

Non-return valve

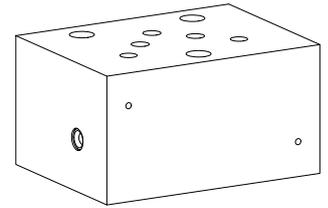
Sandwich construction

- ◆ $Q_{max} = 20 \text{ l/min}$
- ◆ $p_{max} = 350 \text{ bar}$

DESCRIPTION

Non-return valves allow a free flow in one direction and close off the opposite direction by metallic sealing. In the free flow direction, the volume flow opens the spring loaded seat cone. In the opposite direction, the spring keeps the valve closed. The required opening pressure depends on the spring force.

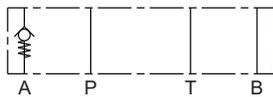
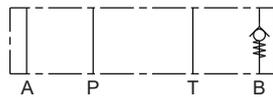
NG4-Mini Wandfluh standard

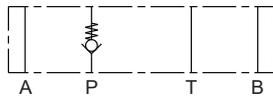
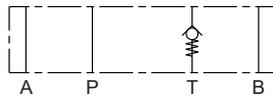
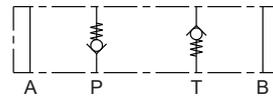


APPLICATION

Non-return valves in the P port prevent the pump from backward rotation. When installed in the T port, the spring controlled opening pressure prevents a hydraulic system from draining to the tank. Miniature valves are used where both, reduced dimensions and weight are important.

SYMBOL

BRVA4

BRVB4

BRVAB4

BRVP4

BRVT4

BRVPT4


TYPE CODE

Mounting interface according to Wandfluh standard	B RV <input type="text"/> 4 - <input type="text"/> # <input type="text"/>
Non-return valve	
Type list / Function	
in A	<input type="text" value="A"/> in B
in P	<input type="text" value="P"/> in T
	<input type="text" value="B"/> in A and B
	<input type="text" value="T"/> in P and T
	<input type="text" value="AB"/> <input type="text" value="PT"/>
Nominal size 4-Mini	
Sealing material	NBR <input type="text"/> FKM (Viton) <input type="text" value="D1"/> NBR 872 <input type="text" value="Z604"/>
Design index (subject to change)	

2.7-20

SEALING MATERIAL

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

SURFACE TREATMENT

- ◆ The sandwich bodies made of steel are zinc-phosphated

STANDARDS

Mounting interface	Wandfluh standard
Contamination efficiency	ISO 4406

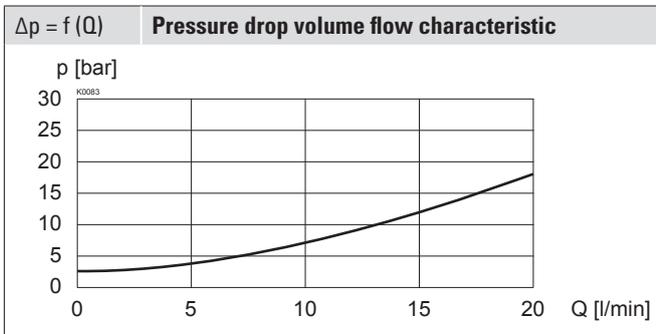
GENERAL SPECIFICATIONS

Designation	Non-return valve
Mounting	Sandwich construction
Nominal size	NG4-Mini according to Wandfluh standard
Actuation	None
Ambient temperature	-25...+70 °C
Weight	0.46 kg

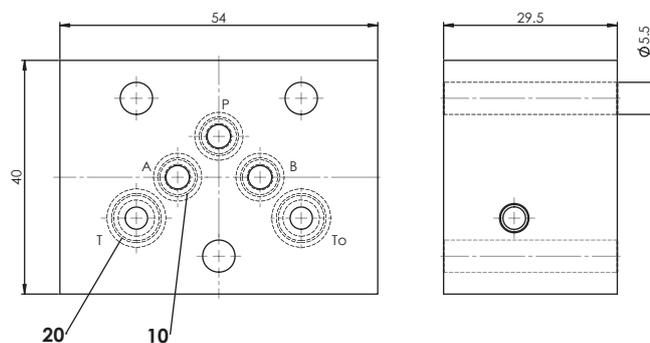
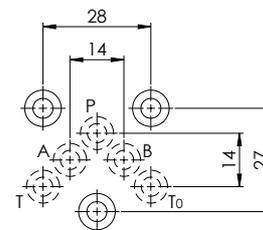
HYDRAULIC SPECIFICATIONS

Working pressure	$p_{max} = 350$ bar
Opening pressure	$p_a = 2,2$ bar
Maximum volume flow	$Q_{max} = 20$ l/min
Leakage oil	Seat tight, max. 0,15 ml / min (approx. 3 drops / min) at 30 cSt
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 20 / 18 / 14
Filtration	Required filtration grade $\beta_{10...16} \geq 75$, see data sheet 1.0-50

PERFORMANCE SPECIFICATIONS

 Oil viscosity $\nu = 30$ mm²/s

ACCESSORIES

Fixing screws	Data sheet 1.0-60
Threaded subplates	Data sheet 2.9-10
Multi-station subplates	Data sheet 2.9-50
Module type manifold blocks	Data sheet 2.9-90
Technical explanations	Data sheet 1.0-100
Hydraulic fluids	Data sheet 1.0-50
Filtration	Data sheet 1.0-50

DIMENSIONS

HYDRAULIC CONNECTION

PARTS LIST

Position	Article	Description
10	160.2052	O-ring ID 5,28 x 1,78 (NBR)
	160.6052	O-ring ID 5,28 x 1,78 (FKM)
20*	160.2067	O-ring ID 6,75 x 1,78 (NBR)
	160.6067	O-ring ID 6,75 x 1,78 (FKM)

Note!


* in A or / and B, when non-return valve in A, B or AB. In T, when non-return valve in T.

INSTALLATION NOTES

Mounting type	Sandwich mounting 3 fixing holes for socket head screws or studs M5
Mounting position	Any
Tightening torque	Fixing screws $M_D = 5,2$ Nm (screw quality 8.8, zinc coated)