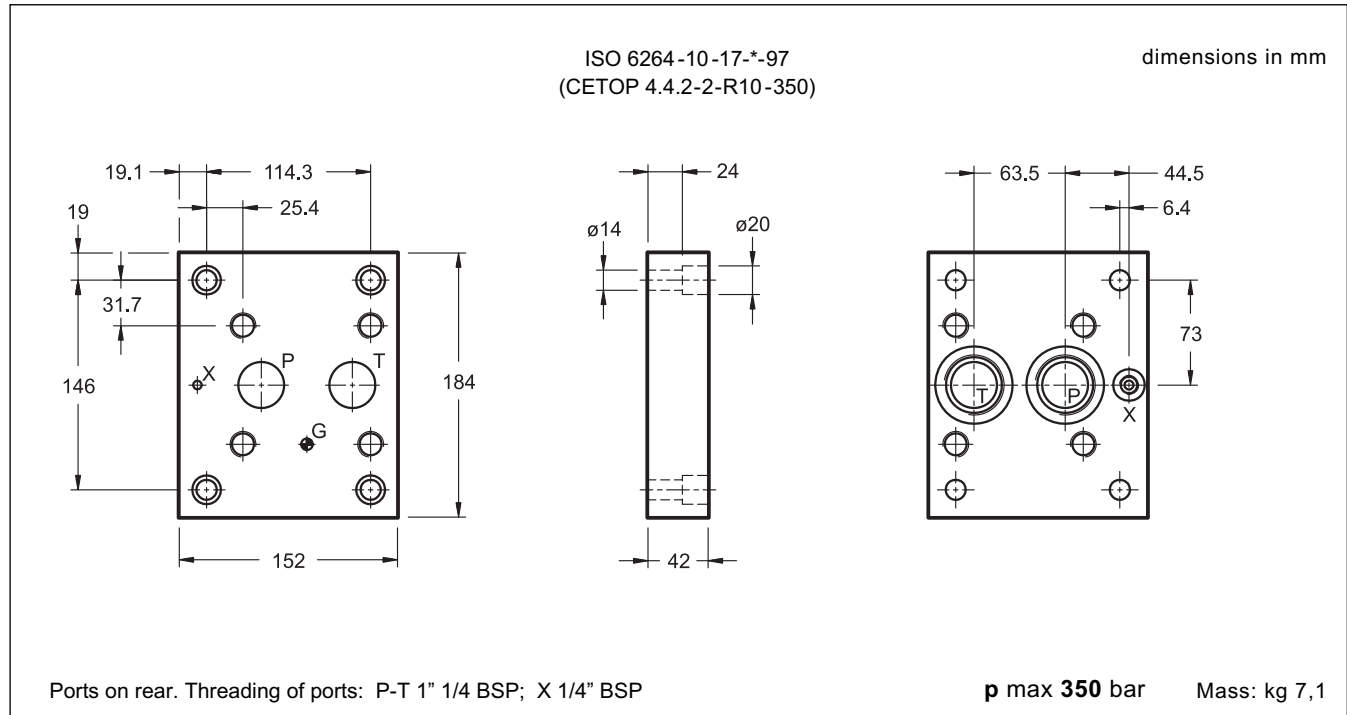




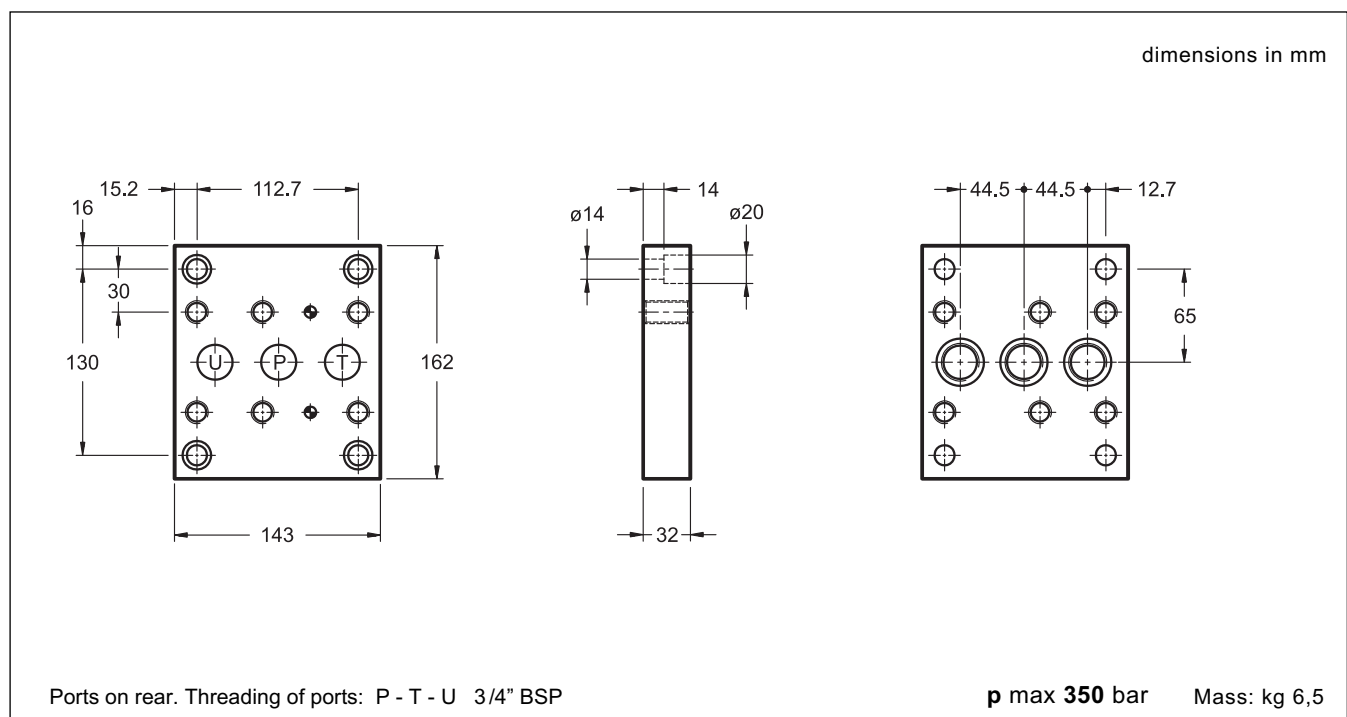
PMRQ*

SUBPLATES FOR PRESSURE CONTROL VALVES

3 - OVERALL AND MOUNTING DIMENSIONS PMRQ7-AI7G/10 (cod. 1960051)



4 - OVERALL AND MOUNTING DIMENSIONS PMRQA5-AI5G/10 (cod. 1960070)

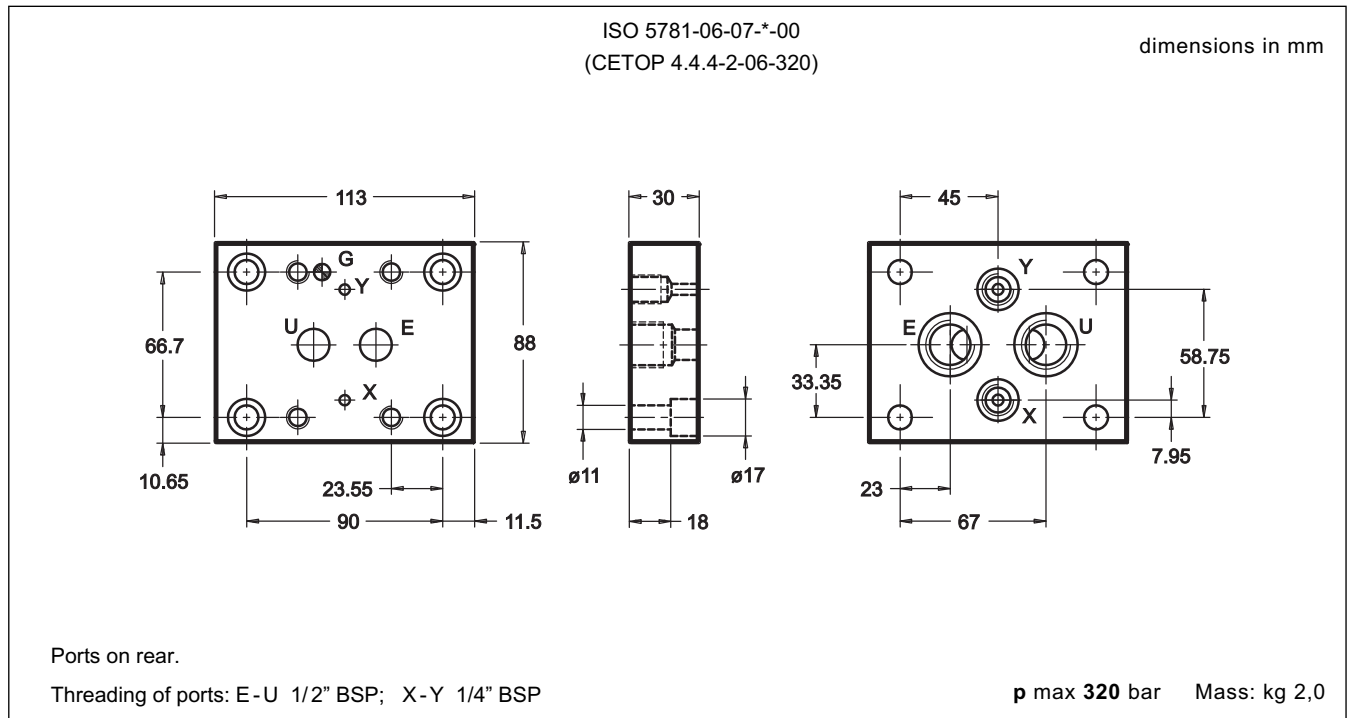




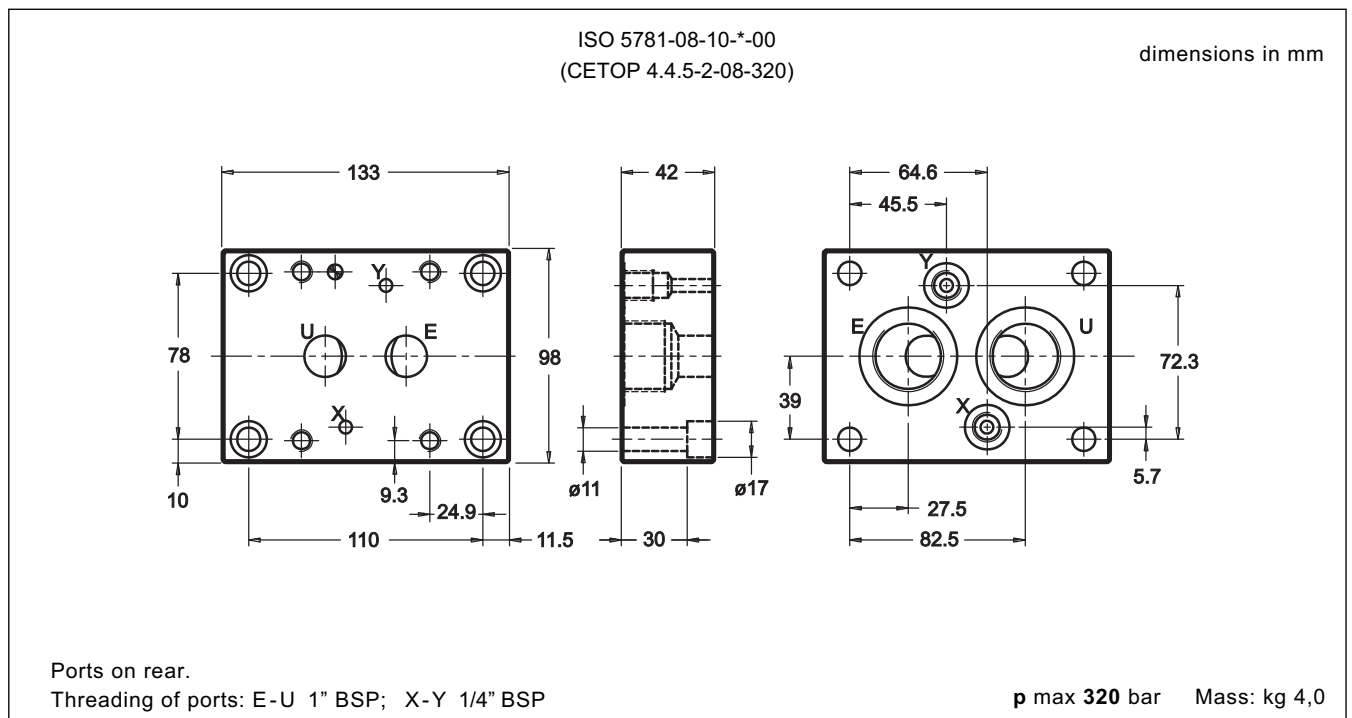
PMSZ*

SUBPLATES FOR S - Z VALVES

5 - OVERALL AND MOUNTING DIMENSIONS PMSZ3-AI4G/20 (cod. 1961231)



6 - OVERALL AND MOUNTING DIMENSIONS PMSZ5-AI6G/20 (cod. 1961241)



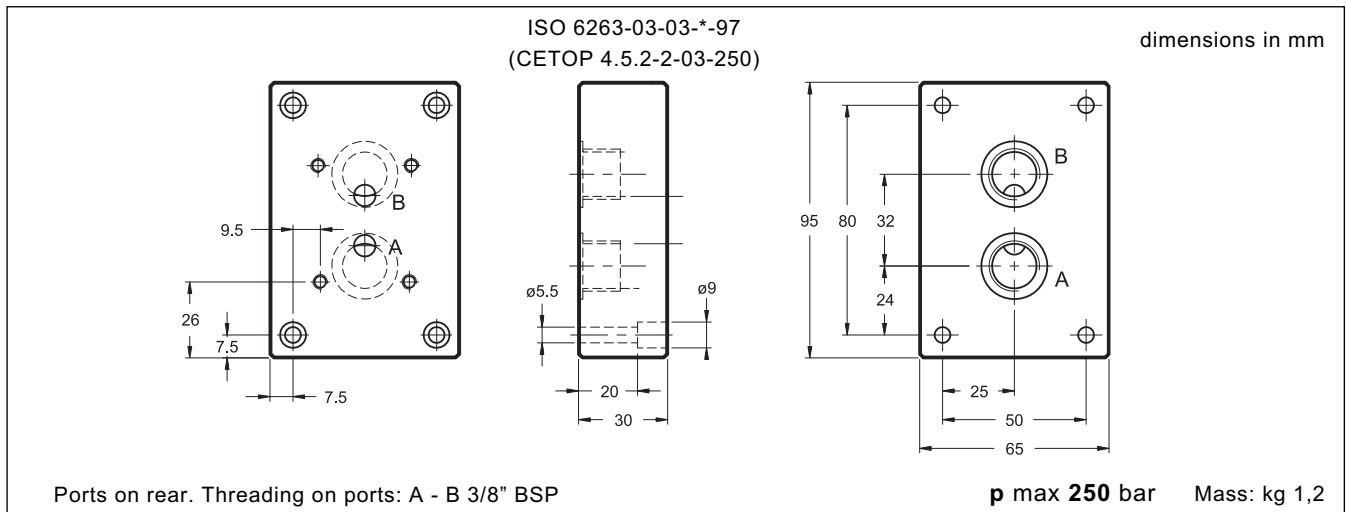


PMRPC*

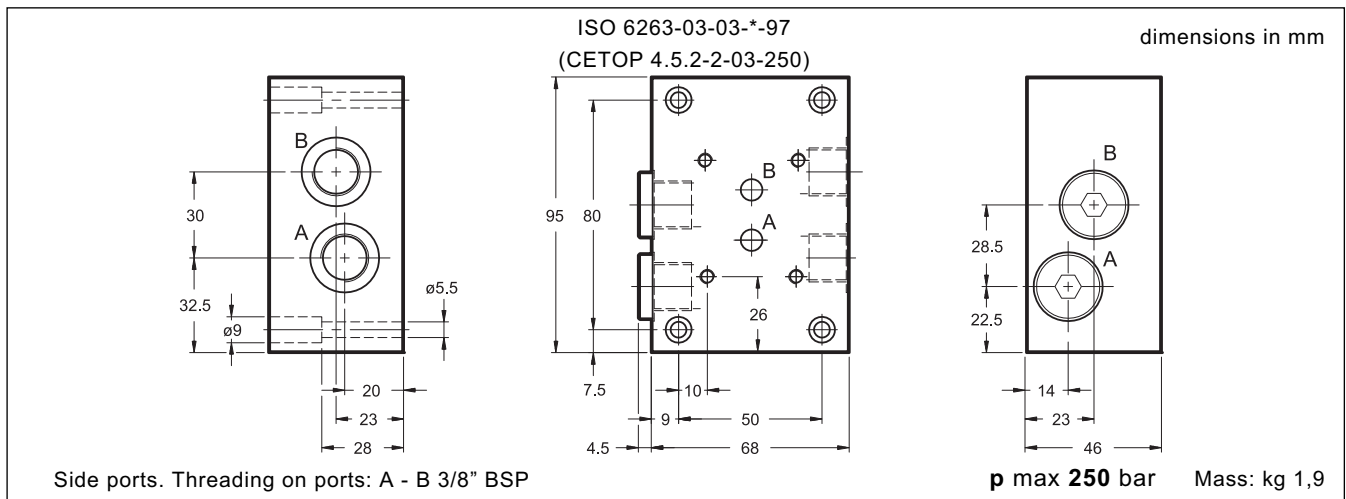
SUBPLATES

FOR FLOW CONTROL VALVES

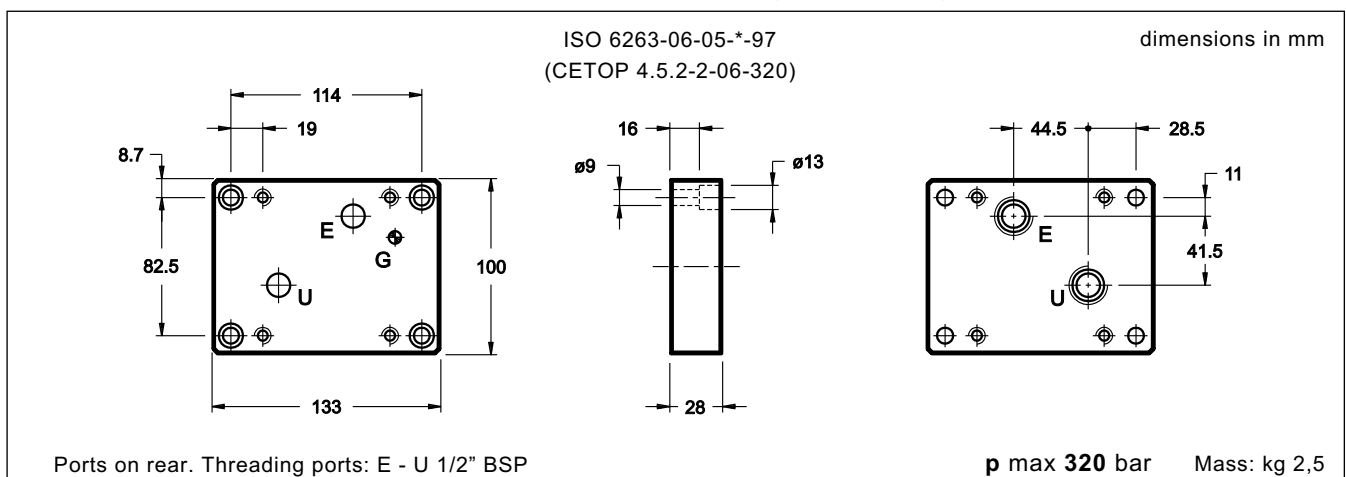
7 - OVERALL AND MOUNTING DIMENSIONS PMRPC1-AI3G/10 (cod. 1961045)



8 - OVERALL AND MOUNTING DIMENSIONS PMRPC1-AL3G/10 (cod. 1961051)



9 - OVERALL AND MOUNTING DIMENSIONS PMRPC2-AI4G/10 (cod. 1960330)



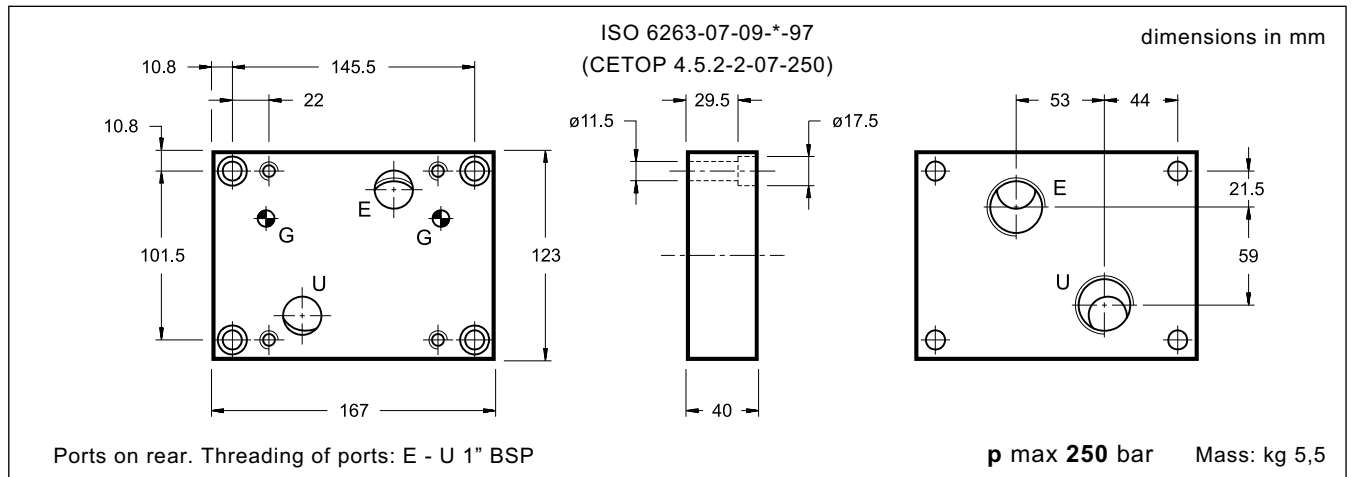


PMRPC*

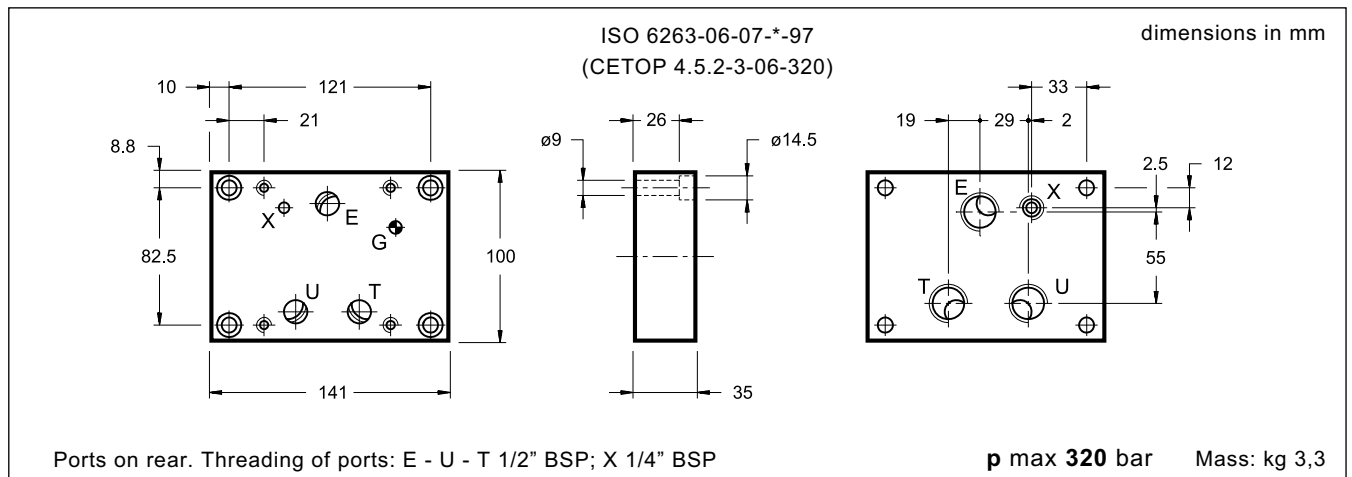
SUBPLATES

FOR FLOW CONTROL VALVES

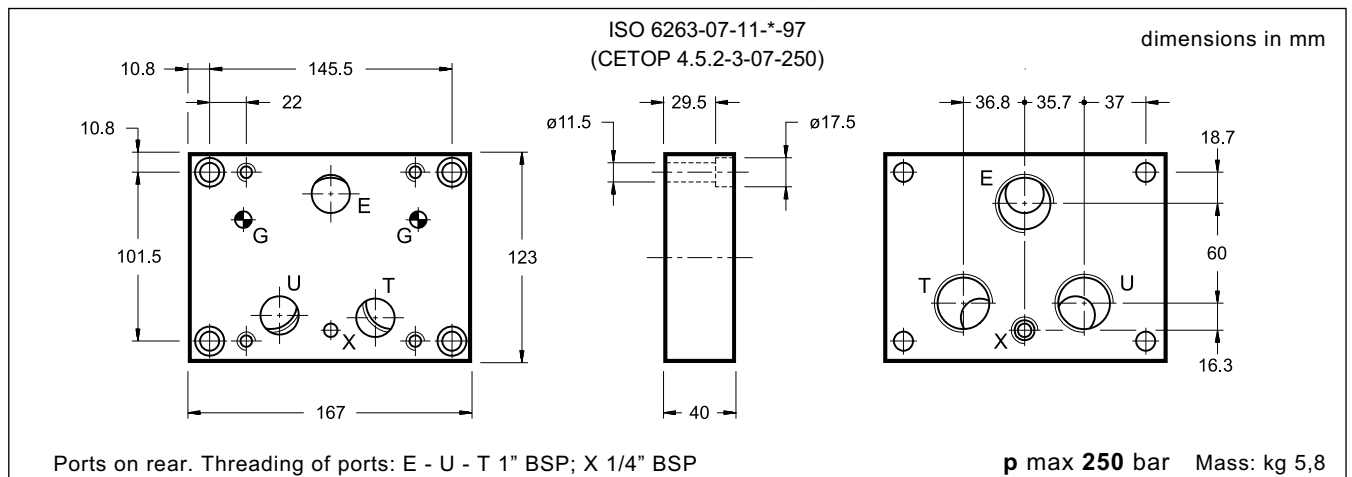
10 - OVERALL AND MOUNTING DIMENSIONS PMRPC3-AI6G/10 (cod. 1960511)



11 - OVERALL AND MOUNTING DIMENSIONS PMRPCQ2-AI4G/10 (cod. 1960526)



12 - OVERALL AND MOUNTING DIMENSIONS PMRPCQ3-AI6G/10 (cod. 1960423)

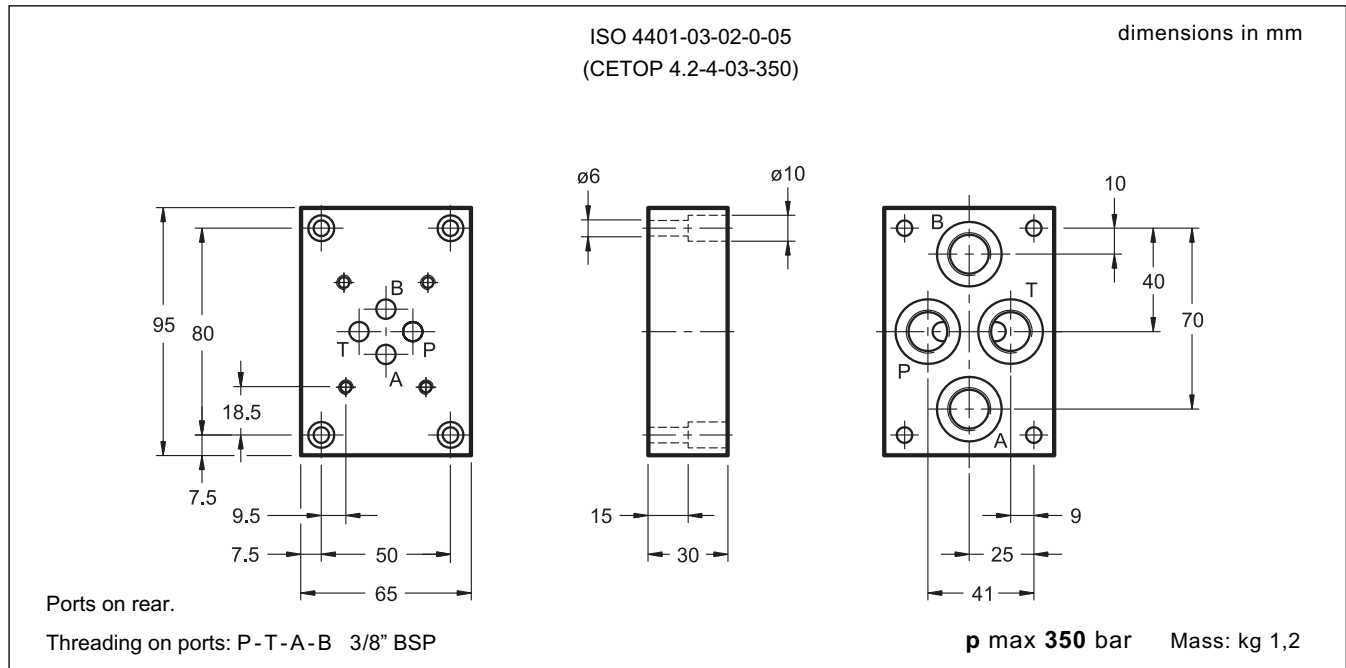




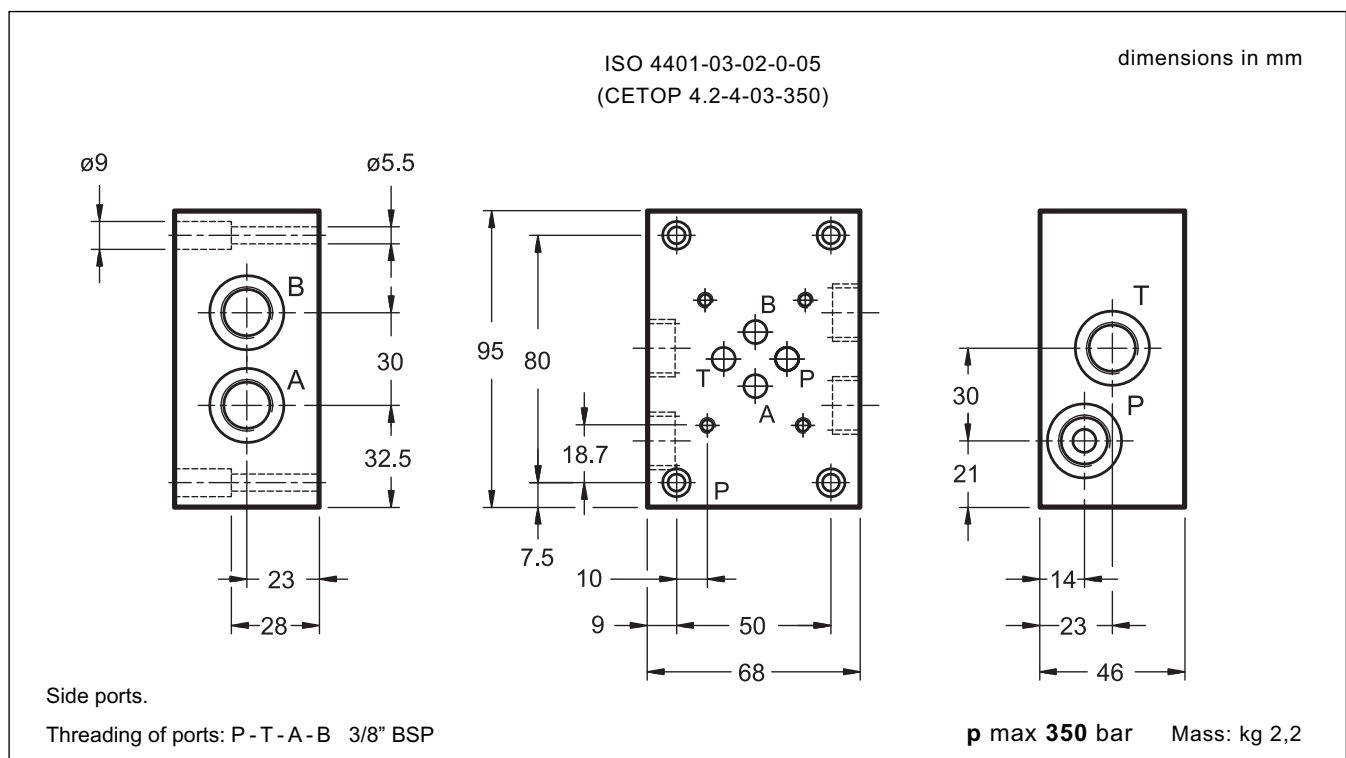
PMMD

SUBPLATES FOR ISO 4401-03 (CETOP 03) VALVES

13 - OVERALL AND MOUNTING DIMENSIONS PMMD-AI3G/20 (cod. 1961261)



14 - OVERALL AND MOUNTING DIMENSIONS PMMD-AL3G/11 (cod. 1961251)

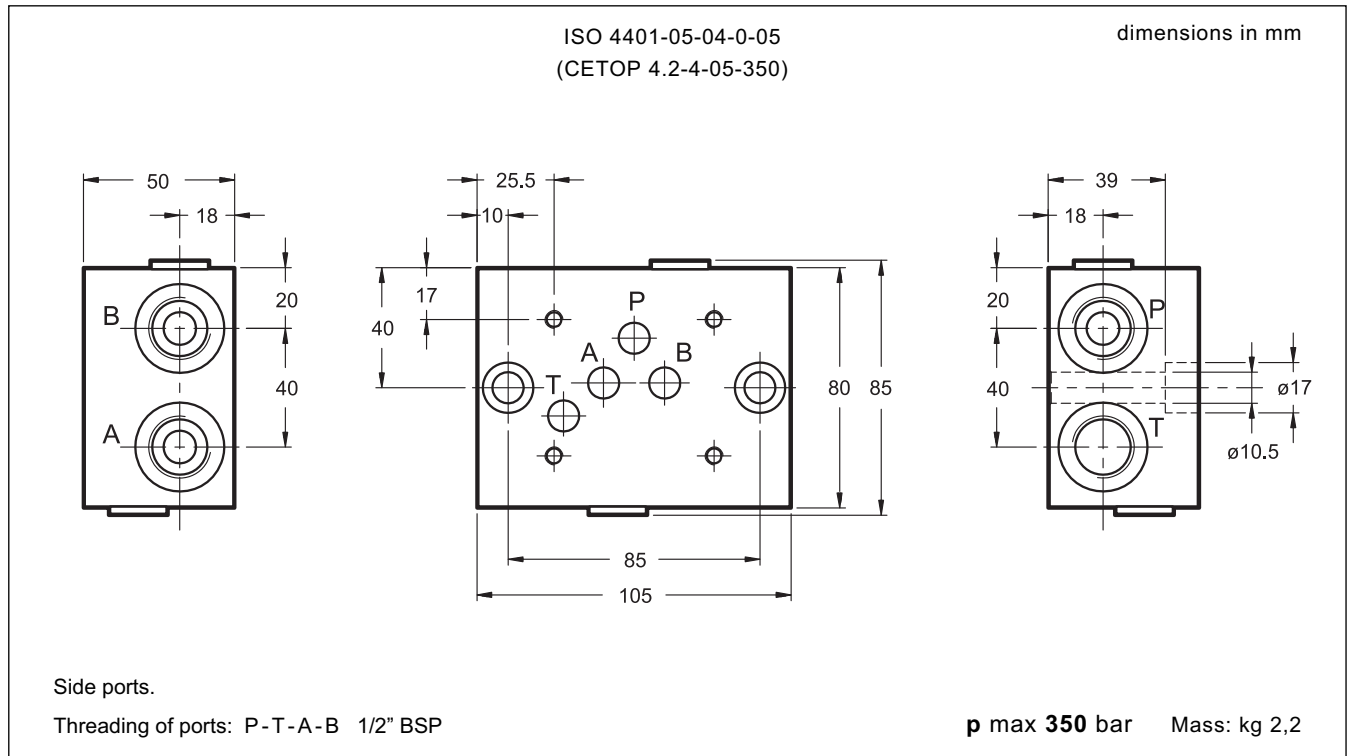




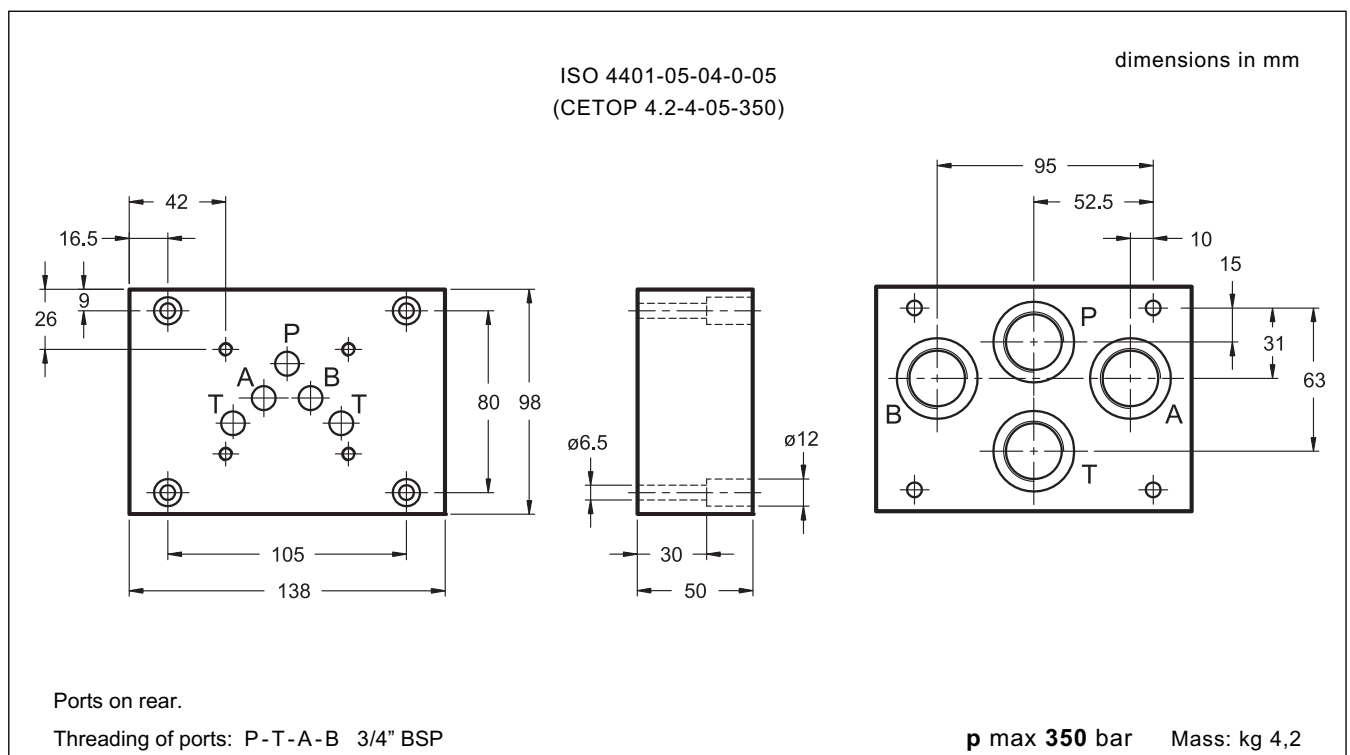
PMD4

SUBPLATES FOR ISO 4401-05 (CETOP 05) VALVES

15 - OVERALL AND MOUNTING DIMENSIONS PMD4-AL4G/10 (cod. 1960981)



