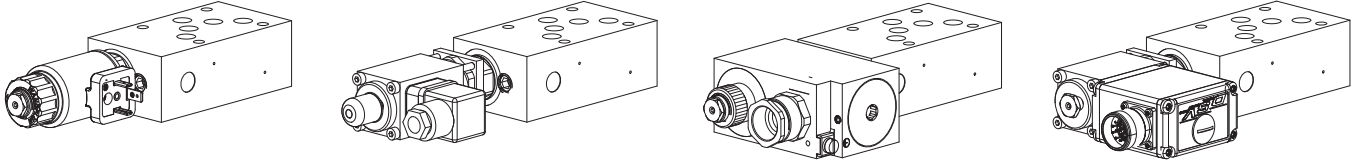


**Proportional pressure relief valve  
 Flange and sandwich construction**

 •  $p_{max} = 400 \text{ bar}$ 
**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.

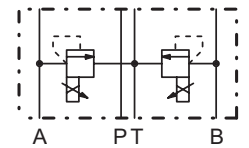
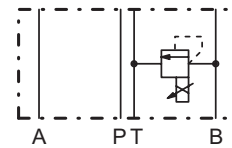
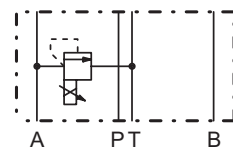
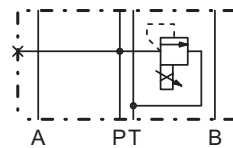
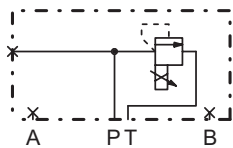
**TYPE CODE**

		B	V	<input type="checkbox"/>	<input type="checkbox"/>	A10	-	<input type="text"/>	-	<input type="text"/>	#	<input type="checkbox"/>
Pressure relief valve												
Pilot operated												
Proportional	<input type="checkbox"/>											
Proportional inverse	<input type="checkbox"/>											
Proportional explosion proof, execution Ex d	<input type="checkbox"/>											
Proportional with integrated electronics	<input type="checkbox"/>											
Flange construction	<input type="checkbox"/>											
Sandwich construction	<input type="checkbox"/>											
International standard interface ISO, NG10												
Type list / Function:	<i>flange construction</i>	<i>sandwich construction</i>										
	in P	in P	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		in A			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		in B			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		in A and B			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nominal pressure levels, nominal voltage, etc.: see data sheet of the installed screw-in cartridges												
Examples:	BVPFA10-P-	<input type="text" value="20-G24 / WD-D1"/>										
	BVISA10-A-	<input type="text" value="160-G12"/>										
	BVBSA10-B-	<input type="text" value="350-G24 / L15"/>										
	BVVSA10-AB-	<input type="text" value="200-12 A1"/>										
Design-Index (Subject to change)												

**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
BVPPM22**	pilot operated	2.3-530	100 l/min
BVIPM22	pilot operated, inverse	2.3-532	100 l/min
BVCPM22**	pilot operated, explosion proof EEx em	2.3-534	100 l/min
BVBPM22	pilot operated, explosion proof Ex d	2.3-536	100 l/min
BVBPM22**	pilot operated, explosion proof EEx d	2.3-535	100 l/min
BVVPM22	pilot operated, with integrated electronics	2.3-531	100 l/min

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

\*\* Do not use anymore for new applications.

**GENERAL SPECIFICATIONS**

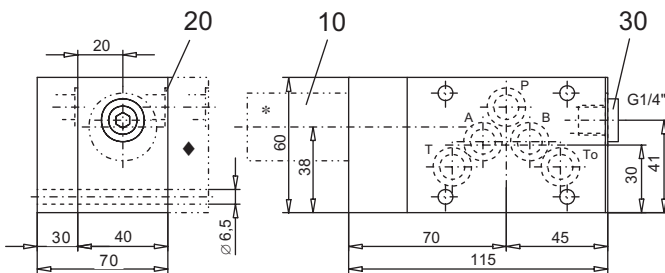
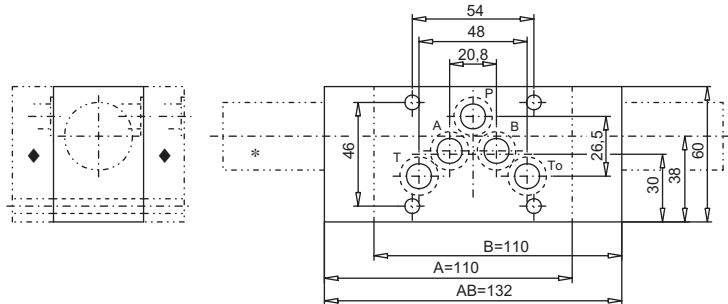
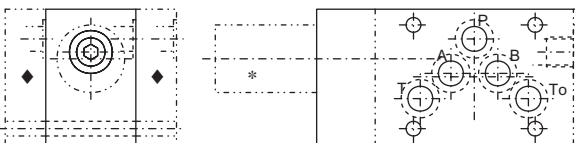
Description	Pilot operated proportional pressure relief valve	
Nominal size	NG10 according to ISO 4401-05	
Constructions	Flange or sandwich	
Operations	Proportional solenoid	
Mounting	4 fixing holes for socket head cap screws M6 or studs M6	
Connections	Threaded connection plates Multi-flange subplates 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	609.3 ...	Screw-in cartridge
20	160.2140	O-ring ID 14,00x1,78
30	238.2406	Plug VSTI G1/4"-ED (only flange and sandwich type in P)

**ACCESSORIES**

Proportional amplifier	register 1.13
Distance plate ADP10/18 (18 mm)	art. no. 173.4450

Technical explanation see data sheet 1.0-100