

# PZM2

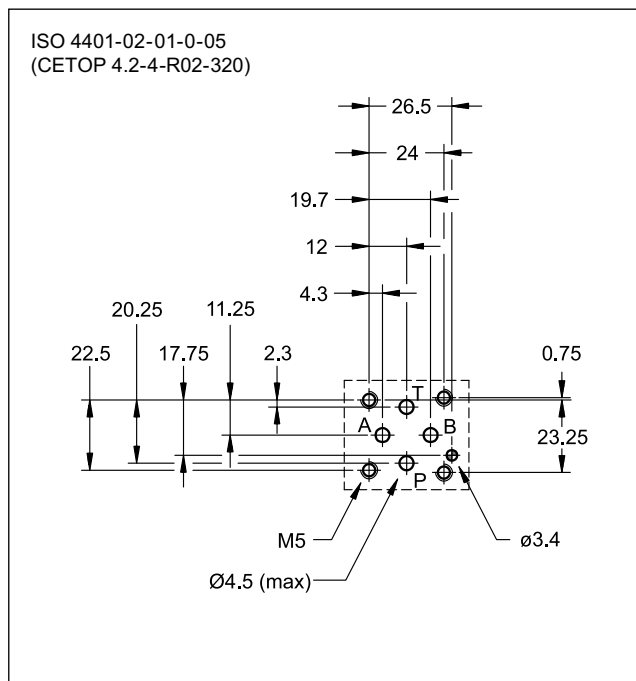
## PRESSURE REDUCING VALVE DIRECT OPERATED WITH VARIABLE ADJUSTMENT SERIES 21



### MODULAR VERSION ISO 4401-02

**p** max 320 bar  
**Q** max 20 l/min

### MOUNTING SURFACE



### OPERATING PRINCIPLE

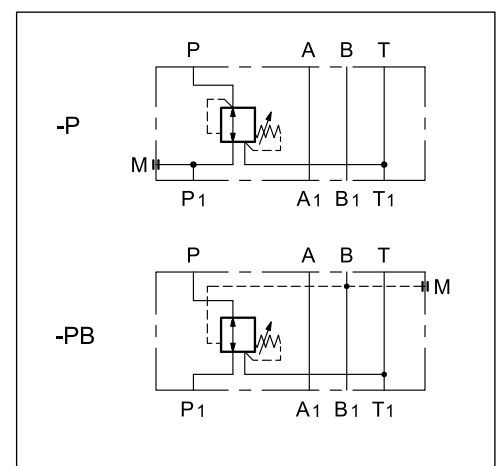
- The PZM2 valve is a three-ports pressure reducing valve, direct operated, spool type, made as modular version, with ports according to the ISO 4401 standards and can be assembled quickly, without use of pipes, under the ISO 4401-02 solenoid valves.
- The PZM2 is a normally open valve. The hydraulic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

### PERFORMANCES

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

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

### HYDRAULIC SYMBOL



### 1 - IDENTIFICATION CODE

<b>P</b>	<b>Z</b>	<b>M</b>	<b>2</b>	<b>-</b>		<b>/ 21</b>	<b>/</b>	<b>S</b>
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Pressure-reducing valve direct operated

Modular version

Size: ISO 4401-02

Versions

**P** = pressure reduction on line P  
**PB** = pressure reduction on line P with pilot signal from line B

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 20 to 29)

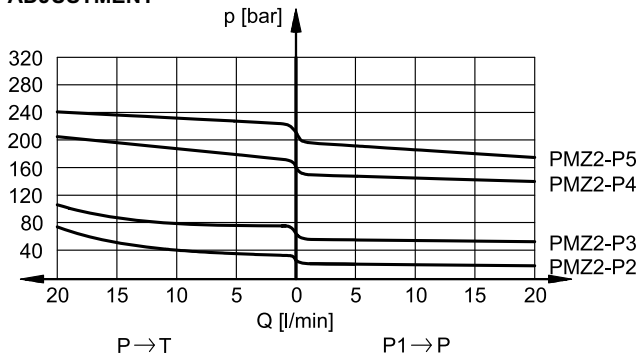
Pressure adj. range:

<b>2</b> = 10 ÷ 25 bar	<b>4</b> = 30 ÷ 160 bar
<b>3</b> = 20 ÷ 63 bar	<b>5</b> = 50 ÷ 210 bar

### 2 - CHARACTERISTIC CURVES

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

#### ADJUSTMENT



### 3 - HYDRAULIC FLUIDS

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

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

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

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

### 4 - OVERALL AND MOUNTING DIMENSIONS

dimensions in mm

1	Mounting surface with sealing rings: n. 4 KANTSEAL type DKAR00011 (7.65x1.68x1.68) - 70 Shore
2	Hex adjustment screw with lead-sealing hole: Allen key 4. Rotate clockwise to increase pressure
3	Pressure gauge port 1/4" BSP
4	Protective cap with embedded locking nut