16 - OVERALL AND MOUNTING DIMENSIONS PMD4-AI4G/20 (cod. 1961271)





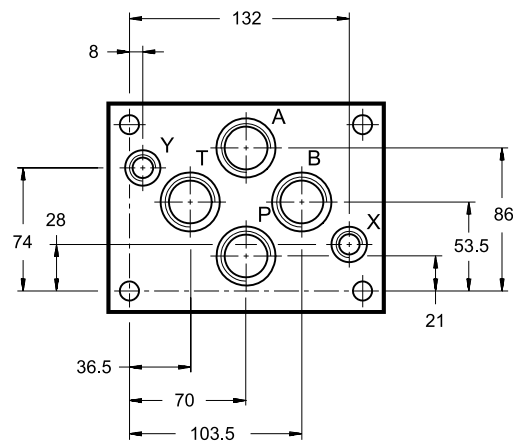
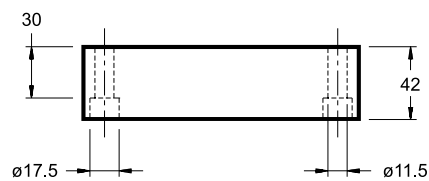
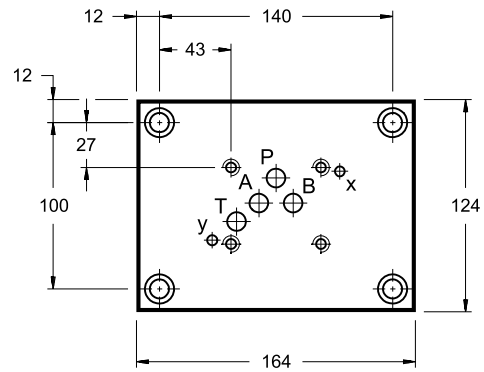
PME4

SUBPLATES FOR CETOP P05 VALVES

17 - OVERALL AND MOUNTING DIMENSIONS PME4-AI5G/10 (cod. 1961181)

CETOP 4.2-4-P05-320

dimensions in mm



Ports on rear.
Threading of ports:
P-T-A-B 3/4" BSP
X-Y 1/4" BSP

p max 320 bar Mass: kg 5,3

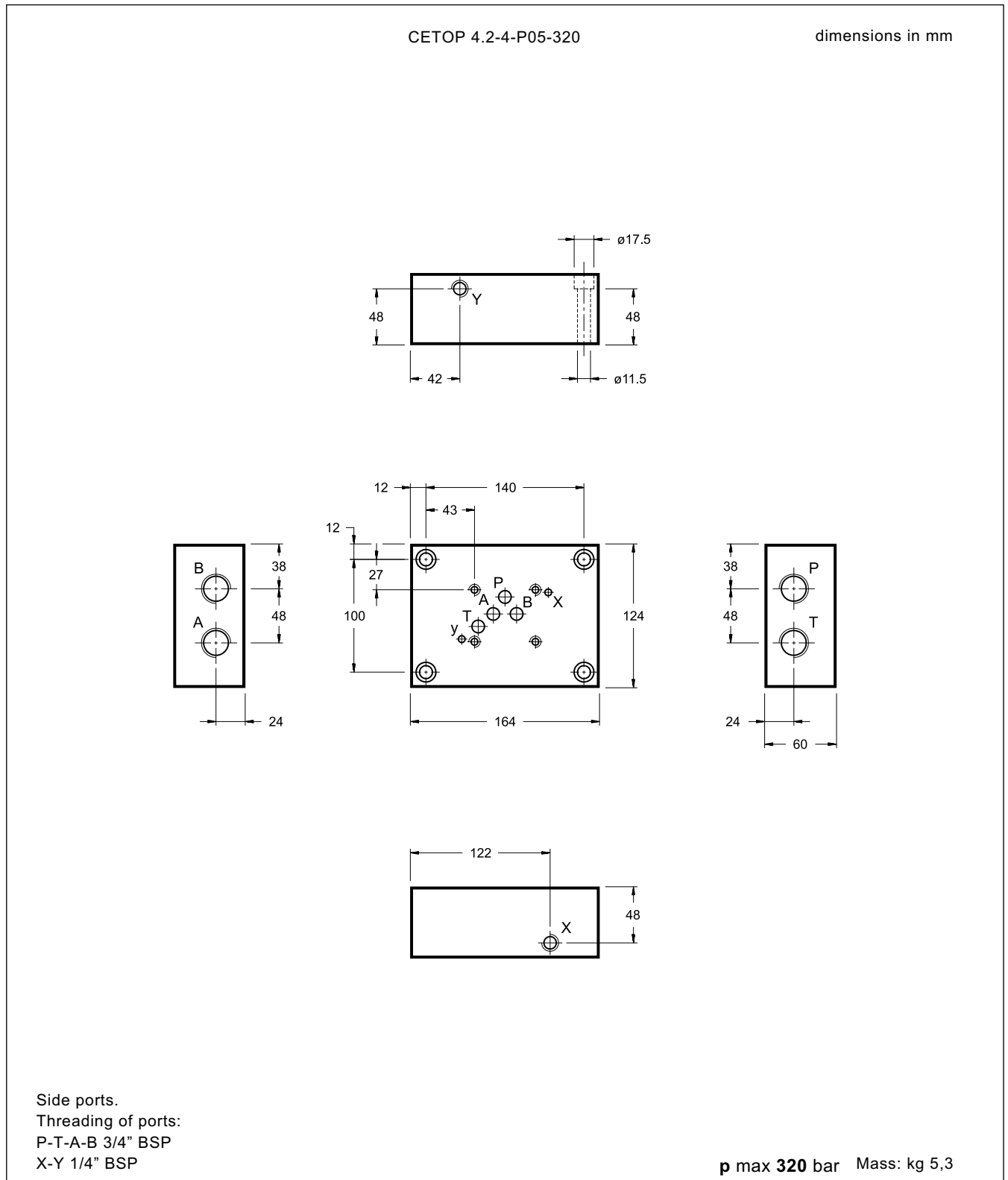


PME4

SUBPLATES

FOR CETOP P05 VALVES

18 - OVERALL AND MOUNTING DIMENSIONS PME4-AL5G/10 (cod. 1961201)





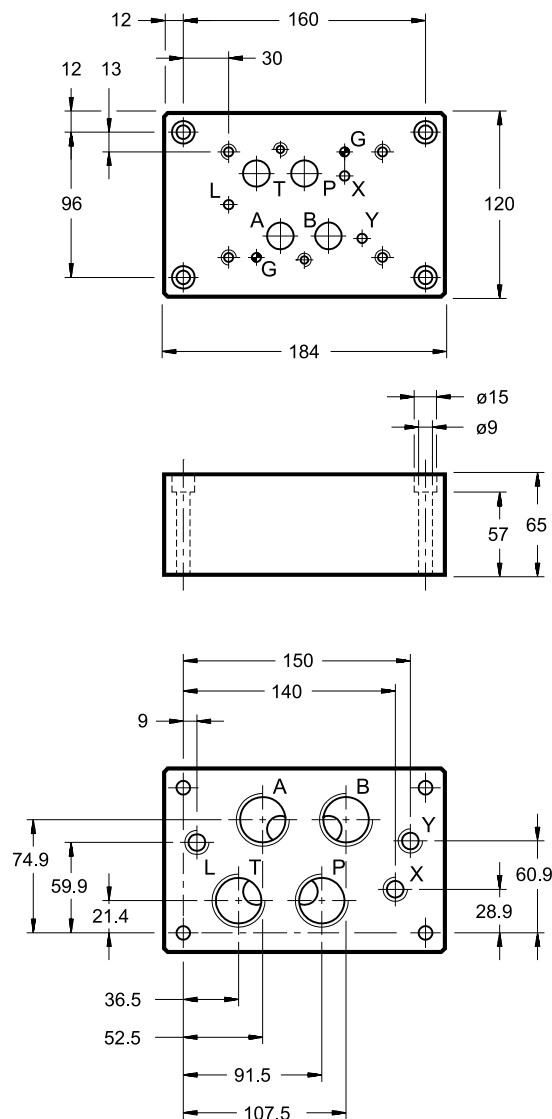
PME07

SUBPLATES FOR ISO 4401-07 (CETOP 07) VALVES

19 - OVERALL AND MOUNTING DIMENSIONS PME07-AI6G/10 (cod. 1961071)

dimensions in mm

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



Ports on rear.
Threading of ports:
P-T-A-B 1" BSP
X-Y-L 1/4" BSP

p max 350 bar

Mass: kg 9



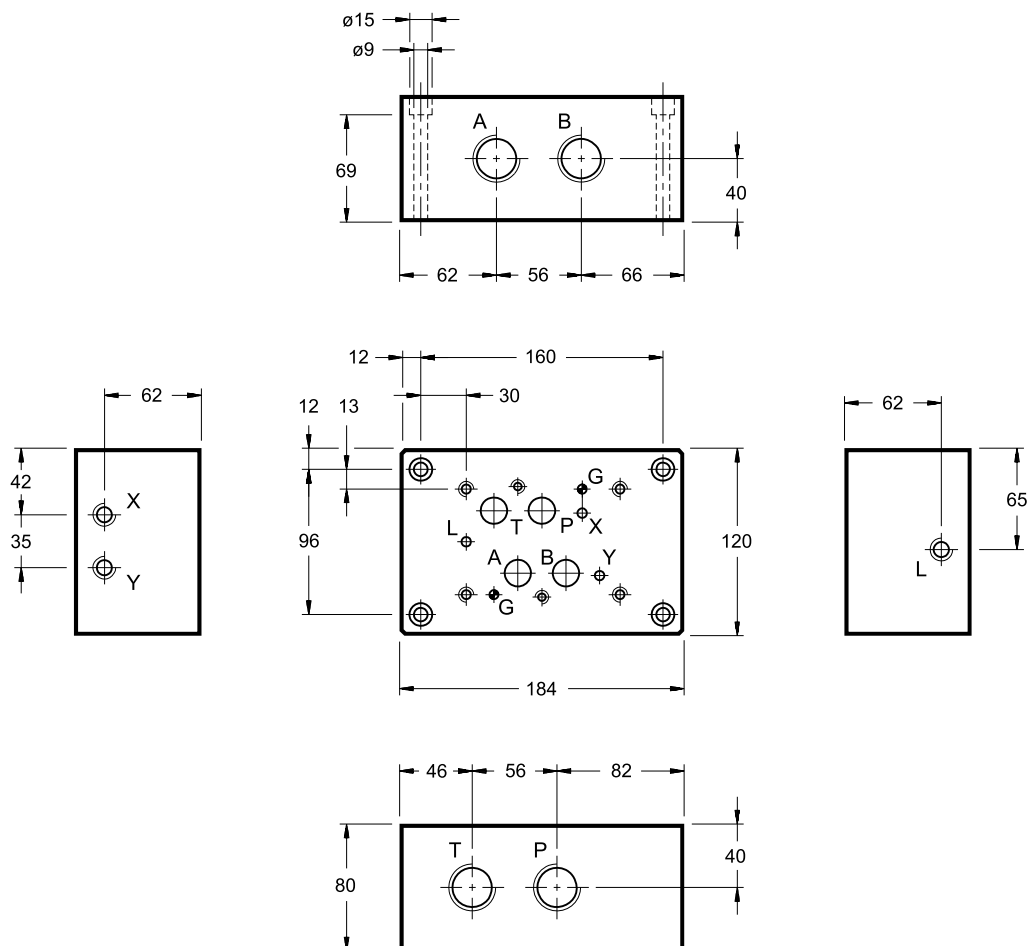
PME07

SUBPLATES FOR ISO 4401-07 (CETOP 07) VALVES

20 - OVERALL AND MOUNTING DIMENSIONS PME07-AL6G/10 (cod. 1961111)

dimensions in mm

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



Side ports.
Threading of ports:
P-T-A-B 1" BSP
X-Y-L 1/4" BSP

p max 350 bar

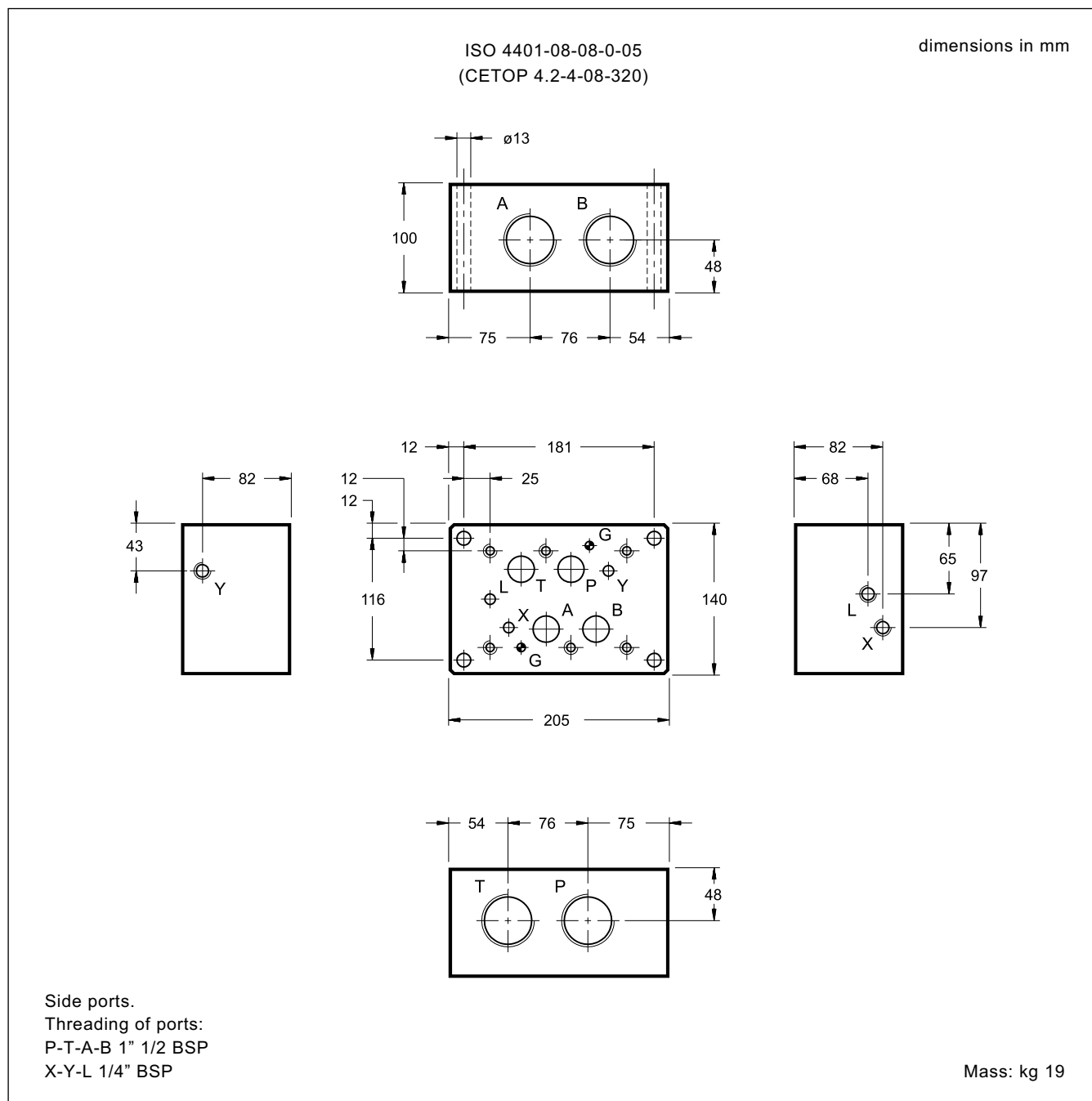
Mass: kg 11,5



PME5

SUBPLATES FOR ISO 4401-08 (CETOP 08) VALVES

21 - OVERALL AND MOUNTING DIMENSIONS PME5-AL8G/10 (cod. 1961141)



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This series of modular subplates has been designed to make hydraulic circuits and can be used directly on power packs or on any other section of the machine.

The subplates are assembled by means of 4 tie-rods with seal seats incorporated in the subplate.

The above assembly achieves compact units (including pressure and discharge manifolds): one face per subplate is used for connection to services and the other to mount ISO 4401-03 (CETOP 03) valves.

Complex circuits can also be set up using modular valves.

The recommended mounting configuration for **P2*** subplates on hydraulic power packs is with the main axis positioned vertically to obtain the bundle of pipes to utilities in two vertical rows; however assembly is not restricted to this configuration.

P2*

MODULAR SUBPLATES FOR ISO 4401-03 (CETOP 03) VALVES

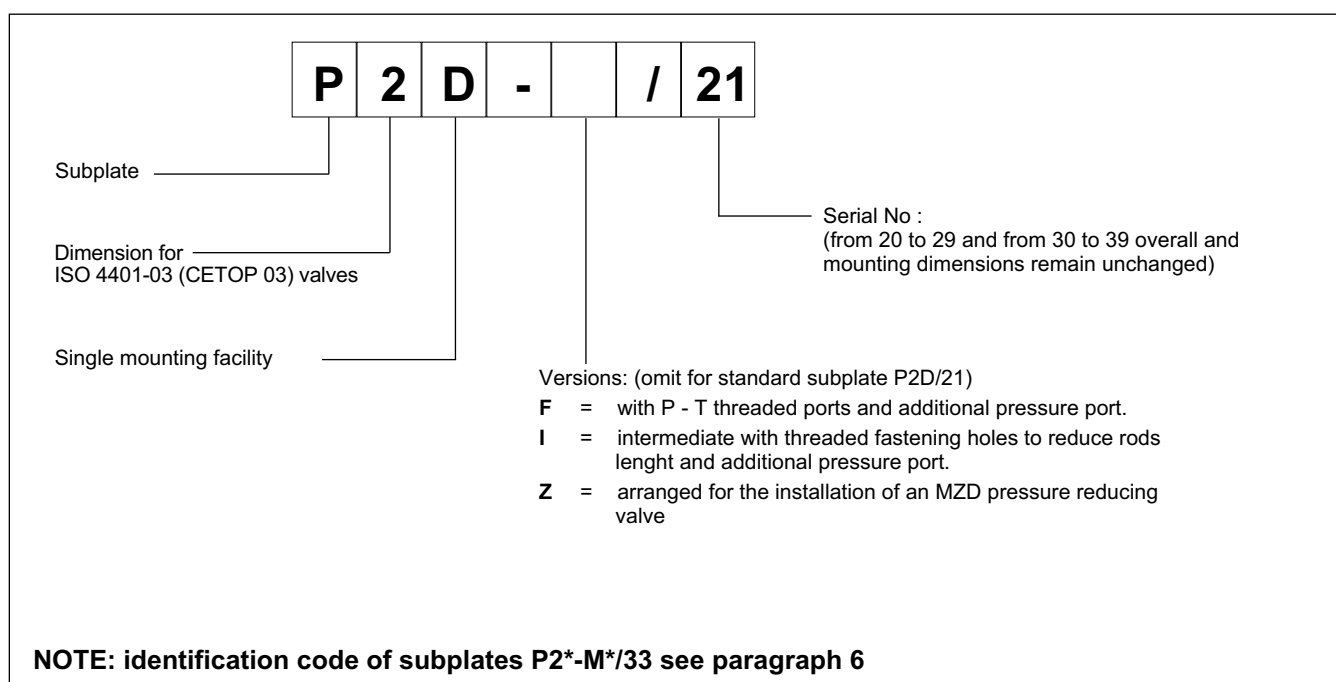
p max 350 bar

Q max 50 l/min

TECHNICAL SPECIFICATIONS

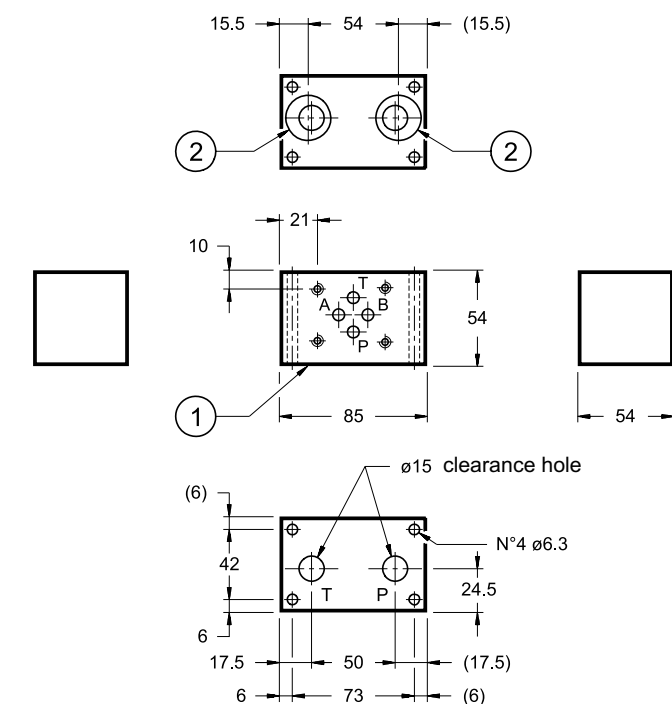
Maximum operating pressure - ports P - A - B - port T	bar	see paragraph 11 140
Maximum flow	l/min	50
Port dimensions: P - pressure T - lower drainage T - upper drainage A/B - users	BSP	3/8" 1/2" 3/8" 3/8"
Ambient temperature range	°C	-20 / +50
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	cSt	25
Recommended viscosity	According to ISO 4406:1999 class 20/18/15	

1 - IDENTIFICATION CODE

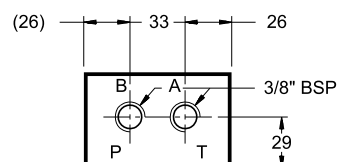
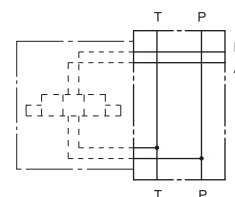


2 - OVERALL AND MOUNTING DIMENSIONS P2D/21 (cod. 1560121)

STANDARD SUPBLATE



Mass: kg 1,5



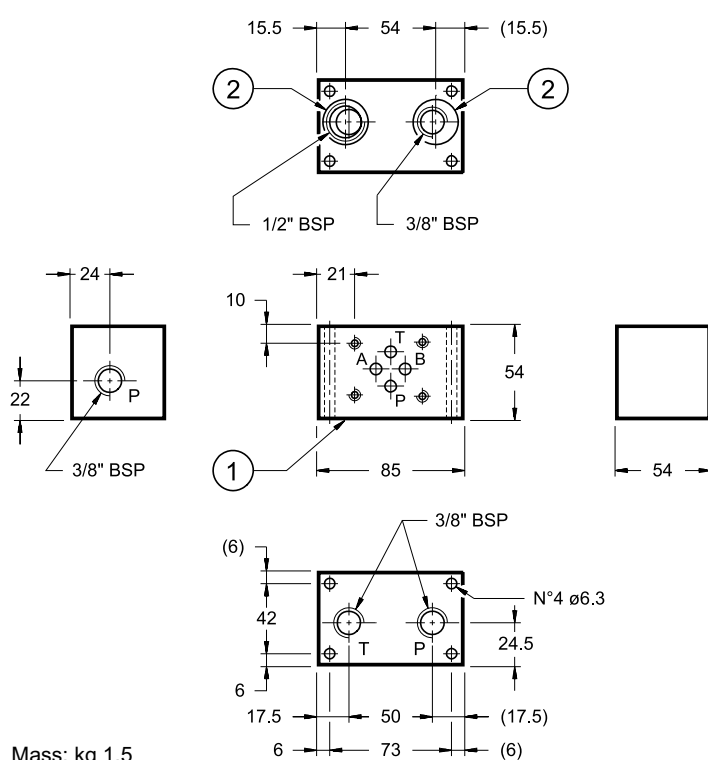
NOTE: The subplate is supplied with O-Ring made of NBR 90 Shore

dimensions in mm

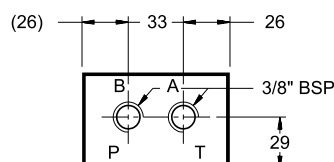
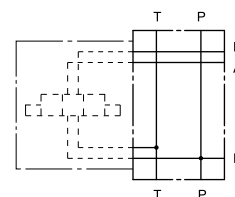
1	Mounting surface
2	OR seats 2093 (23.52x1.78)

3 - OVERALL AND MOUNTING DIMENSIONS P2D-F/21 (cod. 1560122)

P - T THREADED PORTS AND ADDITIONAL PRESSURE PORT SUBPLATE



Mass: kg 1,5



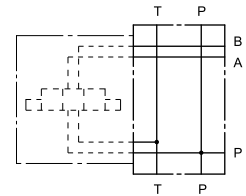
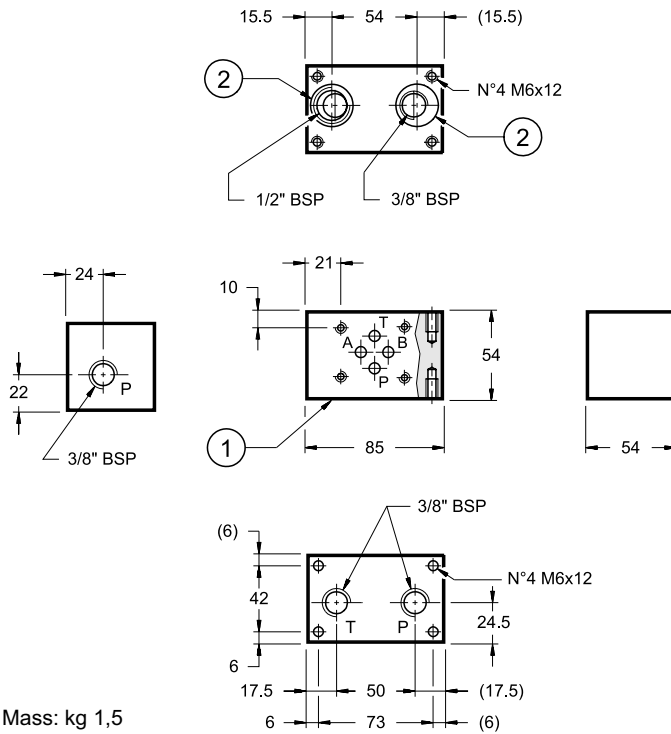
NOTE: The subplate is supplied with O-Ring made of NBR 90 Shore

dimensions in mm

1	Mounting surface
2	OR seats 2093 (23.52x1.78)

4 - OVERALL AND MOUNTING DIMENSIONS P2D-I/21 (cod. 1560123)

INTERMEDIATE SUBPLATE WITH THREADED FASTENING HOLES TO REDUCE ROD LENGHT AND ADDITIONAL PRESSURE PORT



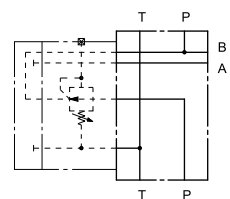
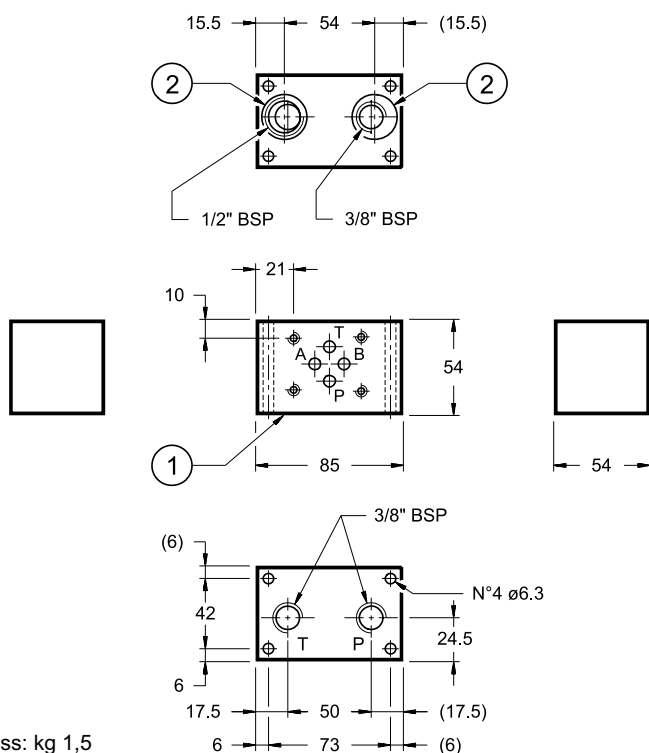
NOTE: The subplate is supplied with O-Ring made of NBR 90 Shore

dimensions in mm

1	Mounting surface
2	OR seats 2093 (23.52x1.78)

5 - OVERALL AND MOUNTING DIMENSIONS P2D-Z/21 (cod. 1560025)

SUBPLATE ARRANGED FOR THE INSTALLATION OF AN MZD PRESSURE REDUCING VALVE

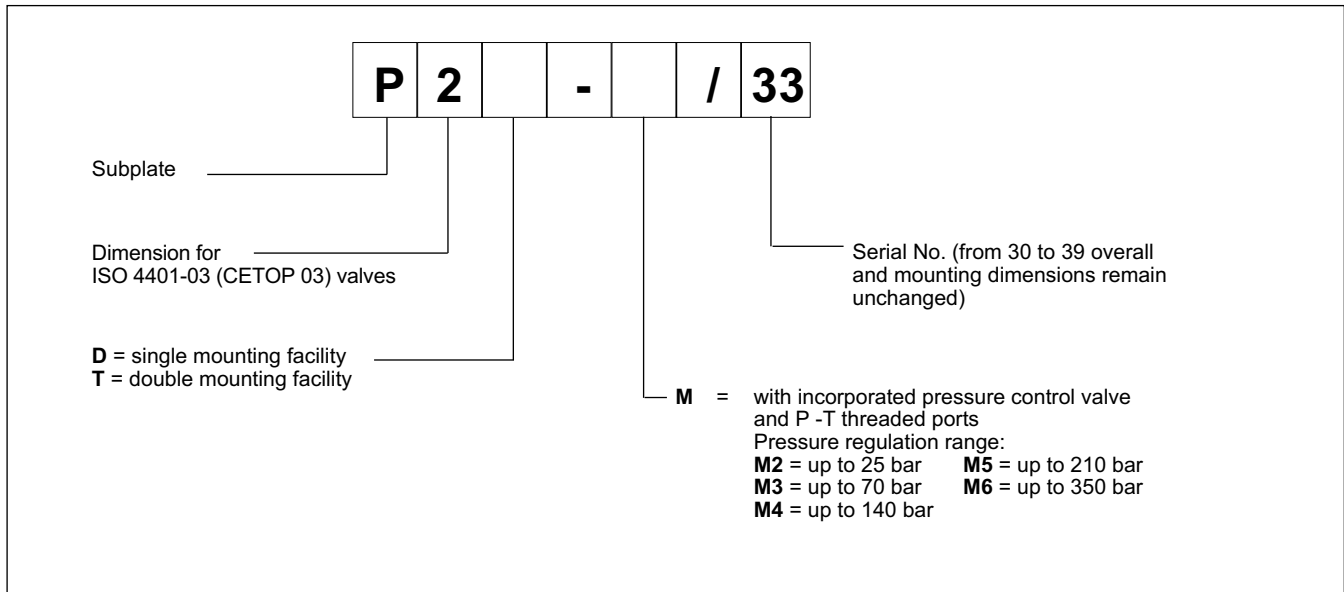


NOTE: The subplate is supplied with O-Ring made of NBR 90 Shore

dimensions in mm

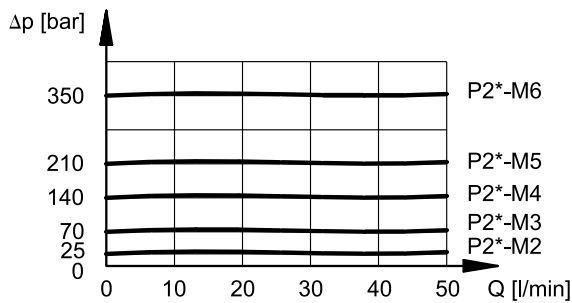
1	Mounting surface
2	OR seats 2093 (23.52x1.78)

6 - IDENTIFICATION CODE subplates with incorporated pressure control valve

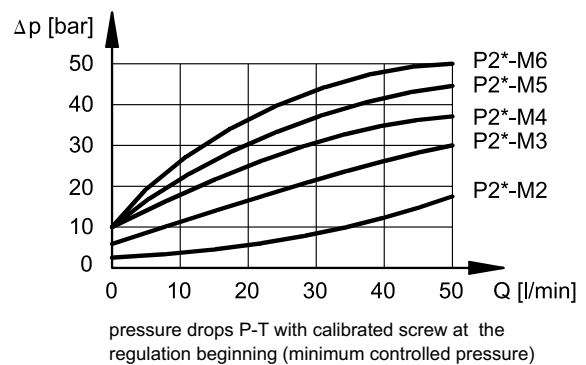


7 - CHARACTERISTIC CURVES FOR P2D-M* E P2T-M* SUBPLATES WITH PRESSURE CONTROL VALVE INCORPORATED (values obtained with viscosity of 36 cSt at 50°C)

