



DIPLOMATIC  
HYDRAULICS

24 310/108 ED

**DZC\***

**BALANCING VALVE  
SERIES 10**



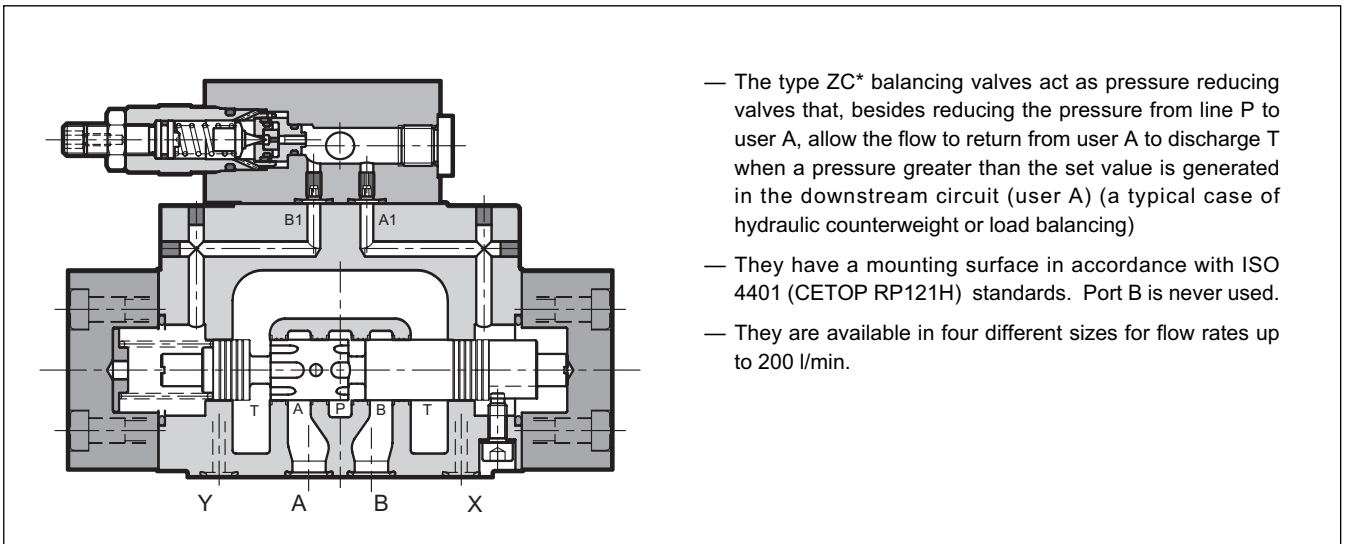
**DZC5  
DZC7  
DZC8**

**CETOP P05  
ISO 4401-07 (CETOP 07)  
ISO 4401-08 (CETOP 08)**

**p** max **350** bar

**Q** max (see table of performances)

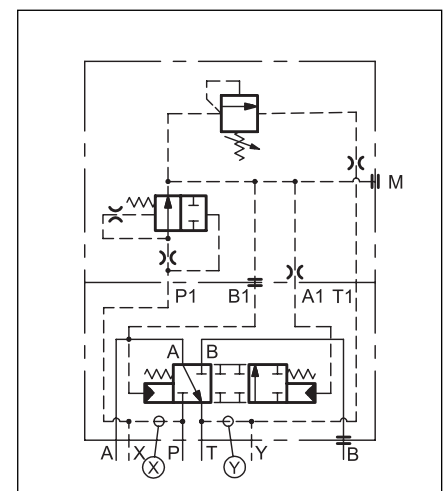
**OPERATING PRINCIPLE**



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

