



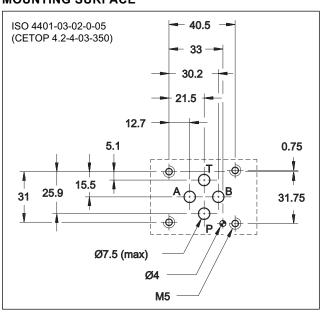
MVPP

PILOT OPERATED CHECK VALVE SERIES 50

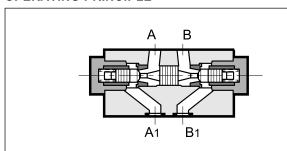
MODULAR VERSION ISO 4401-03

p max 350 barQ max (see table of performances)

MOUNTING SURFACE



OPERATING PRINCIPLE



- This is a check valve (spring closing and cone on edge seals) with a built-in flow control feature. The mounting surface is according to the ISO 4401 standards.
- Its use allows:
 - prevention of flow one-way;
 - flow in one-way, if opened by a pilot pressure;
 - free flow in the other way.
- The MVPP are always mounted under the ISO 4401-03 directional solenoid valves and can be assembled with all other ISO 4401-03 valves.

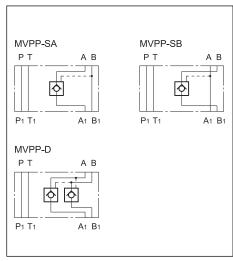
CONFIGURATIONS (see hydraulic symbols table)

- 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 Check valve cracking pressure	bar	350 3
Maximum flow rate in controlled lines Maximum flow rate in the free lines	l/min	50 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

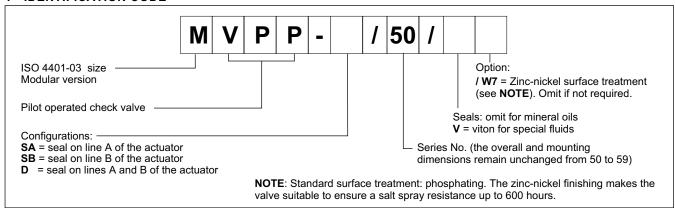


65 250/117 ED 1/2

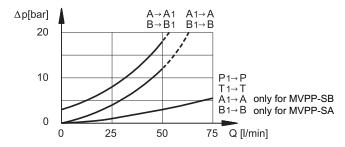




1 - IDENTIFICATION CODE



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

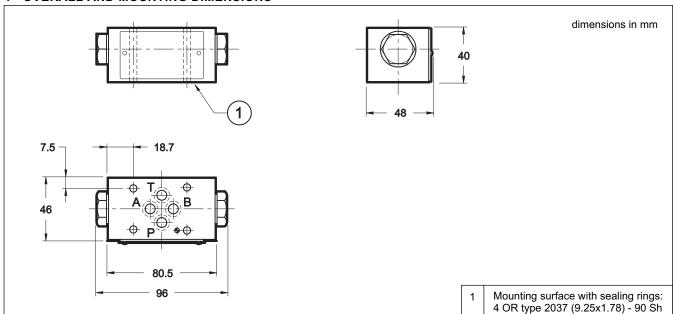


3 - HYDRAULIC FLUIDS

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





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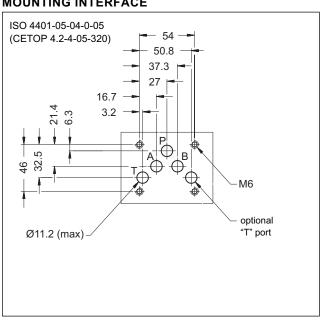


CHM5 PILOT OPERATED CHECK VALVE **SERIES 10**

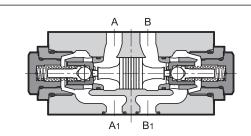
MODULAR VERSION ISO 4401-05 (CETOP 05)

p max **320** bar Q max 120 l/min

MOUNTING INTERFACE



OPERATING PRINCIPLE

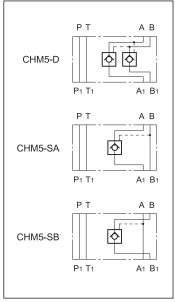


- This is a pilot operated check valve (spring closing and cone on edge seals) with a built-in flow control feature. The mounting surface is according to the ISO 4401 (CETOP RP 121H) standard.
- The CHM5 are always mounted under the ISO 4401-05 (CETOP 05) directional solenoid valves and can be assembled with all other ISO 4401-05 (CETOP 05)
- The pre-opening feature of the valve causes the decompression of the cylinder chamber, leading to a smooth motion.

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

Maximum operating pressure	bar	320	
Maximum flow rate	l/min	120	
Decompression ratio	14,9:1		
Piloting ratio	2,3:1		
Check valve cracking pressure	bar	2	
Ambient temperature range	°C	-20 / +50	
Fluid temperature range	°C	-20 / +80	
Fluid viscosity range	cSt	10 ÷ 400	
Recommended viscosity	cSt	25	
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15		
Mass: CHM5-D CHM5-SA e CHM5-SB	kg	2,2 1,9	

