

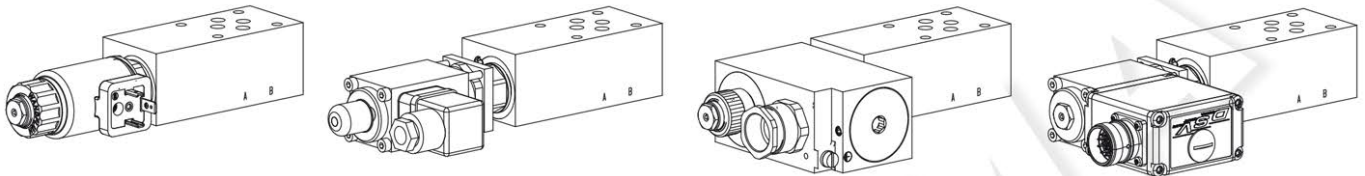
Part number:

**Proportional  
pressure relief valves**

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

•  $p_{max} = 400 \text{ bar}$

**NG6**  
ISO 4401-03



**DESCRIPTION**

Pilot and direct operated proportional pressure relief valves NG6. Flange and sandwich construction according to ISO 4401-03 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    A06 -  -  #

Pressure relief valve

- Pilot operated  V
- Direct operated  D
- Proportional  P
- Proportional inverse  I
- Proportional explosion proof, execution Ex d  B
- Proportional with integrated electronics  V
- Proportional inverse with integrated electronics  W (only direct operated)

- Flange construction  F
- Sandwich construction  S

International standard interface ISO, NG6

- Type list / Function:
- |                                 |  |
|---------------------------------|--|
| <i>flange construction</i>      | <i>sandwich construction</i>           |
| in P <input type="checkbox"/> 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 levels, nominal voltage, etc.: see data sheet of the installed screw-in cartridges

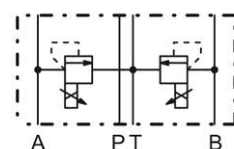
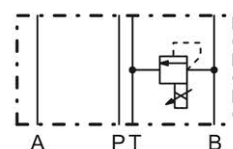
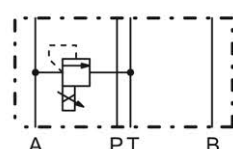
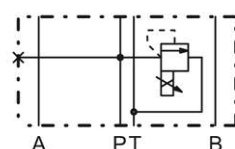
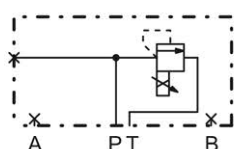
- Examples:
- BVPFA06-P-  20-G24 / WD-D1
  - BDISA06-A-  160-G12
  - BVBSA06-B-  350-G24 / L15
  - BVVSA06-AB-  200-12 A1

Design-Index (Subject to change)

**TYPE LIST / FUNCTION**

Flange construction:

Sandwich construction:



B..FA06-P

B..SA06 - P

B..SA06 - A

B..SA06 - B

B..SA06 - 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	60 l/min
BVPPM22**	pilot operated	2.3-530	60 l/min
BVIPM22	pilot operated, inverse	2.3-532	60 l/min
BVCPM22**	pilot operated, explosion proof EEx em	2.3-534	60 l/min
BVBPM22	pilot operated, explosion proof Ex d	2.3-536	60 l/min
BVBPM22**	pilot operated, explosion proof EEx d	2.3-535	60 l/min
BVVPM22	pilot operated, with integrated electronics	2.3-531	60 l/min
BDPPM22	direct operated	2.3-539	25 l/min
BDPPM22**	direct operated	2.3-540	25 l/min
BDIPM22	direct operated, inverse	2.3-542	20 l/min
BDCPM22**	direct operated, explosion proof EEx em	2.3-544	25 l/min
BDBPM22	direct operated, explosion proof Ex d	2.3-547	25 l/min
BDBPM22**	direct operated, explosion proof EEx d	2.3-545	25 l/min
BDVPM22	direct operated, with integrated electronics	2.3-541	25 l/min
BDWPM22	direct operated, inverse, with integrated electronics	2.3-543	20 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 and direct operated proportional pressure relief valve	
Nominal size	NG6 according to ISO 4401-03	
Constructions	Flange or sandwich	
Operations	Proportional solenoid	
Mounting	4 fixing holes for socket head cap screws M5 or studs M5	
Connections	Threaded connection plates Multi-flange subplates Longitudinal stacking system	
Weight:	• Flange type	m = 1,43 kg
(without screw-in cartridge)	• Sandwich type P, A, B	m = 1,18 kg
	• Sandwich type AB	m = 1,58 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.

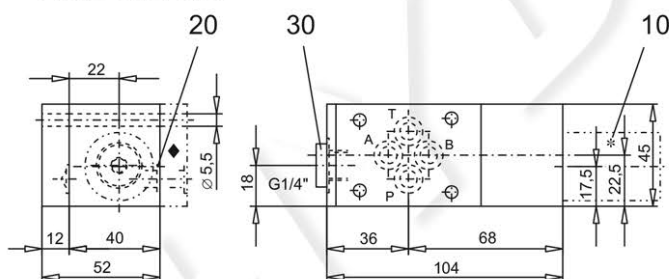


### CAUTION!

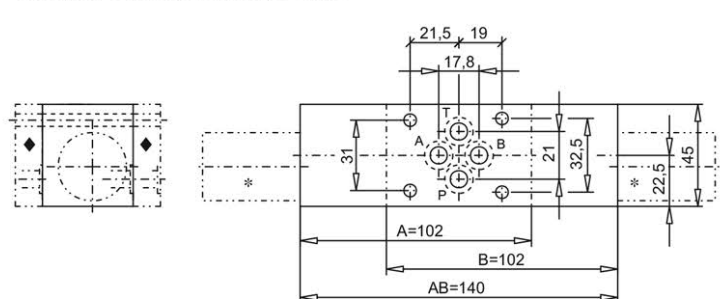
The performance data especially the „**pressure-flow-characteristic**“, on the data sheets of the screw-in cartridges refer to the screw-in cartridges only. The additional pressure drop of the flange body respectively sandwich body must be taken into consideration.

### DIMENSIONS

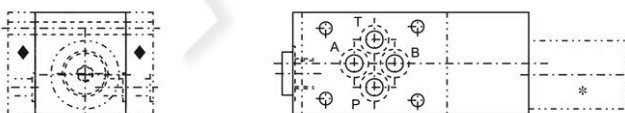
Flange construction



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 ADP6/... must be ordered separately.

### PARTS LIST

Position	Article	Description
10	609.3 ...	Screw-in cartridge
20	160.2093	O-ring ID 9,25x1,78
30	238.2406	Plug VSTI G1/4"-ED (only flange and sandwich type in P)

### ACCESSORIES

Proportional amplifier	register 1.13
Distance plate ADP6/12 (12 mm)	art. no. 173.3451
Distance plate ADP6/30 (30 mm)	art. no. 173.3453
Distance plate ADP6/46 (46 mm)	art. no. 173.3454
Distance plate ADP6/87 (87 mm)	art. no. 173.3461

Technical explanation see data sheet 1.0-100