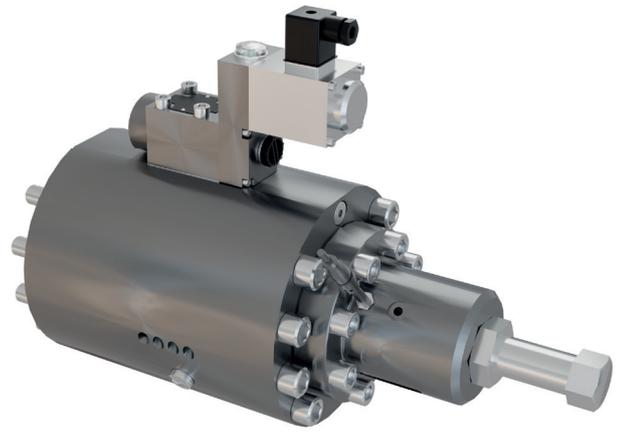


2/2-way valve C3 X, Y actuated

DN16 - DN100 PN 500



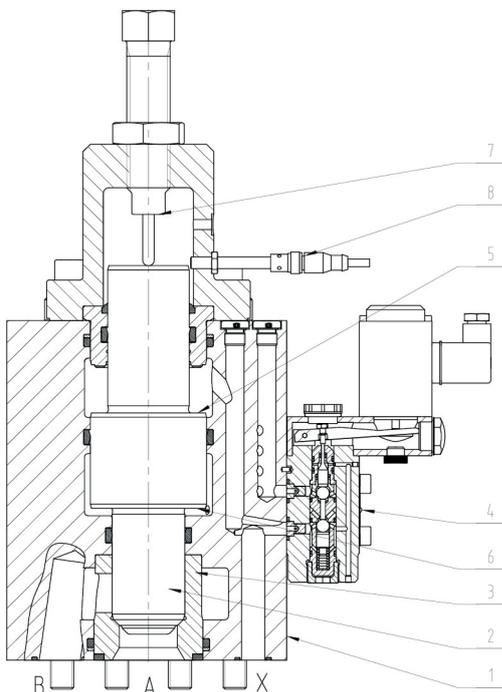
Features

- Hydraulically actuated directional seat valve controlling liquid media.
- Actively controllable 2/2-way valve with a 3-stage control logic provides safe opening and closing
- The valve is actuated via a 3/2-way pilot valve
- Valve piston and seat are coupled and close hydraulically „leak-free“.
- Valve pistons are sealed via seals within the body, thus no inner leakages develop
- Valve fastening structural plate form with a Hauhinco connection diagram
- The valve cross-section can be set via the stroke limitation and be locked mechanically
- Optically and with an optional proximity switch, the valve position can be monitored
- Optionally, a locking device can be selected for the stroke limitation

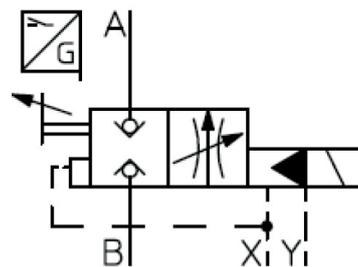
Function

The valve piston (2) guided within the valve body (1) is pressed into the valve seat (3) by the hydraulic power generated by the control pressure (X) on the closing area (5), provided the opening area (6) is depressurised by the pilot valve (4). Thus, the lines (A, B) are separated. By switching the pilot valve (4), also the opening area (6) of the valve piston (2) is pressurised and lifts off the valve seat (3), the valve piston (2) moves into the opened position up to the mechanical end position and to the stroke limitation (7). Thus, the lines (A, B) are connected. The valve can be opened and closed actively by means of control pressure (X, Y), independent of the pressure along the work lines (A, B). The area ratios „opening area/closing area“ and „closing area/cable area (A, B)“, ensure a safe opening and closing of the valve. Depending on the design of the pilot valve (4), the basic valve position normally closed (NC) or normally open.

