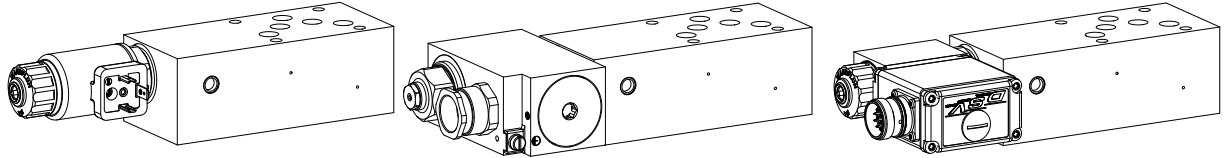


**Proportional pressure reducing valve
 Flange and sandwich construction**
 • $p_{max} = 400 \text{ bar}$
NG10
 ISO 4401-05

DESCRIPTION

Pilot operated proportional pressure reducing valves NG10. Flange and sandwich construction according to ISO 4401-05 with 4 ports. Incorporated are proportional pressure reducing cartridges size M22x1,5 according to ISO 7789. The steel bodies for flange constructions are painted with a two component painting and the bodies for sandwich constructions are phosphatized.

FUNCTION

By adjusting the electric current to the proportional solenoid the pressure in the controlled port will be changed proportionally to the solenoid current. A pressure rise in the controlled port above the adjusted value, caused e.g. by an active oil consumer, will be prevented by relieving excessive flow to the tank line T. This proportional pressure reducing valves are adjustable very sensitively. To control the valve proportional amplifiers are available from Wandfluh (see register 1.13).

APPLICATION

The valves have their applications in hydraulic systems in which the pressure in a consumer has to remain constant at the adjusted value independently of pressure fluctuations on the supply side. The facility for remote control and signal processing from process control systems enable economical solutions to problems with repeatable sequences.

TYPE CODE

	M <input type="checkbox"/> <input type="checkbox"/> A10 - <input type="checkbox"/> - <input type="checkbox"/> # <input type="checkbox"/>														
Pressure reducing valve															
2nd and 3rd digit position of the designation of the built-in cartridge															
Flange construction	<input type="checkbox"/> F														
Sandwich construction	<input type="checkbox"/> S														
International standard interface ISO, NG10															
Type list / Function	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">flange construction</td> <td style="width: 50%; border: none;">sandwich construction</td> </tr> <tr> <td style="border: none;">P → A</td> <td style="border: none;">in P</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> P/A</td> <td style="border: none;"><input type="checkbox"/> P</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">in A</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"><input type="checkbox"/> A</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">in B</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"><input type="checkbox"/> B</td> </tr> </table>	flange construction	sandwich construction	P → A	in P	<input type="checkbox"/> P/A	<input type="checkbox"/> P		in A		<input type="checkbox"/> A		in B		<input type="checkbox"/> B
flange construction	sandwich construction														
P → A	in P														
<input type="checkbox"/> P/A	<input type="checkbox"/> P														
	in A														
	<input type="checkbox"/> A														
	in B														
	<input type="checkbox"/> B														
Nominal pressure range, nominal voltage, etc., of the built-in cartridge															
Design-Index (Subject to change)															

Examples: M V P F A10 - P/A - 100 - G24 / WD - D1
 M V B S A10 - A - 200 - G12 / L15 / IN
 M Q P S A10 - B - 350 - G24 / MEA1 - HB0

GENERAL SPECIFICATIONS

Description	Pilot operated proportional pressure reducing valve	
Nominal size	NG10 according to ISO 4401-05	
Constructions	Flange or sandwich	
Operations	Proportional solenoid	
Mounting	4 fixing holes for socket head cap screws	
	M6 or studs M6	
Connections	Threaded connection plates	
	Multi-flange subplates	
	Longitudinal stacking system	
Weight:	• Flange type	m = 1,80 kg
(without screw-in cartridge)	• Sandwich type	m = 2,72 kg

SCREW-IN CARTRIDGES INSTALLED

The following screw-in cartridges are used in either the flange body or the sandwich body:

Type	Designation	Data sheet no.	Q_{max}^*
MVPPM22	pilot operated	2.3-629	60 l/min
MQPPM22	pilot operated from connection P	2.3-641	40 l/min
MVBPM22	pilot operated, explosion proof Ex d	2.3-635	60 l/min
MVVPM22	pilot operated, with integrated electronics	2.3-632	60 l/min
MQVPM22	pilot operated from connection P, with integrated electronics	2.3-643	40 l/min


REMARK!

Detailed performance data and additional hydraulic and electric specifications may be drawn from the data sheets of the corresponding installed screw-in cartridge.