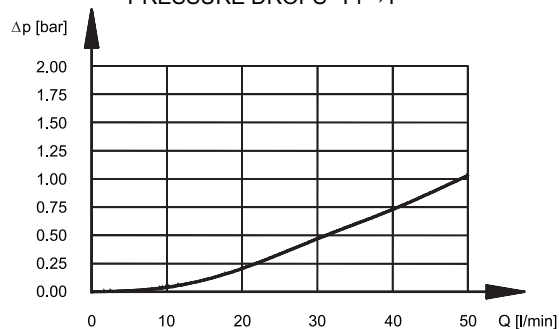
ADJUSTMENT



MINIMUM CONTROLLED PRESSURE



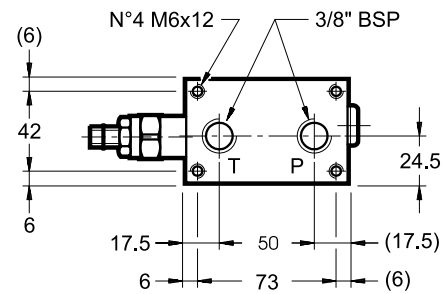
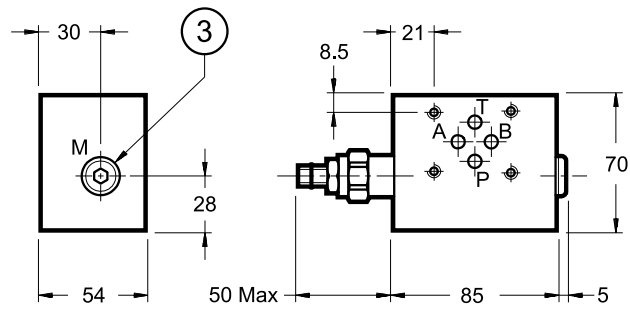
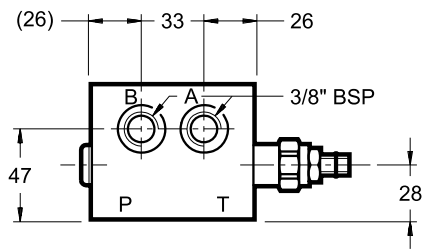
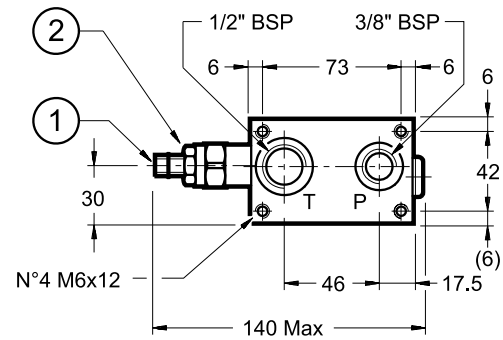
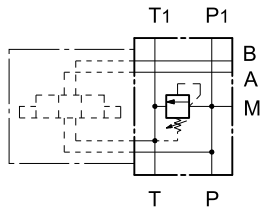
PRESSURE DROPS T1→T



8 - OVERALL AND MOUNTING DIMENSIONS P2D-M*/ 33

SINGLE MOUNTING FACILITY SUBPLATE WITH PRESSURE RELIEF VALVE INCORPORATED

HYDRAULIC SYMBOL



dimensions in mm

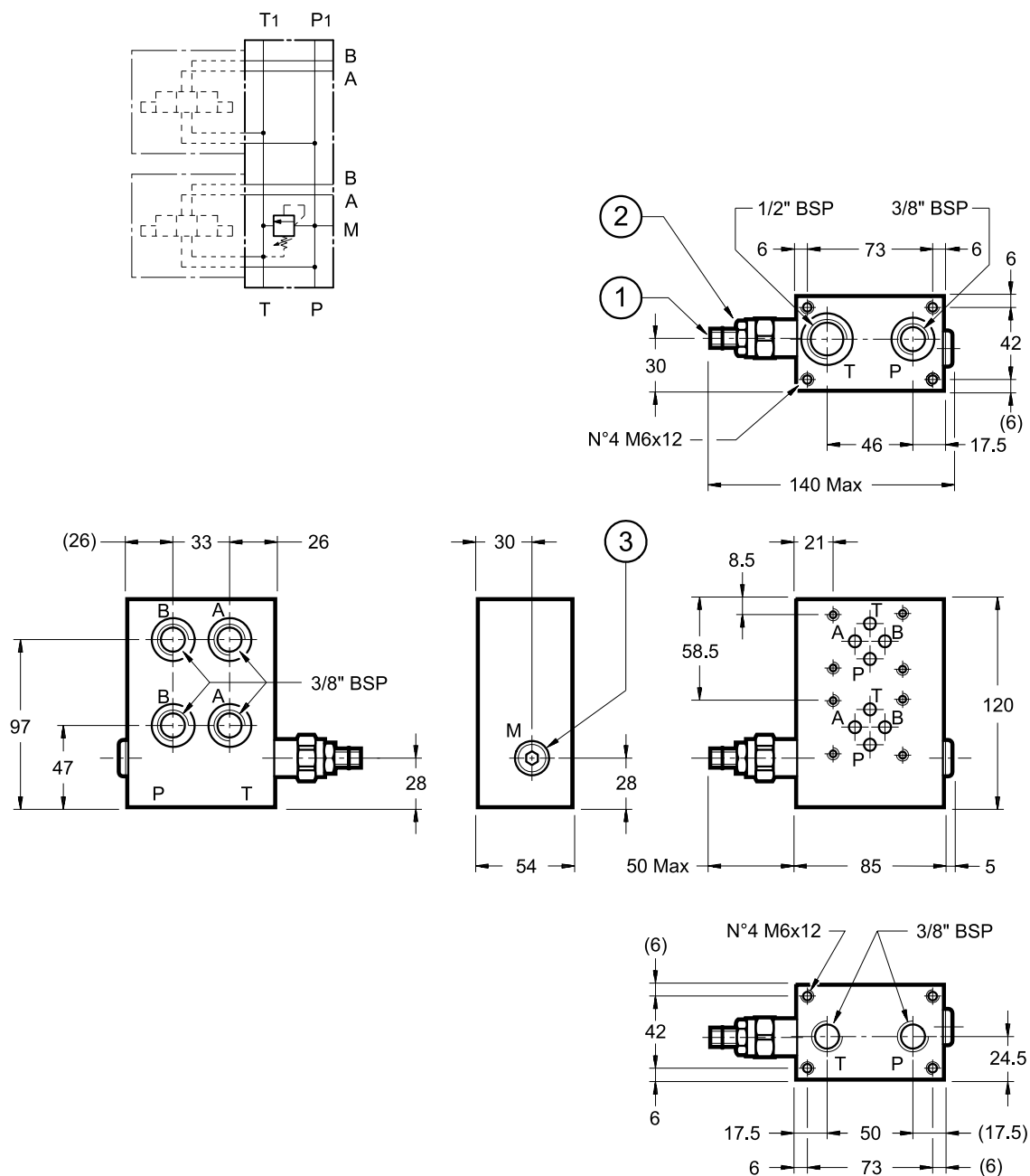
Mass: kg 2,5

1	Countersunk hex. adjustment screw: spanner 6 Clockwise rotation to increase pressure
2	Locking nut: spanner 19
3	Pressure gauge port 1/4" BSP plugged

9 - OVERALL AND MOUNTING DIMENSIONS P2T-M* /33

DOUBLE MOUNTING FACILITY SUBPLATE WITH PRESSURE RELIEF VALVE INCORPORATED

HYDRAULIC SYMBOL



dimensions in mm

1	Countersunk hex adjustment screw: spanner 6 Clockwise rotation to increase pressure
2	Locking nut: spanner 19
3	Pressure gauge port 1/4" BSP plugged

Mass: kg 5

10 - 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.

11 - PRESSURE LIMIT ON P

Depending on the tie-rod type and on the number of assembled subplates it is necessary to pay attention to the maximum pressure on P in order to avoid extruding the O-Rings.

n° of assembled subplates	Threaded bar class B7 DIN 975	Stud class 8.8 UNI 5911	Stud class 12.9
2	350 bar	350 bar	350 bar
3	300 bar	350 bar	350 bar
4	250 bar	300 bar	350 bar
5	200 bar	250 bar	300 bar
6	150 bar	200 bar	250 bar
Tightening torque	8 Nm	8 Nm	12 Nm



P2*



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P2A*L

MANIFOLDS FOR ISO 4401-03 (CETOP 03) VALVES WITH SIDE PORTS SERIES 11

- The P2A*L series of manifolds is designed for connection in parallel of two or more ISO 4401-03 (CETOP 03) valves.
- The monocast design enables the simple creation of circuits without the use of pipes and fittings, thereby reducing overall dimensions to a minimum.
- All sections feature a common pressure and discharge fitting on both ends of the subplate.
- Maximum flow rate can be increased up to double the output if the sub-plates are powered at both ends.
- Each section is fitted with work ports A and B positioned on the side of the sub-plate.
- Subplates are available in aluminium.

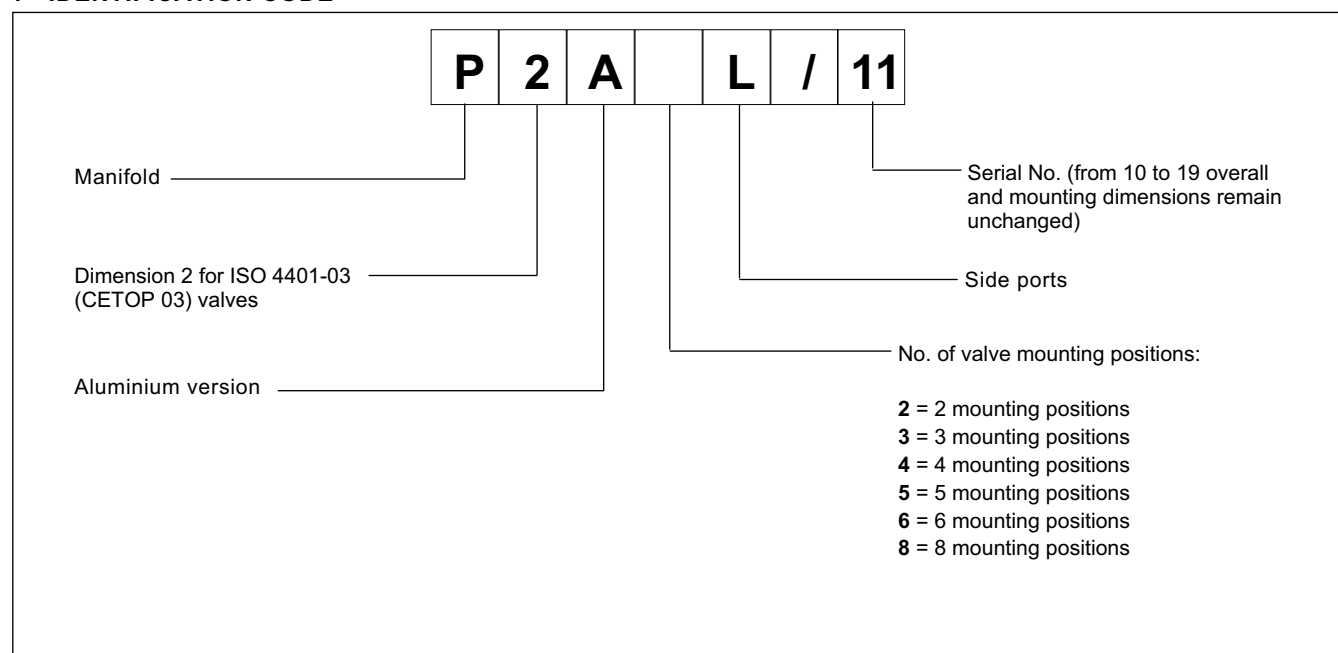
p max 210 bar

Q max 50 l/min

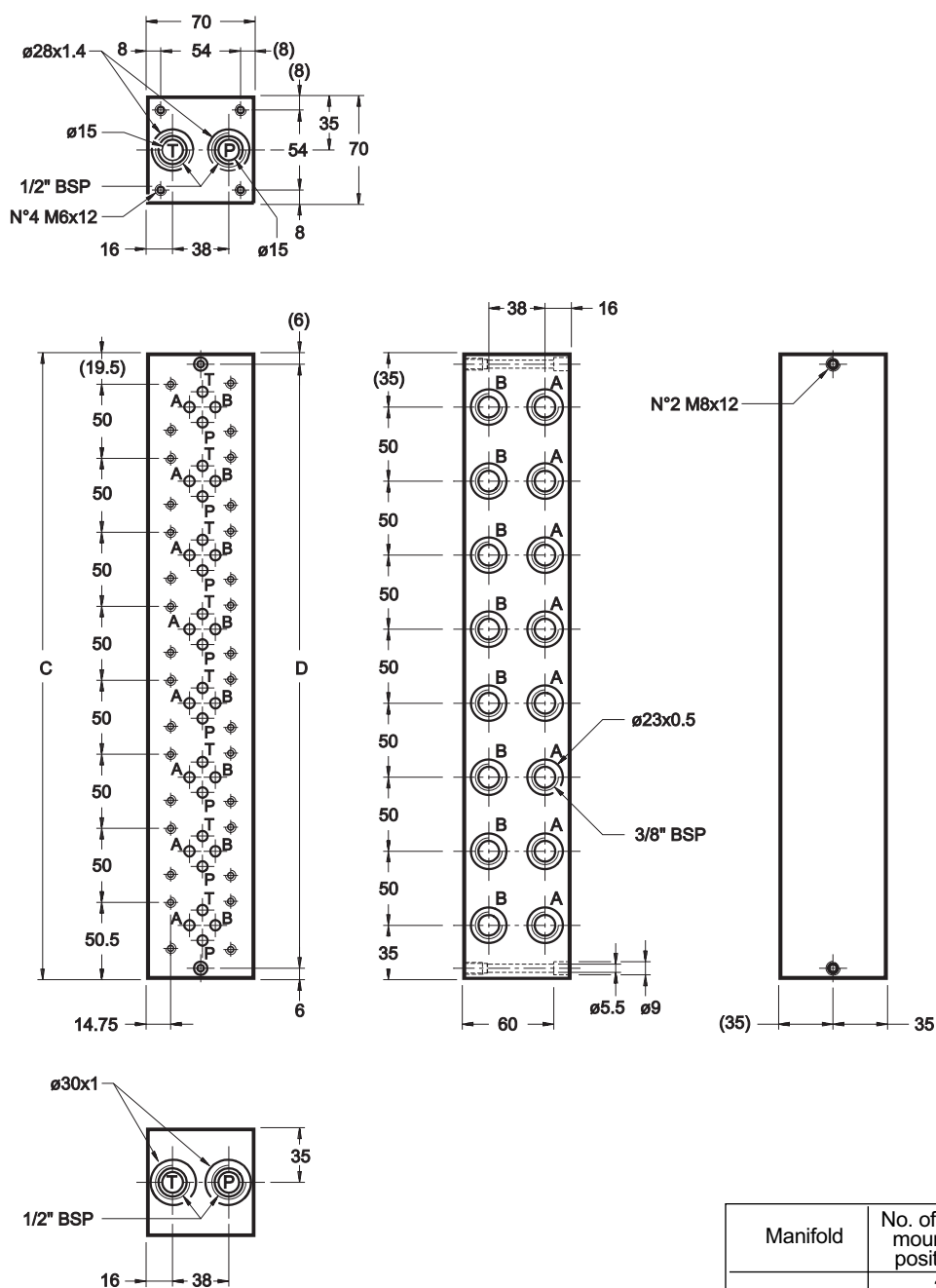
TECHNICAL SPECIFICATIONS

Maximum operating pressure - ports P - A - B - port T	bar	210 140
Maximum flow	l/min	50
Port dimensions: P - pressure T - lower drainage A/B - users	BSP	1/2" 1/2" 3/8"
Ambient temperature range	°C	-20 / +50
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	cSt	25
Recommended viscosity	According to ISO 4406:1999 class 20/18/15	

1 - IDENTIFICATION CODE



2 - OVERALL AND MOUNTING DIMENSIONS



dimensions in mm

Manifold	No. of valve mounting positions	C	E
	2	120	108
P2A3L	3	170	158
P2A4L	4	220	208
P2A5L	5	270	258
P2A6L	6	320	308
P2A8L	8	420	408

P2X*M

MANIFOLDS

FOR ISO 4401-03 (CETOP 03) VALVES WITH PORTS ON REAR

SERIES 10

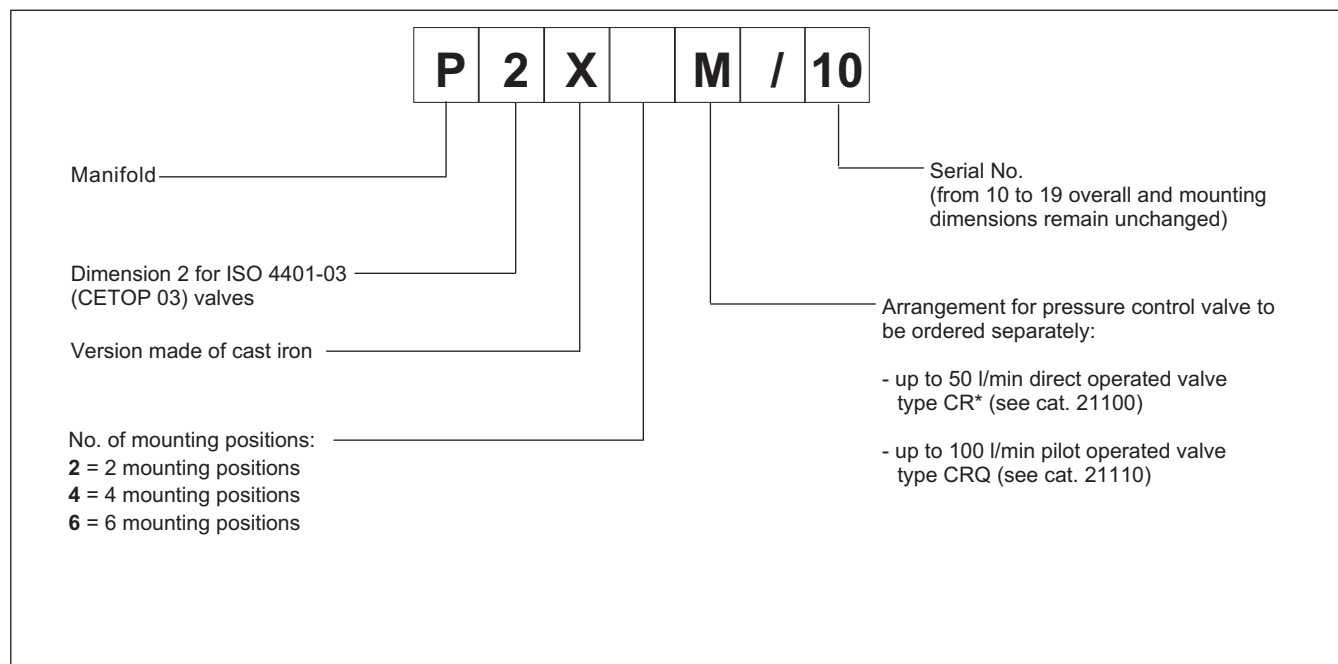
- The P2X*M series of manifolds is designed for connection in parallel of two or more ISO 4401-03 (CETOP 03) valves.
- The monobloc design enables the simple creation of circuits without the use of pipes and fittings, thereby reducing overall dimensions to a minimum.
- Subplates are arranged for the installation of a pressure control valve with cartridge.
- Each section is fitted with work ports A and B positioned on the rear of the subplate.
- Subplates are fitted with additional rear ports P and T.
- Subplates are made of cast iron.

p max 350 bar
Q max 100 l/min

TECHNICAL SPECIFICATIONS

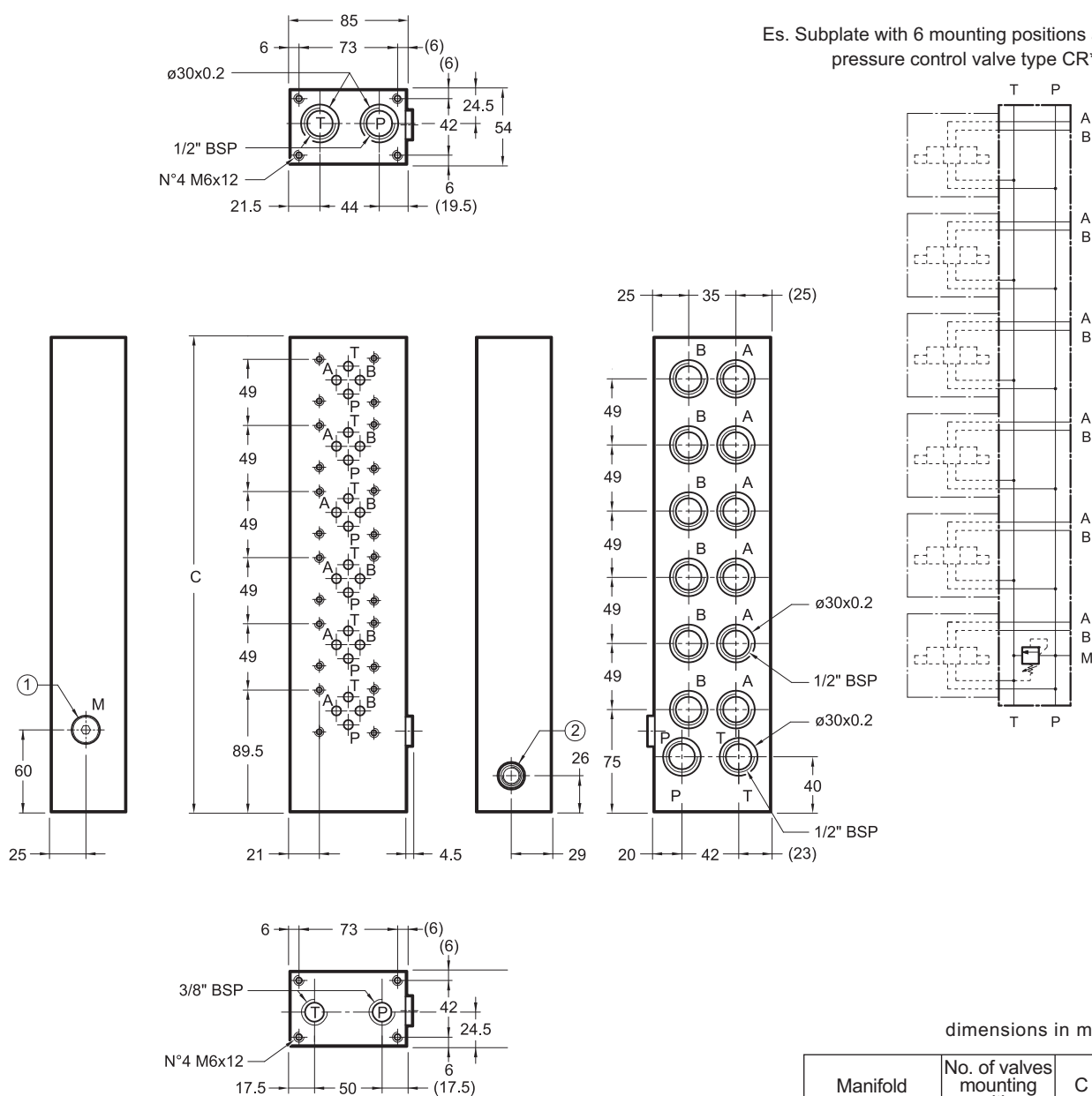
Maximum operating pressure - ports P - A - B - port T	bar	350 140
Maximum flow	l/min	100
Port dimensions: P - pressure T - drainage B - users A - drainage	BSP	1/2"
Ambient temperature range	°C	-20 / +50
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	cSt	25
Recommended viscosity	According to ISO 4406:1999 class 20/18/15	

1 - IDENTIFICATION CODE





2 - OVERALL AND MOUNTING DIMENSIONS



- | | |
|---|---|
| 1 | Pressure gauge port 1/4" BSP plugged |
| 2 | Arranged for the installation of a pressure control valve (to be ordered separately - see par. 1) |



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P4D*

MODULAR SUBPLATES FOR ISO 4401-05 (CETOP 05) VALVES

- This series of modular subplates has been designed to make hydraulic circuits and can be used directly on power packs or on any other section of the machine.
- The subplates are assembled by means of 4 tie-rods with seal seats incorporated in the subplate.
- The above assembly achieves compact units (including pressure and discharge manifolds): one face per subplate is used for connection to services and the other to mount ISO 4401-05 (CETOP 05) or ISO 4401-03 (CETOP 03) valves.
- Complex circuits can also be set up using modular valves.
- The recommended mounting configuration for **P4D** subplates on hydraulic power packs is with the main axis positioned vertically to obtain the bundle of pipes to utilities in two vertical rows; however, assembly is not restricted to this configuration.

p max 350 bar
Q max 100 l/min

TECHNICAL SPECIFICATIONS

Maximum operating pressure - ports P - A - B - port T	bar	see paragraph 8 140
Maximum flow	l/min	100
Ambient temperature range	°C	-20 / +50
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	cSt	25
Recommended viscosity	According to ISO 4406:1999 class 20/18/15	

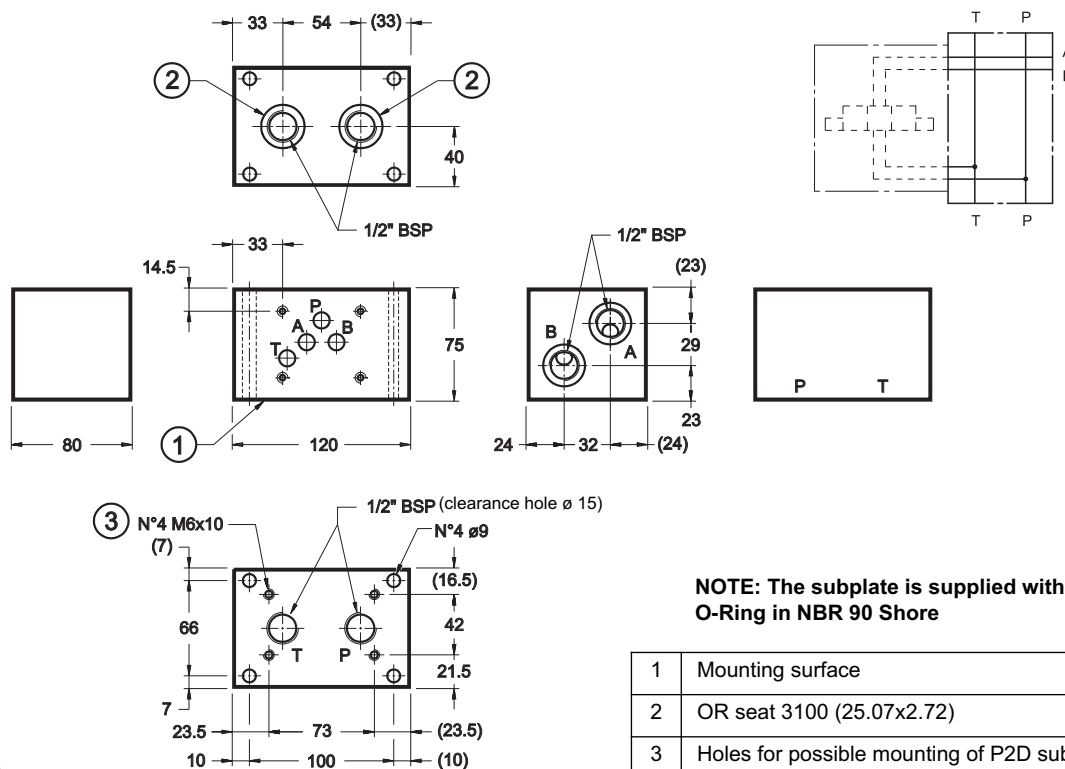
1 - IDENTIFICATION CODE

<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin: 2px;">P</div> <div style="border: 1px solid black; padding: 5px; margin: 2px;">4</div> <div style="border: 1px solid black; padding: 5px; margin: 2px;">D</div> <div style="border: 1px solid black; padding: 5px; margin: 2px;">-</div> <div style="border: 1px solid black; padding: 5px; margin: 2px;"></div> <div style="border: 1px solid black; padding: 5px; margin: 2px;">/</div> <div style="border: 1px solid black; padding: 5px; margin: 2px;"></div> <div style="border: 1px solid black; padding: 5px; margin: 2px;"></div> </div>	<p>Subplate _____</p> <p>Dimension for ISO 4401-05 valves _____</p> <p>D = single mounting facility _____</p> <p>Versions: _____</p> <p>F = with P - T threaded ports, mounting interface ISO 4401-05 (CETOP 05) and side ports of 1/2" BSP.</p> <p>P = with P - T threaded ports, mounting interface ISO 4401-05 (CETOP 05) and A - B rear ports of 3/4" BSP.</p> <p>D3 = with P - T threaded ports, mounting interface ISO 4401-03 (CETOP 03) and side ports of 3/8" BSP.</p> <p>D3P = with P - T threaded ports, mounting interface ISO 4401-03 (CETOP 03) and A - B rear ports of 1/2" BSP</p> <p>M* = with pressure relief valve included and P - T threaded ports. Pressure adjustment range: 070 = up to 70 bar 140 = up to 140 bar 210 = up to 210 bar 350 = up to 350 bar</p>	<p>for P4D-M* version only: Seals: N = NBR seals for mineral oil (standard) V = FPM seals for special fluids</p> <p>Series No. 30 = for P4D-M* 21 = for all the other versions (Within the same ten dimensions remain unchanged)</p>
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2 - OVERALL AND MOUNTING DIMENSIONS P4D-F/21 (COD. 1561441)

P - T THREADED PORTS SUBPLATE, WITH MOUNTING INTERFACE FOR
ISO 4401-05 (CETOP 05) VALVE AND A-B SIDE PORTS OF 1/2" BSP

dimensions in mm



Mass: kg 4,8

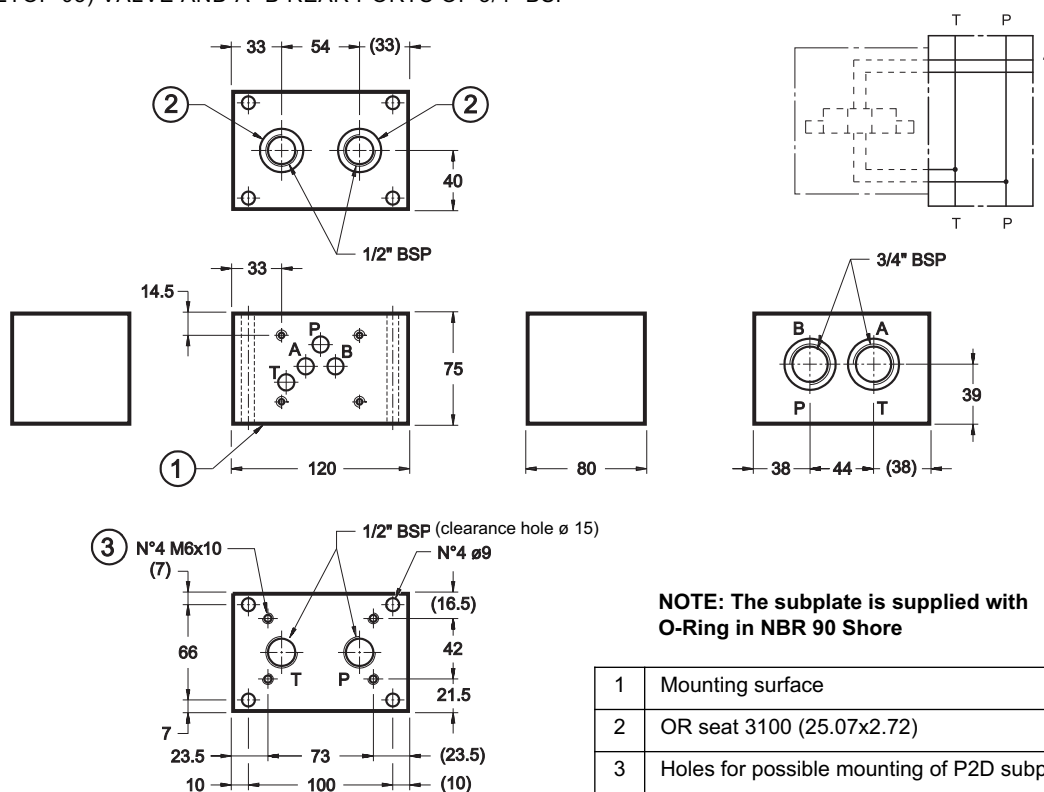
NOTE: The subplate is supplied with O-Ring in NBR 90 Shore

1	Mounting surface
2	OR seat 3100 (25.07x2.72)
3	Holes for possible mounting of P2D subplates

3 - OVERALL AND MOUNTING DIMENSIONS P4D-P/21 (COD. 1561461)

P - T THREADED PORTS SUBPLATE WITH MOUNTING INTERFACE FOR
ISO 4401-05 (CETOP 05) VALVE AND A -B REAR PORTS OF 3/4" BSP

dimensions in mm



Mass: kg 4,8

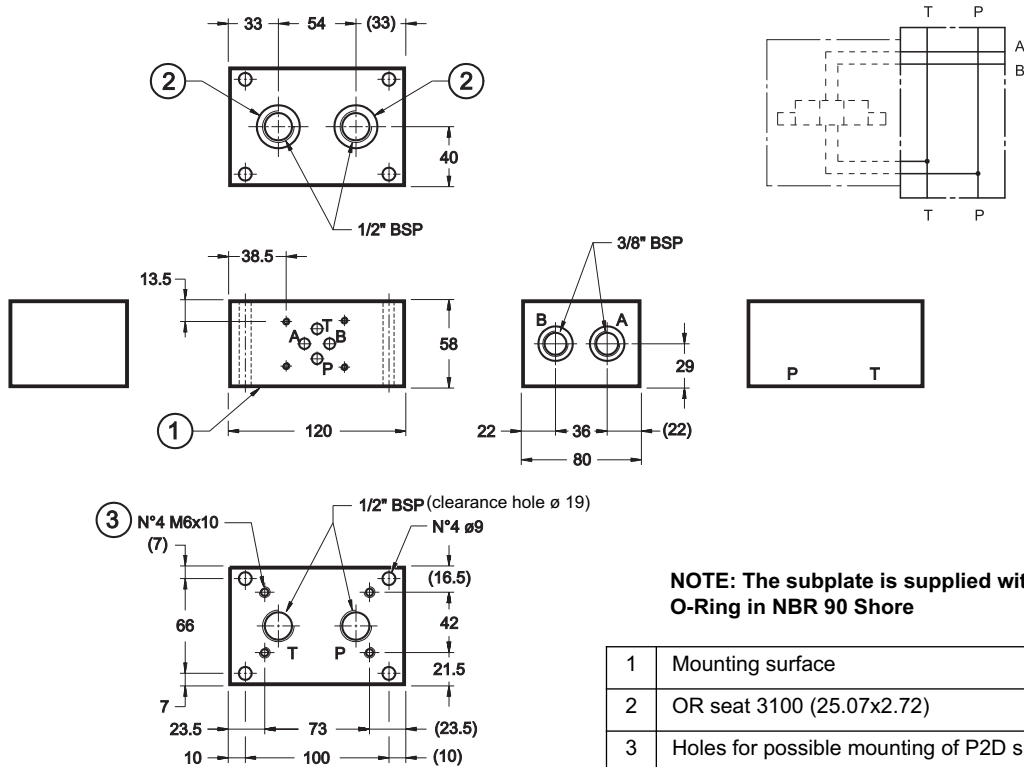
NOTE: The subplate is supplied with O-Ring in NBR 90 Shore

1	Mounting surface
2	OR seat 3100 (25.07x2.72)
3	Holes for possible mounting of P2D subplates

4 - OVERALL AND MOUNTING DIMENSIONS P4D-D3/21 (COD. 1561451)

