

Part number:



# MVPP

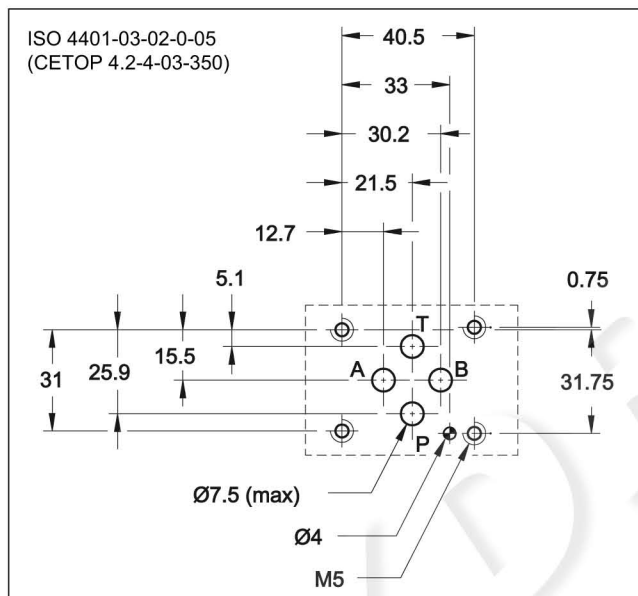
## PILOT OPERATED CHECK VALVE

### SERIES 50

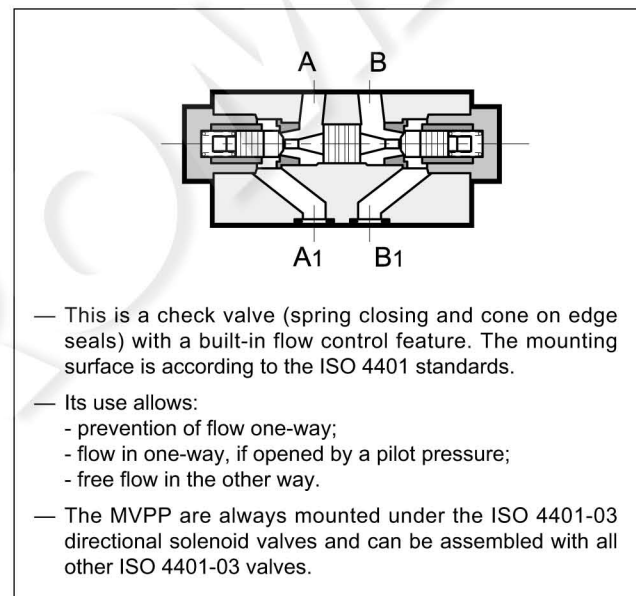
#### MODULAR VERSION ISO 4401-03

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

#### MOUNTING SURFACE



#### OPERATING PRINCIPLE



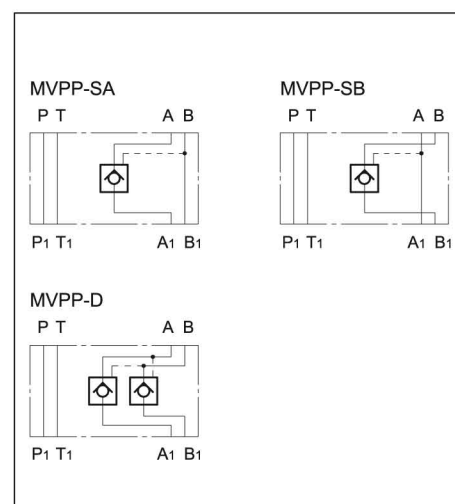
#### CONFIGURATIONS (see hydraulic symbols table)

- 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 / +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	1,3

#### HYDRAULIC SYMBOLS



### 1 - IDENTIFICATION CODE

	<b>M</b>	<b>V</b>	<b>P</b>	<b>P</b>	<b>-</b>		<b>/ 50 /</b>		
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ISO 4401-03 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

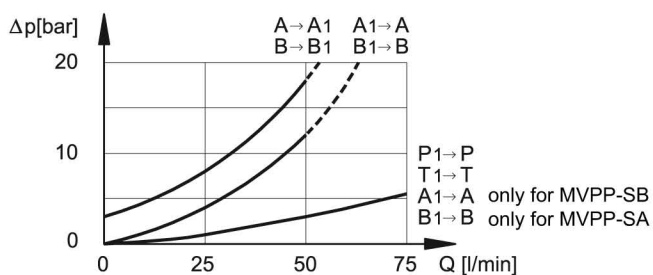
Option:  
**/ W7** = Zinc-nickel surface treatment (see **NOTE**). Omit if not required.

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

The technical drawings show the valve from three perspectives:

- Top view:** Shows the valve body with a width of 48 mm and a height of 40 mm.
- Front view:** Shows the valve with a total width of 96 mm and a total height of 46 mm. The distance between the two mounting surfaces is 80.5 mm. The distance between the two actuator lines is 18.7 mm. The distance from the top edge to the center of the actuator lines is 7.5 mm.
- Side view:** Shows the valve with a height of 40 mm and a width of 48 mm.

1 Mounting surface with sealing rings:  
4 OR type 2037 (9.25x1.78) - 90 Sh