

## 3/2-way valve B2 X, Y- externally

DN10 – DN16  
PN320

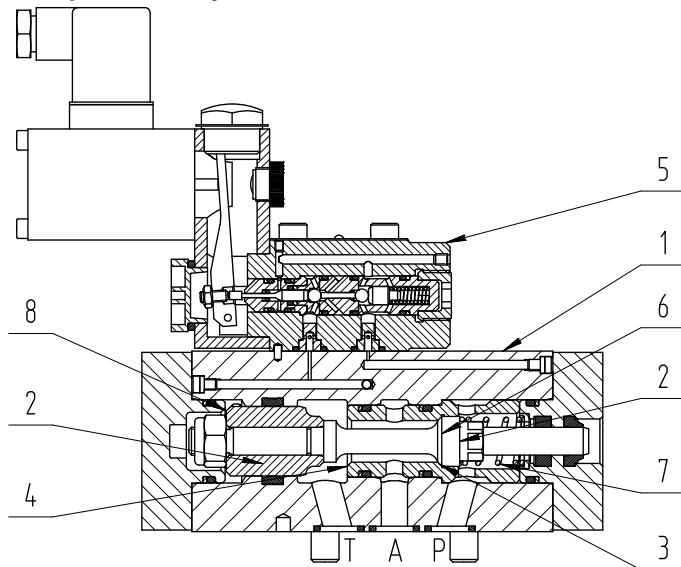
### Features:

- Hydraulically actuated directional seat valve controlling liquid media.
- Passively controllable 3/2-way valve with 2-stage control logic
- The basic valve position is maintained by the hydraulic pressure (P)
- The valve is designed in two function variants , A-T NO and P-T NO
- The hydraulic control pressure (X, Y) is applied externally via the connection diagram
- Valve piston and valve seat are coupled and close hydraulically "leak-free"
- The valve is actuated hydraulically via a 3/2-way pilot valve
- Valve fastening structural plate form with a Hauhinco connection diagram

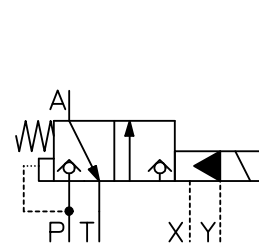
### Function of 3/2-way valve A→T NO

The valve piston (2) guided within the valve body (1) is pressed into the valve seat (3) by the hydraulic power and the spring force (7) generated by the operating pressure (P) on the control surface (6). Thus, the line (P) is shut off and the lines (A, T) are connected. By switching the pilot valve (5), the control surface (8) is pressurised and the valve piston (2) is moved into the actuated position. Thus, the valve piston (2) is pressed into the valve seat (4), the lines (P, A) are connected and the line (T) shut off. Within the switching phase, the valve is provided with a positive overlap

### Examples 3/2-way valve A→T NO:



### Symbol

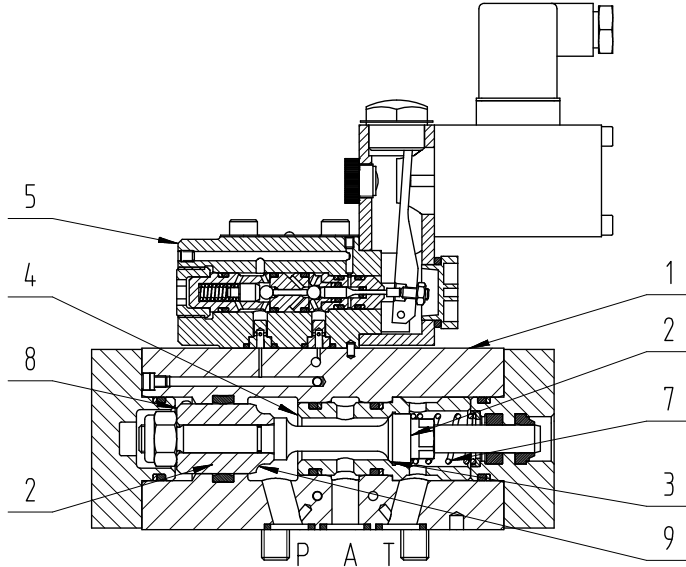


### Function of 3/2-way valve P→A NO

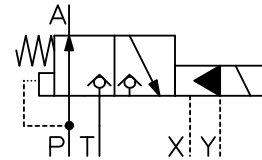
The valve piston (2) guided within the valve body (1) is pressed into the valve seat (3) by the hydraulic power and the spring force (7) generated by the operating pressure (P) on the control surface (9). Thus, the line (T) is shut off and the lines (P, A) are connected. By switching the pilot valve (5), the piston valve area (8) is pressurised and the valve piston (2) is moved into the actuated position. Thus, the valve piston (2) is pressed into the valve seat (4), the lines (A, T) are connected and the line (P) is shut off. Within the switching phase, the valve is provided with a positive overlap.