P - T THREADED PORTS SUBPLATE, WITH MOUNTING INTERFACE FOR ISO 4401-03 (CETOP 03) VALVE AND SIDE PORTS OF 3/8" BSP

dimensions in mm

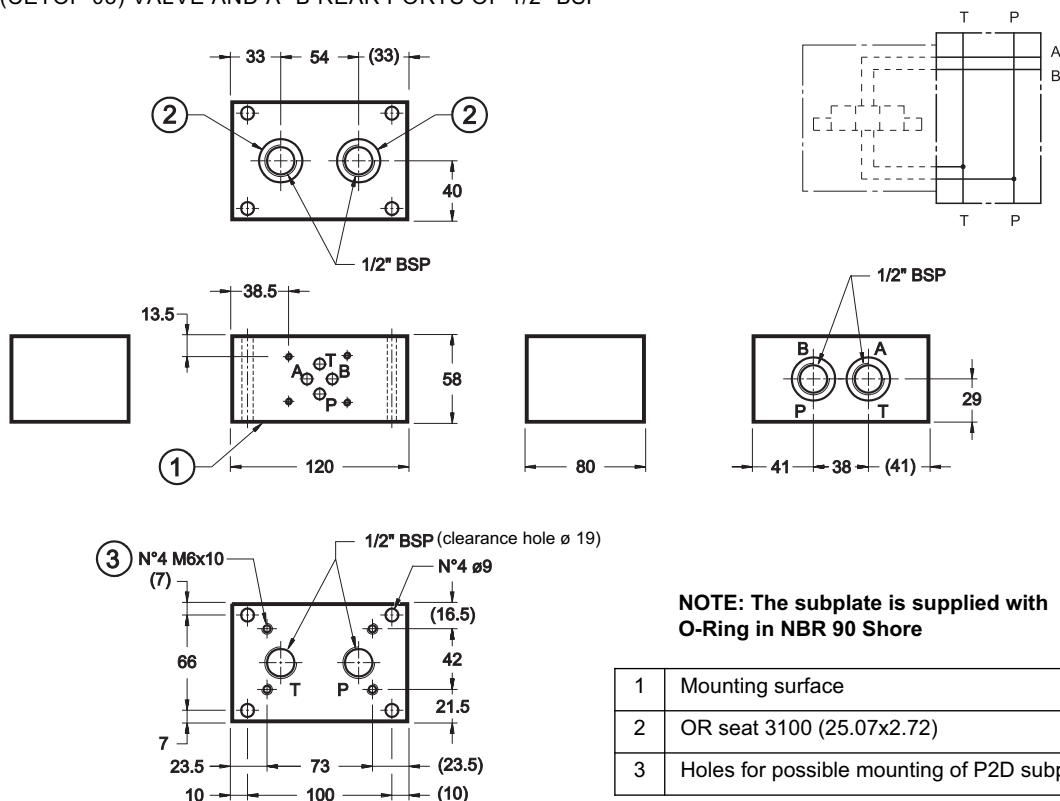


Mass: kg 3,8

5 - OVERALL AND MOUNTING DIMENSIONS P4D-D3P/21 (COD. 1561481)

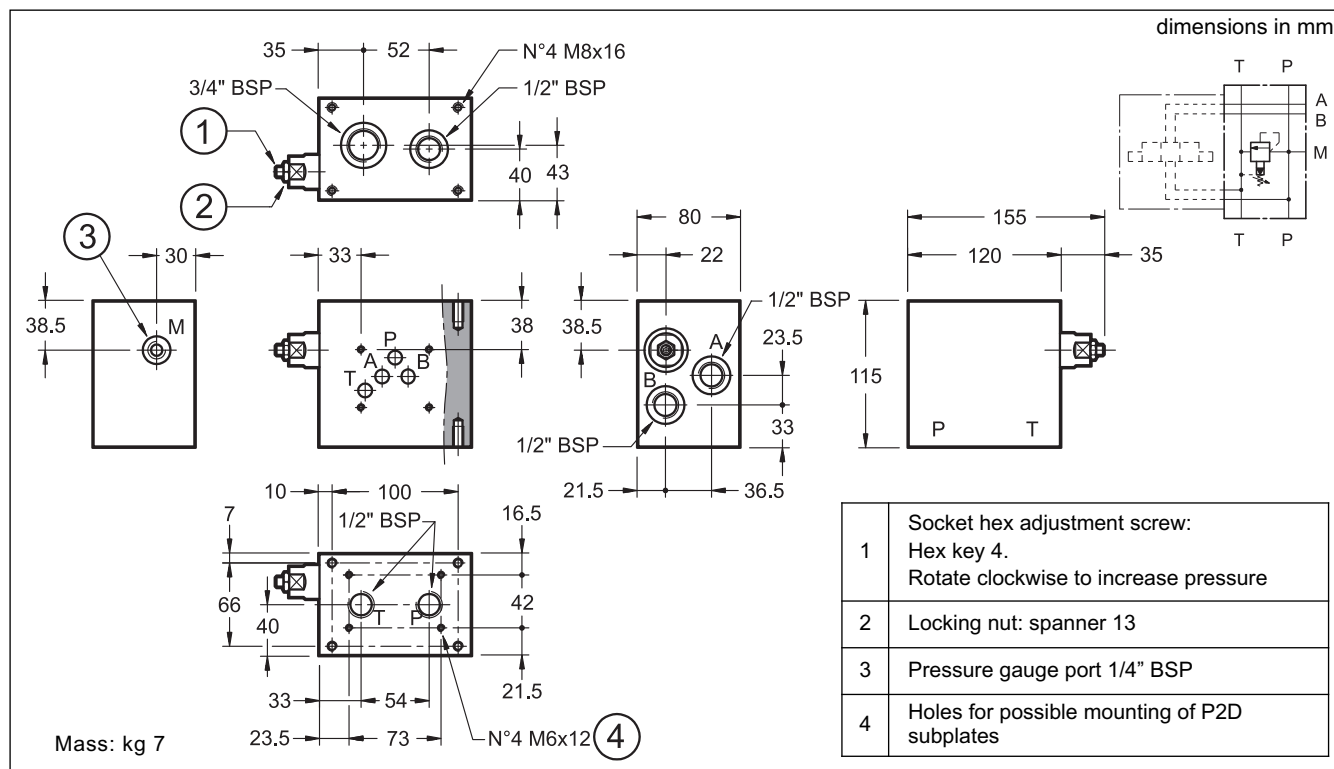
P - T THREADED PORTS SUBPLATE, WITH MOUNTING INTERFACE FOR ISO 4401-03 (CETOP 03) VALVE AND A -B REAR PORTS OF 1/2" BSP

dimensions in mm



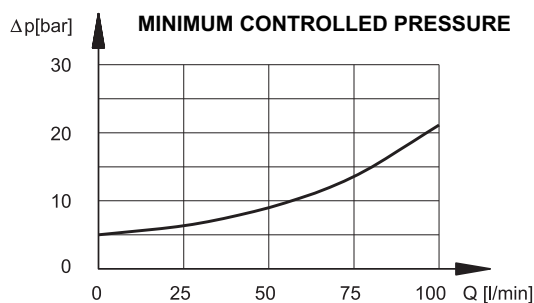
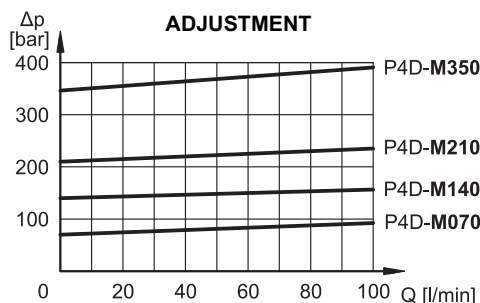
Mass: kg 3,8

6 - OVERALL AND MOUNTING DIMENSIONS P4D-M*/30



7 - CHARACTERISTIC CURVES

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



8 - MAXIMUM PRESSURE ON P

Depending on the tie-rod type and on the number of assembled subplates it is necessary to pay attention to the maximum pressure on P in order to avoid extruding the O-Ring.

No. of assembled subplates	Threaded bar class B7 ISO 6547 (DIN 975)	Stud class 8.8 UNI 5911	Stud class 12.9
2	350 bar	350 bar	350 bar
3	300 bar	350 bar	350 bar
4	250 bar	300 bar	350 bar
5	200 bar	250 bar	300 bar
6	150 bar	200 bar	250 bar
Tightening torque	20 Nm	20 Nm	30 Nm

RM4-*-MP

SUBPLATE WITH PRESSURE RELIEF VALVE

SERIES 40

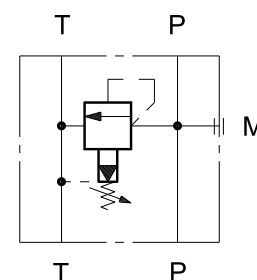
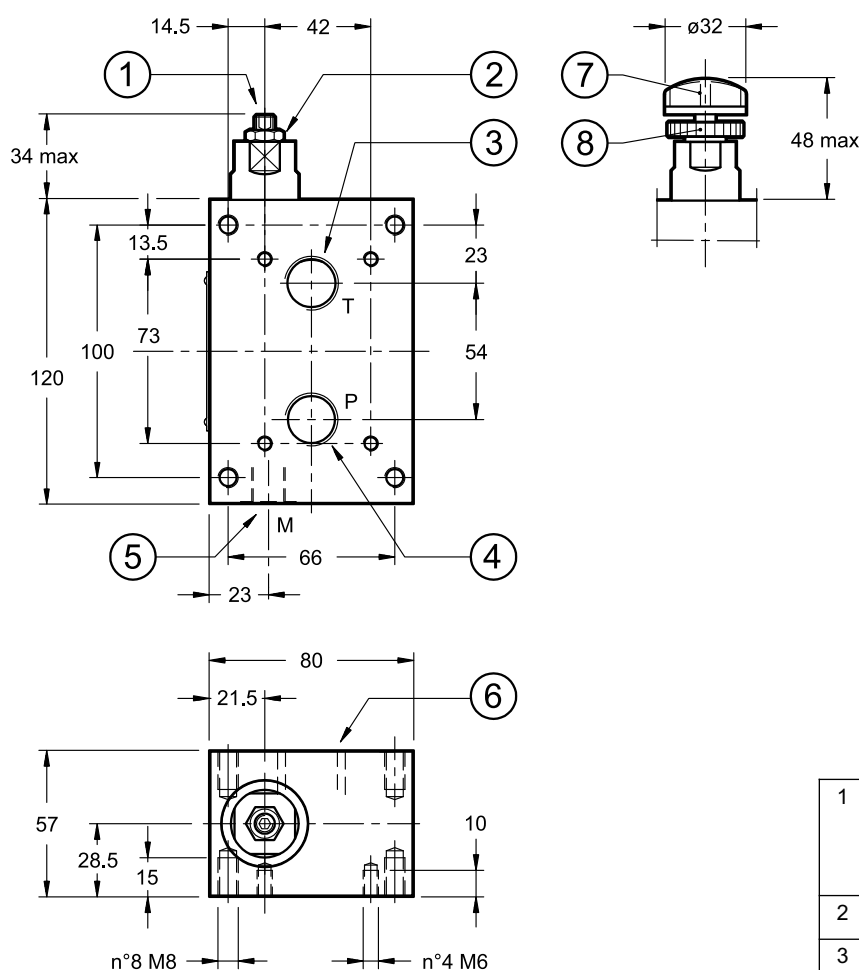
- The RM4-*-MP subplate includes a pressure relief valve with P and T threaded ports.
- It is used as mounting surface for P2D and P4D subplates on power packs.
- It is available in four pressure adjustment ranges up to 350 bar.
- It is supplied with a socket set screw with locking nut, or alternatively with knob and maximum adjustment limiting device.

THREADED PORTS

p max 350 bar
Q max 100 l/min

1 - OVERALL AND MOUNTING DIMENSIONS

dimensions in mm



1	Socket hex adjustment screw: Hex key 4. Rotate clockwise to increase pressure
2	Locking nut: spanner 13
3	Tank port 1/2" BSP
4	Pressure port 1/2" BSP
5	Pressure gauge port 1/4" BSP
6	Tank port 3/4" BSP
7	Locking ring
8	Adjustment knob: K

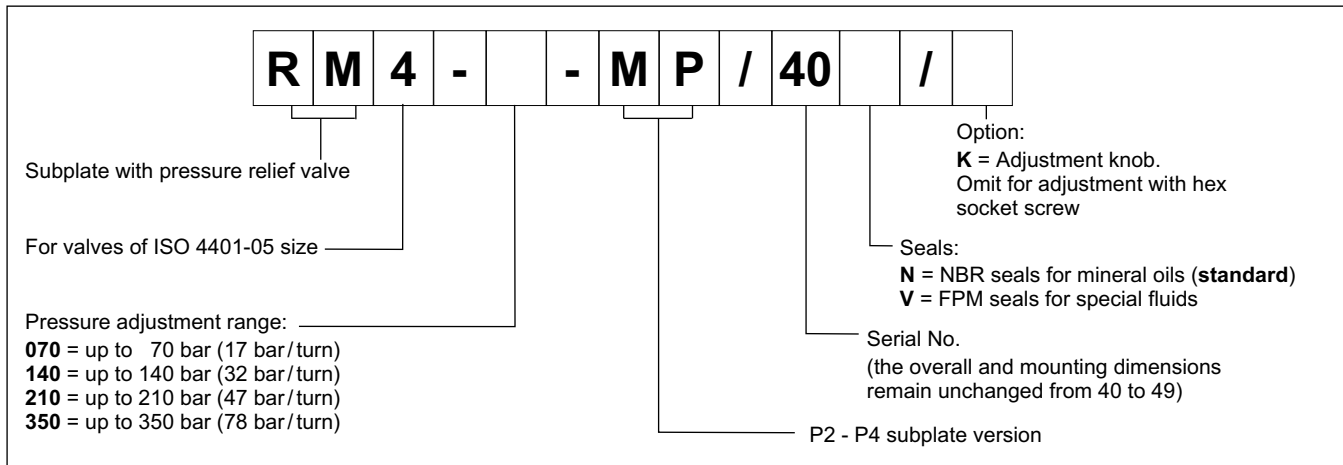
Mass: kg 3,5



RM4-*-MP

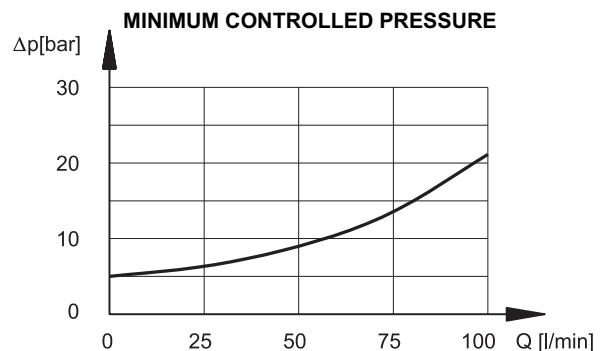
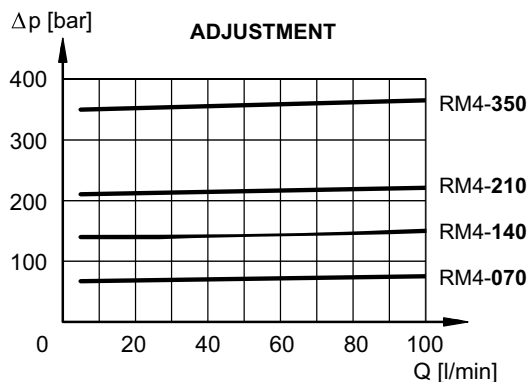
SERIES 40

2 - IDENTIFICATION CODE



3 - CHARACTERISTIC CURVES

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



4 - 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.



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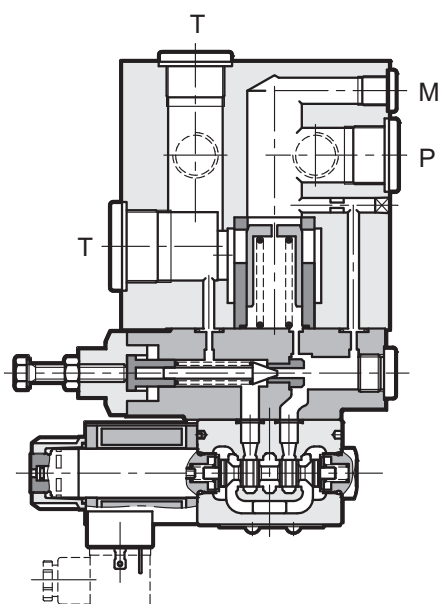
P4D-RQM5

MODULAR SUBPLATE WITH PRESSURE RELIEF VALVE AND UNLOADING SOLENOID VALVE

SERIES 30

p max **350** bar
Q max **250** l/min

OPERATING PRINCIPLE



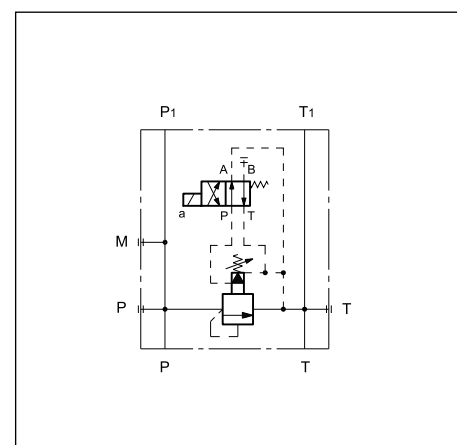
- The P4D-RQM5 is a compact group that includes a pressure relief valve and it is used as mounting surface for P2D and P4D subplates.
- It also includes a solenoid valve for venting of the total flow at a minimum pressure value.
- It is available in two pressure adjustment ranges up to 350 bar.
- It is normally supplied with a hexagonal head adjustment screw. Upon request, it can be equipped with a SICBLOC adjustment knob on the main pressure control.

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

Maximum operating pressure	bar	350
Maximum flow on P (3/4") and T(1")	l/min	250
Maximum flow on P ₁ and T ₁ (1/2")		120
Minimum flow		10
Ambient temperature range	°C	-20 / +50
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	10

NOTE: for the solenoid valve DS3 characteristics see catalogue 41 150

HYDRAULIC SYMBOL





P4D-RQM5

SERIES 30

1 - IDENTIFICATION CODE

P	4	D	-	R	Q	M	5	-	/	/	30	-	K1	/	
---	---	---	---	---	---	---	---	---	---	---	----	---	----	---	--

Subplate
ISO 4401-05 (CETOP 05)
dimension

Pressure relief valve
with unloading solenoid valve

DN 25 nominal dimension

Pressure adjustment range
5 = 250 bar 6 = 350 bar

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

Series: (the overall and mounting dimensions
remain unchanged from 30 to 39)

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

NOTE: The locking rings of the coils and the relevant O-Rings are supplied together
with valves.

Manual override:
omit for override
integrated in the
tube (**standard**)
CM = manual
override, boot
protected

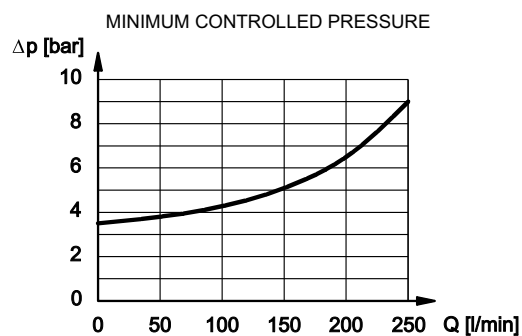
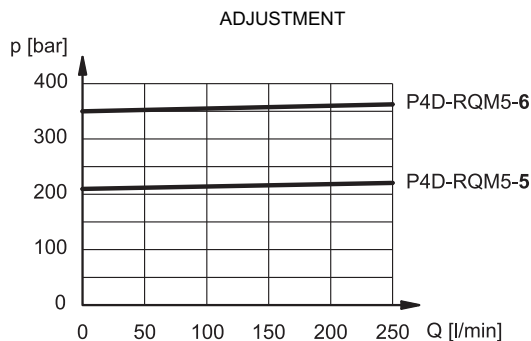
Coil electrical connection:
plug for connector type DIN
43650 (**standard**)

DC power supply
D12 = 12 V
D24 = 24 V
D48 = 48 V
D110 = 110 V
D220 = 220 V
D00 = valve without coils (see **NOTE**)

AC power supply
A24 = 24 V - 50 Hz
A48 = 48 V - 50 Hz
A110 = 110 V - 50 Hz / 120 V - 60 Hz
A230 = 230 V - 50 Hz / 240 V - 60 Hz
A00 = valve without coils (see **NOTE**)

F110 = 110 V - 60 Hz
F220 = 220 V - 60 Hz

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



NOTE: The maximum flow deliverable to P₁ port is 120 l/min (for P2D and P4D modular subplates).
The maximum flow through the pressure relief valve (additional 3/4" BSP P port) is 250 l/min.

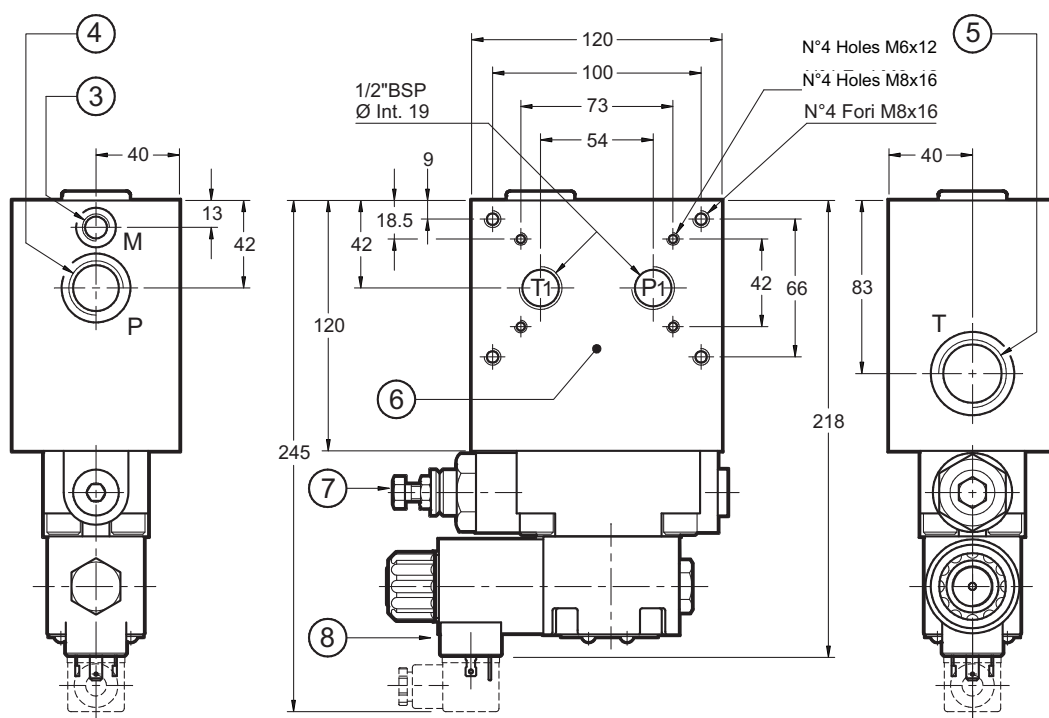
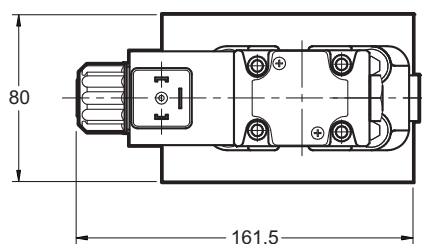
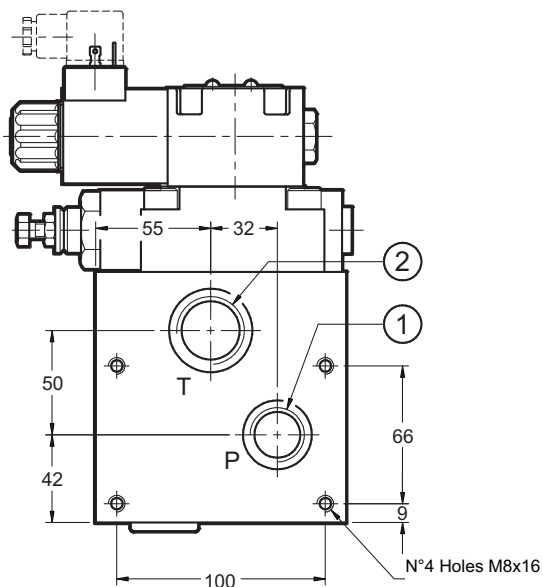
3 - HYDRAULIC FLUIDS

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

1	Pressure port P 3/4" BSP
2	Tank port T 1" BSP
3	Pressure gauge port M 1/4" BSP
4	Additional P port 3/4" BSP
5	Additional T port 1" BSP
6	Mounting surface for: P2D ISO 4401-03 (CETOP 03) P4D ISO 4401-05 (CETOP 05)
7	Hexagonal head pressure adjustment screw: spanner 13 Clockwise rotation to increase pressure
8	Unloading solenoid valve

dimensions in mm



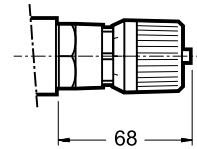


P4D-RQM5

SERIES 30

5 - ADJUSTMENT KNOB

The P4D-RQM5 valves can be equipped with a SICBLOC adjustment knob.
To operate it, push and rotate at the same time.
To request this option, add: **/M** (see par.1).



6 - ELECTRIC CONNECTORS

The solenoid valves are never supplied with connector. Connectors must be ordered separately. For the identification of the connector type to be ordered, please see catalogue 49 000.

7 - MANUAL OVERRIDE, BOOT PROTECTED: CM

Whenever the solenoid valve installation may involve exposure to atmospheric agents or utilization in tropical climates, use of the manual override, boot protected, is recommended.

Add the suffix **CM** to request this device (see paragraph 1).
For overall dimensions see catalogue 41 150.



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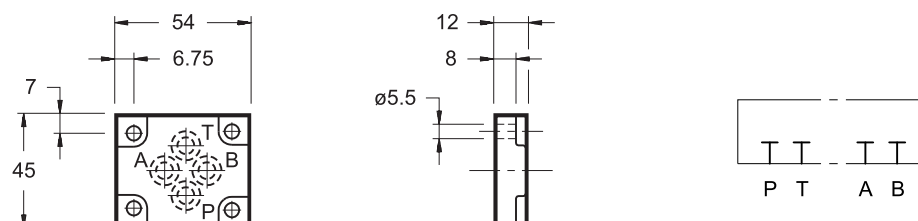
www.diplomatic.com • e-mail: sales.exp@diplomatic.com

PE BLANKING PLATE

p max 350 bar

1 - OVERALL AND MOUNTING DIMENSIONS PE-MD1/20 (cod. 1950591)

dimensions in mm

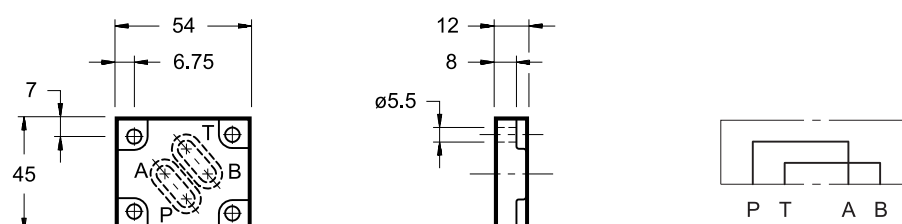


FASTENING BOLTS: 4 bolts M5x16

4 OR type 2037 (9.25x1.78) - 90 Shore

2 - OVERALL AND MOUNTING DIMENSIONS PE-C/PA/MD1/20 (cod. 1950751)

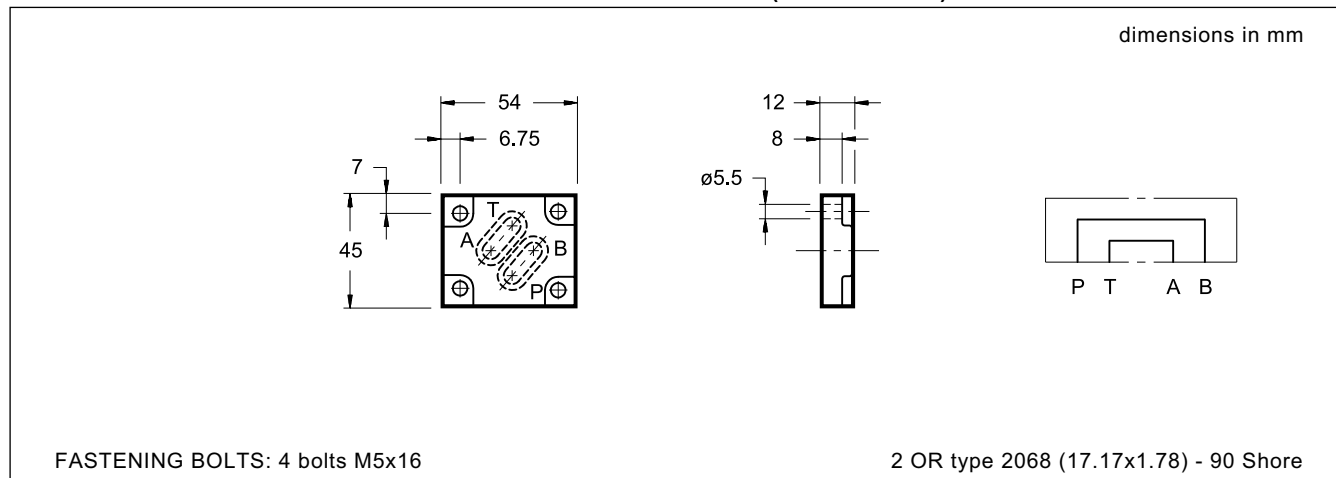
dimensions in mm



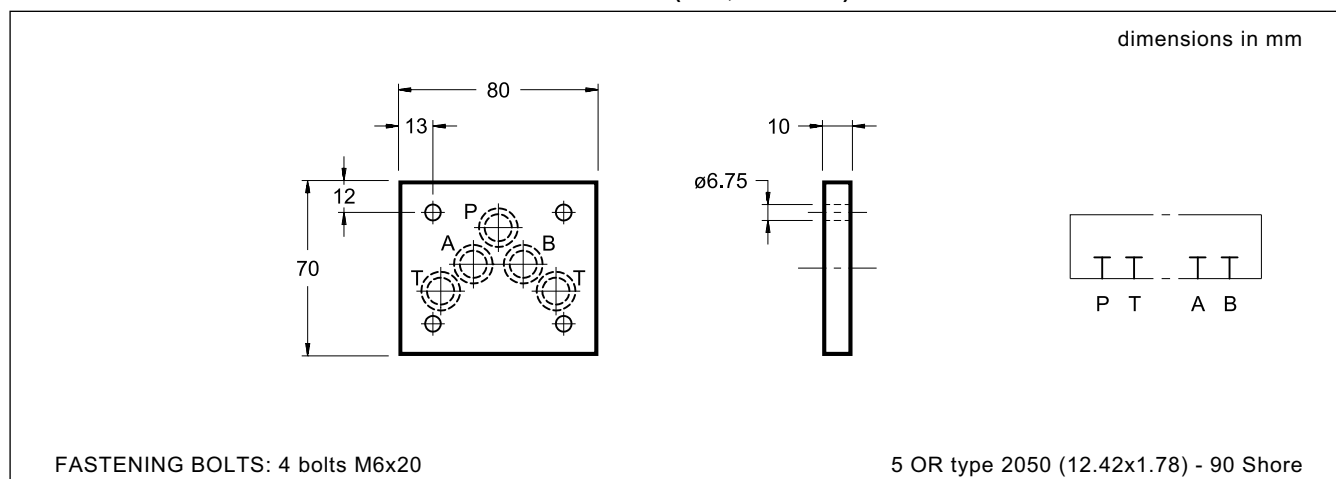
FASTENING BOLTS: 4 bolts M5x16

2 OR type 2068 (17.17x1.78) - 90 Shore

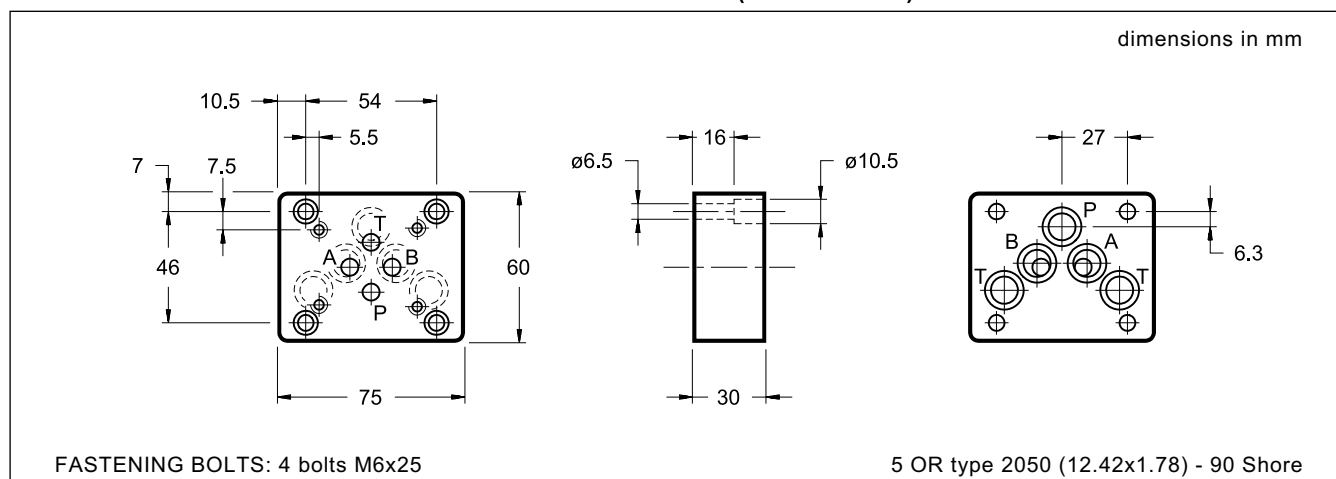
3 - OVERALL AND MOUNTING DIMENSIONS PE-C/PB/MD1/20 (cod. 1950601)



4 - OVERALL AND MOUNTING DIMENSIONS PE/D4-M (cod. 1950042)



5 - OVERALL AND MOUNTING DIMENSIONS PC-D4/MD1-M (cod. 1950222)



NOTE: On request, plates can be supplied with the O-Rings in viton. To order it, please indicate the letter /V at the end of the identification code of the plate.



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PRM2

DIRECT OPERATED
PRESSURE RELIEF VALVE
SERIES 10

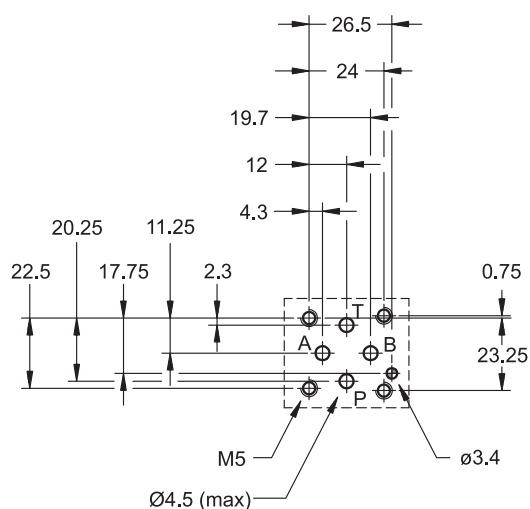
**MODULAR VERSION
ISO 4401-02**

p max 320 bar

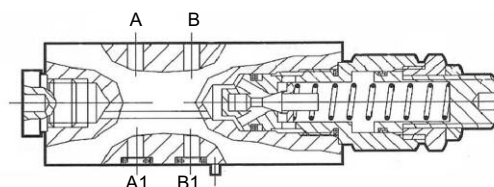
Q max 20 l/min

MOUNTING SURFACE

ISO 4401-02-01-0-05
(CETOP 4.2-4-R02-320)



OPERATING PRINCIPLE



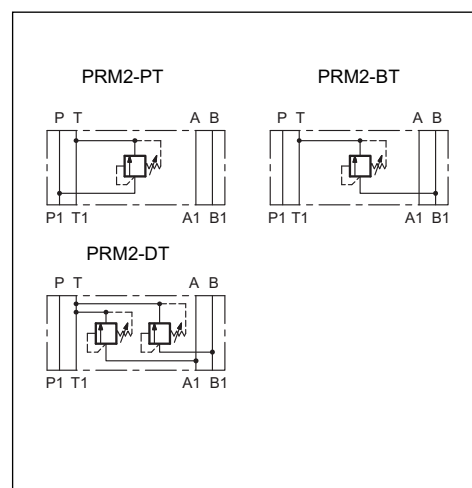
- The PRM2 valve is a direct operated pressure relief valve made as a modular version with mounting surface according to the ISO 4401 standards.
- It can be assembled with all ISO 4401-02 modular valves without use of pipes, using suitable tie-rods or bolts.
- It is available in versions for single relief on P or B with discharge in T, or two independent relief on A and B with discharge in T, all with three different pressure adjustment ranges.
- This valve is normally used as a hydraulic circuit pressure limiting device or as a limiting device of the pressure peaks generated during the movement of hydraulic actuators.
- It is supplied with a countersunk hex adjustment screw and locking nut.