Example 2/2-way valve C3 - X,Y - actuated



Symbol



Control surfaces, hydraulic forces
 A channel: Area A1, open valve passively
 B channel: Area A2, open valve passively
 Control surface (6): A3, open valve actively
 Control surface (5): A4, close valve actively

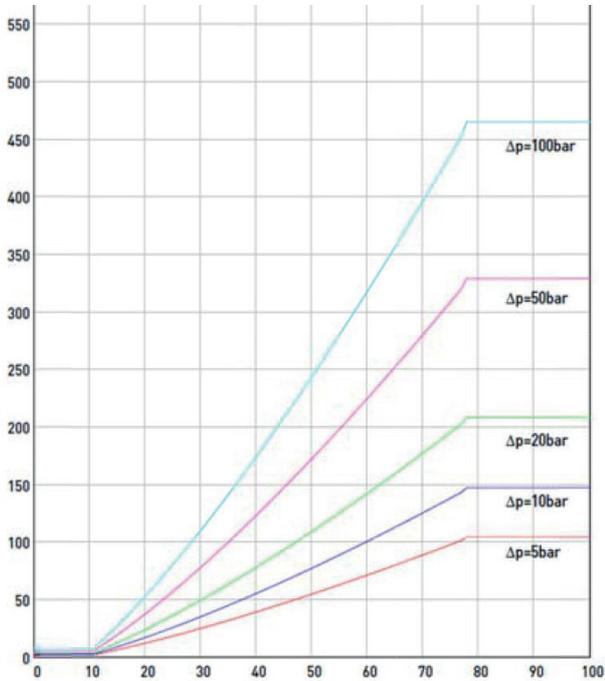
Technical data

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

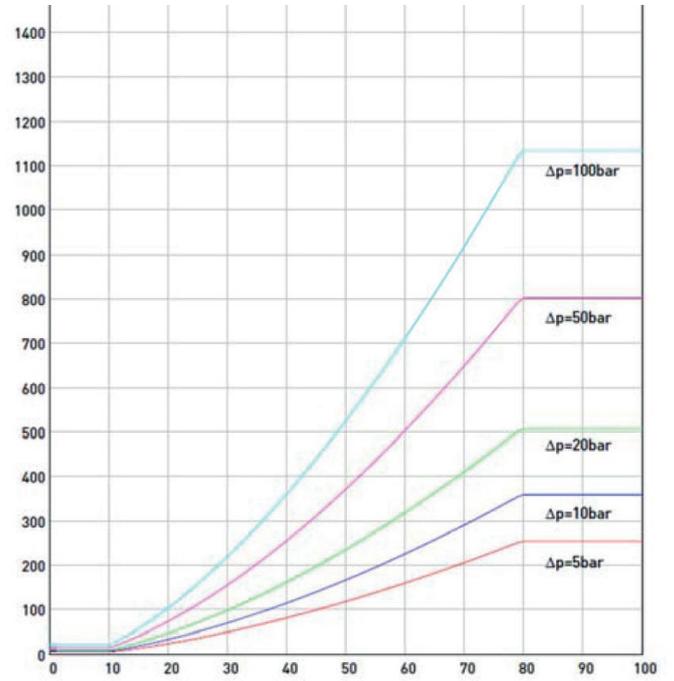
General	
Weight	see Order information
Installation position	any
Ambient temperature	-10 to 50°C (hydraulic fluids, heed standard requirements)
Material Valve parts	Stainless steel, bronze
Material Seals	NBR, PTFE, PUR
Hydraulic	
Hydraulic pressure connector A, B	≤ 500 bar
Hydraulic pressure connector X	≥ 50 bar ≥ hydr. Druck am Anschluss A, B ≤ 500 bar
Hydraulic pressure connector Y	≤ 10 bar
Direction of flow	any, preferred direction of flow B→A
Area sum	A3 > A4, A4 > A1 + A2
Pressure fluid	Water, HFA
- Medium - Quality	see Hauhinco media requirement, water, HFA
- Medium - Temperature range	5 - 40°C
- min filter fineness connector A, B	Filter fineness 100µm
- min filter fineness connector X	Filter fineness 25µm
Pressure fluid	Mineral oil HLP according to DIN51624-2
- Medium - Temperature range	5 to 50°C
- Medium - Quality	Cleanliness class -/19/16 nach ISO 4406
- Viscosity	0,6 bis 100 mm ² /s
Use of other pressure fluids on request.	
Electric	
Magnet	
- Voltage	24 VDC, other voltages on request
- Power consumption	see Order information
- Operating time	100% ED
- Degree of protection acc. to EN60529	IP65
Inductive proximity switch	
- Output	NO contact, PNP
- Voltage	10 – 30 VDC
- Current	0,150 A
- Switching distance	2,0 mm
- Electrical connection	Three wire, plug connection M12x1

