



MVPP

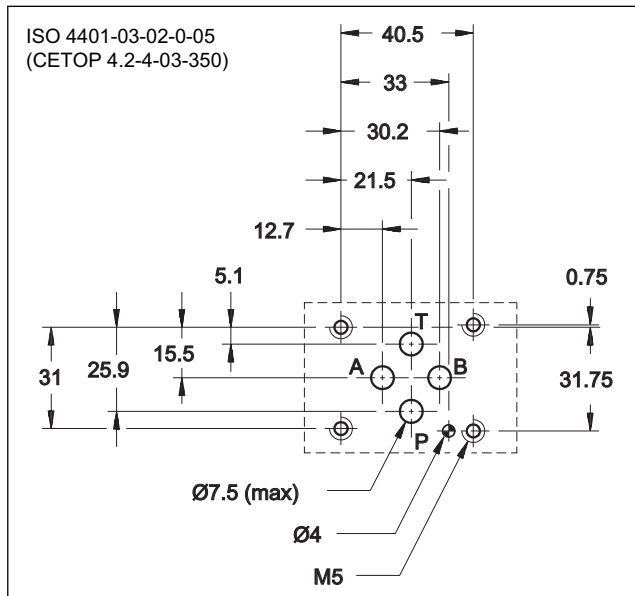
PILOT OPERATED CHECK VALVE

SERIES 50

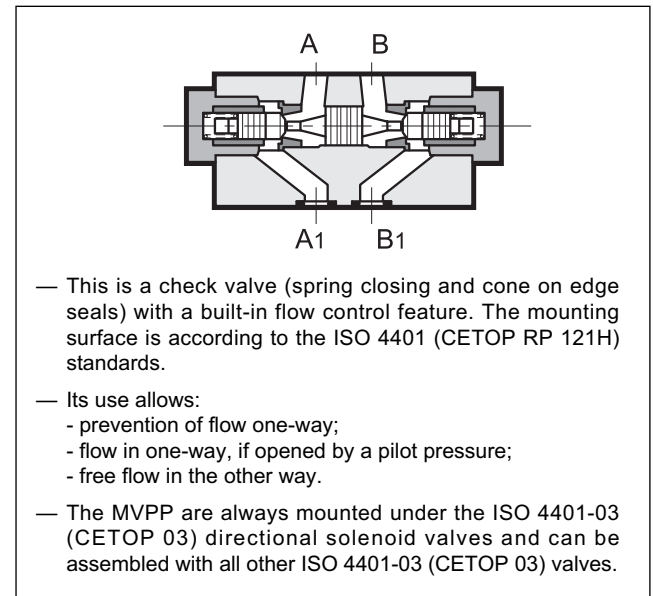
MODULAR VERSION ISO 4401-03 (CETOP 03)

p max 350 bar
Q max (see table of performances)

MOUNTING SURFACE



OPERATING PRINCIPLE



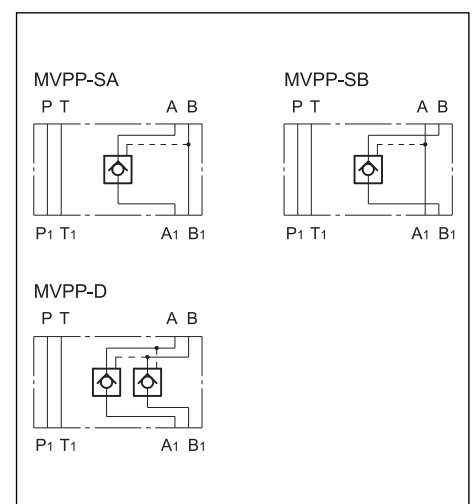
CONFIGURATIONS (see hydraulic symbols table)

- Configurations "SA" - "SB": are used to lock the actuator in one direction
- Configuration "D": is used to lock the position of the actuator in both directions

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

Maximum operating pressure	bar	350
Check valve cracking pressure		3
Maximum flow rate in controlled lines	l/min	50
Maximum flow rate in the free lines		75
Ratio between the pressure in the locked chambers and the piloting pressure		3,4:1
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	1,3

HYDRAULIC SYMBOLS



1 - IDENTIFICATION CODE

	M V P P -	/ 50 /	
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ISO 4401-03 (CETOP 03) size
Modular version

Pilot operated check valve

Configurations: _____

SA = seal on line A of the actuator
SB = seal on line B of the actuator
D = seal on lines A and B of the actuator

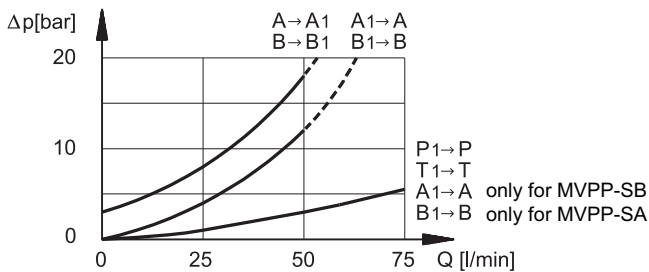
Option:
/ W7 = Zinc-nickel surface treatment (see **NOTE**). Omit if not required.

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

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

NOTE: Standard surface treatment: phosphating. The zinc-nickel finishing makes the valve suitable to ensure a salt spray resistance up to 600 hours.

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

dimensions in mm

Technical drawings showing overall dimensions and mounting details:

- Top view: shows the valve body with ports A, B, P, T.
- Right view: shows a square profile with a width of 48 mm and a height of 40 mm.
- Bottom view: shows the valve with dimensions: 7.5 mm (port offset), 18.7 mm (port spacing), 46 mm (height), 80.5 mm (width), and 96 mm (total width).
- Detail 1: Mounting surface with sealing rings: 4 OR type 2037 (9.25x1.78) - 90 Sh.