



DIPLOMATIC
HYDRAULICS

62 300/104 ED



Z4M

PILOT OPERATED PRESSURE REDUCING VALVE SERIES 50

MODULAR VERSION

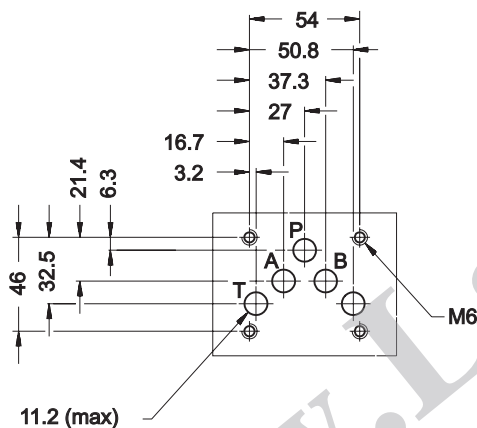
CETOP 05

p max 320 bar

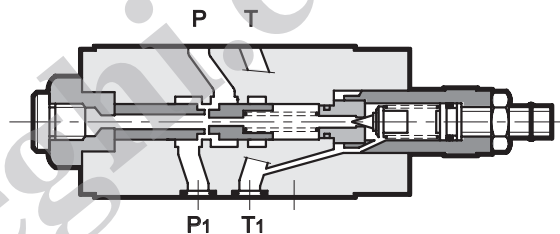
Q max (see performance ratings table)

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.

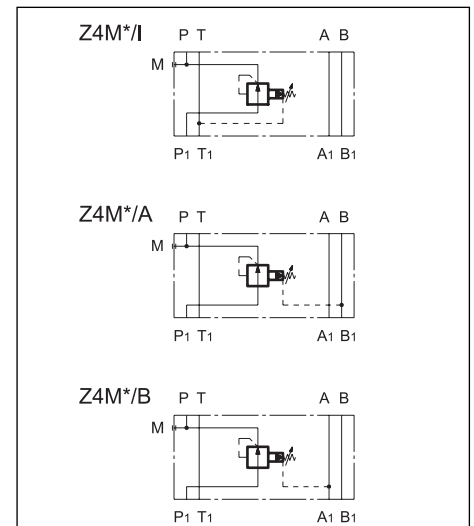
CONFIGURATIONS (see Hydraulic symbols table)

- 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

Z	4	M	-	/	/ 50 /	
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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

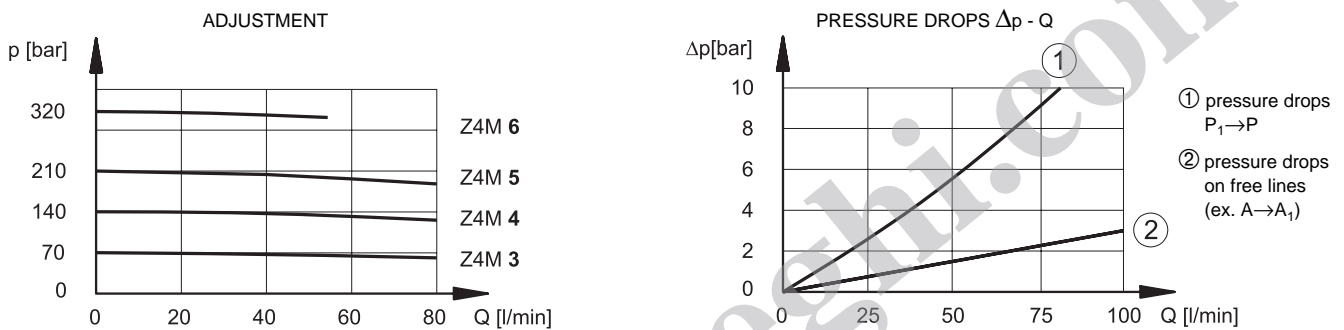
Seals: omit for mineral oils
V = viton for special fluids

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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