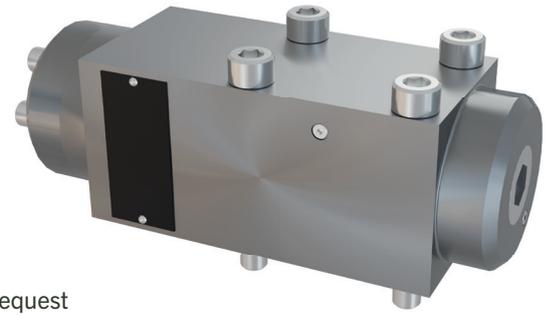


Pilot operated non-return valve

DN10, PN320



Features

- Pilot operated non-return valve controlling liquid media
- Opening pressure of the preload spring approx. 1bar, other opening pressures on request
- Valve piston and valve seat are coupled and close hydraulically leak-free
- Valve fastening structural plate form with a Hauhinco connection diagram
- Valve parts made of corrosion-resistant stainless steel

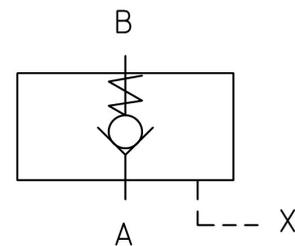
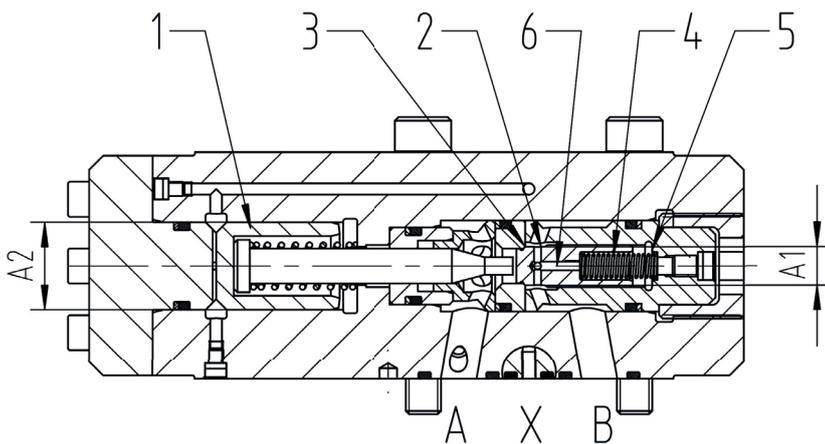
Function of pilot operated non-return valve

The valve piston (2) is pressed into the valve seat (3) by the force of the spring (4). The control chamber (5) is connected to the B-channel via the control channels (6) within the valve piston (2). The hydraulic pressure supplied at the B-channel with the valve closed is thus acting on the control surface A1, keeps the valve closed and shuts off the direction of flow from the B- to the A-channel. Conversely, the nonreturn valve opens when the hydraulic pressure at the A-channel exceeds the hydraulic pressure at the B-channel and the spring force (4).

The valve blocked via the B port can be opened against the blocking direction. This is done via the control piston (1) which is pressurized via the control port (X). The control pressure (X) acts to surface A2, surface A2 is > as surface A1 and open the non-return valve.