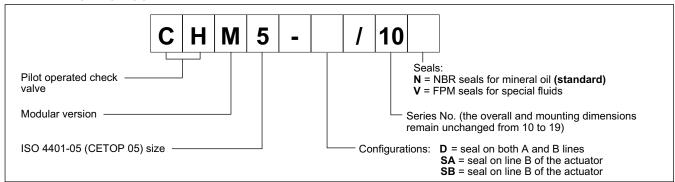
HYDRAULIC SYMBOLS



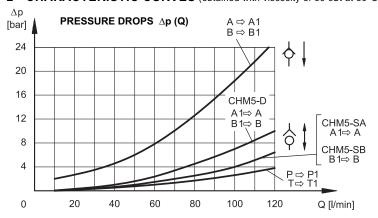
65 360/110 ED 1/2



1 - IDENTIFICATION CODE



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



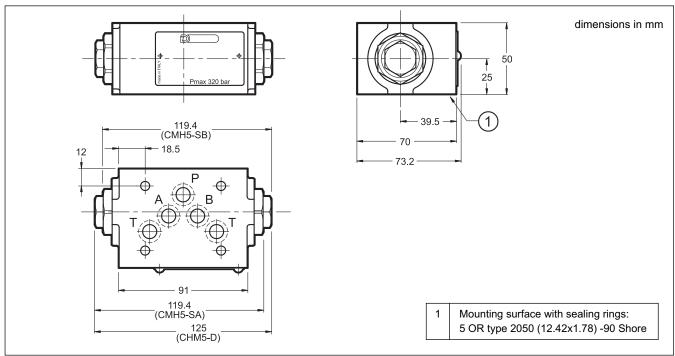
3 - HYDRAULIC FLUIDS

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 $^{\circ}$ 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





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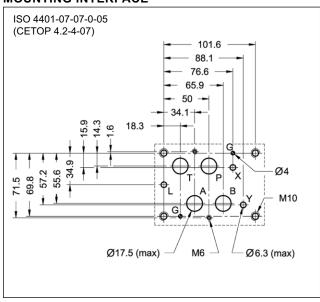


CHM7 PILOT OPERATED CHECK VALVE SERIES 11

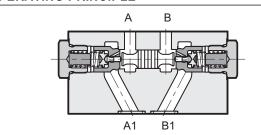
MODULAR VERSION ISO 4401-07

p max 350 barQ max 300 l/min

MOUNTING INTERFACE



OPERATING PRINCIPLE



- This is a hydraulically released check valve with spring closing and with cone on edge seals; the mounting surface is according to the ISO 4401 standards.
- Its use allows:
 - prevention of flow in one direction;
 - flow in the same direction, if opened by a pilot pressure;
 - free flow in the other direction.
- The CHM7 valves are always mounted downstream of the DSP7 type directional solenoid valves (see cat. 41 420) and can be assembled with all other ISO 4401-07 valves.

CONFIGURATIONS (see hydraulic symbols table)

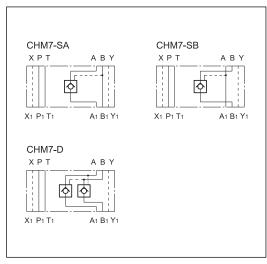
- Configuration "SA" "SB": is used to lock the actuator in one direction.
- Configuration "D": is used to lock the actuator position in both directions.

The opening of the valve is gradual and occurs with the pre-opening of the main shutter that permits the plant decompression.

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

Maximum operating pressure	bar	350
Maximum flow rate	I/min	300
Ratio between pressure of the sealed chamber and the piloting pressure		13:1
Opening pressure	bar	2
Ambient temperature range	°C	-25 / +80
Fluid temperature range	°C	-25 / +80
Fluid viscosity range	cSt	10 ÷ 400
Fluid contamination degree	According to ISO 4406:1999 class 20/18/15	
Recommended viscosity	cSt	25
Mass: CHM7-S* CHM7-D	kg	7,6 7,7

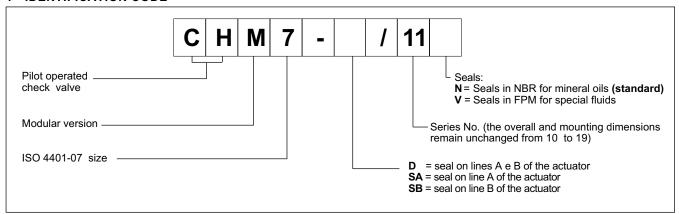
HYDRAULIC SYMBOLS



65 410/118 ED 1/2

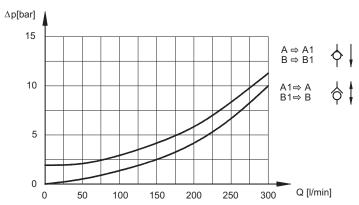


1 - IDENTIFICATION CODE



2 - CHARACTERISTIC CURVES

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



3 - HYDRAULIC FLUIDS

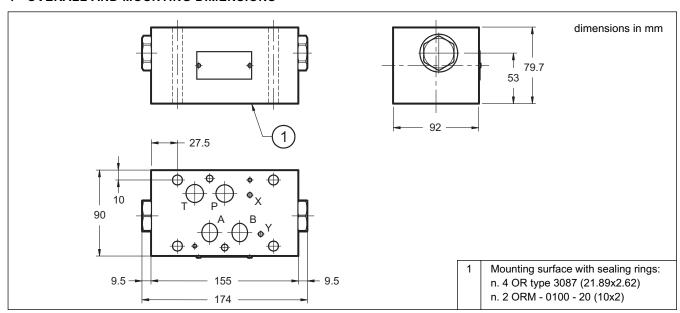
Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. With this kind of fluids, use NBR seals type (code N). With HFDR fluids type (phosphate esters) use FPM seals (code V).

For the use of other fluid types 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 itself and of the seals characteristics.

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

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