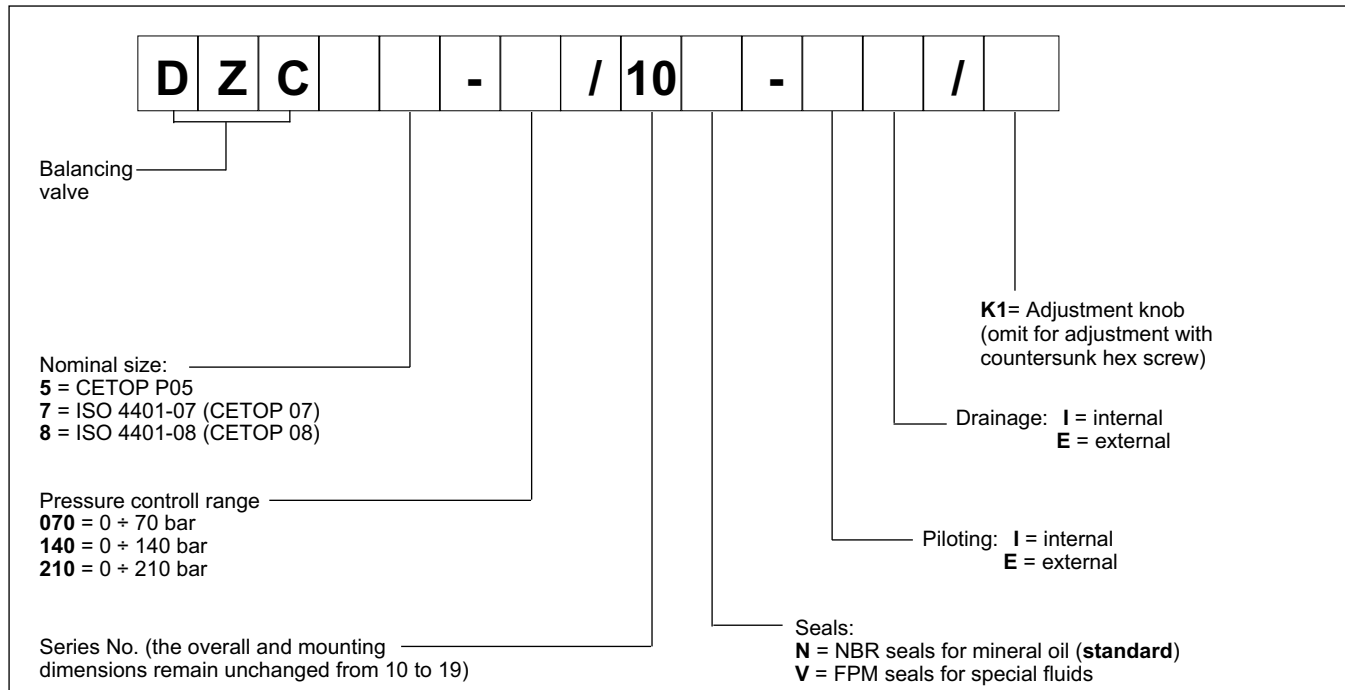
		DZC5	DZC7	DZC8
Maximum operating pressure:	bar	350		
Maximum flow	l/min	75	125	200
Ambient temperature range	°C	-20 / +50		
Fluid temperature range	°C	-20 / +80		
Fluid viscosity range	cSt	10 + 400		
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15			
Recommended viscosity	cSt	25		
Mass: single solenoid valve double solenoid valve	kg	6,5	8,7	15

