



**DIPLOMATIC**  
HYDRAULICS

62 300/104 ED



# Z4M

## PILOT OPERATED PRESSURE REDUCING VALVE SERIES 50

**MODULAR VERSION**

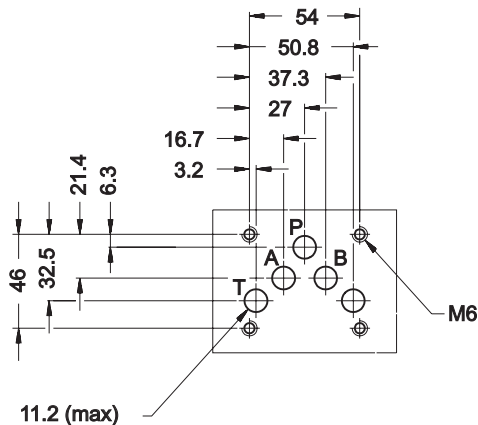
**CETOP 05**

**p max 320 bar**

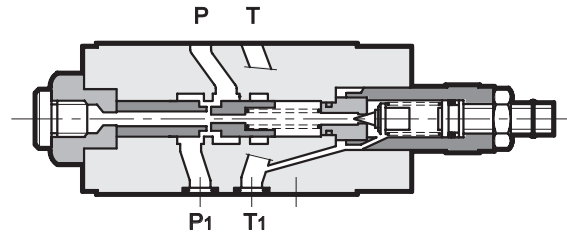
**Q max (see performance ratings table)**

### MOUNTING INTERFACE

CETOP 4.2-4-05-320  
ISO/CD 4401-05



### OPERATING PRINCIPLE



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

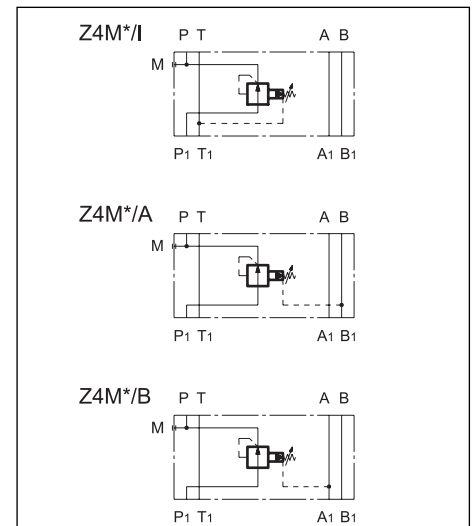
### CONFIGURATIONS (see Hydraulic symbols table)

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

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

Maximum operating pressure	bar	320
Maximum flow rate in controlled line P	l/min	80
Maximum flow rate in the free lines	l/min	100
Drainage flow rate	l/min	≤ 0,7
Ambient temperature range	°C	-20 ÷ +50
Fluid temperature range	°C	-20 ÷ +80
Fluid viscosity range	cSt	10 ÷ 400
Recommended viscosity	cSt	25
Degree of fluid contamination	According to NAS 1638 class 10	
Mass	kg	2,7

### HYDRAULIC SYMBOLS





## 1 - IDENTIFICATION CODE

<b>Z</b>	<b>4</b>	<b>M</b>	<b>-</b>	<b>/</b>	<b>/ 50 /</b>	
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Pressure reducing valve ————

CETOP 05 size ————

Modular version ————

Pressure adjustment range: ————

**3** = 5 ÷ 70 bar  
**4** = 8 ÷ 140 bar  
**5** = 10 ÷ 210 bar  
**6** = 15 ÷ 320 bar

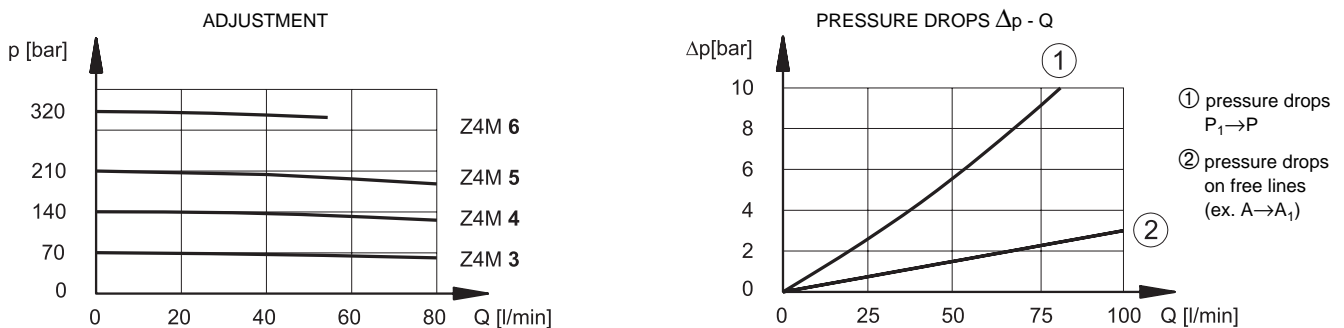
Seals: omit for mineral oils  
V = viton for special fluids

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

**M1** = Adjustment knob  
(omit for adjustment with countersunk hex screw)

Configurations: **I**: pressure reduction on line P. Internal drainage connected to line T  
**A**: pressure reduction on line A and full pressure on line B  
**B**: pressure reduction on line B and full pressure on line A

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



## 3 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids, with the addition of suitable anti-frothing and anti-oxidizing agents. For the use of other types (water glycol, phosphate esters and others), please consult our technical department.

## 4 - OVERALL AND MOUNTING DIMENSIONS

dimensions in mm

1	Locking nut spanner 17
2	Countersunk hex adjustment screw: spanner 5 Rotate clockwise to increase pressure
3	Mounting surface with sealing rings: 5 OR type 2050
4	Pressure gauge port 1/4" BSP.
5	Adjustment knob: M1



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