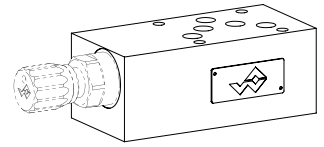


Back pressure valve

Sandwich construction

- ◆ pilot operated or direct operated
- ◆ $p_{max} = 400 \text{ bar}$
- ◆ $p_{Nmax} = 350 \text{ bar}$
- ◆ $Q_{max} = 100 \text{ l/min}$

NG10
ISO 4401-05



DESCRIPTION

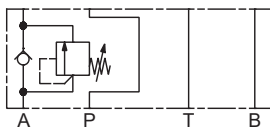
Pilot or direct operated backpressure valve in sandwich construction. The backpressure valve, also called pre-loading valve, opens the main spool when the adjusted pressure is reached.

APPLICATION

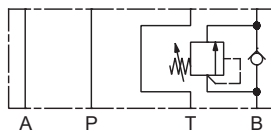
Backpressure valves with pressure adjustment in A, B or T, are used for pre-loading of cylinders / motors, resp. for reaching a back pressure.

SYMBOL

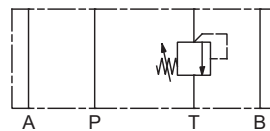
Sandwich execution
 G..SA..-A



Sandwich execution
 G..SA..-B



Sandwich execution
 G..SA..-T



Note!



- ◆ Direct operated execution drawn
- ◆ All variants are also available pilot operated

TYPE CODE

Back-pressure valve		G		S		A10		-		-		-		#		□	
Direct operated		A															
Pilot operated		V															
Type of adjustment	Key	S															
	Control knob	D															
	Cover	A															
Sandwich construction																	
Mounting interface acc. to ISO, NG10																	
Type list / Function	in T	T		in A		A											
	in B	B															
Nominal pressure range (p_N) of the built-in screw-in cartridge																	
Sealing material	NBR	□															
	FKM (Viton)	D1															
Design index (subject to change)																	

2.1-760

GENERAL SPECIFICATIONS

Designation	Back pressure valve
Construction	Direct or pilot operated
Mounting	Sandwich construction
Nominal size	NG10 according to ISO 4401-05
Actuation	Manually
Ambient temperature	-25...+70 °C
Weight	2,3 kg

HYDRAULIC SPECIFICATIONS

Working pressure	$p_{max} = 400$ bar
Nominal pressure range	P_{Nmax} A: 63, 210, 315 bar V: 63, 160, 350 bar
Minimum pressure	See characteristics
Maximum volume flow	$Q_{max} = 100$ l/min
Fluid	Mineral oil, other fluid on request
Viscosity range	12 mm ² /s...320 mm ² /s
Temperature range fluid	-25...+70 °C (NBR) -20...+70 °C (FKM)
Contamination efficiency	Class 18 / 16 / 13
Filtration	Required filtration grade $\beta_{6...10} \geq 75$, see data sheet 1.0-50

Note! Other specifications, see data sheet of the screw-in cartridges



ACTUATION

Actuation	S = lockable key adjustment D = lockable knob adjustment
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Note! Other specifications, see data sheet of the screw-in cartridges



STANDARDS

Mounting interface	ISO 4401-05
Contamination efficiency	ISO 4406

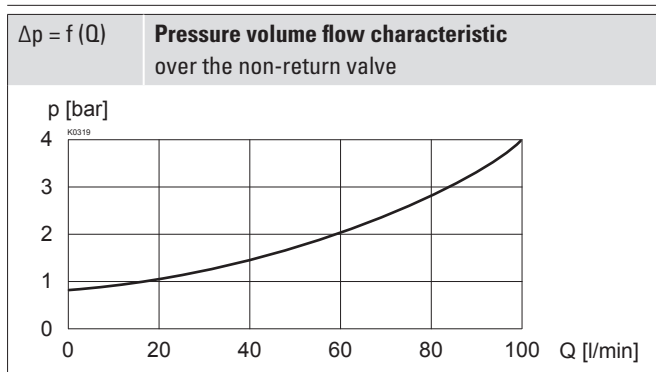
SEALING MATERIAL

NBR or FKM (Viton) as standard, choice in the type code

SURFACE TREATMENT

◆ The sandwich bodies made of steel are zinc-phosphated

PERFORMANCE SPECIFICATIONS



Note! Detailed performance limites and additional hydraulic specifications may be drawn from the data sheets of the corresponding installed pressure relief cartridge.



Attention! The performance data especially the „pressure-flowcharacteristic,“ on the data sheets of the screw-in cartridges refer to the screw-in cartridges only. The additional pressure drop of the sandwich body must be taken into consideration.



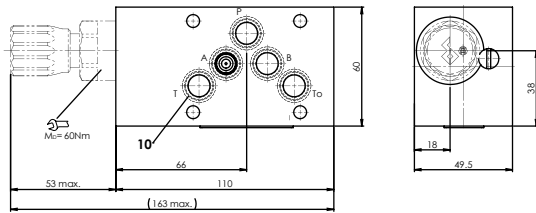
VALVES INSTALLED

The following screw-in cartridges are used in the sandwich body.

Article	Description	Data sheet no.
BV.PM22	Pressure relief cartridge pilot operated	2.1-530
BA.PM22	Pressure relief cartridge direct operated	2.1-540

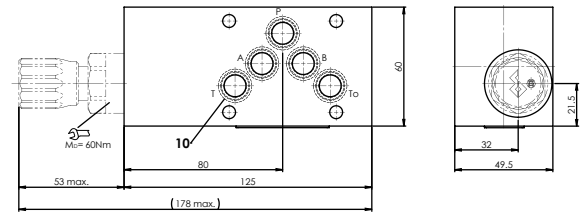
DIMENSIONS

Sandwich execution
 G.DSA10-A / B

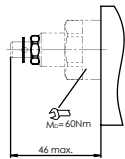


G.DSA10-A: Cartridge on A side
 G.DSA10-B: Cartridge on B side

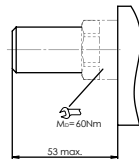
Sandwich execution
 G.DSA10-T



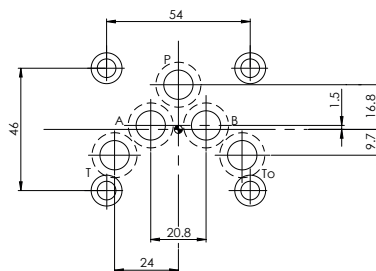
Type of adjustment
 G.SSA10



Type of adjustment
 G.ASA10



HYDRAULIC CONNECTION



ACCESSORIES

Types of adjustment for screw-in cartridges	Data sheet 2.0-50
Threaded subplates	Data sheet 2.9-40
Multi-station subplates	Data sheet 2.9-70
Module type manifold blocks	Data sheet 2.9-110
Technical explanations	Data sheet 1.0-100
Filtration	Data sheet 1.0-50

PARTS LIST

Position	Article	Description
10	160.2140	O-ring ID 14,00 x 1,78 (NBR)
	160.6141	O-ring ID 14,00 x 1,78 (FKM)

INSTALLATION NOTES

Mounting type	Sandwich mounting 4 fixing holes for socket head screws or studs M6
Mounting position	Any, preferably horizontal
Tightening torque	Fixing screws $M_0 = 8,9 \text{ Nm}$ (quality 8.8, zinc coated) Screw-in cartridge $M_0 = 60 \text{ Nm}$