**HYDRAULIC SYMBOL**



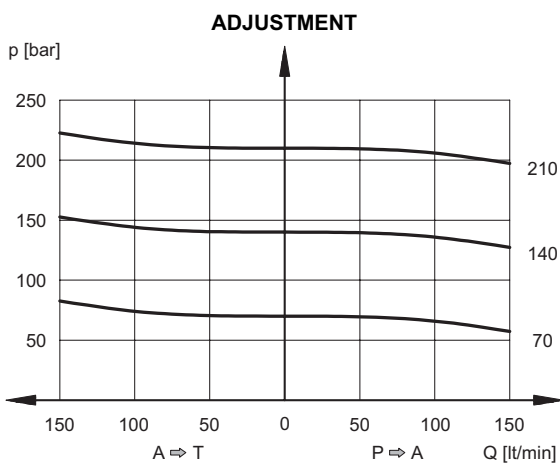


**1 - IDENTIFICATION CODE**

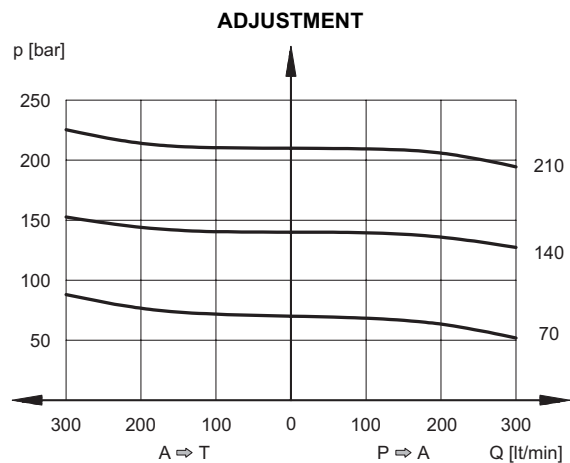


**3 - CHARACTERISTIC CURVES** (obtained with mineral oil with viscosity of 36 cSt at 50°C and electronic control cards)

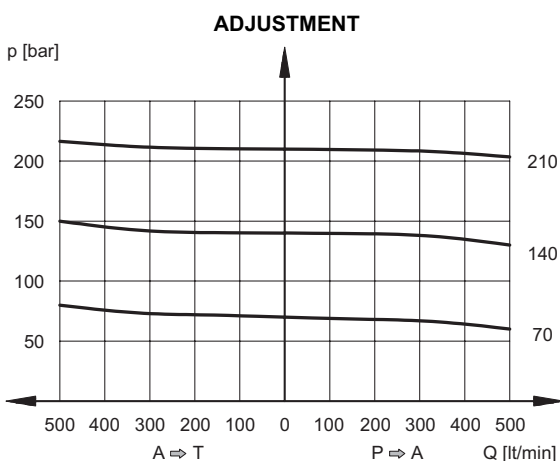
**2.1 - Characteristic curves DZC5**



**2.2 - Characteristic curves DZC7**



**2.3 - Characteristic curves DZC8**





### 3 - HYDRAULIC FLUIDS

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

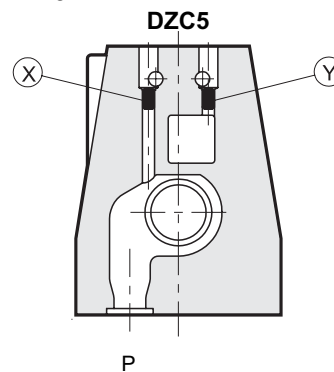
### 4 - PILOTING AND DRAINAGE

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

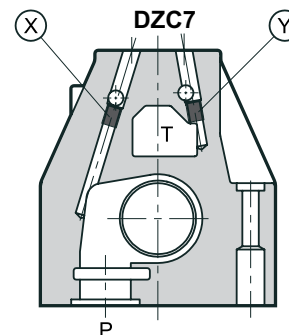
VALVE TYPE	Plug assembly	
	X	Y
<b>IE</b> INTERNAL PILOT AND EXTERNAL DRAIN	NO	YES
<b>II</b> INTERNAL PILOT AND INTERNAL DRAIN	NO	NO
<b>EE</b> EXTERNAL PILOT AND EXTERNAL DRAIN	YES	YES
<b>EI</b> EXTERNAL PILOT AND INTERNAL DRAIN	YES	NO

#### PRESSURES (bar)

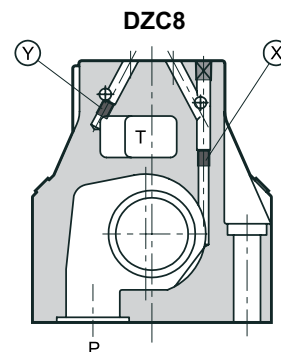
Pressure	MIN	MAX
Piloting pressure on X port	30	210 <b>(NOTE)</b>
Pressure on T port with internal drain	–	10
Pressure on T port with external drain	–	250