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Examples 3/2-way valve P→A NO:



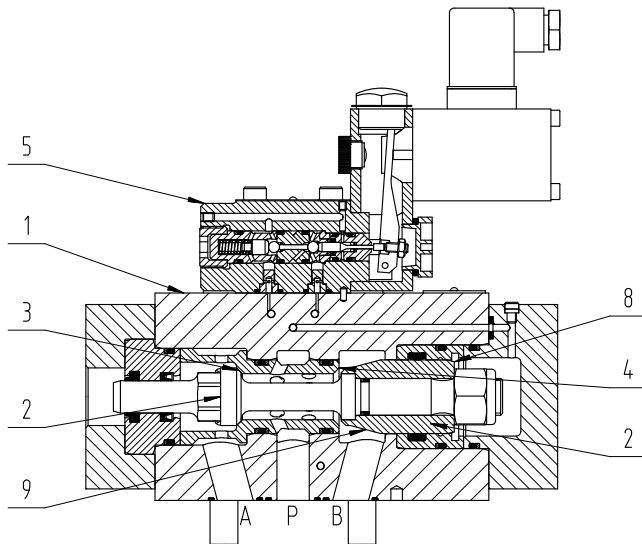
Symbol



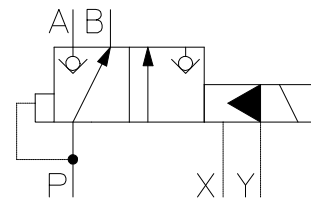
### Function of 3/2-way valve P→B NO

The valve piston (2) guided within the valve body (1) is pressed into the valve seat (3) by the hydraulic power generated by the operating pressure (P) on the control surface (9). Thus, the line (A) is shut off and the lines (P, B) are connected. By switching the pilot valve (5), the control surface (8) is pressurised and the valve piston (2) is moved into the actuated position. Thus, the valve piston (2) is pressed into the valve seat (4), the lines (P, A) are connected and the line (B) shut off. Within the switching phase, the valve is provided with a negative overlap.

Examples 3/2-way valve P→B NO:



Symbol



## 3/2-way valve B2, DN10 – DN16 | PN320 - X, Y- externally

### 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, except for the electromagnet
- Seals	NBR, PTFE

#### hydraulic

hydraulic pressure connector <b>P</b>	≤ 320 bar
hydraulic pressure connector <b>A</b>	≤ P ≤ 320 bar
hydraulic pressure connector <b>T, Y</b>	≤ 10 bar
hydraulic pressure connector <b>X</b>	≥ 30 bar ≥ P ≤ 320 bar
Direction of flow	P → A, A → T
Pressure fluid	<b>Water, HFA</b>
- Medium - Quality	see Hauhinco media requirement, water, HFA
- Medium - Temperature range	5 – 40°C
- min filter fineness connector P, A	Filter fineness 100µm
- min filter fineness connector X	Filter fineness 25µm
Pressure fluid	<b>Mineral oil HLP according to DIN51624-2</b>
- Medium - Quality	Cleanliness class -/19/16 according to ISO 4406
- Medium - Temperature range	5 – 50°C
- Viscosity	0.6 to 100 mm <sup>2</sup> /s

Use of other pressure fluids on request.

#### electric

<b>Magnet</b>	
Voltage	24 VDC
Power consumption	21 W
Operating time	100% OT
Degree of protection acc. to EN60529	IP65
max. switching rate	0.5 Hz

