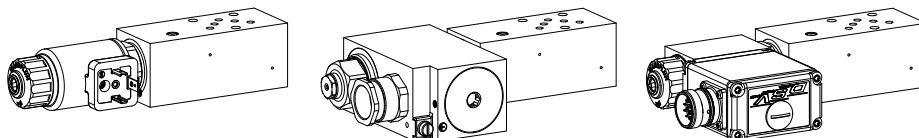


**Proportional pressure relief valve
Flange and sandwich construction**

• $p_{max} = 400 \text{ bar}$

NG4-Mini®



DESCRIPTION

Pilot and direct operated proportional pressure relief valves NG4-Mini. Flange and sandwich construction according to Wandfluh standard 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. NG4-Mini valves are used where both, reduced dimensions and weight are important.

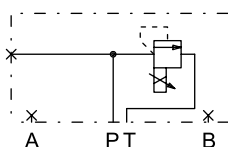
TYPE CODE

Pressure relief valve		B <input type="text"/> <input type="checkbox"/> A04 - <input type="text"/> - <input type="text"/> # <input type="checkbox"/>	
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		
Mounting interface acc. to Wandfluh standard, NG4-Mini			
Type list / Function	flange construction in P <input type="checkbox"/> P	sandwich construction 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 A04 - P - 20 - G24 / WD - HB4,5
 B ☐ D ☐ B ☐ S A04 - A - 100 - G12 / L15
 B ☐ N ☐ I ☐ S A04 - B - 200 - G24 / KD - D1
 B ☐ V ☐ P ☐ S A04 - AB - 350 - G12 / ME A1 R1

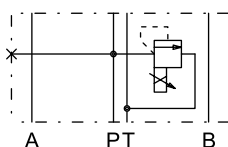
TYPE LIST / FUNCTION

Flange construction:

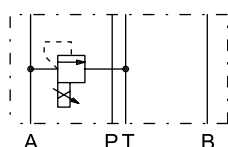


B..FA04-P

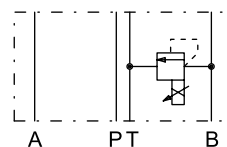
Sandwich construction:



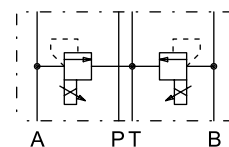
B..SA04 - P



B..SA04 - A



B..SA04 - B



B..SA04 - 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_{max}^*
BVPPM22	pilot operated	2.3-529	20 l/min
BNIPM22	pilot operated, inverse	2.3-533	20 l/min
BVBPM22	pilot operated, explosion proof Ex d	2.3-536	20 l/min
BVPPM22-../ME	pilot operated, with integrated electronics	2.3-537	20 l/min
BDPPM22	direct operated	2.3-539	20 l/min
BDIPM22	direct operated, inverse	2.3-548	20 l/min
BDBPM22	direct operated, explosion proof Ex d	2.3-547	20 l/min
BDPPM22-../ME	direct operated, with integrated electronics	2.3-561	20 l/min
BDIPM22-../ME	direct operated, inverse, with integrated electronics	2.3-562	20 l/min

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

GENERAL SPECIFICATIONS

Description	Pilot and direct operated proportional	
pressure relief valve		
Nominal size	NG4-Mini according to Wandfluh <i>standard</i>	
Constructions	Flange or sandwich	
Operations	Proportional solenoid	
Mounting	3 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 = 1,15 kg
(without screw-in cartridge)	• Sandwich type P, A, B	m = 0,96 kg
	• Sandwich type AB	m = 1,24 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.

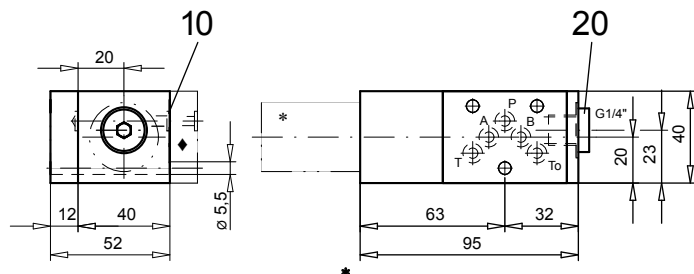


CAUTION!

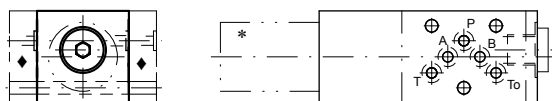
The performance data especially the „**pressure-flow-characteristic**„, on the data sheets of the screw-in cartridges refer to the screw-in cartridges only. The additional pressure drop of the flange body respectively sandwich body must be taken into consideration.

DIMENSIONS

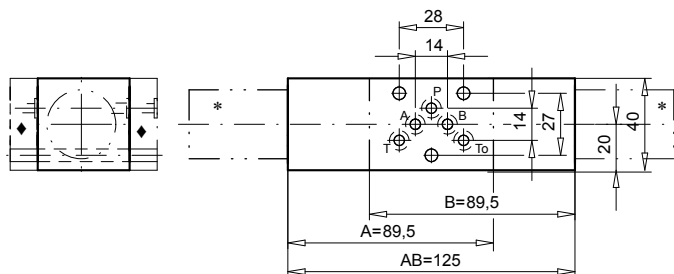
Flange construction



Sandwich construction in P



Sandwich construction in A, B or AB



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

- ◆ Distance plate BDP4/... must be ordered separately.

PARTS LIST

Position	Article	Description
10	160.2052	O-ring ID 5,28x1,78 (NBR)
20	238.2406	Plug VSTI G1/4"-ED

ACCESSORIES

Proportional amplifier	register 1.13
Distance plate BDP4/12 (12 mm)	art. no. 173.1450
Distance plate BDP4/20 (20 mm)	art. no. 173.1451
Distance plate BDP4/30 (30 mm)	art. no. 173.1452

Technical explanation see data sheet 1.0-100