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



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

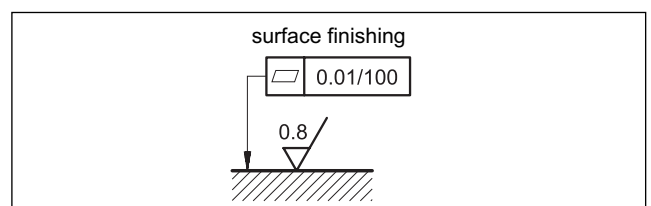


**X:** M6x8 plug for external pilot  
**Y:** M6x8 plug for external drain

### 5 - INSTALLATION

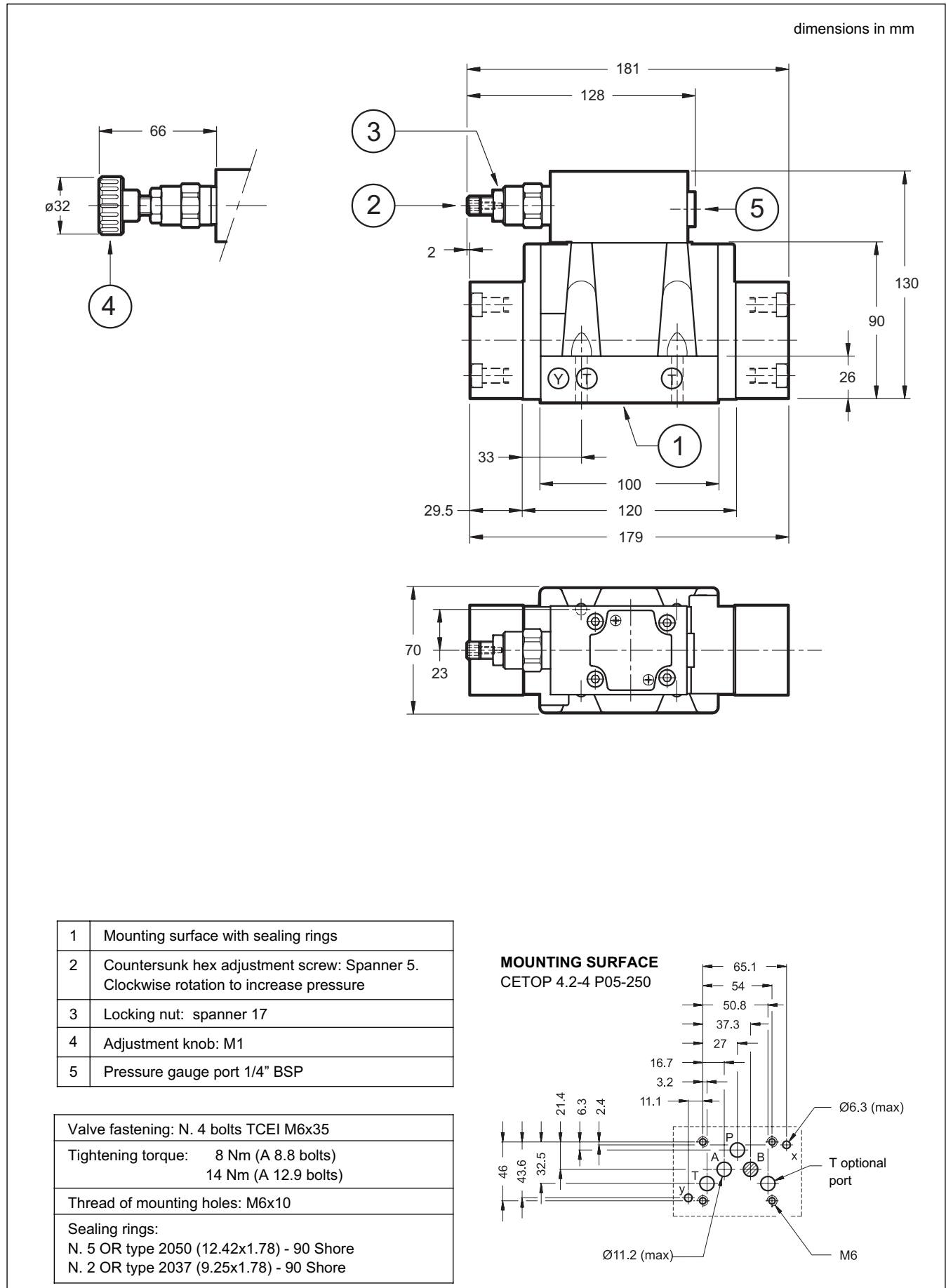
The DZC\* valves can be installed in any position without impairing correct operation.