PERFORMANCES

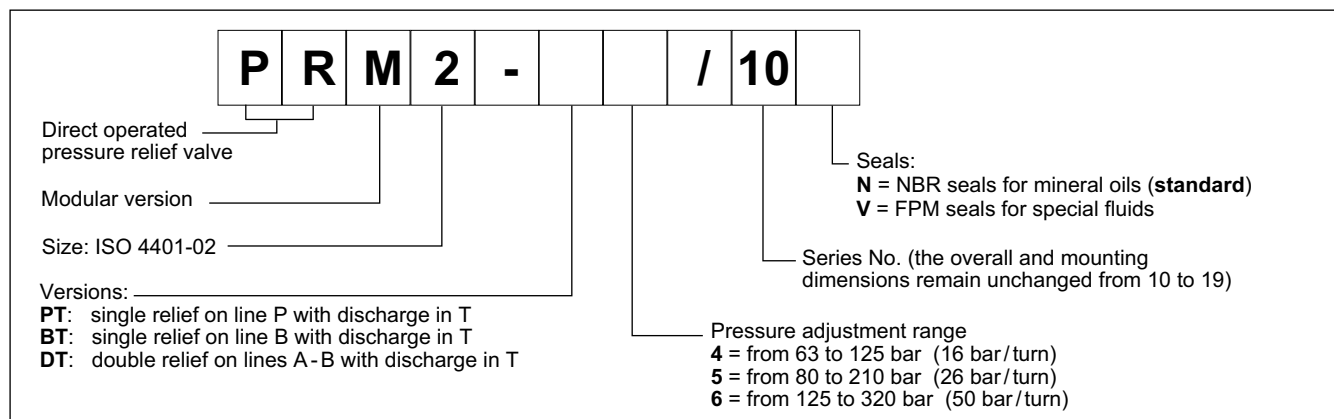
(measured with mineral oil of viscosity 36cSt at 50°C)

Maximum operating pressure	bar	320
Minimum controlled pressure	see Δp diagram.	
Maximum flow rate	l/min	20
Ambient temperature range	°C	-20 / +50
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: PRM2-PT and PRM2-BT PRM2-DT	kg	0.85 1

HYDRAULIC SYMBOLS

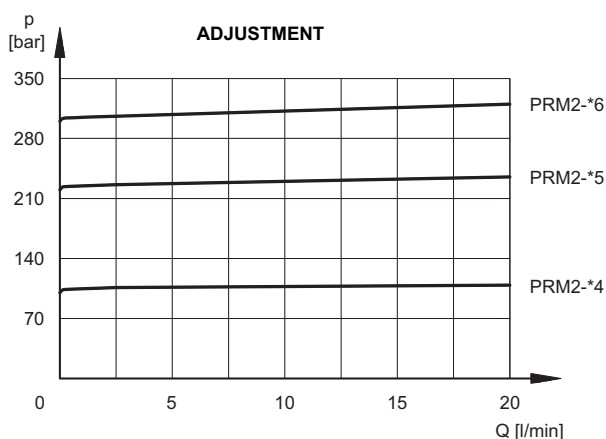


1 - IDENTIFICATION CODE



2 - CHARACTERISTIC CURVES

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



3 - HYDRAULIC FLUIDS

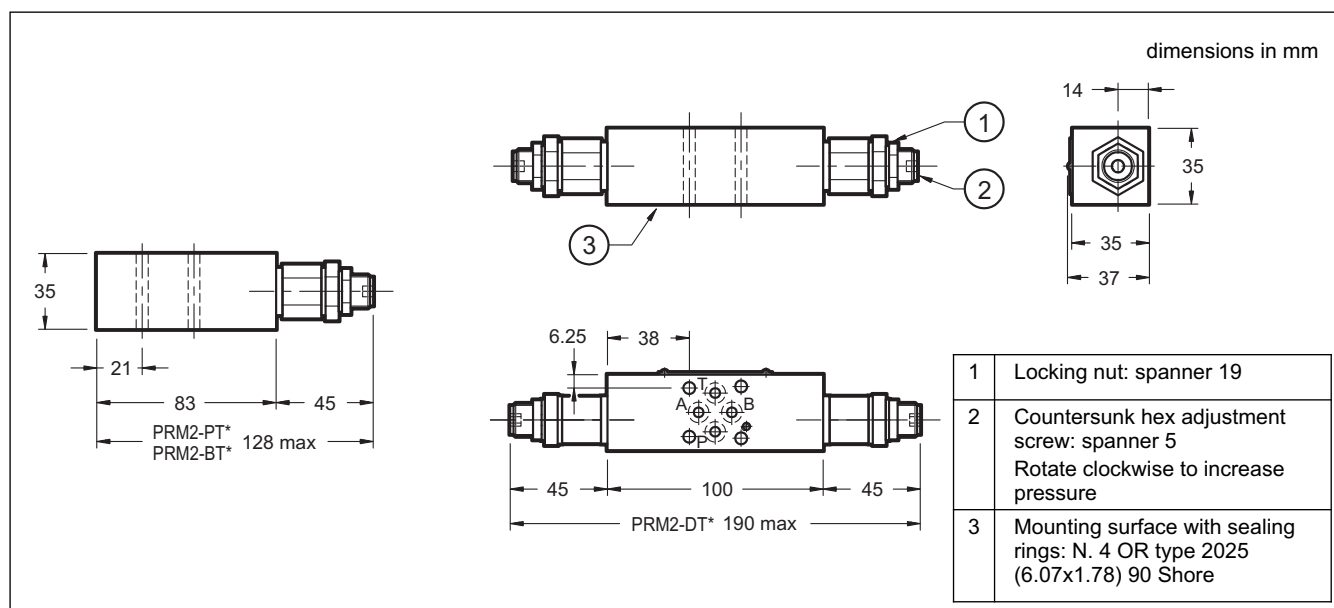
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V).

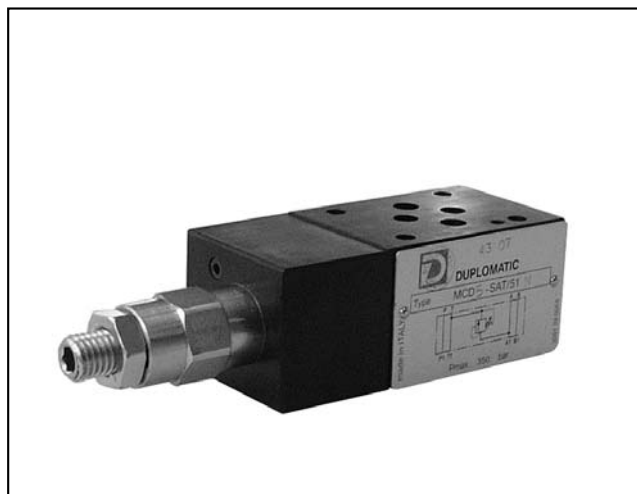
For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department.

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 - OVERALL AND MOUNTING DIMENSIONS





MCD

DIRECT OPERATED PRESSURE RELIEF VALVE

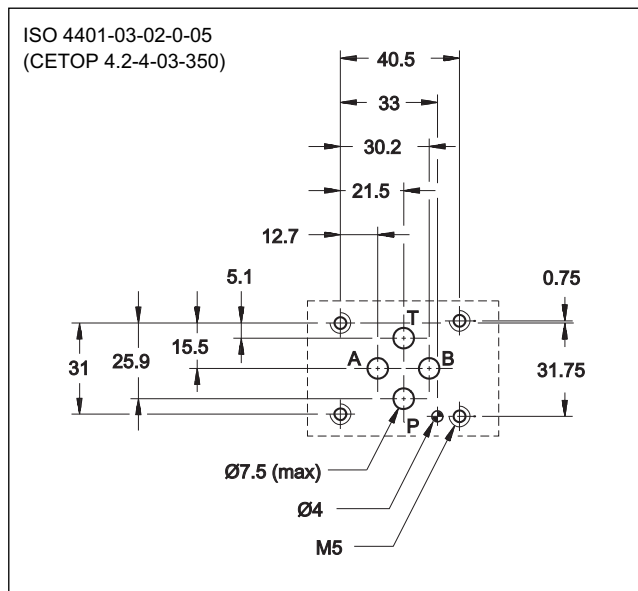
SERIES 51

MODULAR VERSION ISO 4401-03 (CETOP 03)

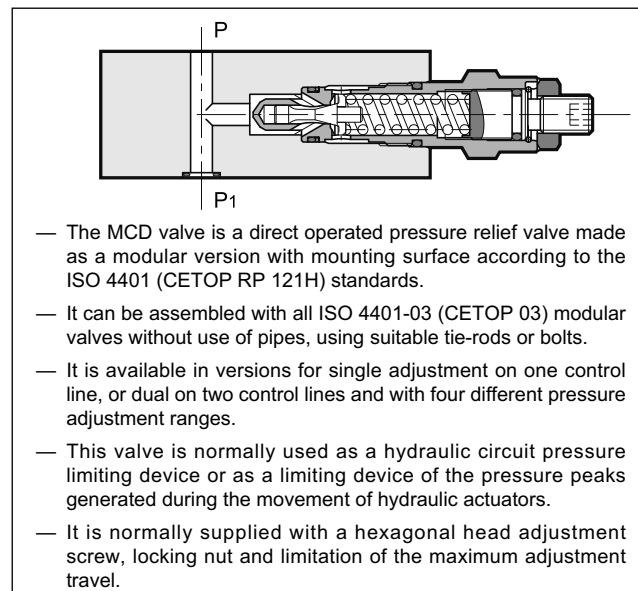
p max **350** bar

Q max (see table of performances)

MOUNTING INTERFACE



OPERATING PRINCIPLE



CONFIGURATIONS (see Hydraulic symbols table)

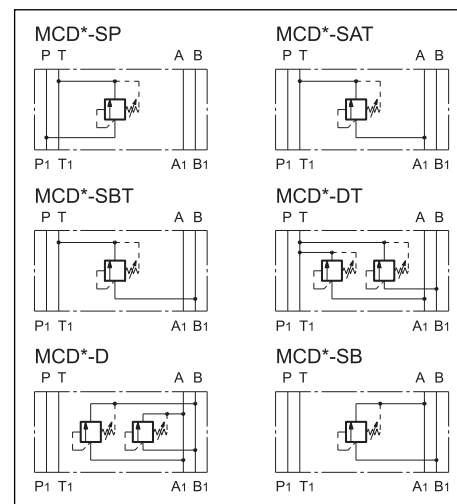
- “SP”: controls the pressure on line P with discharge in T.
- “SAT”: controls the pressure on line A with discharge in T.
- “SBT”: controls the pressure on line B with discharge in T.

- “DT”: controls the pressure on lines A-B with discharge in T.
- “D”: controls the pressure on lines A-B with crossed discharges
- “SB”: controls the pressure on line B with discharge in A.

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

Maximum operating pressure	bar	350
Minimum controlled pressure	see Δp diagram.	
Maximum flow rate in controlled lines	l/min	50
Maximum flow rate in the free lines		75
Ambient temperature range	°C	-20 / +50
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: MCD-SP / MCD-SAT / MCD-SBT / MCD-SB	kg	1,4
MCD-DT / MCD-D		2,0

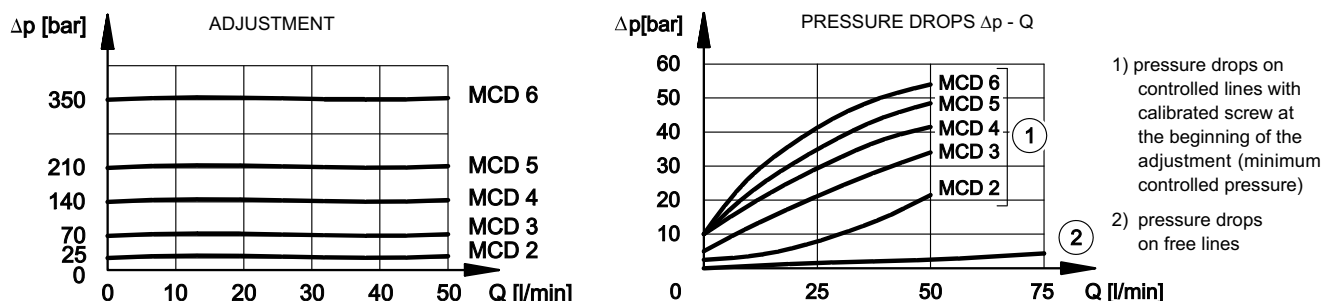
HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE

M	C	D	-	/ 51	/	
Size: ISO 4401-03 (CETOP 03). Modular version	Direct operated pressure relief valve	Pressure adjustment range 2 = up to 25 bar 3 = up to 70 bar 4 = up to 140 bar		Seals: N = NBR seals for mineral oils (standard) V = FPM seals for special fluids	omit for adjustment with countersunk hex screw - standard K = Adjustment knob	Series No. (the overall and mounting dimensions remain unchanged from 50 to 59)
Configurations: SP: single on line P with discharge in T SAT: single on line A with discharge in T SBT: single on line B with discharge in T			DT: double on lines A-B with discharge in T D: double on lines A-B with crossed discharges SB: single on line B with discharge in A			

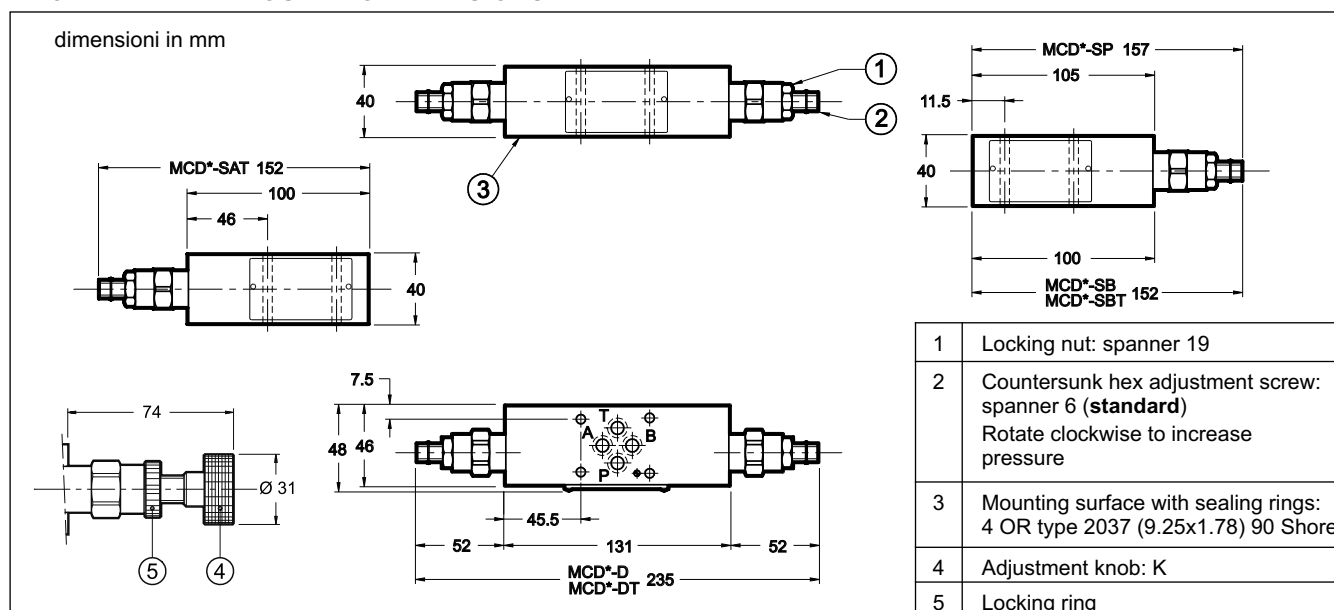
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)



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



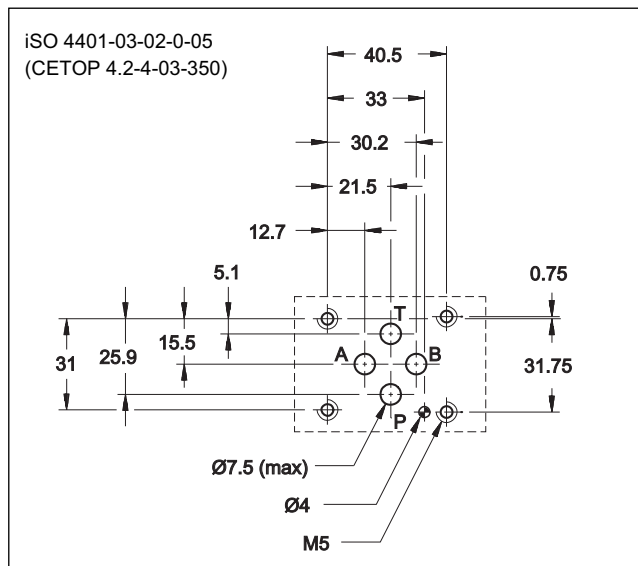


MRQ
PILOT OPERATED
PRESSURE RELIEF VALVE
SERIES 51

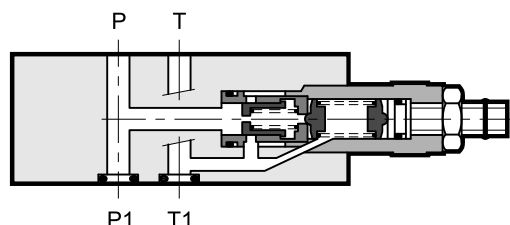
MODULAR VERSION
ISO 4401-03 (CETOP 03)

p max **350** bar
Q max **75** l/min

MOUNTING INTERFACE



OPERATING PRINCIPLE



- The MRQ valve is a pilot operated pressure relief valve made as a modular version with mounting surface according to ISO 4401 (CETOP RP 121H) standards.
- It can be assembled with all ISO 4401-03 (CETOP 03) modular valves without the use of pipes, using suitable tie-rods or bolts.
- It is available in versions for single adjustment on one control line or dual on two control lines and with four different pressure adjustment ranges.
- This valve is normally used as a hydraulic circuit pressure limiting device.
- It is normally supplied with a hexagonal head adjustment screw, locking nut and limitation of the maximum adjustment travel.

CONFIGURATIONS (see Hydraulic symbols table)

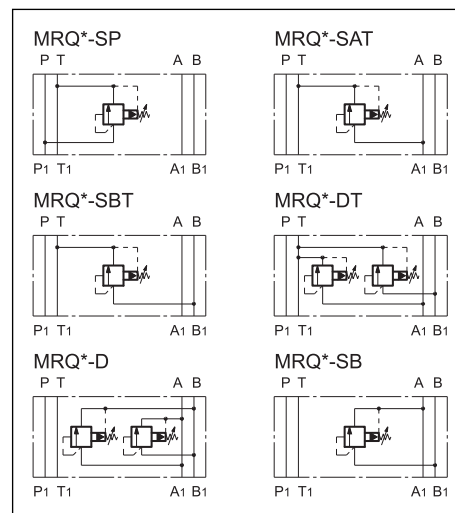
- “SP”: controls the pressure on line P with discharge in T.
- “SAT”: controls the pressure on line A with discharge in T.
- “SBT”: controls the pressure on line B with discharge in T.

- “DT”: controls the pressure on lines A-B with discharge in T.
- “D”: controls the pressure on lines A-B with crossed discharges.
- “SB”: controls the pressure on line B with discharge in A.

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

Maximum operating pressure	bar	350
Minimum controlled pressure	see Δp diagram.	
Maximum flow rate in controlled lines and in the free lines	l/min	75
Ambient temperature range	°C	-20 / +50
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: MRQ-SP / MRQ-SAT / MRQ-SBT / MRQ-SB MRQ-DT / MRQ-D	kg	1,4 2,1

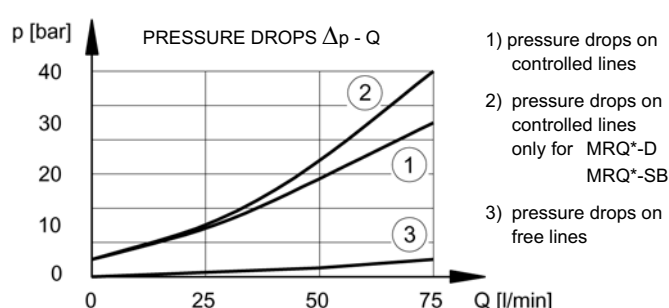
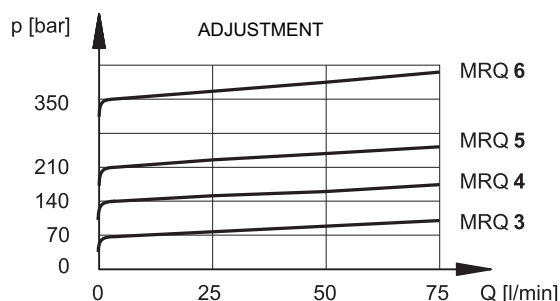
HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE

M	R	Q	-	/	/	51	/	
ISO 4401-03 (CETOP 03) size. Modular version						Seals: omit for mineral oils V = viton for special fluids		
Pilot operated pressure relief valve						Series No. (the overall and mounting dimensions remain unchanged from 50 to 59)		
Pressure adjustment range: 3 = up to 70 bar 5 = up to 210 bar 4 = up to 140 bar 6 = up to 350 bar						M1 = Adjustment knob (omit for adjustment with countersunk hex screw)		
Configurations: SP: single on line P with discharge in T SAT: single on line A with discharge in T SBT: single on line B with discharge in T						DT: double on lines A-B with discharge in T D: double on lines A-B with crossed discharges SB: single on line B with discharge in A		

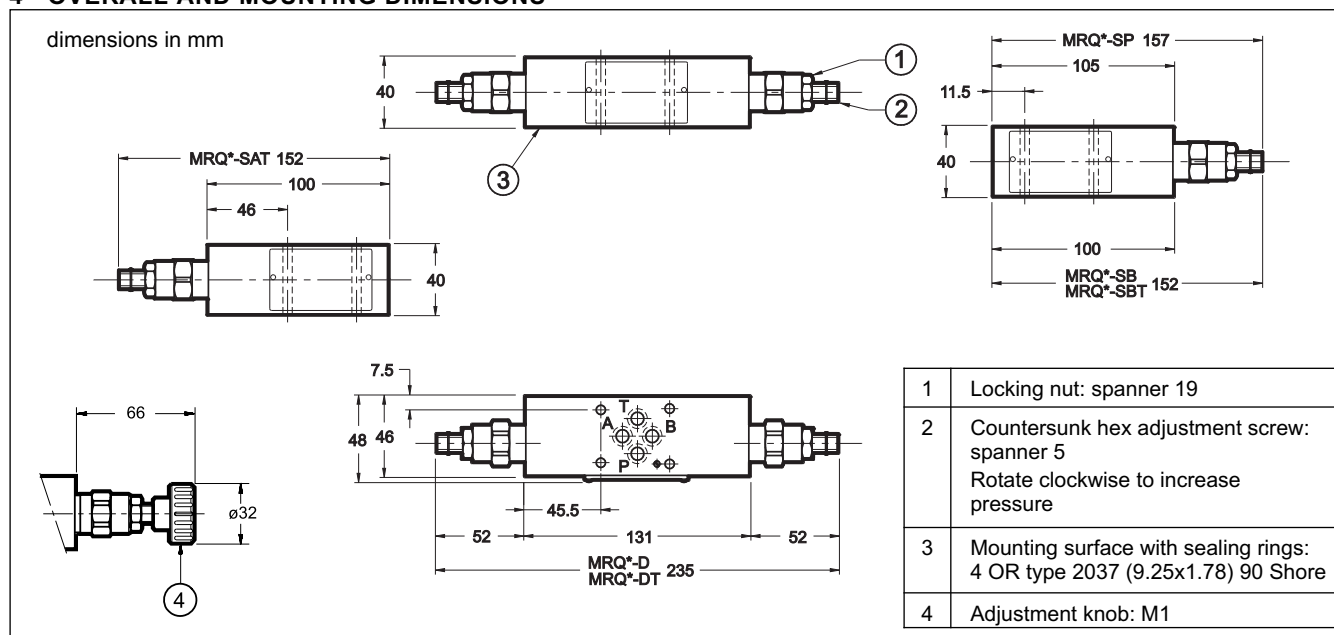
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)



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



PBM3

BACKPRESSURE VALVE

SERIES 10



MODULAR VERSION

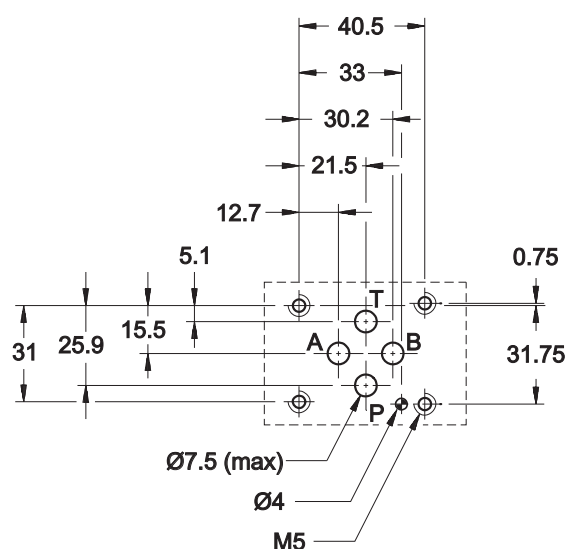
ISO 4401-03 (CETOP 03)

p max **350** bar

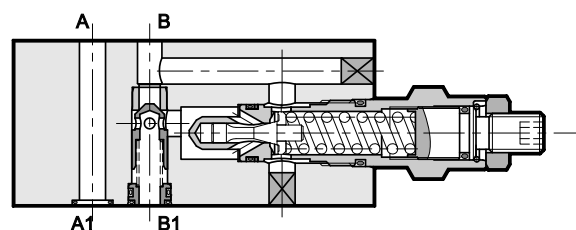
Q max (see table of performances)

MOUNTING INTERFACE

ISO 4401-03-02-0-05
CETOP 4.2-4-03-350



OPERATING PRINCIPLE

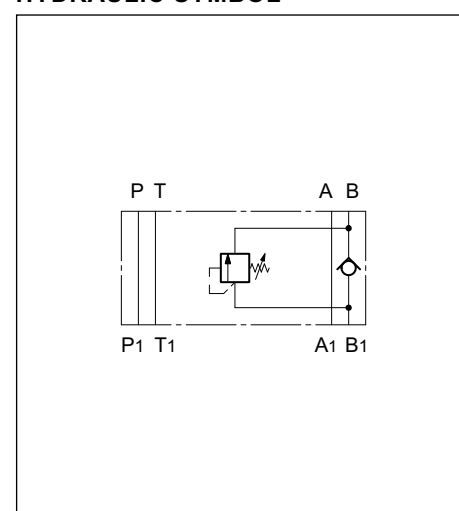


- The valve PBM3 is a direct operated three-way pressure regulator, developed as a modular version with mounting surface according to the ISO 4401 (CETOP RP121H) standards.
- Its aim is to adjust the output backpressure coming from the actuator, so as to allow the input free flow.
- It is normally used on vertically mounted cylinders where the cancellation of a load weighting on the rod of the same cylinder is needed.

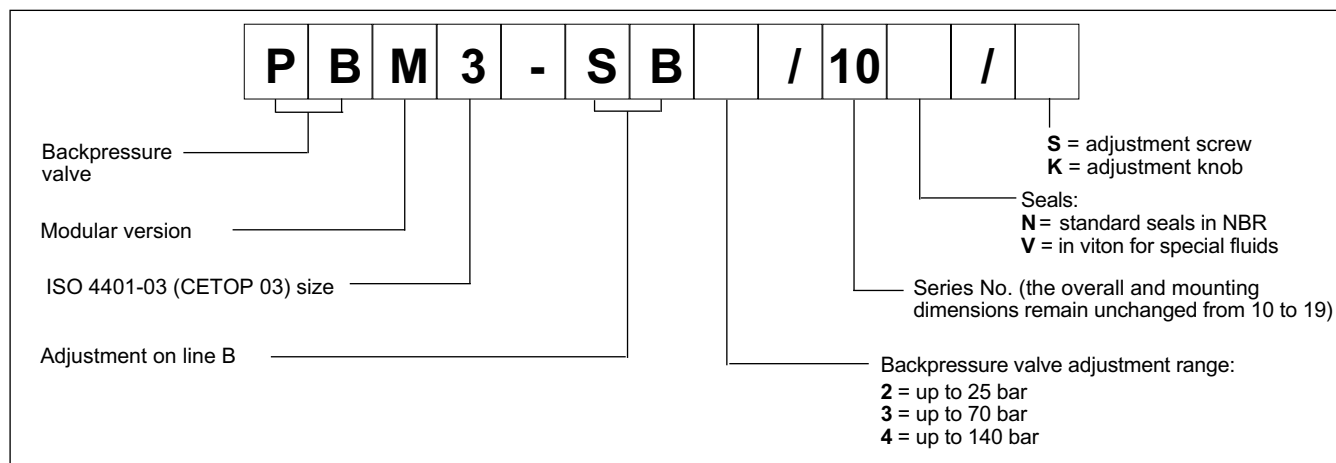
PERFORMANCES (measured with mineral oil of viscosity 36cSt at 50°C)

Maximum operating pressure	bar	350
Check valve cracking pressure	bar	3,5
Max. flow on check valve B→B1 (Δp 8 bar)	bar	50
Maximum flow rate in controlled line B1→B	l/min	50
Maximum flow rate in the free lines P, A, T		75
Ambient temperature range	°C	-20 / +50
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	1,6

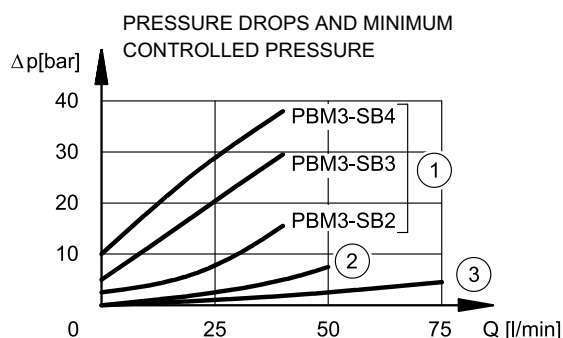
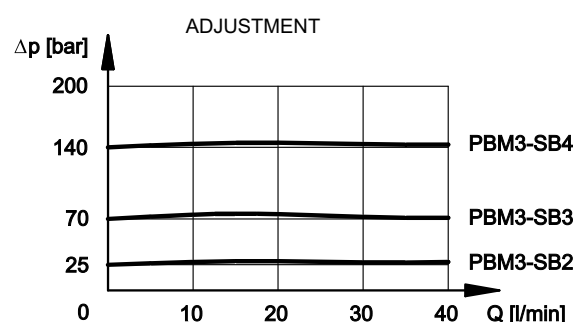
HYDRAULIC SYMBOL



1 - IDENTIFICATION CODE



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

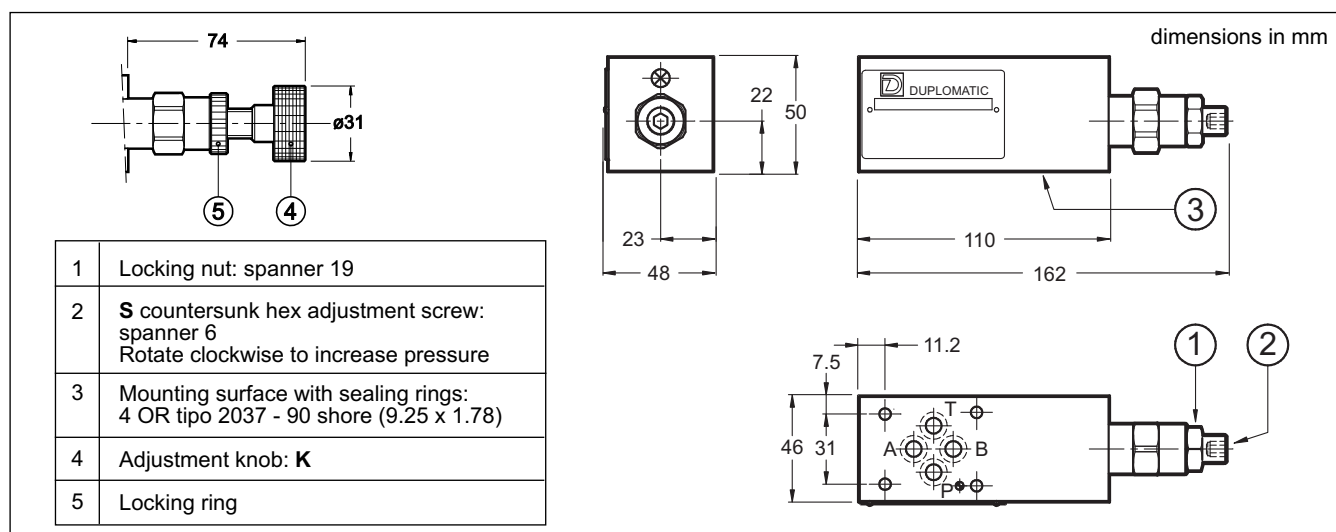


- 1) pressure drops on line B1→B with calibrated screw at the beginning of the adjustment (min. controlled pressure)
- 2) pressure drops on line B→B1 to which the cracking pressure of the check valve is to be added
- 3) pressure drops on free lines

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





PRM5

PILOT OPERATED PRESSURE RELIEF VALVE

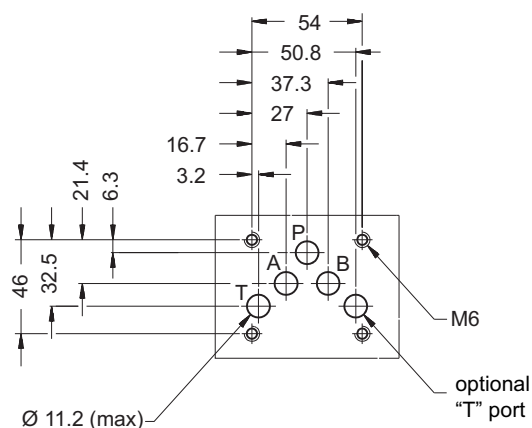
SERIES 10

MODULAR VERSION ISO 4401-05 (CETOP 05)

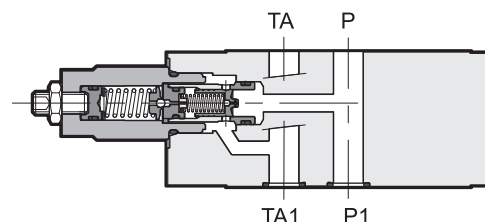
p max **350** bar
Q max **120** l/min

MOUNTING SURFACE

ISO 4401-05-04-0-05
CETOP 4.2-4-05-350



OPERATING PRINCIPLE

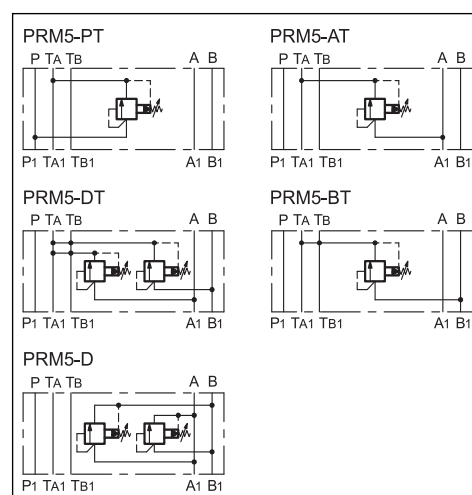


- The PRM5 valve is a pilot operated pressure relief valve made as a modular version with mounting surface according to ISO 4401 (CETOP RP121H) standards.
- It can be assembled with all ISO 4401-05 modular valves without the use of pipes, using suitable tie-rods or bolts.
- Versions are available for single adjustment on one control line, or dual on two control lines and with four different pressure adjustment ranges.
- This valve is used as a hydraulic circuit pressure limiting device.
- It is supplied with an hexagonal head adjustment screw and locking nut. It is also available with knob.

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

Maximum operating pressure	bar	350
Minimum controlled pressure	bar	see $\Delta p - Q$ diagram
Max flow	l/min	120
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: PRM5-PT, -AT, -BT PRM5-DT, -D	kg	2,8 3

HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE

P	R	M	5	-		/ 10	/	
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Pilot operated pressure relief valve

Modular version

ISO 4401-05 (CETOP 05) size

Option: W7 surface treatment. Omit if not required (**NOTE**)

Option: **K** = Adjustment knob. Omit for adjustment with hex socket screw (**standard**)

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

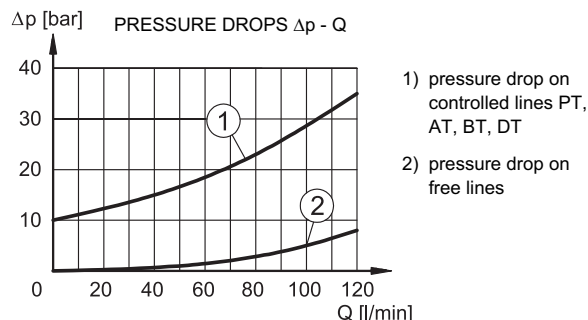
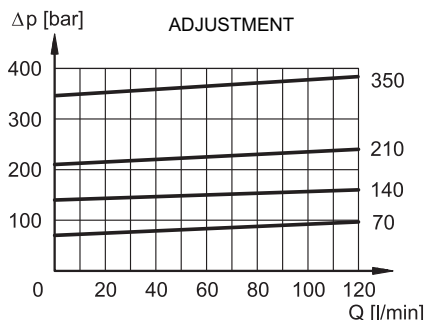
Series No. (the overall and mounting dimensions remain unchanged from 10 to 19)

NOTE: Upon request we can supply these valves completely with zinc-nickel surface treatment on the body. Add the suffix **/W7** at the end of the identification code.