CAUTION!

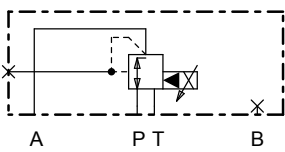
The performance data especially the „**pressure-flow-characteristic**„, on the data sheets of the screw-in cartridges refer to the screw-in cartridges only. The additional pressure drop of the flange body respectively sandwich body must be taken into consideration.

* Can deviate from the values on the data sheets of the screw-in cartridges. ** Do not use anymore for new applications.

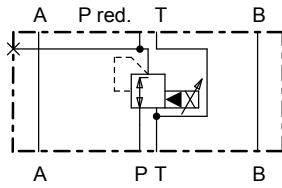
TYPE LIST / FUNCTION

Flange construction:

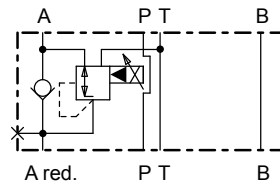
Sandwich construction:



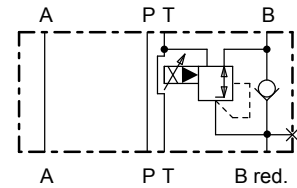
MV.FA10-P/A



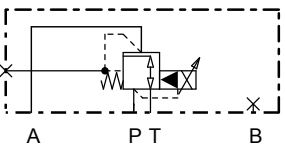
MV.SA10 - P



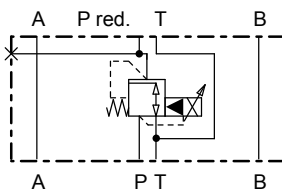
MV.SA10 - A



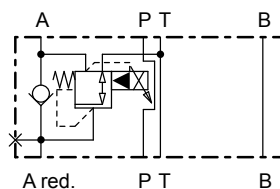
MV.SA10 - B



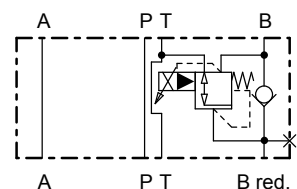
MQ.FA10-P/A



MQ.SA10 - P



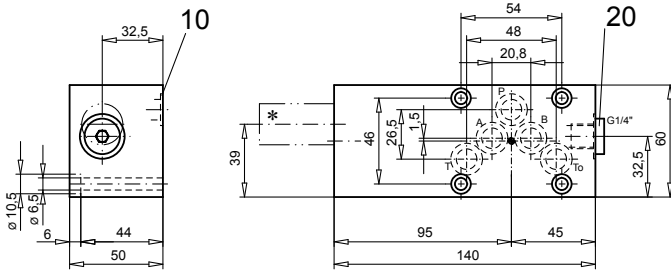
MQ.SA10 - A



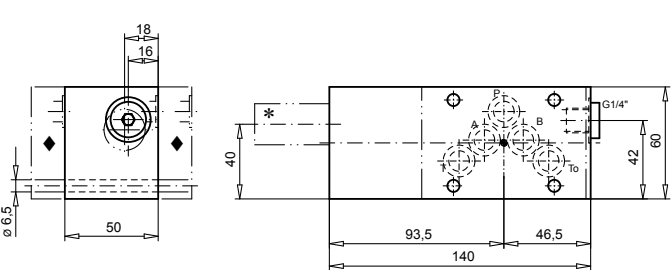
MQ.SA10 - B

DIMENSIONS

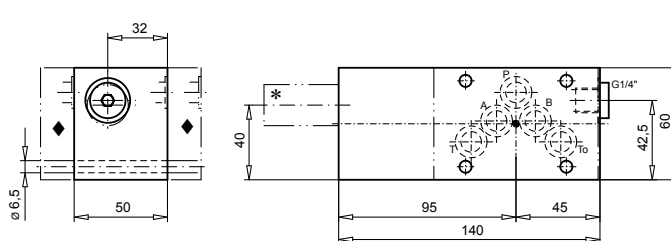
Flange construction



Sandwich construction in A or B



Sandwich construction in P



For sandwich red. pressure in B cartridge is located on B-side.

* The envelop dimensions of the screw-in cartridge are shown on their corresponding data sheets.

◆ Distance plate ADP10/... must be ordered separately.

PARTS LIST

Position	Article	Description
10	160.2140	O-ring ID 14,00 x 1,78 (NBR)
20	238.2406	Plug VSTI G1/4"-ED

ACCESSORIES

Proportional amplifier	register 1.13
Distance plate ADP10/29,5 (29,5 mm)	art. no. 173.4456

Technical explanation see data sheet 1.0-100