Connect the valve T port directly to the tank. Add any backpressure value detected in the T line to the controlled pressure value. Maximum admissible backpressure in the T line, under operational conditions, is 2 bar. Valves are fixed by means of screws or tie rods on a flat surface with planarity and roughness equal to or better than those indicated in the relative symbols. If minimum values are not observed, fluid can easily leak between the valve and support surface.





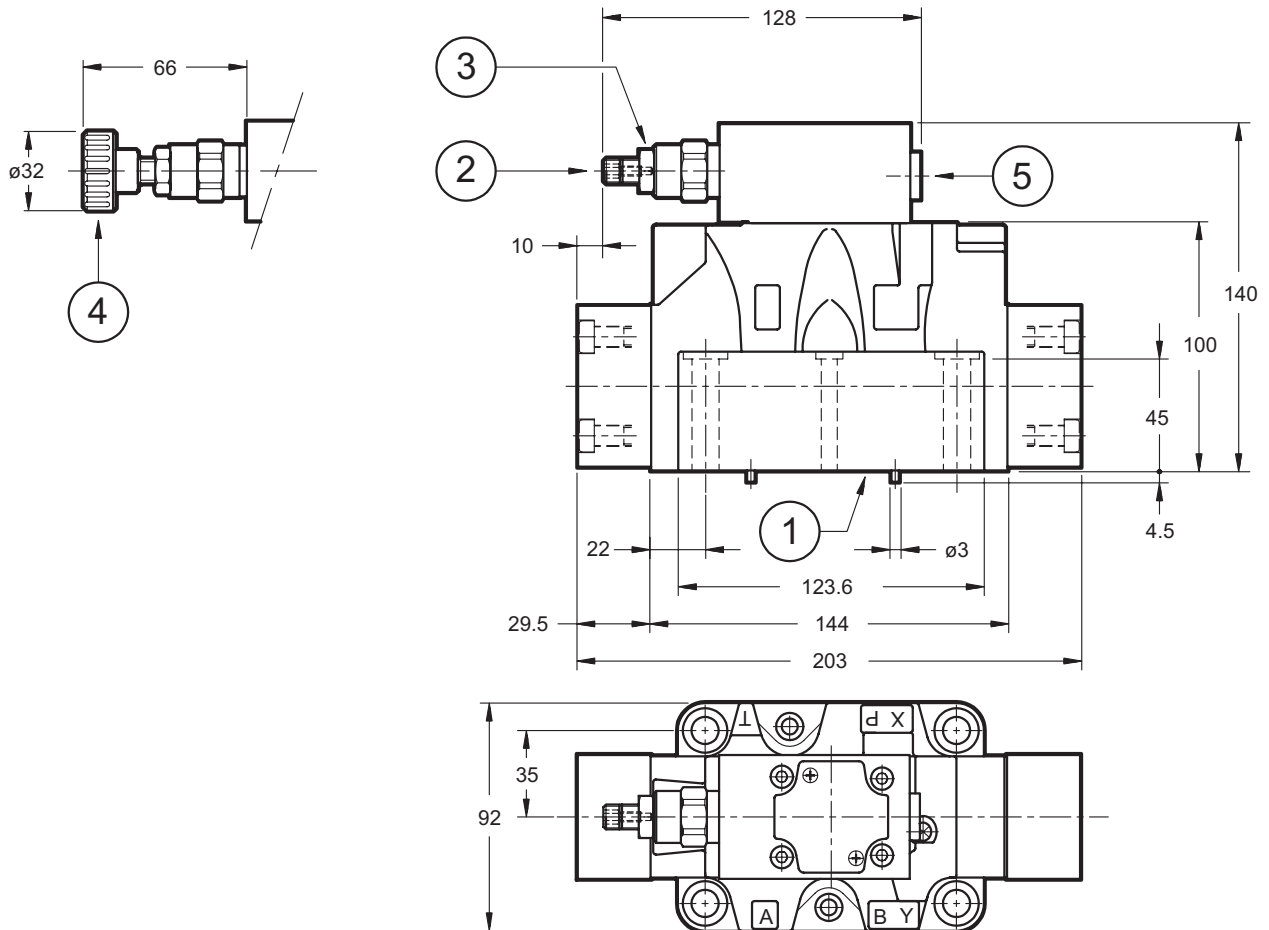
**6 - DZC5 OVERALL AND MOUNTING DIMENSIONS**