Versions:
PT: single on line P with discharge in TA
AT: single on line A with discharge in TA
BT: single on line B with discharge in TA and TB
DT: double on lines A-B with discharge in TA and TB
D: double on lines A-B with cross discharge

Pressure adjustment range:
070 = 6 ÷ 70 bar (17 bar/turn) **210** = 6 ÷ 210 bar (47 bar/turn)
140 = 6 ÷ 140 bar (32 bar/turn) **350** = 6 ÷ 350 bar (78 bar/turn)

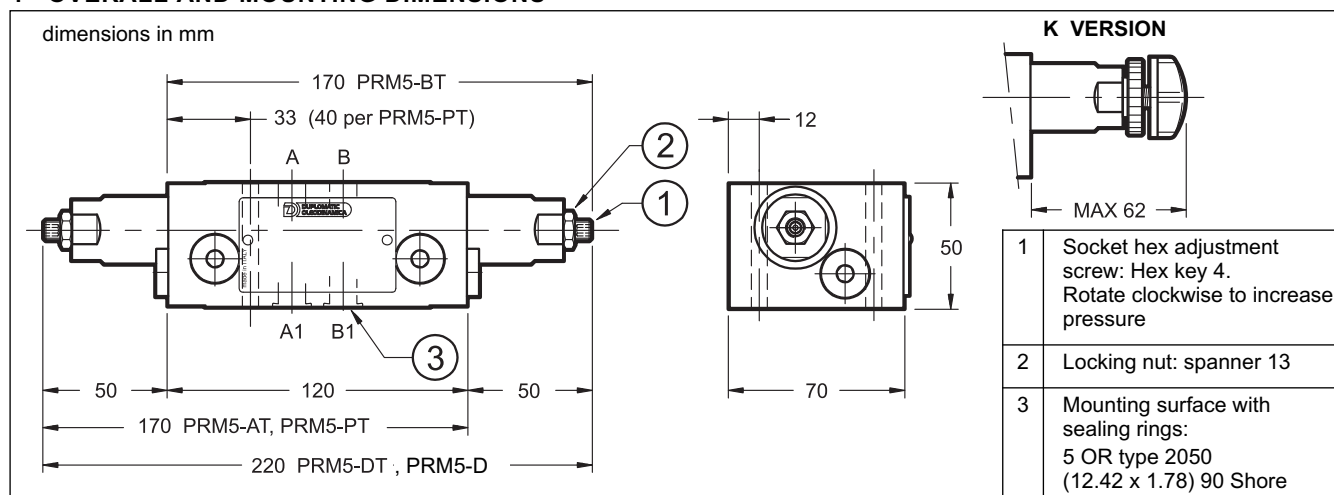
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)

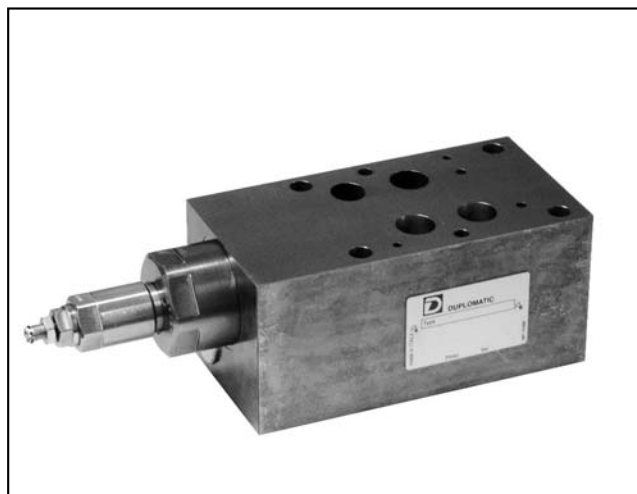


3 - HYDRAULIC FLUIDS

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





PRM7

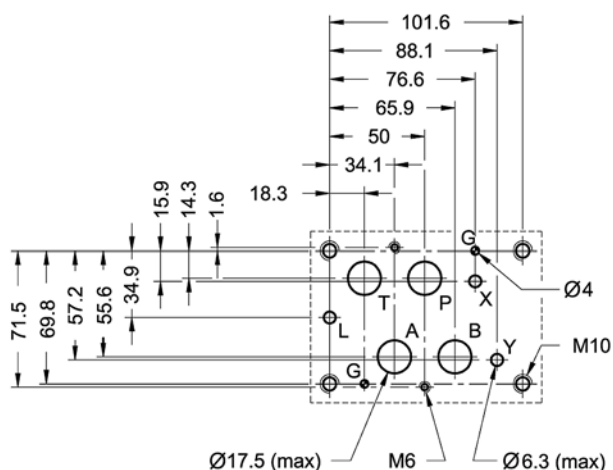
PILOT OPERATED PRESSURE RELIEF VALVE SERIES 10

MODULAR VERSION ISO 4401-07 (CETOP 07)

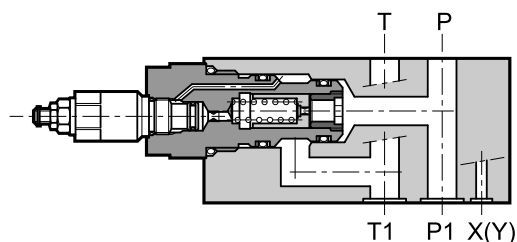
p max **350** bar
Q max **300** l/min

MOUNTING INTERFACE

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



OPERATING PRINCIPLE

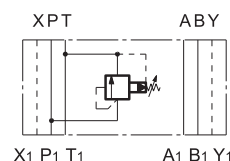


- The PMR7 valve is a pilot operated pressure relief valve made as a modular version with a mounting surface according to ISO 4401 (CETOP RP 121H) standards.
- It can be assembled with all ISO 4401-07 (CETOP 07) modular valves without the use of pipes, using suitable tie-rods or bolts.
- It is available in the type for single adjustment on line P and discharge in T with two pressure adjustment ranges.
- This valve is normally used as a hydraulic circuit pressure limiting device.
- It is normally supplied with an adjustment screw.

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

Maximum operating pressure	bar	350
Maximum flow rate	l/min	300
Ambient temperature range	°C	-20 / +50
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	8,5

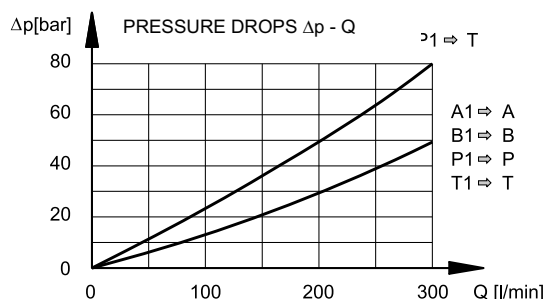
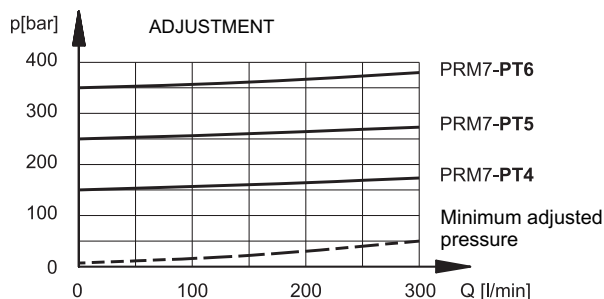
HYDRAULIC SYMBOL



1 - IDENTIFICATION CODE

P	R	M	7	-	PT		/	10	/	
Pressure relief valve							S = adjustment screw (standard) K = adjustment knob			
Modular version							Seals: N = standard seals in NBR (standard) V = in viton for special fluids			
ISO 4401-07 (CETOP 07) size							Series No. (the overall and mounting dimensions remain unchanged from 10 to 19)			
Pressure adjustment on line P with discharge in T							Pressure adjustment range: 4 = 15 ÷ 160 bar (30 rpm) 5 = 15 ÷ 250 bar (45 rpm) 6 = 15 ÷ 315 bar (56 rpm)			

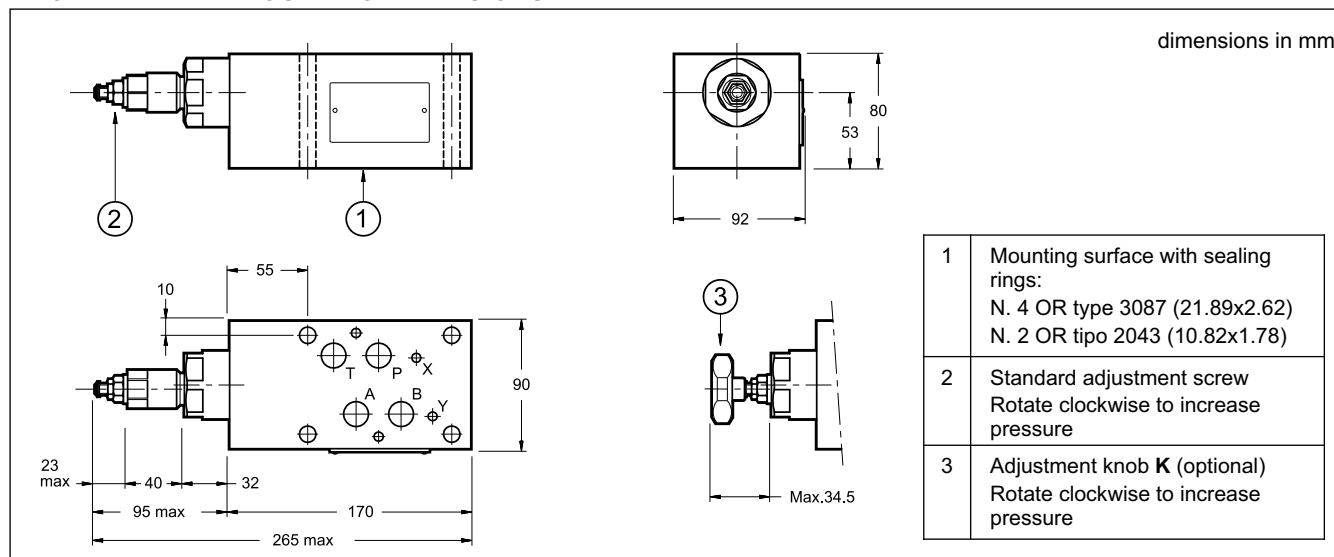
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)



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



PZM2

PRESSURE REDUCING VALVE DIRECT OPERATED WITH VARIABLE ADJUSTMENT SERIES 10

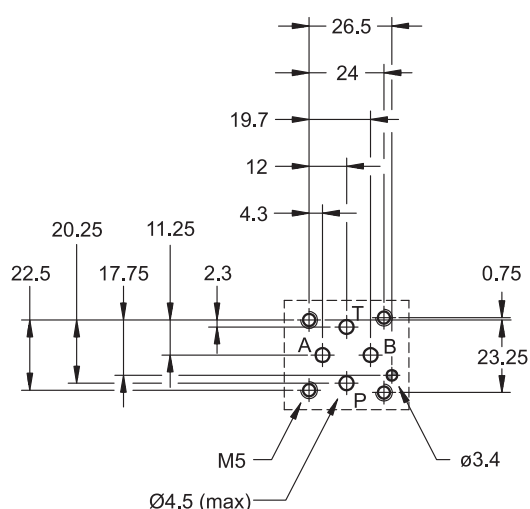
MODULAR VERSION ISO 4401-02

p max **320** bar

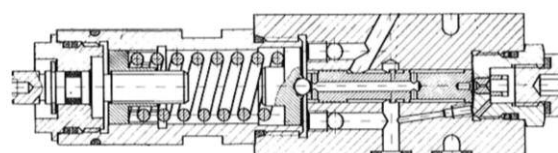
Q max **20** l/min

MOUNTING SURFACE

ISO 4401-02-01-0-05
(CETOP 4.2-4-R02-320)



OPERATING PRINCIPLE



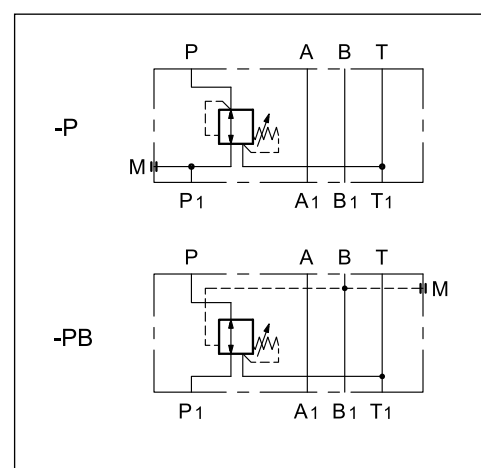
- The PZM2 valve is a three-ports pressure reducing valve, direct operated, spool type, made as modular version, with ports according to the ISO 4401 standards and can be assembled quickly, without use of pipes, under the ISO 4401-02 solenoid valves.
- The PZM2 is a normally open valve. The hydraulic 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		100
Maximum flow rate in the controlled lines	l/min	20
Maximum flow rate in the free lines		30
Ambient temperature range	°C	-20 / +50
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	0,7

HYDRAULIC SYMBOL

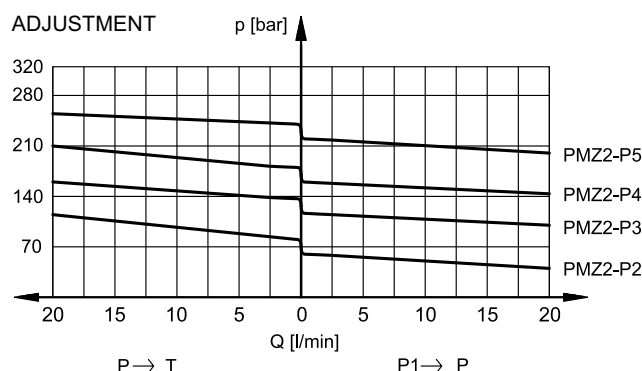


1 - IDENTIFICATION CODE

PZ	M	2	-			/ 10		/ S
Pressure-reducing valve, direct operated	Modular version	Size: ISO 4401-02						Adjustment screw
								Seals: N = NBR seals for mineral oils (standard) V = FPM seals for special fluids
								Series No. (the overall and mounting dimensions remain unchanged from 10 to 19)
Versions P = pressure reduction on line P PB = pressure reduction on line P with pilot signal from line B						Pressure adj. range: 2 = 4 ÷ 32 bar 3 = 5 ÷ 80 bar		4 = 10 ÷ 200 bar 5 = 25 ÷ 250 bar

2 - CHARACTERISTIC CURVES

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



3 - HYDRAULIC FLUIDS

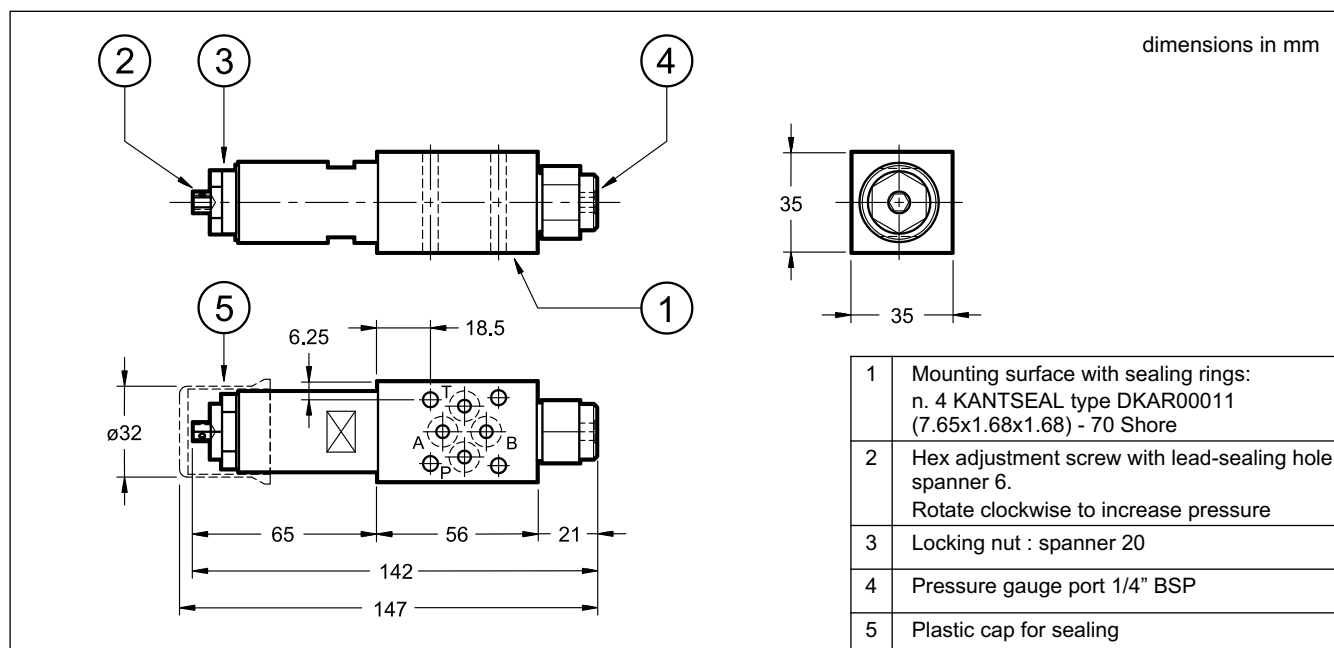
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals (code N).

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



MZD

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

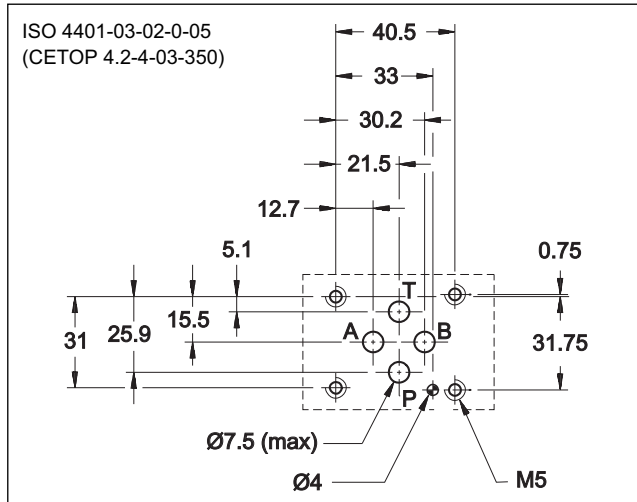
MODULAR VERSION

ISO 4401-03 (CETOP 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 / +50
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 (CETOP RP 121H) standards and can be assembled quickly, without use of pipes, under the ISO 4401-03 (CETOP 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	/	/	/	/
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Size: ISO 4401-03 (CETOP 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

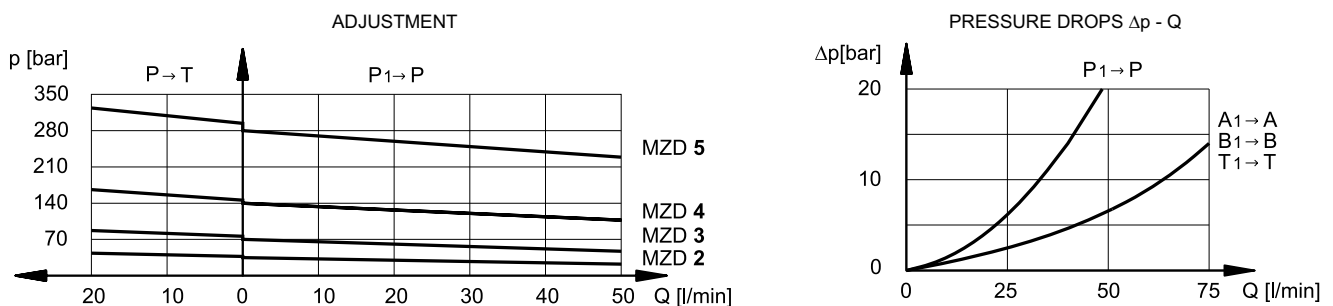
MZD*
MZD*/RP

MZD*/A
MZD*/RA

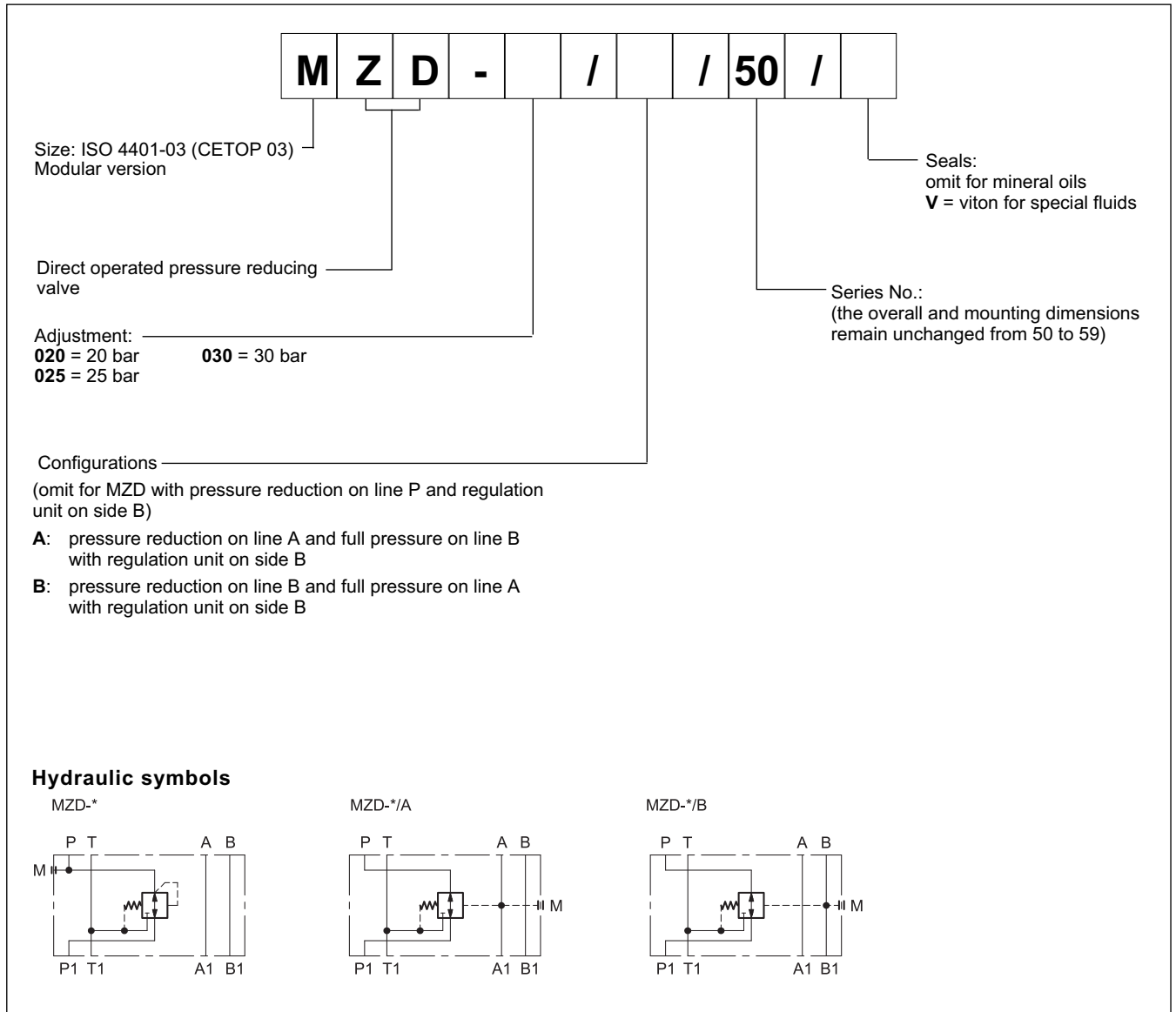
MZD*/B
MZD*/RB

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

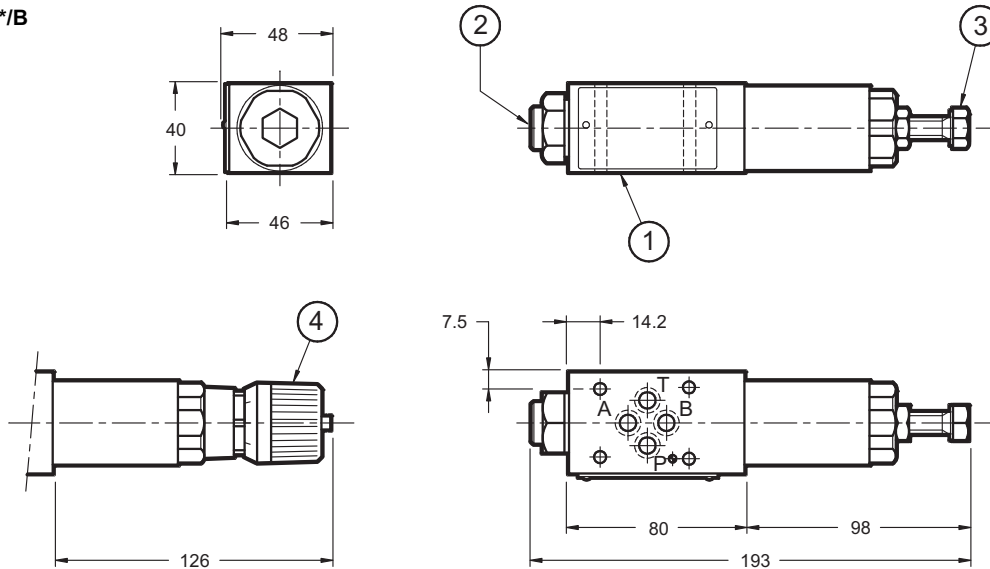


4 - HYDRAULIC FLUIDS

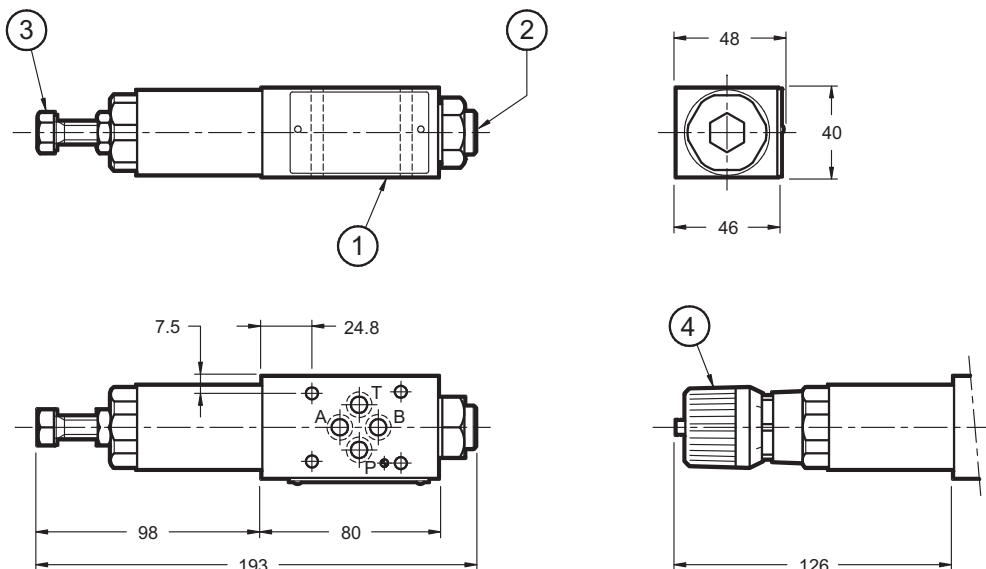
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department. Using fluids at temperatures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



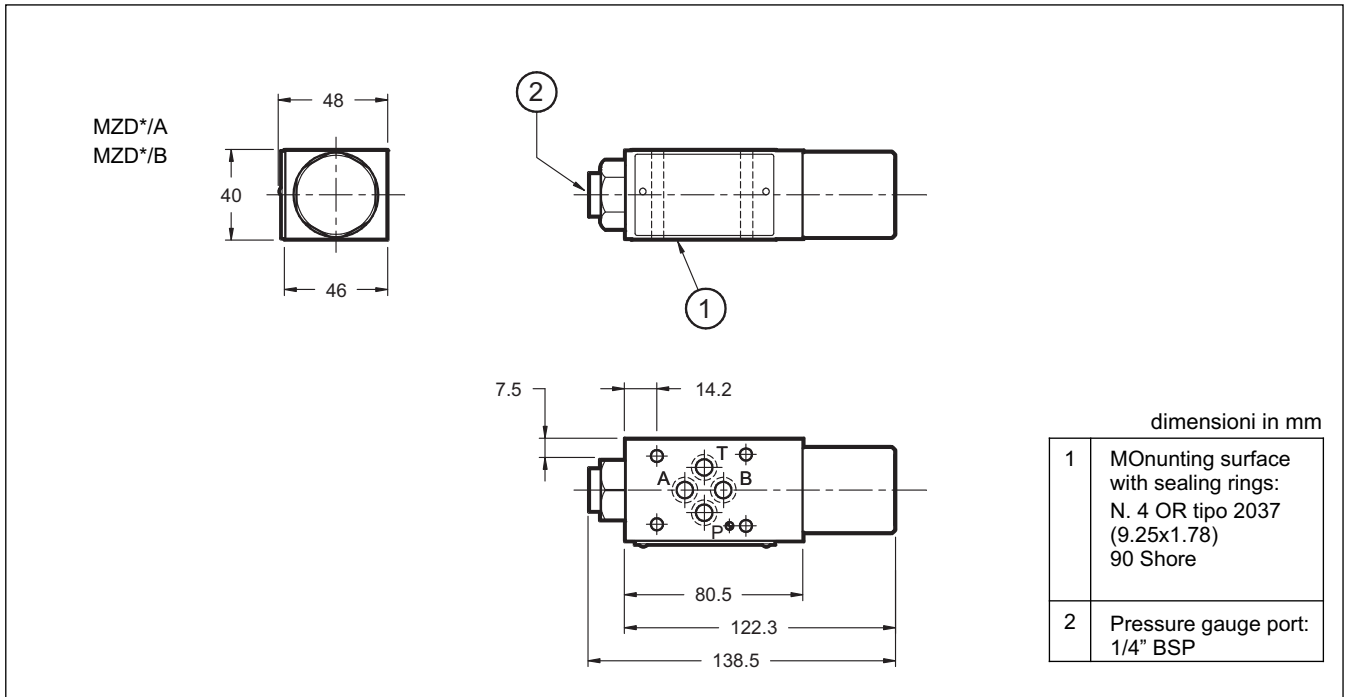
MZD*/RP
MZD*/RA
MZD*/RB



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





MZD



DIPLOMATiC OLEODiNAMiCA S.p.A.

20015 PARABIAGO (MI) • Via M. Re Depaolini 24

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www.diplomatic.com • e-mail: sales.exp@diplomatic.com



Z4M

PILOT OPERATED PRESSURE REDUCING VALVE

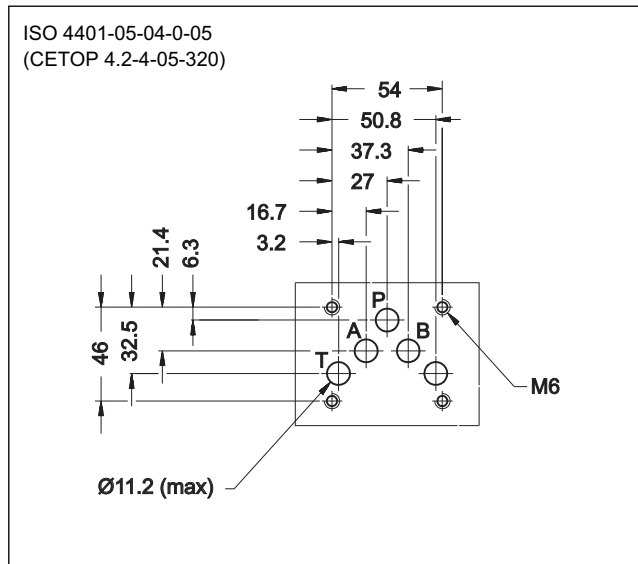
SERIES 50

MODULAR VERSION ISO 4401-05 (CETOP 05)

p max **320** bar

Q max (see table of performances)

MOUNTING INTERFACE



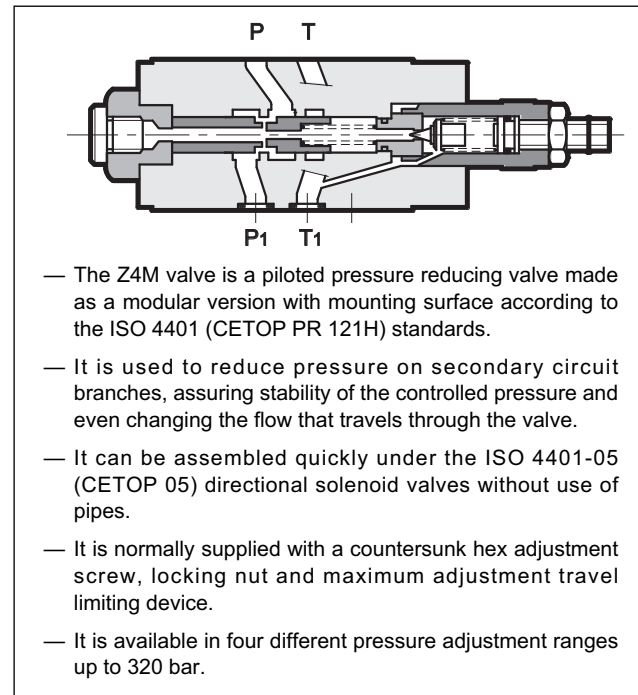
CONFIGURATIONS (see Hydraulic symbols table)

- Z4M*-I: pressure reduction on line P - drainage connected to line T.
- 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.

