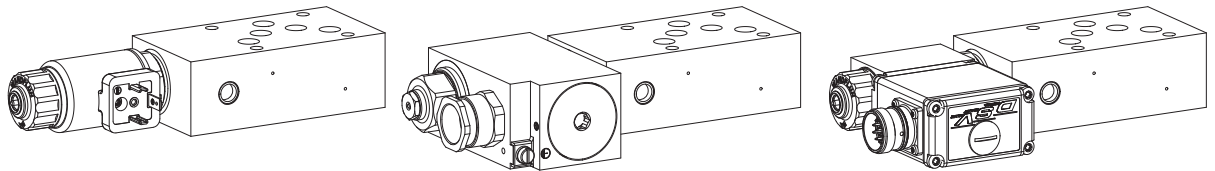


**Proportional pressure relief valve  
 Flange and sandwich construction**

 •  $p_{max} = 400 \text{ bar}$ 
**NG10**  
 ISO 4401-05

**DESCRIPTION**

Pilot operated proportional pressure relief valves NG10. Flange and sandwich construction according to ISO 4401-05 with 4 ports. Incorporated are proportional pressure relief cartridges size M22x1,5 according to ISO 7789. The flange and sandwich bodies made of steel are phosphatized.

**FUNCTION**

By adjusting the electric current to the proportional solenoid the operating pressure in hydraulic systems is limited by relieving the fluid from the protected lines P, A, B or A and B to the return / tank line T. Back pressure in T influences the pressure in the relieved pressure lines. This proportional pressure relief 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 frequently has to be changed. The facility for remote control and signal processing from process control systems enable economical solutions to problems with repeatable sequences.

**TYPE CODE**

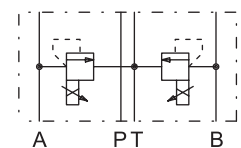
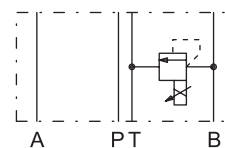
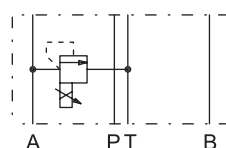
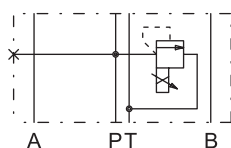
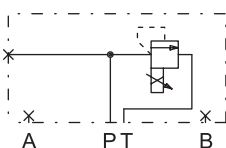
	B <input type="checkbox"/> <input type="checkbox"/> A10 - <input type="checkbox"/> - <input type="checkbox"/> # <input type="checkbox"/>										
Pressure relief valve											
2nd and 3rd digit position of the designation of the built-in cartridge											
Flange construction	<input type="checkbox"/> 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;">in P</td> <td style="border: none;">in P <input type="checkbox"/> P</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">in A <input type="checkbox"/> A</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">in B <input type="checkbox"/> B</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">in A and B <input type="checkbox"/> AB</td> </tr> </table>	flange construction	sandwich construction	in P	in P <input type="checkbox"/> P		in A <input type="checkbox"/> A		in B <input type="checkbox"/> B		in A and B <input type="checkbox"/> AB
flange construction	sandwich construction										
in P	in P <input type="checkbox"/> P										
	in A <input type="checkbox"/> A										
	in B <input type="checkbox"/> B										
	in A and B <input type="checkbox"/> AB										
Nominal pressure range, nominal voltage, etc., of the built-in cartridge											
Design-Index (Subject to change)											

Examples: B  V  P  F A10 - P -  20 - G24 / WD - HB4,5  
 B  D  B SA10 - A -  100 - G12 / L15  
 B  N  I SA10 - B -  200 - G24 / KD - D1  
 B  V  P SA10 - AB -  350 - G12 / ME A1 R1

**TYPE LIST / FUNCTION**

Flange construction:

Sandwich construction:



BV.FA10-P

BV.SA10 - P

BV.SA10 - A

BV.SA10 - B

BV.SA10 - AB

**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 <sub>max</sub> *
BVPPM22	pilot operated	2.3-529	100 l/min
BNIPM22	pilot operated, inverse	2.3-533	100 l/min
BVBPM22	pilot operated, explosion proof Ex d	2.3-536	100 l/min
BVPPM22-../ME	pilot operated, with integrated electronics	2.3-537	100 l/min
BDPPM22	direct operated	2.3-539	25 l/min
BDBPM22	direct operated, explosion proof Ex d	2.3-547	25 l/min
BDPPM22-../ME	direct operated, with integrated electronics	2.3-561	25 l/min

\* Can deviate from the values on the data sheets of the screw-in cartridges.

**GENERAL SPECIFICATIONS**

Description	Pilot operated proportional pressure relief 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 = 2,34 kg	
(without screw-in cartridge)	• Sandwich type P, A, B	m = 1,70 kg	
	• Sandwich type AB	m = 1,94 kg	


**REMARK!**

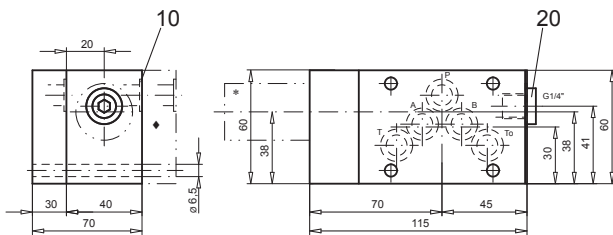
Detailed performance data and additional hydraulic and electric specifications may be drawn from the data sheets of the corresponding installed screw-in cartridge.


**CAUTION!**

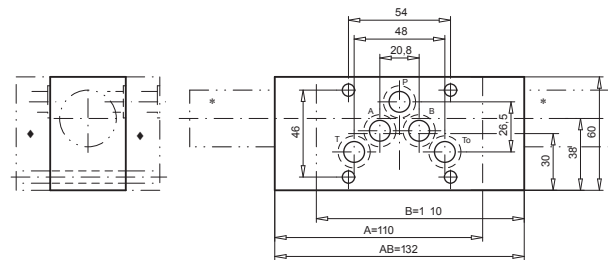
 The performance data especially the „**pressure-flow-characteristic**„ on the data sheets of the screw-in cartridges refer to the screw-in cartridges only. The additional pressure drop of the flange body respectively sandwich body must be taken into consideration.

**DIMENSIONS**

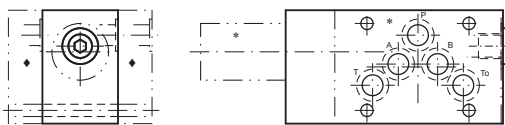
Flange construction



Sandwich construction in A, B or AB



Sandwich construction in P



\* 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