**7 - DZC7 OVERALL AND MOUNTING DIMENSIONS**

dimensions in mm

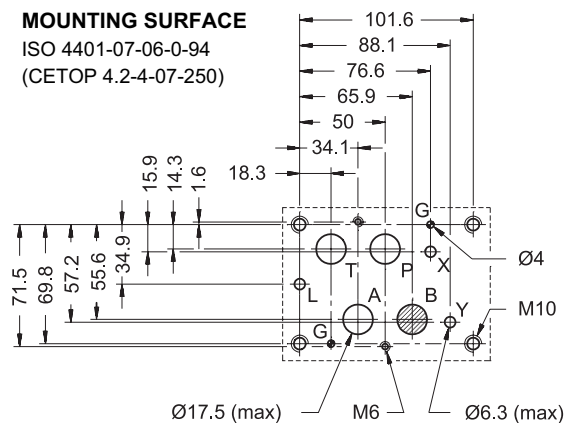


1	Mounting surface with sealing rings
2	Countersunk hex adjustment screw: Spanner 5. Clockwise rotation to increase pressure
3	Locking nut: spanner 17
4	Adjustment knob: M1
5	Pressure gauge port 1/4" BSP

Single valve fastening:	N. 4 TCEI M10x60 bolts N. 2 TCEI M6x50 bolts
Tightening torque M10x60:	40 Nm (A 8.8 bolts) - 67 Nm (A 12.9 bolts) M6x50: 8 Nm (A 8.8 bolts) - 14 Nm (A 12.9)
Thread of mounting holes:	M6x12; M10x18
Sealing rings:	N. 4 OR type 130 (22.22x2.62) - 90 Shore N. 2 OR type 2043 (10.82x1.78) - 90 Shore