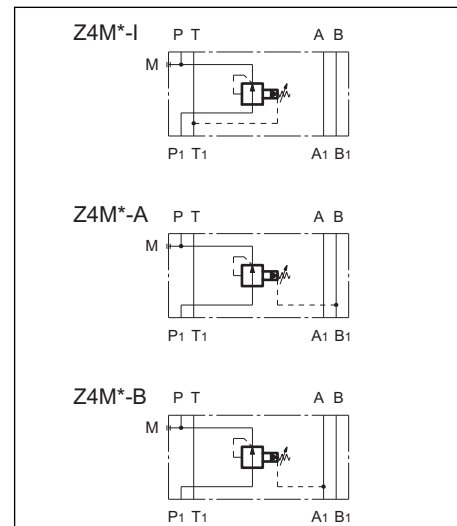
PERFORMANCES (measured with mineral oil of viscosity 36cSt at 50°C)

Maximum operating pressure	bar	320
Maximum flow rate in the controlled line P	l/min	80
Maximum flow rate in the free lines		100
Drainage flow rate		≤ 0,07
Ambient temperature range	°C	-20 / +50
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	2,7

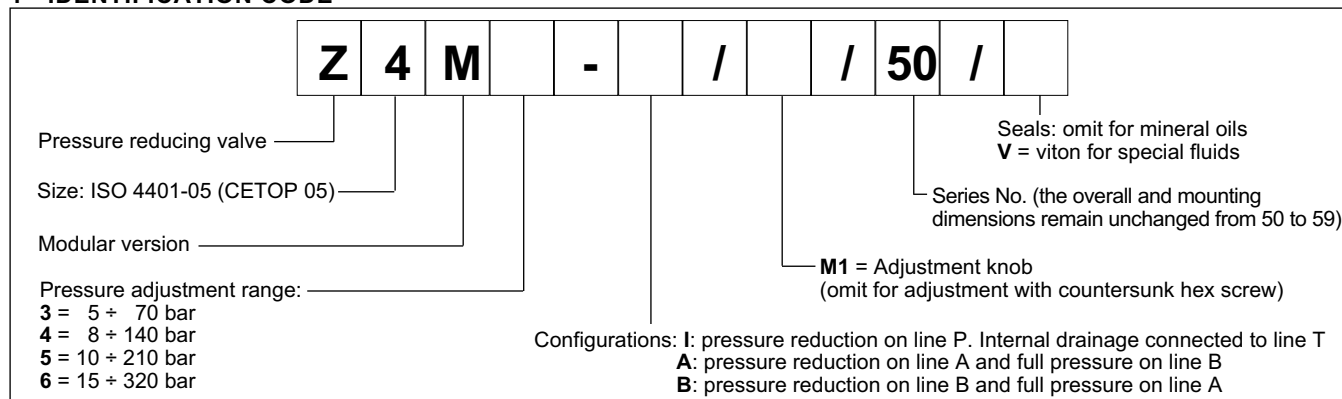
OPERATING PRINCIPLE



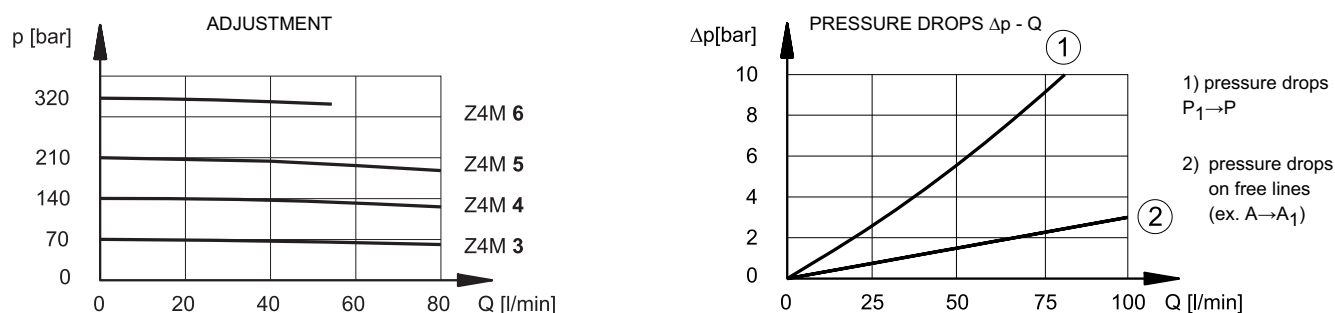
HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE



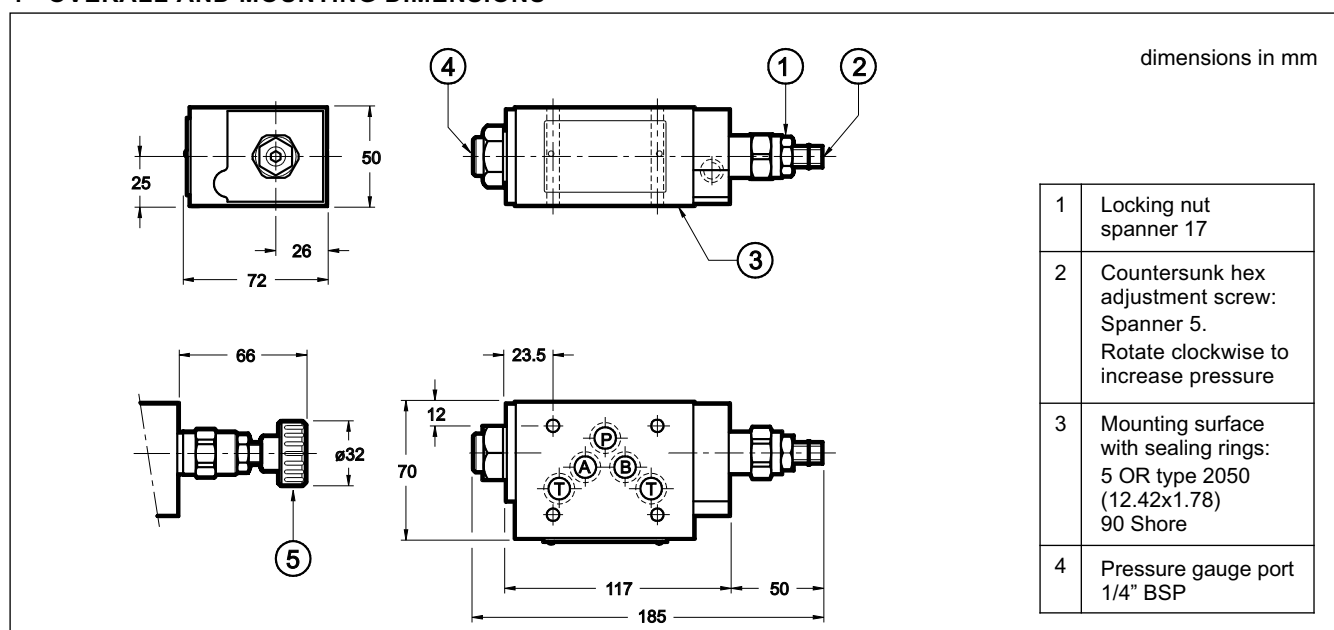
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)

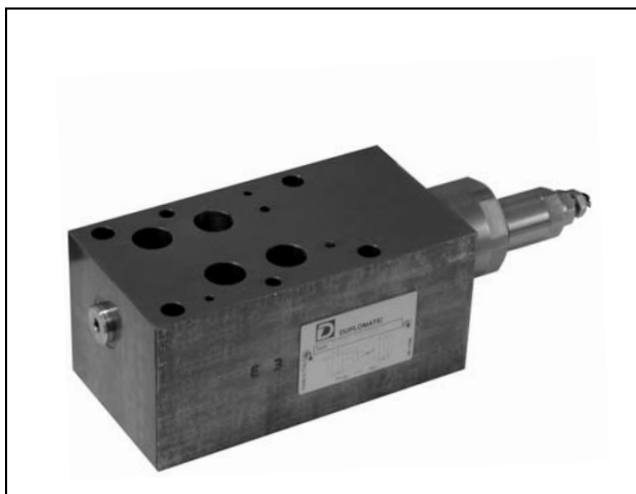


3 - HYDRAULIC FLUIDS

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 - OVERALL AND MOUNTING DIMENSIONS





PZM7

PRESSURE REDUCING VALVE

SERIES 10

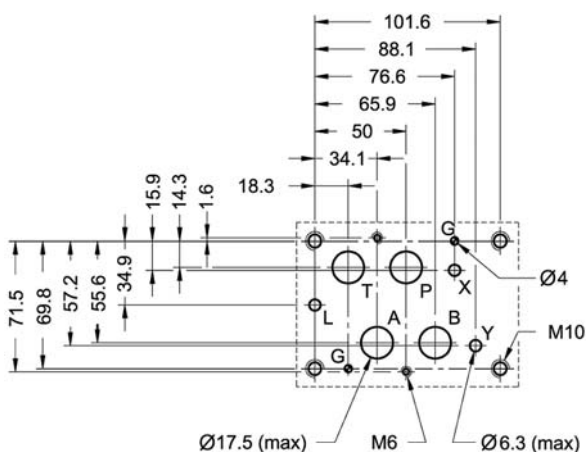
MODULAR VERSION

ISO 4401-07 (CETOP 07)

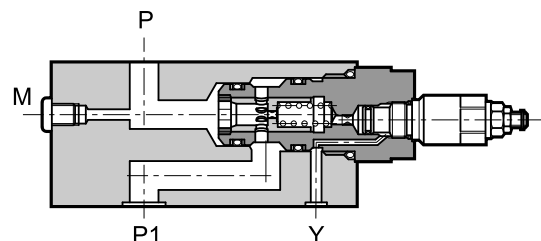
p max 350 bar
Q max 250 l/min

MOUNTING INTERFACE

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



OPERATING PRINCIPLE



- The PZM7 valve is made as a modular valve and has a mounting surface according to the ISO 4401 (CETOP RP 121H) standards.
- It is a two-stage type and is used to assure stability of the controlled pressure, even changing the flow that travels through the valve.
- The PZM7M valve can be assembled quickly under the DSP7 directional valves (see catalogue 41 420) without use of pipes, using suitable tie-rods or bolts, forming compact modular groups.
- It is normally supplied with an adjustment knob.

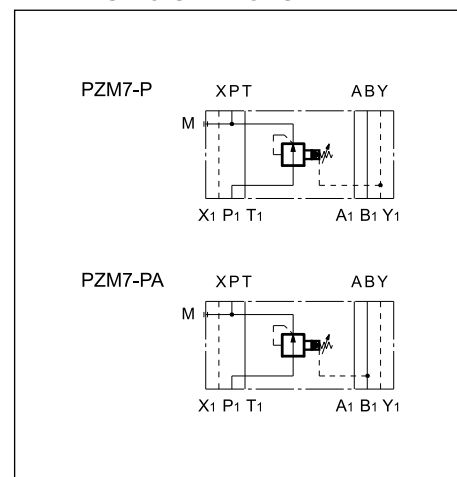
CONFIGURATIONS (see Hydraulic symbols table)

- Configuration "PZM7-P": pressure reduction on line P - external drainage.
- Configuration "PZM7-PA": pressure reduction on line A and valve on line P.

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

Maximum operating pressure	bar	350
Maximum flow rate	l/min	250
Drainage flow rate	l/min	≤ 0,8
Ambient temperature range	°C	-20 / +50
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	Secondo ISO 4406:1999 classe 20/18/15	
Recommended viscosity	cSt	25
Mass:	kg	8,65

HYDRAULIC SYMBOLS

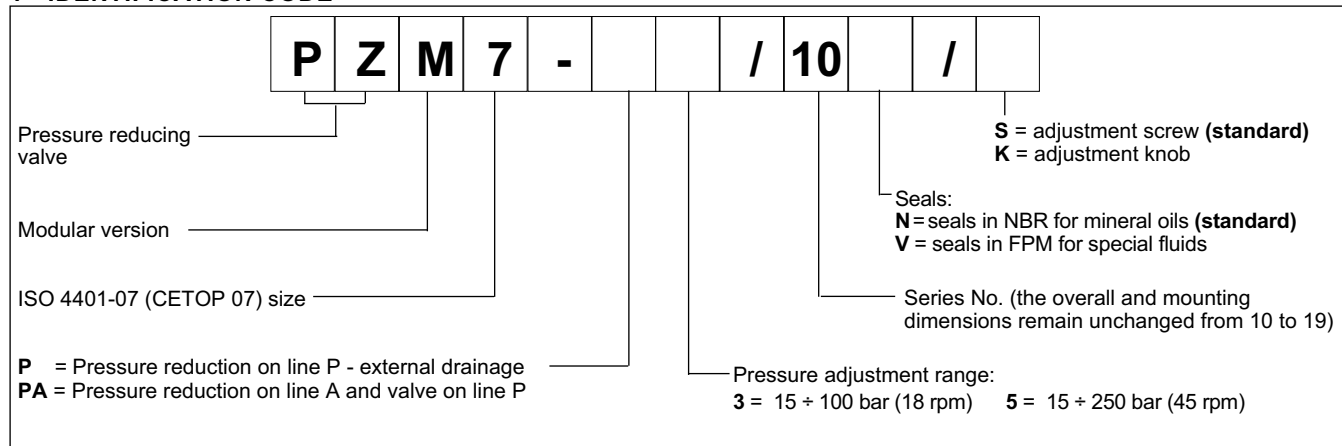




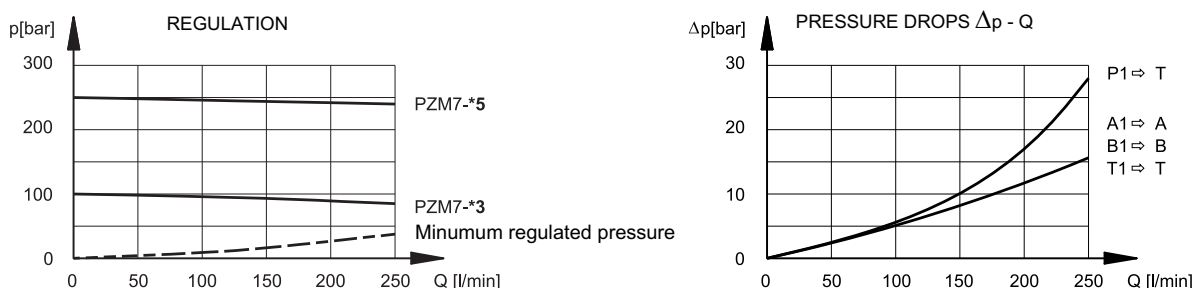
PZM7

SERIES 10

1 - IDENTIFICATION CODE



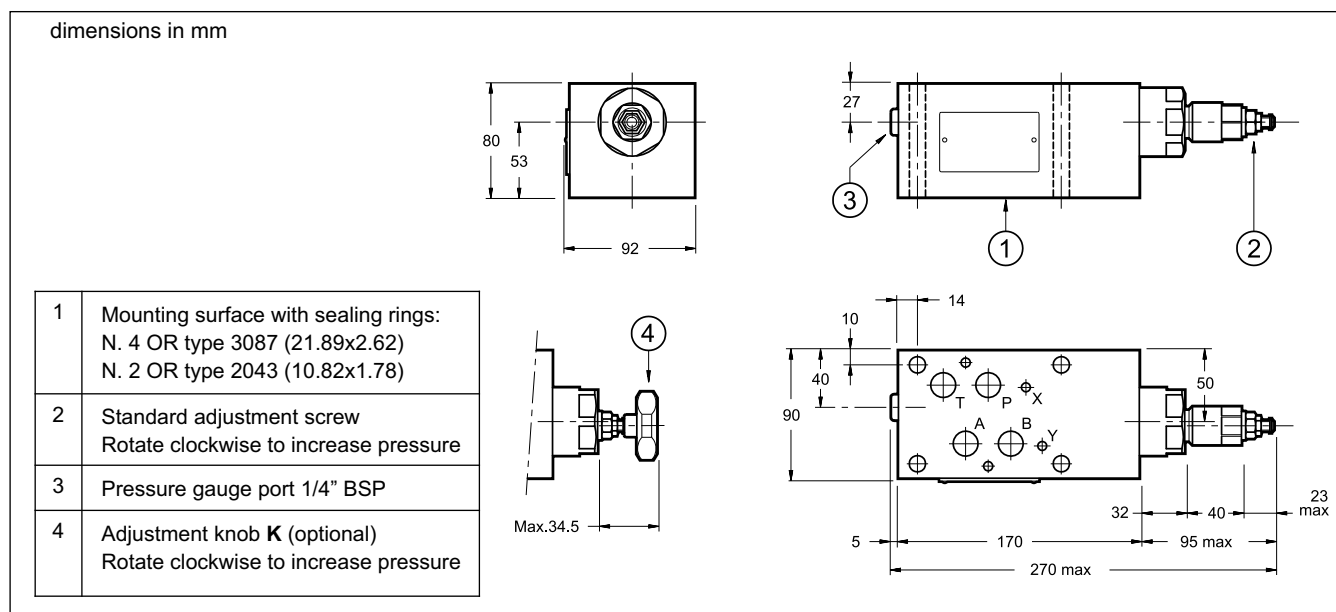
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)



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 - OVERALL AND MOUNTING DIMENSIONS



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Fax +39 0331.895.339
www.duplomatic.com • e-mail: sales.exp@duplomatic.com



MSD

DIRECT OPERATED SEQUENCE VALVE

SERIES 50

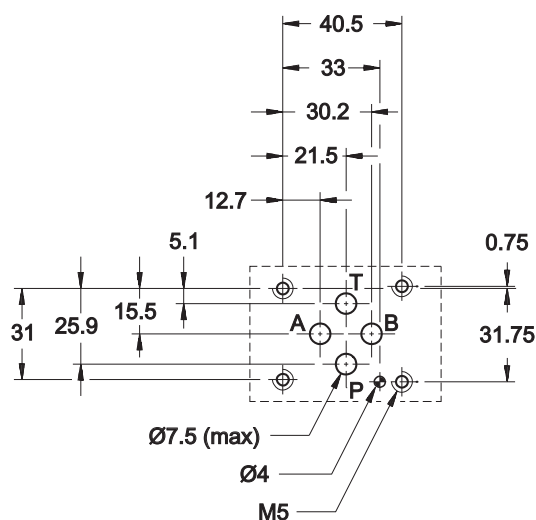
MODULAR VERSION ISO 4401-03 (CETOP 03)

p max **350** bar

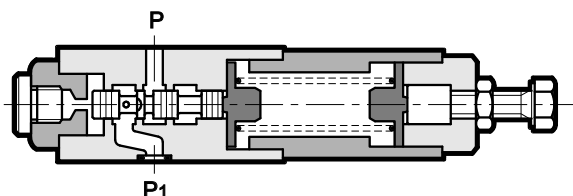
Q max (see table of performances)

MOUNTING INTERFACE

ISO 4401-03-02-0-05
(CETOP 4.2-4-03-350)



OPERATING PRINCIPLE



— The MSD valve is a direct operated sequence valve of the spool type and is used to control two or more actuators in succession.

At rest position, it is normally closed and the spool is subject to pressure in line P1 on one side and to the adjustment screw on the other side. When the pressure in line P1 reaches the set value of the screw, the valve opens and allows passage of the fluid in the pressure line of the main circuit.

The valve stays open until the pressure in the circuit drops below the calibrated value set by the spring.

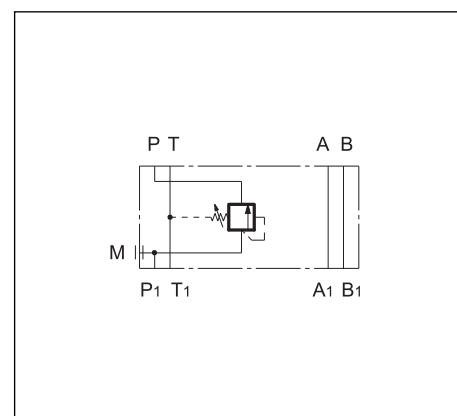
— It is made as a modular version with ports according to the ISO 4401 (CETOP PR 121H) standards and can be assembled quickly without the use of pipes under the ISO 4401-03 (CETOP 03) directional solenoid valves.

— It is normally supplied with a hexagonal head adjustment screw. Upon request, it can be equipped with a SICBLOC adjustment knob with micrometric indication and automatic locking.

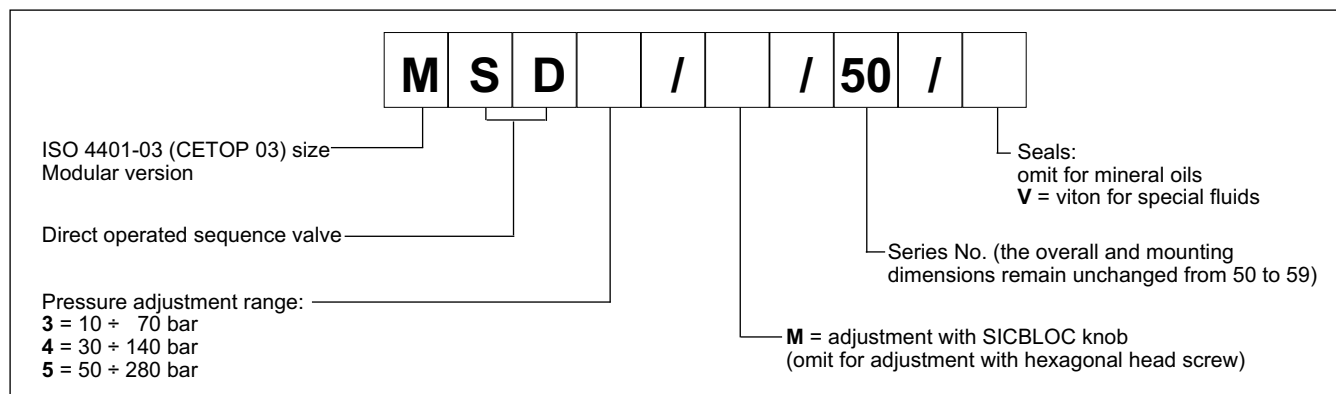
PERFORMANCES (measured with mineral oil of viscosity 36cSt at 50°C)

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
Ambient temperature range	°C	-20 / +50
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

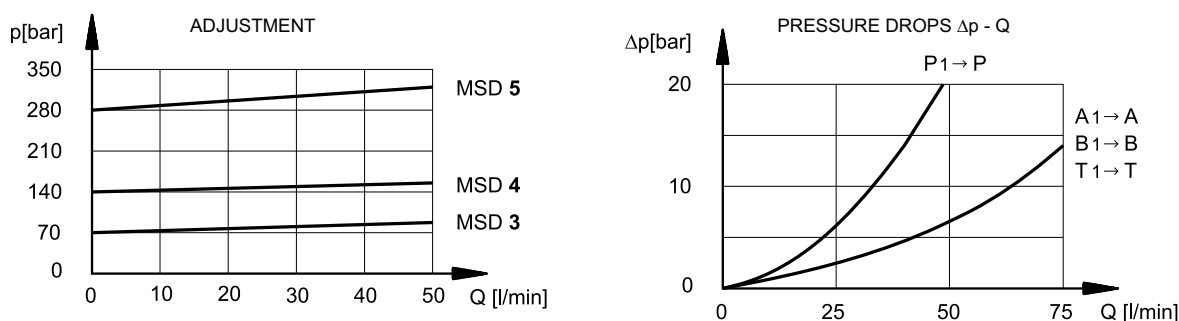
HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE



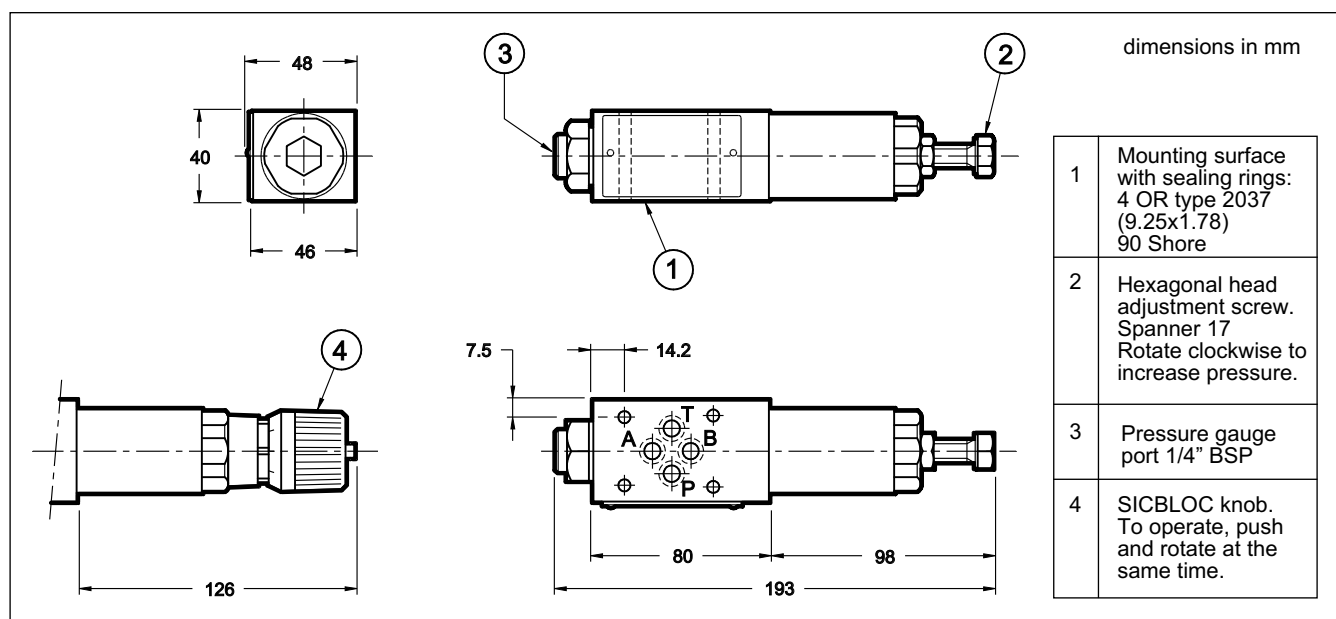
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)



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 - OVERALL AND MOUNTING DIMENSIONS





SD4M

DIRECT OPERATED SEQUENCE VALVE

SERIES 50

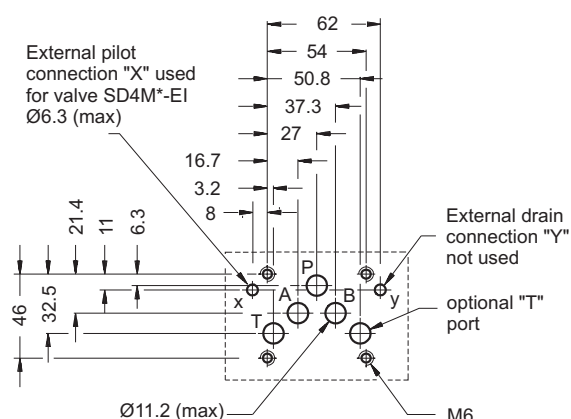
MODULAR VERSION ISO 4401-05 (CETOP 05)

p max 320 bar

Q max (see table of performances)

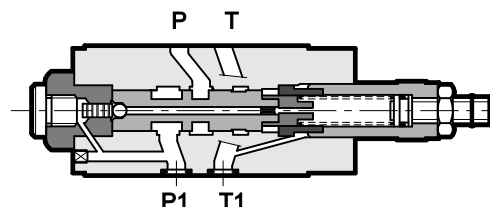
MOUNTING INTERFACE

ISO 4401-05-05-0-05
(CETOP 4.2-4-R05-320)



The internal pilot version of the valve can be installed either on the ISO 4401-05 (CETOP 05) type or ISO 4401-05-05-0-94 (R05) type of mounting interface (ports X and Y of the latter version are not to be used).

OPERATING PRINCIPLE



— The SD4M valve is a direct operated sequence valve of the spool type, made as a modular version with a mounting surface according to the ISO 4401 (CETOP RP 121H) standards.

It is normally used to drive two or more actuators in succession. In the rest position, it is normally closed and, on one side, the spool is subjected to the push of a small piston on which the line (P1) pressure acts and, on the other side, to the adjustment spring. When the pressure in line P1 reaches the calibrated value of the spring, the valve opens and allows passage of the fluid in the controlled line (P). The valve stays open until the pressure in the circuit drops below the set calibration value.

— Made in two versions, with internal or external piloting. The piloting port "X" is according to the CETOP 4.2-4-R05 mounting interface for the latter version.

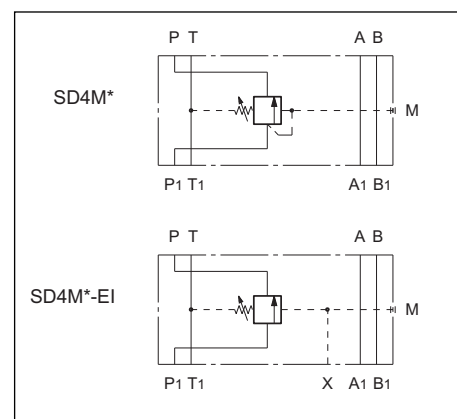
— It can be assembled quickly without use of pipes under the ISO 4401-05 (CETOP 05) directional solenoid valves.

— It is normally supplied with a countersunk hex adjustment screw, locking nut and maximum adjustment travel limiting device.

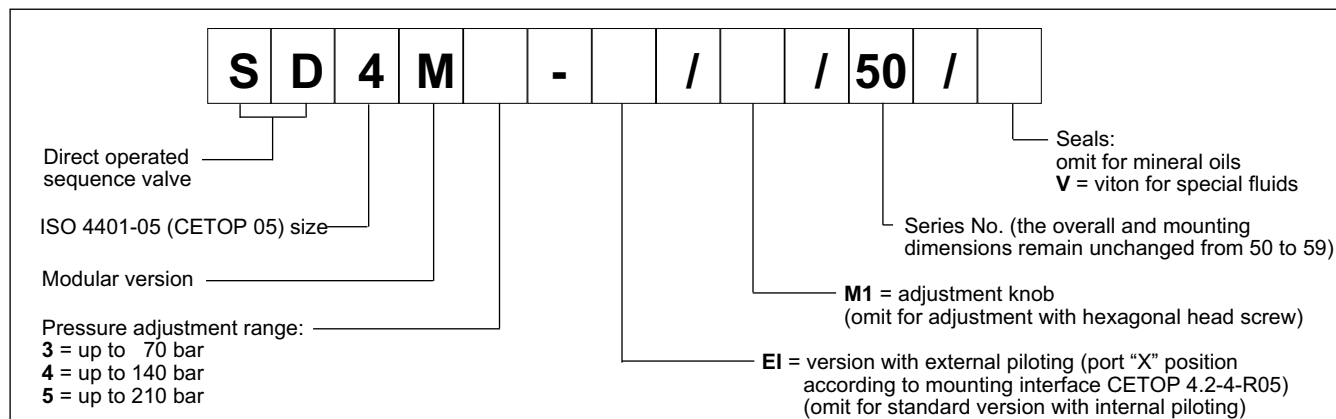
PERFORMANCES (measured with mineral oil of viscosity 36 cSt at 50°C)

Maximum operating pressure	bar	320
maximum pressure on port T		10
Maximum flow rate in the controlled lines	l/min	80
Maximum flow rate in the free lines		100
Ambient temperature range	°C	-20 / +50
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	2,7

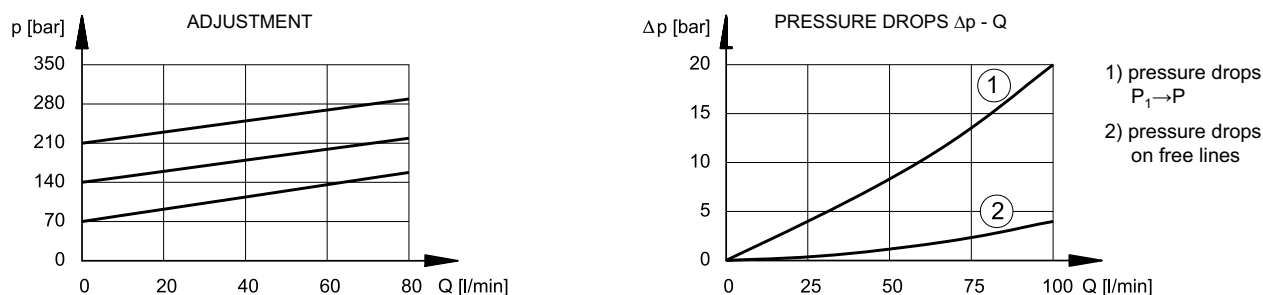
HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE



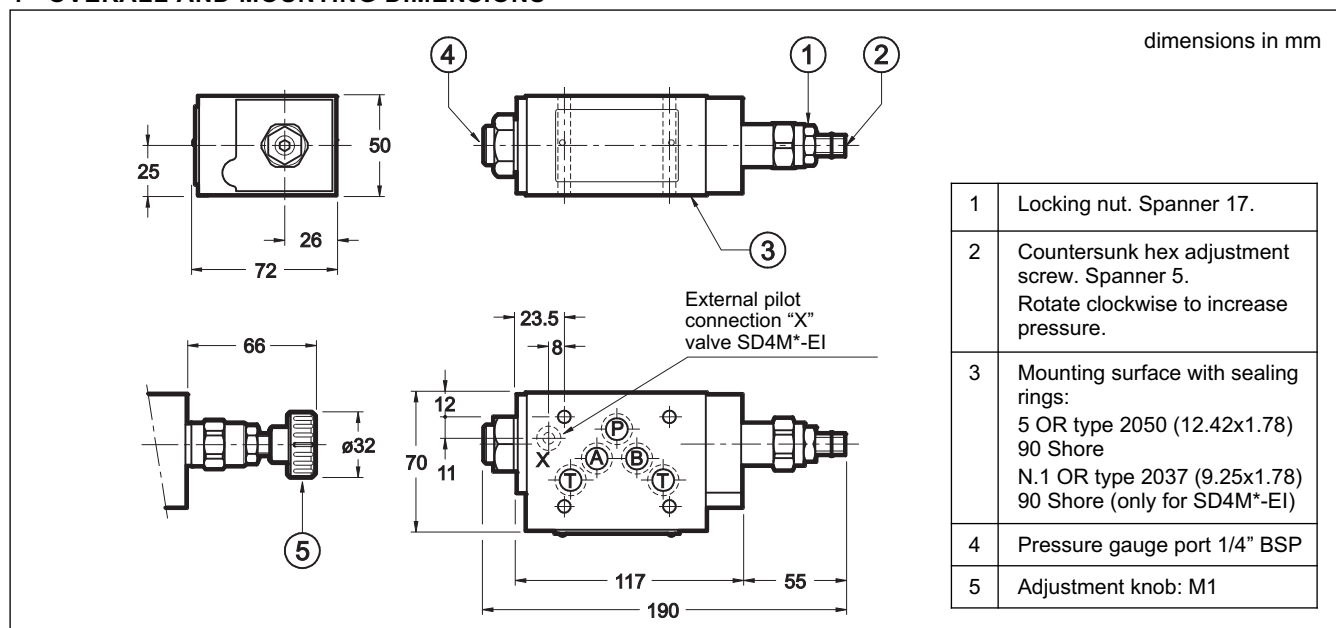
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)



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 - OVERALL AND MOUNTING DIMENSIONS





PCM3

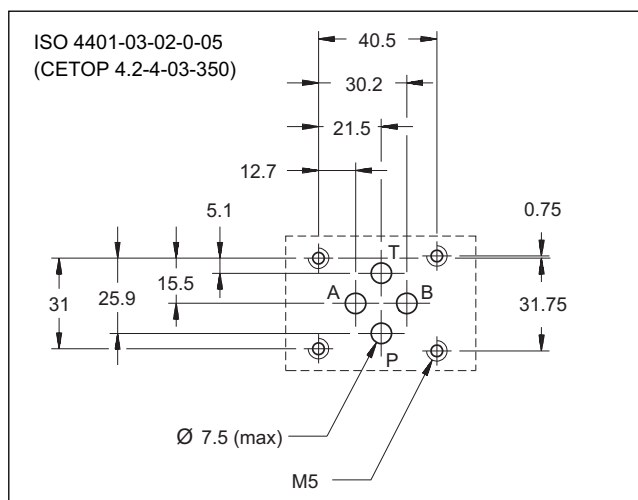
TWO AND THREE-WAY PRESSURE COMPENSATOR WITH FIXED OR VARIABLE ADJUSTMENT SERIES 10

MODULAR VERSION
ISO 4401-03 (CETOP 03)

p max **350** bar

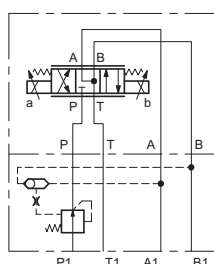
Q max **40** l/min

MOUNTING INTERFACE

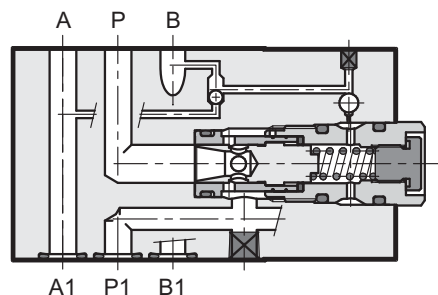


APPLICATION EXAMPLES

Two-way compensator with fixed adjustment, combined with a proportional valve type DSE3-A*



OPERATING PRINCIPLE



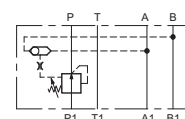
- The PCM3 valve is a two or three-way pressure compensator, developed as a modular version with mounting surface according to the ISO 4401 (CETOP RP121H).
- Its aim is to keep the pressure drop setting (characteristic Δp) between the line P and alternatively the lines A and B, at a constant level.
- It is normally used together with proportional directional valves, in order to control the flow rate independently of the pressure variations.
- The selection of the piloting pressure on the lines A and B is carried out automatically via a shuttle check valve built into the compensator.
- The setting of the variable adjustment compensator (characteristic Δp) can be varied from 7 to 33 bar, via a countersunk hex adjustment screw or via an adjustment knob.
- The fixed adjustment compensator is available with setting (characteristic Δp) of 4 and 8 bar.