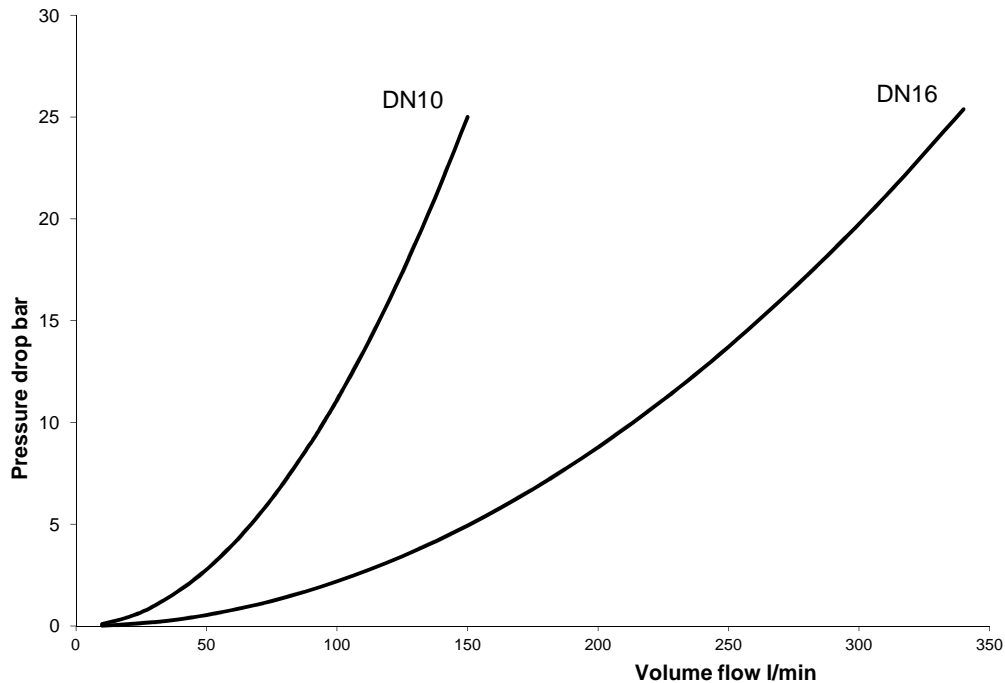
#### Ranges of application

3/2-way valve A→T NO, -P→A NO	Actuation of hydraulic drives (hydraulic cylinder). These valves will particularly be used if due to the medium a separation between the operating and the control circuit is required.
3/2-way valve P→B NO	The valve works like a hydraulic separator; optionally, it may pass on the supplied pressure and the volume flow from line P to line A or B. Thus, optionally pressure can be applied to two different pressure circuits.

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### Valve characteristics

$\Delta p - q_v$  characteristic curves

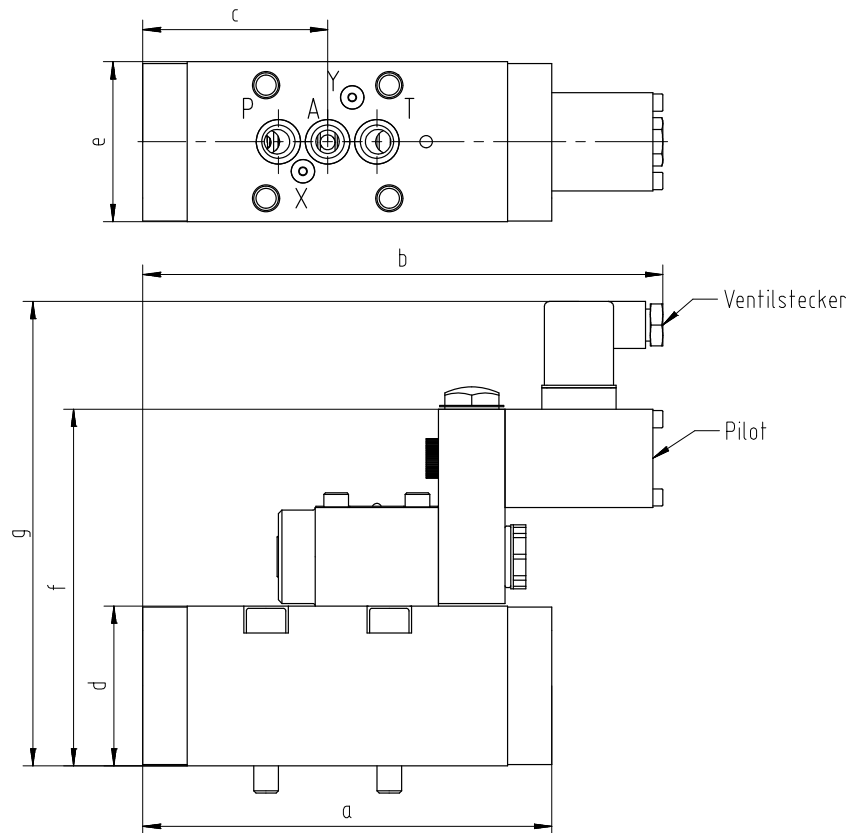


### Valve data

Nominal value		DN10		DN16		DN16			
Pressure stage		PN320		PN320		PN320			
Weight		7 kg		13.5 kg		13.5 kg		kg	
3/2-way valve	hydraulic	A→T NO	P→A NO	A→T NO	P→A NO	P→A NO	P→B NO		
	Art. No.	6270646	6270662	6270425	6270441	6259596	6259596		
	a	166	166	217	217	205	205		
	b	211	187	218	231	206	206		
	c	75	91	102	115	90	90		
	d	65	65	90	90	90	90		
	e	65	65	90	90	90	90		
	f	145	145	170	170	170	170		
g	189	189	214	214	214	214			
Connection diagram	Art. No.	6556302		6555829		6555829			
min. pressure difference P→T		30 bar	30 bar	30 bar	30 bar	30 bar	30 bar		
Pilot valve	DN	3		3		3			
	hydraulic	A→T NO		A→T NO		P→A NO	A→T NO	A→T NO	
	Art. No.	6545599		6545599		6545602	6545599		
	Actuation	Electromagnet, voltage 24V DC							
		1.0 A		1.0 A		1.0 A			
		Cable socket magnet DIN43650 – form A: max. 100VA, LED display + Z-diode, IP65							

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### Dimension sheet



Deutsch	Englisch
Ventilstecker	Valve connector
Pilot	Pilot

#### Included in the scope of supply:

Mounting screws of the valve

Cable socket of the valve solenoid

- Supply voltage 24 VDC

Cheese-head screw

according to DIN 43650 – type of design A

max. 100 VA

Ordering example 1: 3/2-way valve B2 – DN10 - PN320 - XY-externally, 24 VDC, A-T NO  
 1 item, 3/2-way valve DN10, Art. No. 6270646  
 1 item, 3/2-way valve DN3, Art. No. 6545599