**MOUNTING SURFACE**

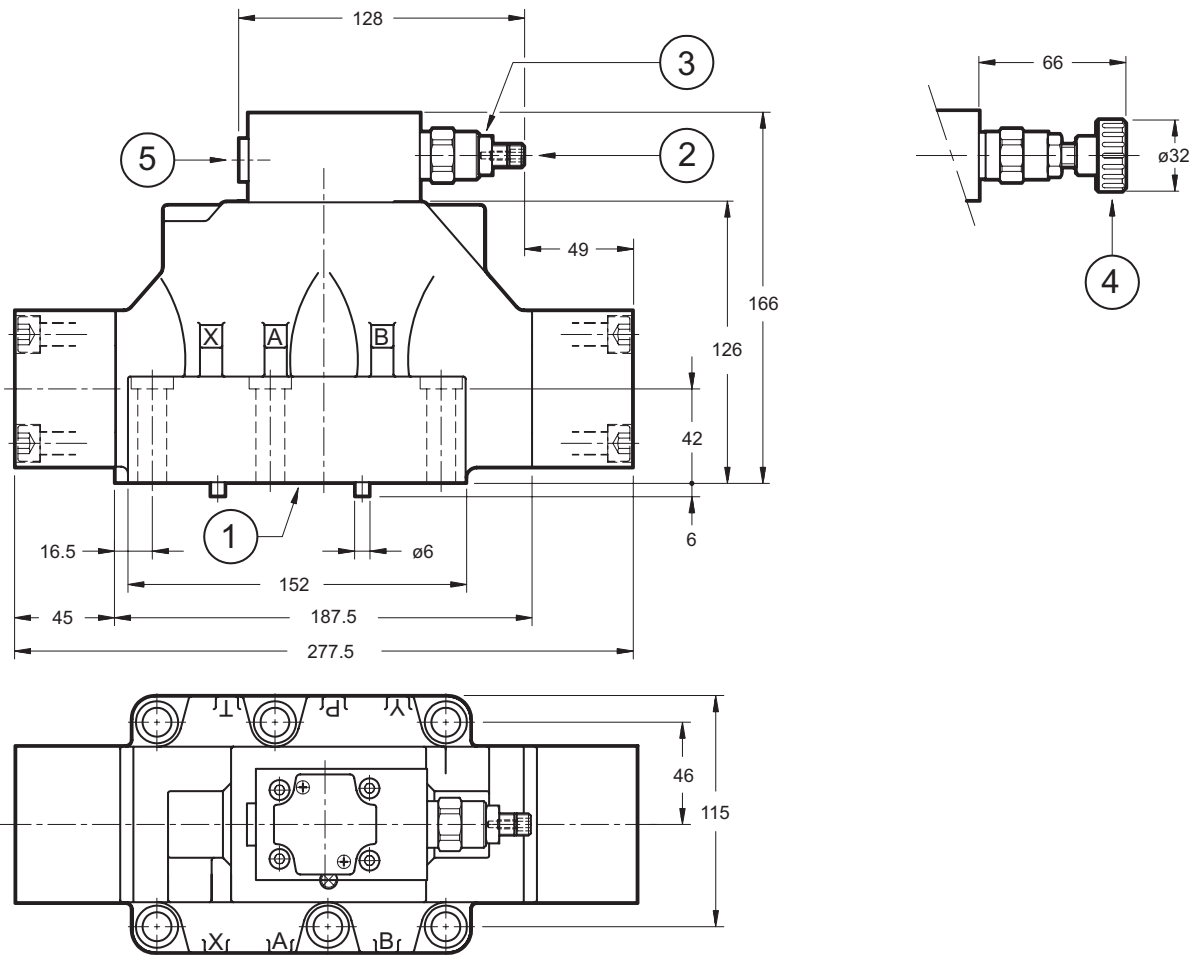
ISO 4401-07-06-0-94  
(GETOP 4.2-4-07-250)





**8 - DZC8 OVERALL AND MOUNTING DIMENSIONS**

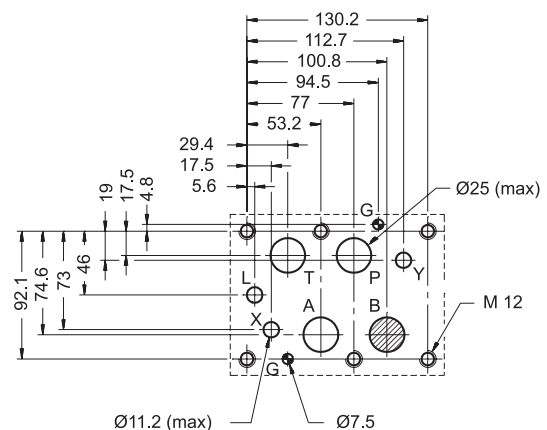
dimensions in mm



1	Mounting surface with sealing rings
2	Countersunk hex adjustment screw: Spanner 5. Clockwise rotation to increase pressure
3	Locking nut: spanner 17
4	Adjustment knob: M1
5	Pressure gauge port 1/4" BSP

Valve fastening: N. 6 TCEI M12x60 bolts
Tightening torque: 69 Nm (A 8.8 bolts) 115 Nm (A 12.9 bolts)
Thread of mounting holes: M12x20
Sealing rings: N. 4 OR type 3118 (29.82x2.62) - 90 Shore N. 2 OR type 3081 (20.24x2.62) - 90 Shore

**MOUNTING SURFACE**  
ISO 4401-08-07-0-94  
(CETOP 4.2-4-08-250)





**9 - SUBPLATES** (See catalogue 51 000)

	<b>DZC5</b>	<b>DZC7</b>	<b>DZC8</b>
Model with rear ports	PME4-AI5G	PME07-AI6G	
Model with side ports	PME4-AL5G	PME07-AL6G	PME5-AL8G
Thread of ports: P - T - A - B X - Y	3/4" BSP 1/4" BSP	1½" BSP 1/4" BSP	1" BSP 1/4" BSP



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