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

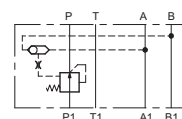
Max operating pressure	bar	350
Characteristic Δp : fixed adjustment variable adjustment	bar	4 - 8 7 ÷ 33
Max flow rate	l/min	40
Ambient temperature range	°C	-20 / +50
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass	kg	1,5

HYDRAULIC SYMBOLS

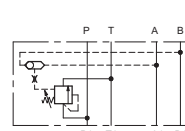
PCM3-PV/10



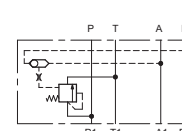
PCM3-P*/10



PCM3-PTV/10

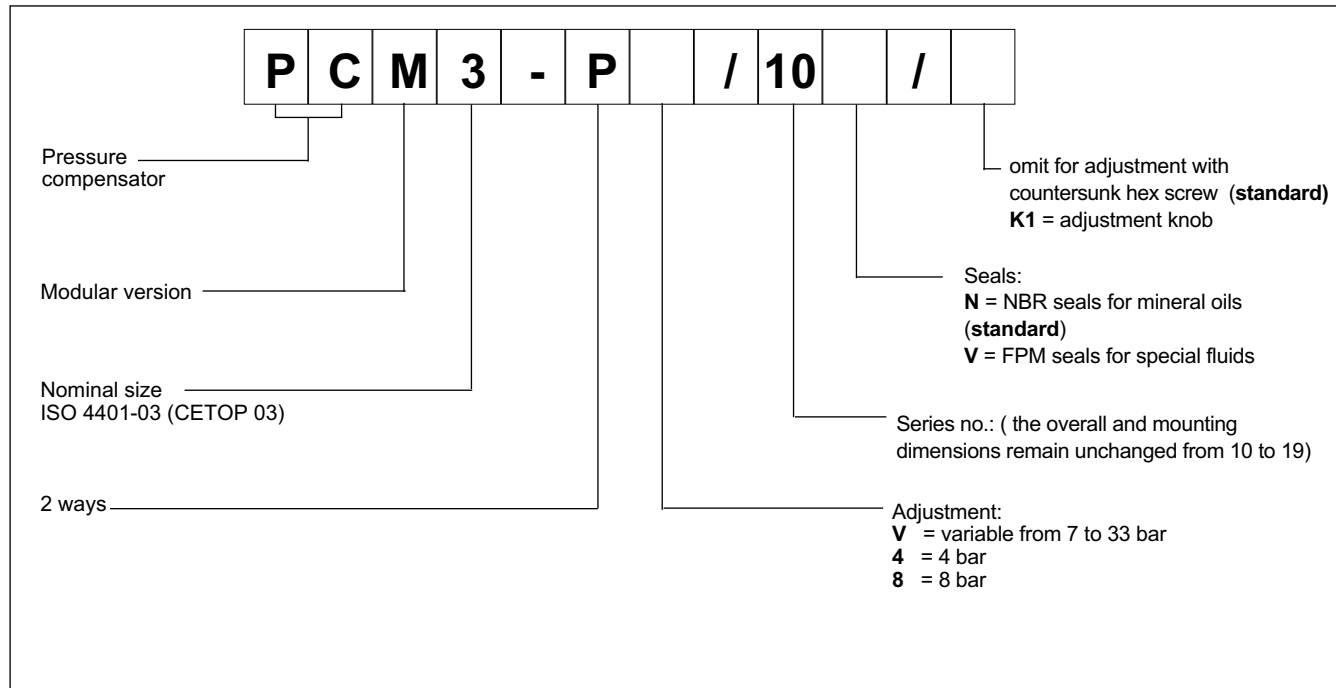


PCM3-PT*/10

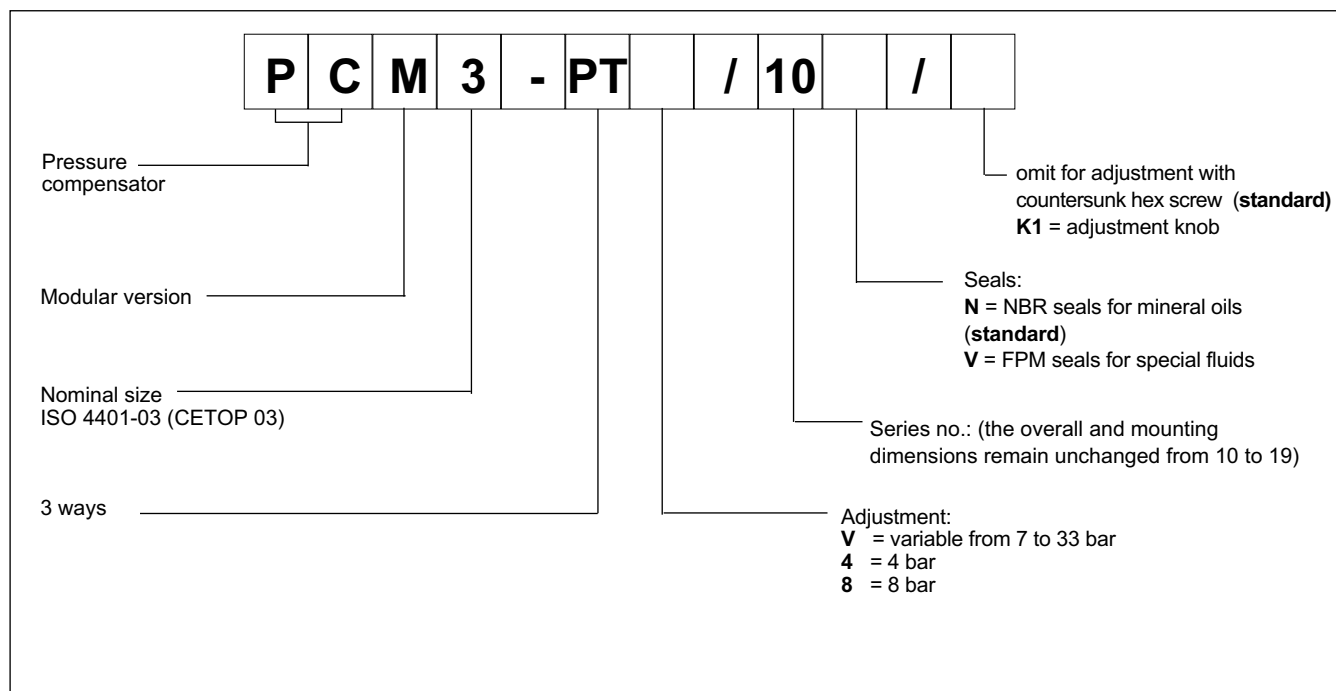


1 - IDENTIFICATION CODE

1.1 - Two-way compensator identification code



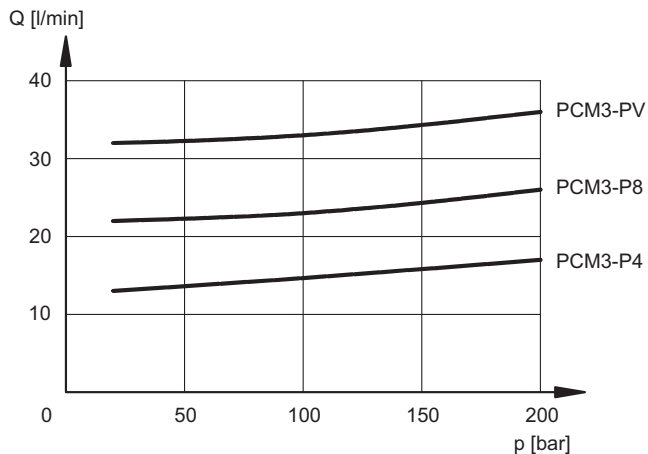
1.2 - Three-way compensator identification code



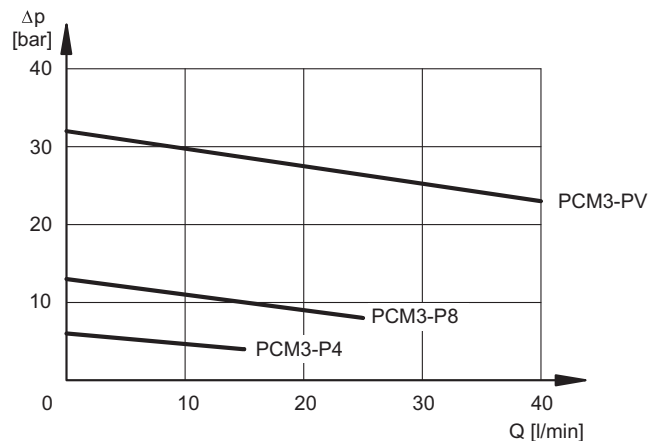
2 - CHARACTERISTIC CURVES (values obtained with viscosity of 36 cSt at 50°C)

2.1 - Two-way compensator characteristic curves

FLOW RATE - PRESSURE $Q = f(p)$

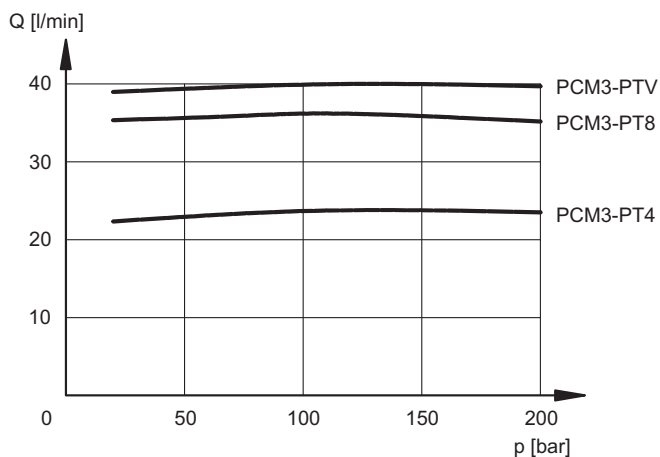


PRESSURE DROPS $\Delta p = f(Q)$

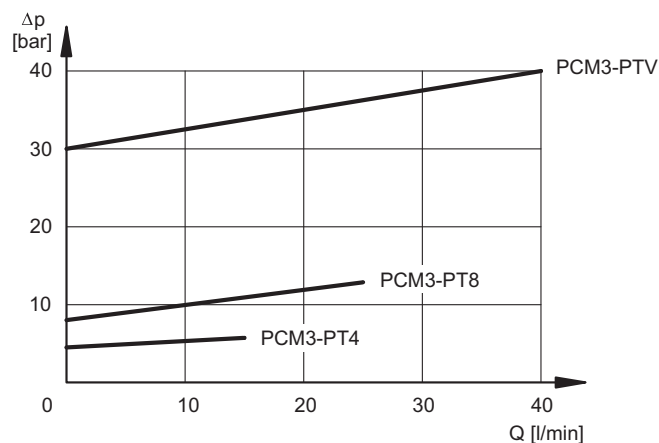


2.2 - Three-way compensator characteristic curves

FLOW RATE - PRESSURE $Q = f(p)$



PRESSURE DROPS $\Delta p = f(Q)$



3 - HYDRAULIC FLUIDS

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

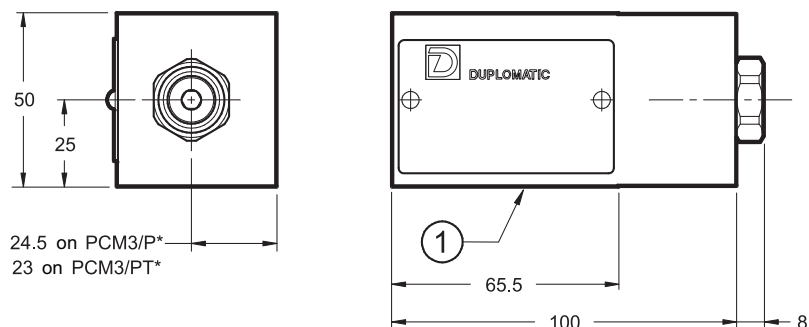
Using other fluid types such as HFA, HFB, HFC, please consult our technical department.

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

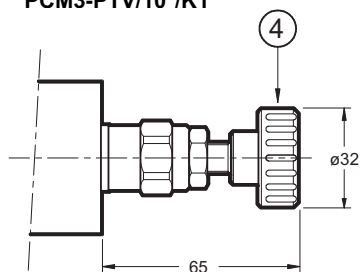
The fluid must be preserved in its physical and chemical characteristics.

4 - OVERALL AND MOUNTING DIMENSIONS

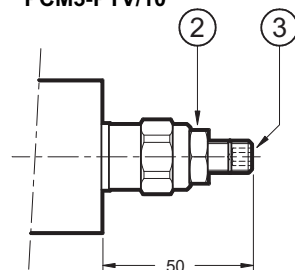
PCM3-P*/10
PCM3-PT*/10



PCM3-PV/10*/K1
PCM3-PTV/10*/K1



PCM3-PV/10
PCM3-PTV/10



dimensions in mm

1	Mounting surface with sealing rings: 4 OR type 2037 - (9.25x1.78) 90 shore
2	Locking nut: spanner 17
3	Countersunk hex adjustment screw: spanner 5 Clockwise rotation to increase pressure
4	Adjustment knob: K1



PCM5

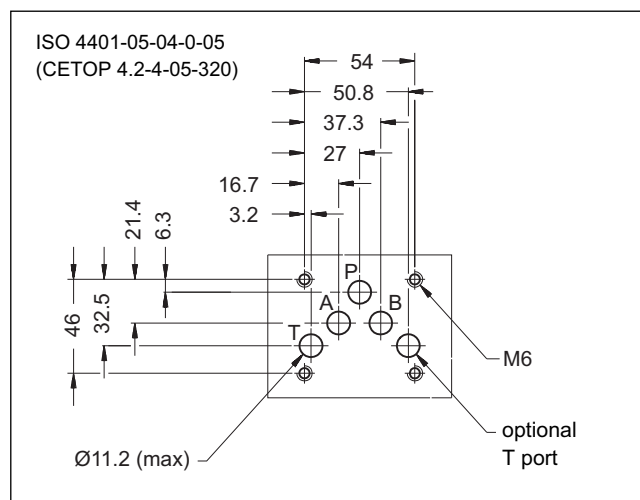
TWO- AND THREE-WAY PRESSURE COMPENSATOR WITH FIXED ADJUSTMENT

SERIES 11

MODULAR VERSION
ISO 4401-05 (CETOP 05)

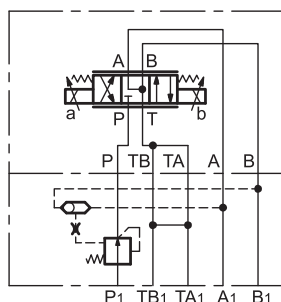
p max 320 bar
Q max 100 l/min

MOUNTING INTERFACE

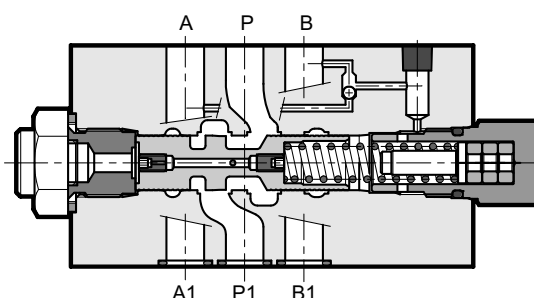


APPLICATION EXAMPLES

2-way compensator combined with a proportional valve type DSE5-A*



OPERATING PRINCIPLE

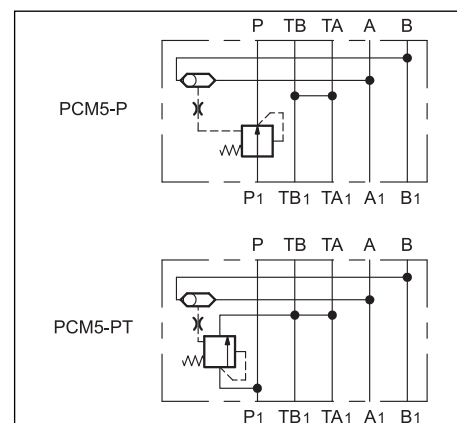


- The PCM5 valve is a two- or three- way pressure compensator, designed as a modular version with mounting surface according to ISO 4401-05 (CETOP RP121H).
- It keeps the pressure drop setting (characteristic Δp) between the line P and alternatively the lines A and B at a constant level.
- It is used together with proportional directional valves, in order to control the flow rate independently of the pressure variations.
- The selection of the piloting pressure on the lines A and B is carried out automatically via a shuttle check valve built into the compensator.

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

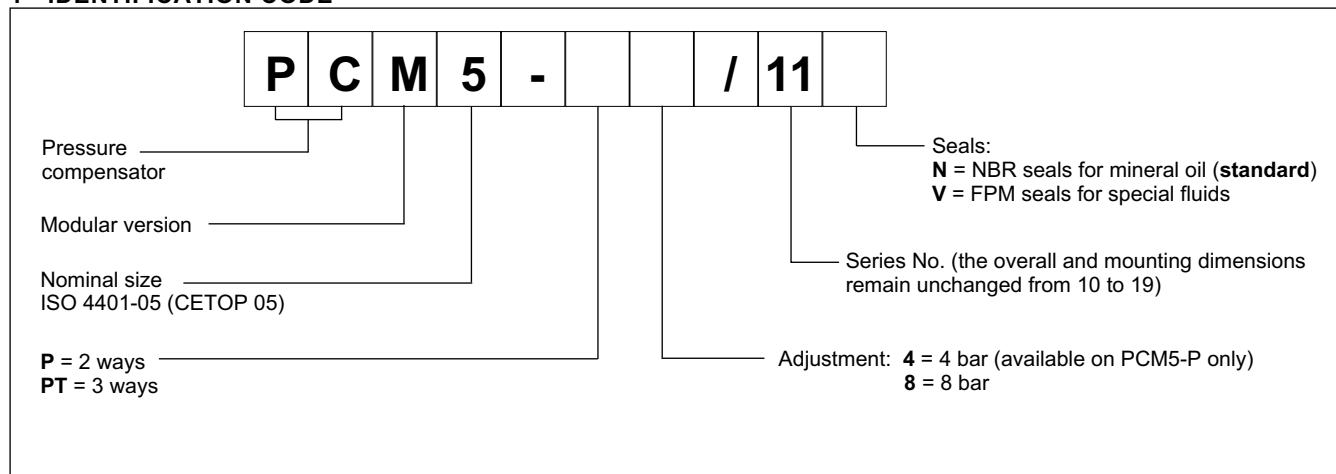
Max operating pressure	bar	320
Characteristic Δp	bar	4 - 8
Max flow rate	l/min	100
Ambient temperature range	°C	-20 / +60
Fluid temperature range	°C	-20 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass	kg	2,7

HYDRAULIC SYMBOL



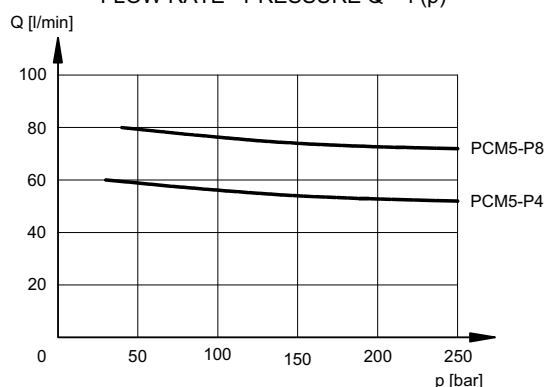


1 - IDENTIFICATION CODE

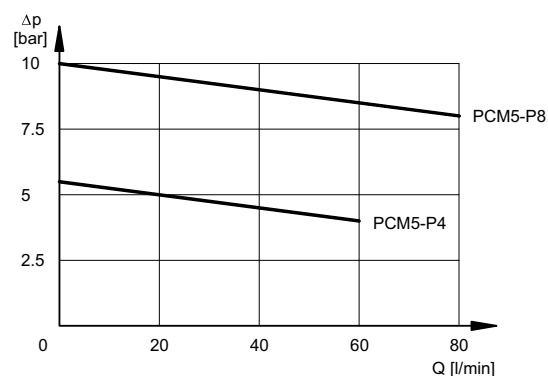


2 - CHARACTERISTIC CURVES PCM5-P* (2-way) (values obtained with viscosity of 36 cSt at 50°C)

FLOW RATE - PRESSURE $Q = f(p)$

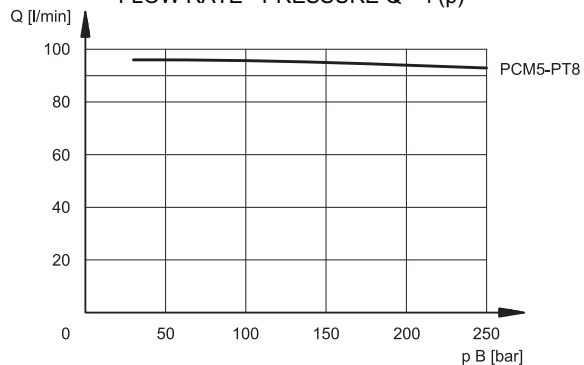


PRESSURE DROPS $\Delta p = f(Q)$

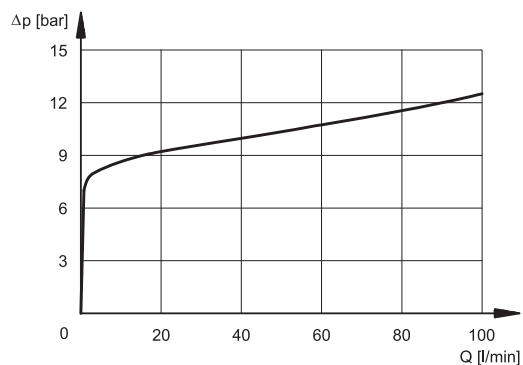


3 - CHARACTERISTIC CURVES PCM5-PT8 (3-way) (values obtained with viscosity of 36 cSt at 50°C)

FLOW RATE - PRESSURE $Q = f(p)$



PRESSURE DROPS $\Delta p = f(Q)$

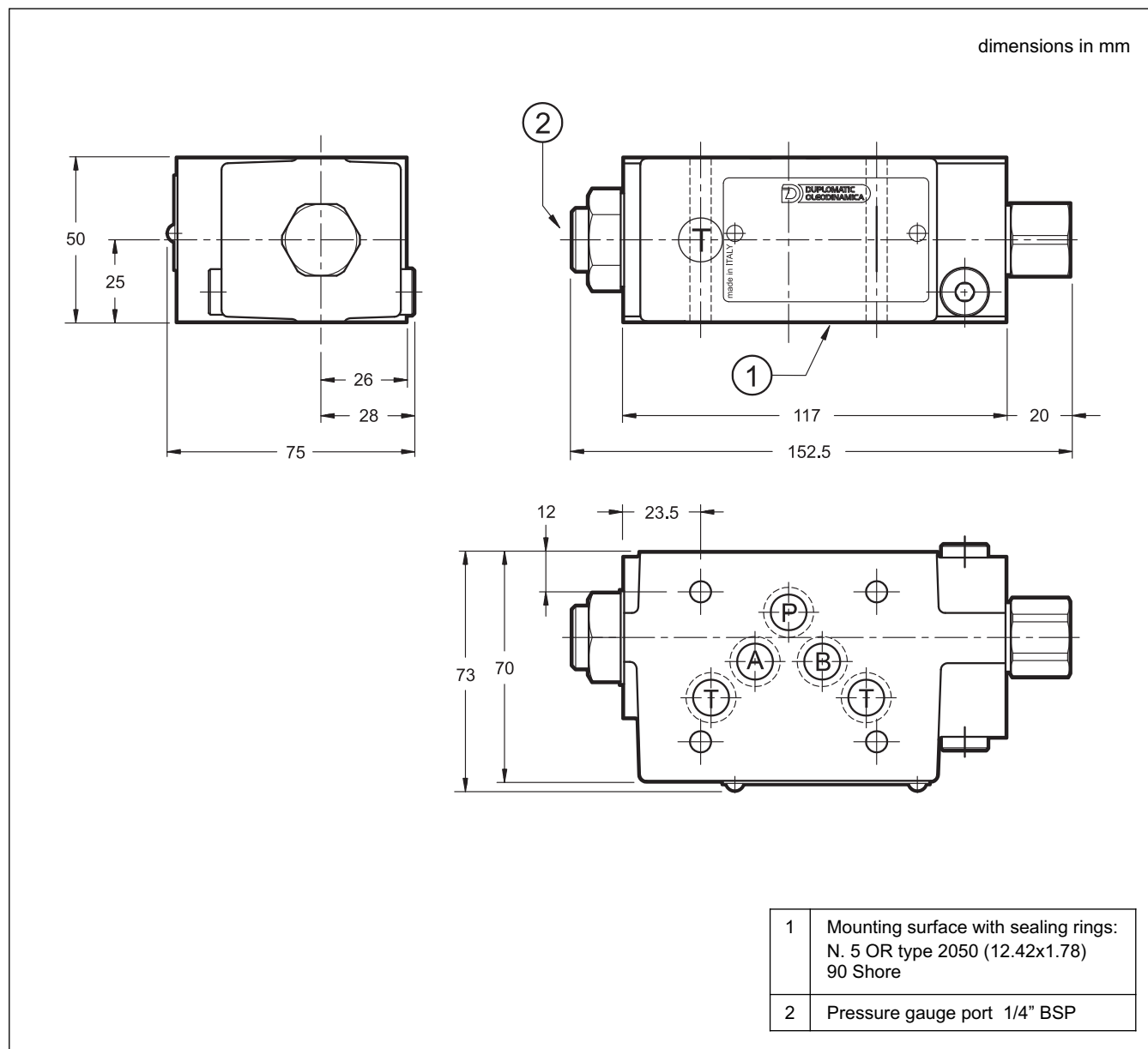


4 - HYDRAULIC FLUIDS

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.

5 - OVERALL AND MOUNTING DIMENSIONS





PCM5

SERIES 11



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PCM8

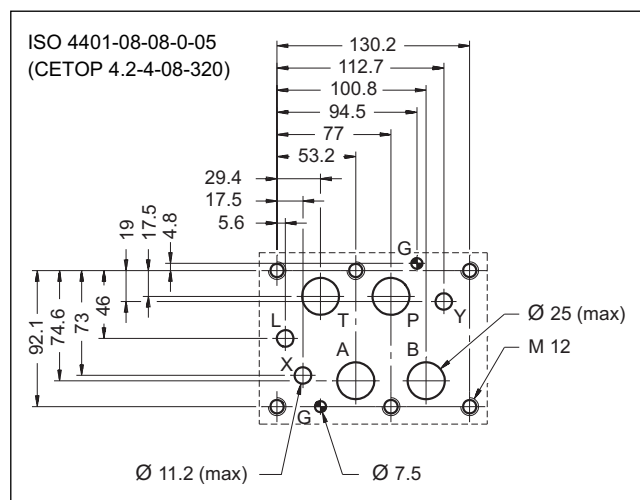
TWO- AND THREE-WAY PRESSURE COMPENSATOR WITH FIXED ADJUSTMENT

SERIES 10

MODULAR VERSION
ISO 4401-08 (CETOP 08)

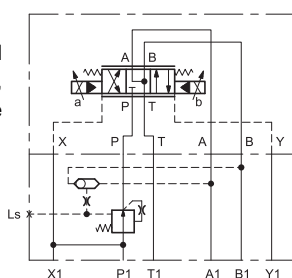
p max **320** bar
Q max **300** l/min

MOUNTING INTERFACE



APPLICATION EXAMPLES

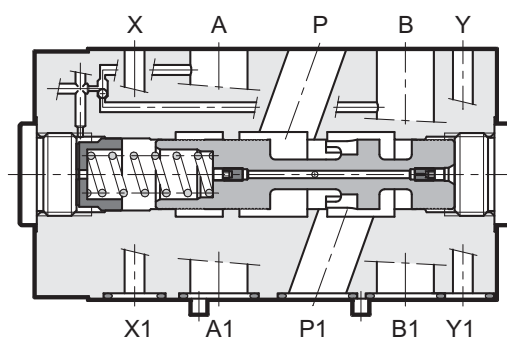
Two-way compensator with fixed adjustment and internal piloting, combined with a proportional valve type E5E-S9*/E



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

Max operating pressure	bar	320
Characteristic Δp :	bar	4 - 8
Max flow rate	l/min	300
Ambient temperature range	°C	-20 / +50
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	13,5

OPERATING PRINCIPLE



- The PCM8 valve is a two or three-way pressure compensator, developed as a modular version with mounting surface according to ISO 4401 (CETOP RP 121H).
- Its function is to keep the pressure drop setting (characteristic Δp) between the line P and alternatively the lines A and B at a constant level.
- It is normally used together with proportional directional valves, in order to control the flow rate independently of the pressure variations.
- The selection of the piloting pressure on the lines A and B is carried out automatically via a shuttle check valve built into the compensator.
- They are available with fixed adjustment (characteristic Δp) of 4 and 8 bar.
- The load sensing port can also be used as pressure gauge port or as remote pressure control.

1 - IDENTIFICATION CODE

1.1 - Two-way compensator identification code

P	C	M	8	-	P	/	E	/	10	
---	---	---	---	---	---	---	---	---	----	--

Pressure compensator

Modular version

Nominal size
ISO 4401-08 (CETOP 08)

2 ways

Adjustment: **4** = 4 bar
8 = 8 bar

Piloting: (relevant to the combined directional valve, that must always have external piloting)
I = internal (withdrawn inside the compensator, upstream the narrowing)
E = external (passing line X)

Seals:
N = NBRseals for mineral oils
(standard)
V = FPM seals for special fluids

Series no.:
 (the overall and mounting dimensions remain unchanged from 10 to 19)

External drain (passing line Y)

Hydraulic symbols

PCM8-P*/IE/10

PCM8-P*/EE/10

1.2 - Three-way compensator identification code

P	C	M	8	-	PT	/	E	/	10	
---	---	---	---	---	----	---	---	---	----	--

Pressure compensator

Modular version

Nominal size
ISO 4401-08 (CETOP 08)

3 ways

Adjustment: **4** = 4 bar
8 = 8 bar

Piloting: (relevant to the combined directional valve, that must always have external piloting)
I = internal (withdrawn inside the compensator, upstream the narrowing)
E = external (passing line X)

Seals:
N = NBRseals for mineral oils
(standard)
V = FPM seals for special fluids

Series no.: (the overall and mounting dimensions remain unchanged from 10 to 19)

External drain (passing line Y)

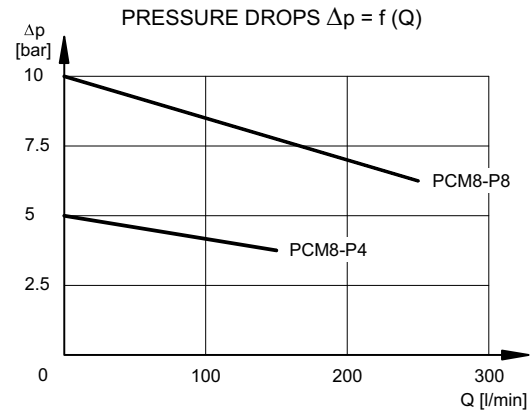
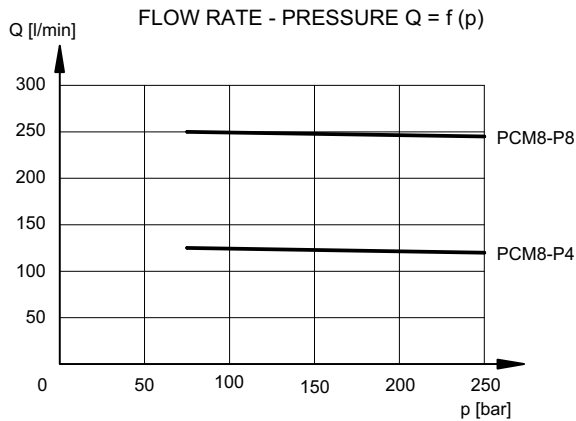
Hydraulic symbols

PCM8-PT*/IE/10

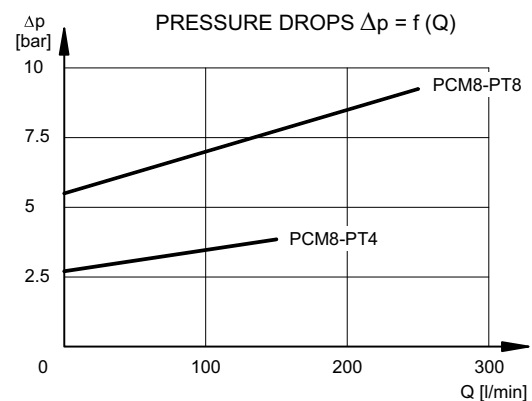
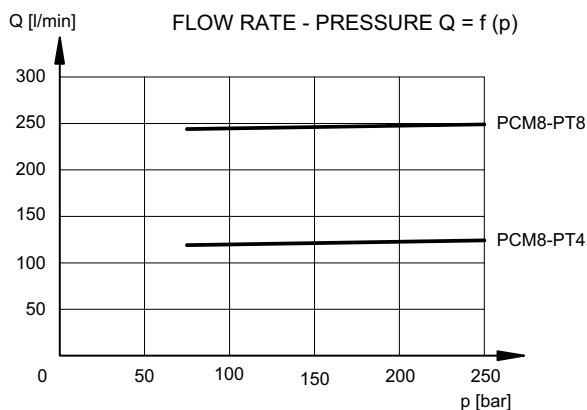
PCM8-PT*/EE/10

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

2.1 - Two-way compensator characteristic curves



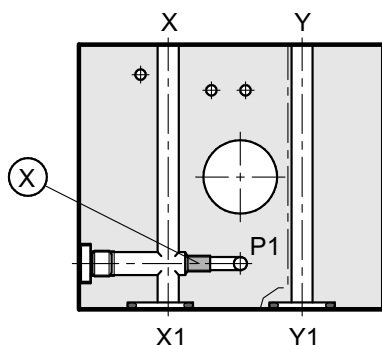
2.2 - Three-way compensator characteristic curves



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 - PILOTING AND DRAINAGE



X: plug M6x10 for external piloting
Drainage always external

The PCM8 compensators are available with the X piloting line both internal and external. The internal piloting line is withdrawn from the P1 line, upstream the narrowing of the compensator, while the external piloting line comes from a separate piloting circuit. Drainage is always external (passing line Y).

The combined directional valve must always have an external piloting configuration. Drainage can be both internal and external.

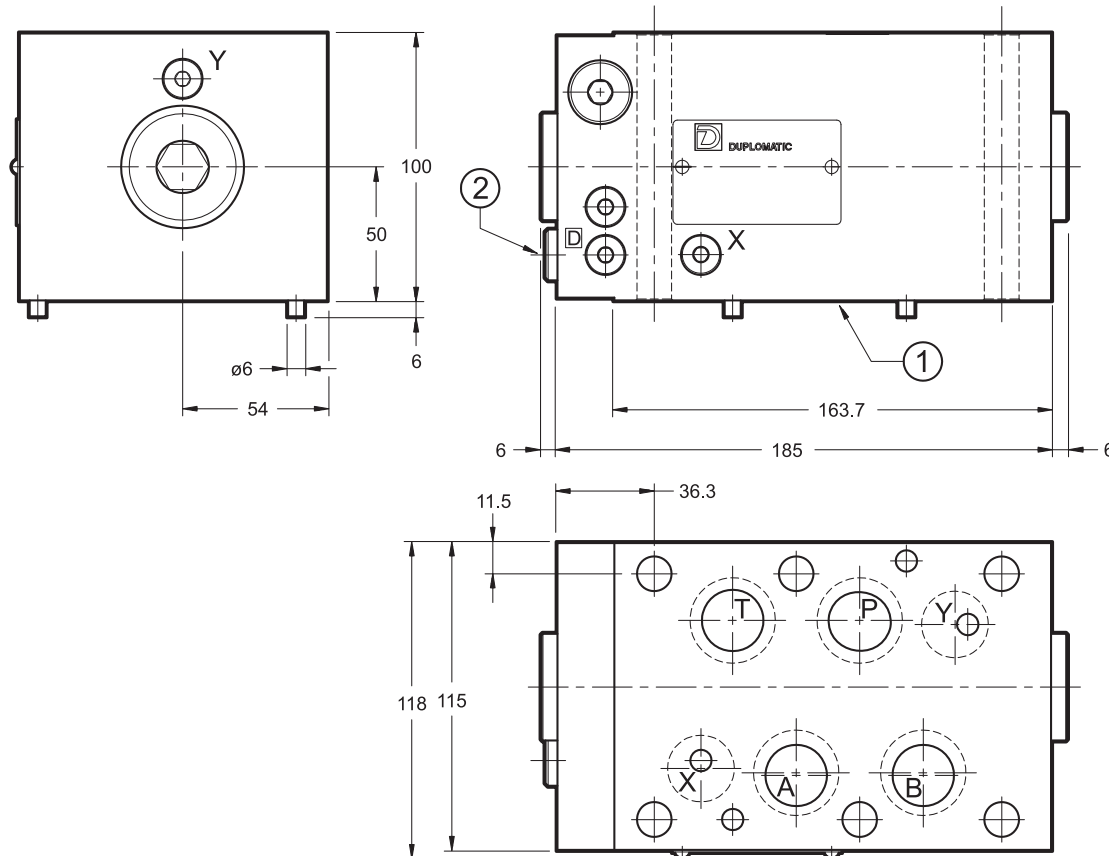
VALVE TYPE		X plug
PCM8-P*/IE	INTERNAL PILOTING AND EXTERNAL DRAINAGE	NO
PCM8-P*/EE	INTERNAL PILOTING AND EXTERNAL DRAINAGE	YES



5 - OVERALL AND MOUNTING DIMENSIONS

PCM8-P*/E/10
PCM8-PT*/E/10

dimensions in mm



- | | |
|---|--|
| 1 | Mounting surface with sealing rings:
4 OR type 3106 (25.65 x 2.62) - 90 Shore
2 OR type 3081 (20.24 x 2.62) - 90 Shore |
| 2 | Load Sensing Port 1/4" BSP closed |



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