Example: Pilot operated non-return valve DN10

Symbol



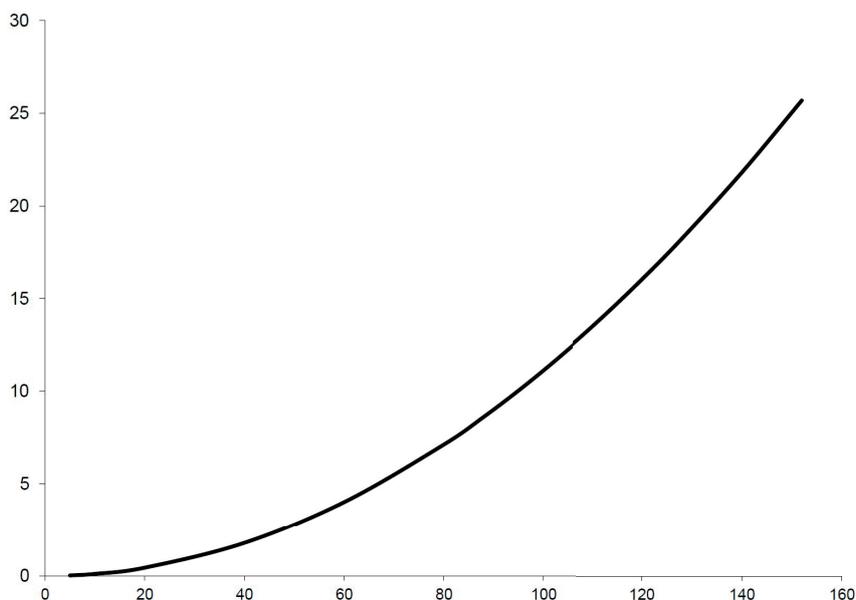
Technical data

measured with HFA medium 97/3%, at 20°C

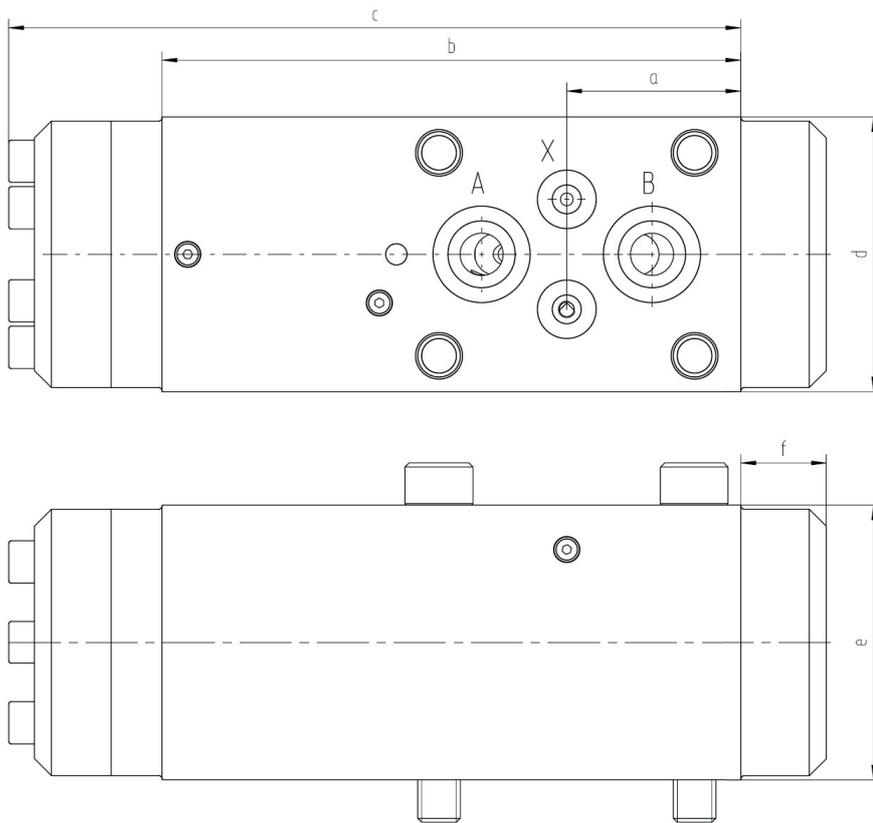
General	
Weight	see Order information
Installation position	any
Ambient temperature	-10 to 50°C (hydraulic fluids, heed standard requirements)
Material Valve parts	Stainless steel
Material Seals	NBR, PTFE, PUR
Hydraulic	
Hydraulic pressure connector A, B, X	≤ 320 bar
Direction of flow	A→B
Pressure fluid	Water, HFA
- Medium - Temperature range	5 to 40°C
- Medium - Quality	see Hauhinco media requirement, water, HFA
- min. filter fineness connection A, B	Filter fineness 100µm
Pressure fluid	Mineral oil HLP according to DIN51624-2
- Medium - Temperature range	5 to 50°C
- Medium - Quality	Cleanliness class -/19/16 according to ISO 4406
- Viscosity	0,6 bis 100 mm ² /s
Use of other pressure fluids on request.	

Characteristic curves DN10

$\Delta p - q_v$ characteristic curves



Dimension sheet



Order information pilot operated non-return valve

Included in the scope of supply

Mounting screws for the non-return valve

Nominal size	Weight [kg]	max. Pressure [bar]	Control ratio [A1/A2]	Dimensions [mm]						Article number
				a	b	c	d	e	f	
DN10	5,4	320	1:5	41	136	172	65	65	20	6377971