2/2-way valve C3, X, Y actuated, PN 500

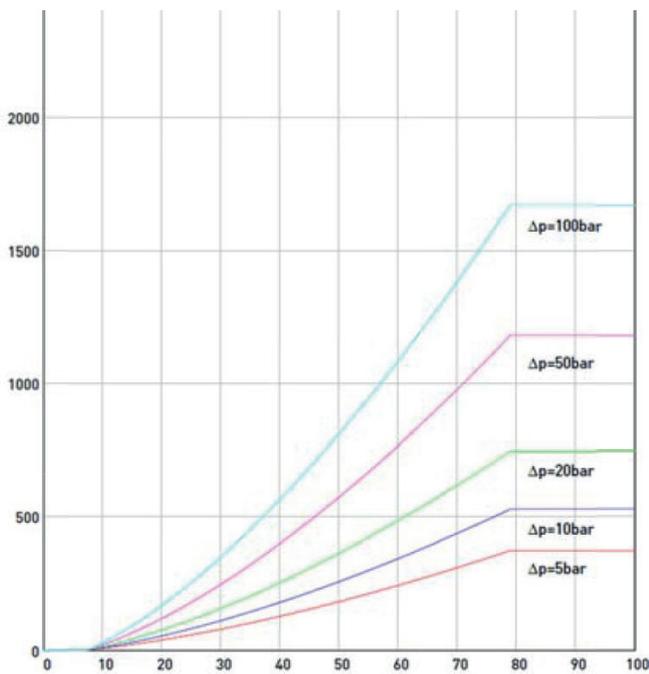
Δp - q_v characteristic curves DN16



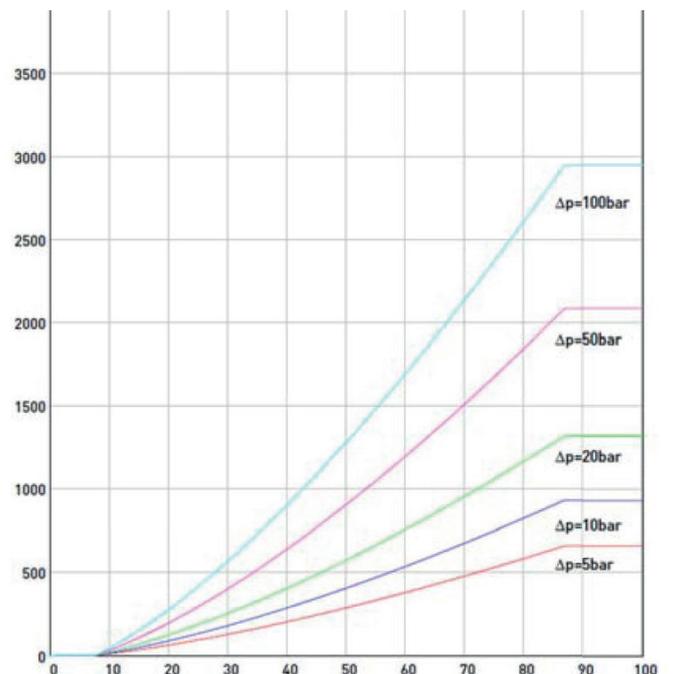
Δp - q_v characteristic curves DN25



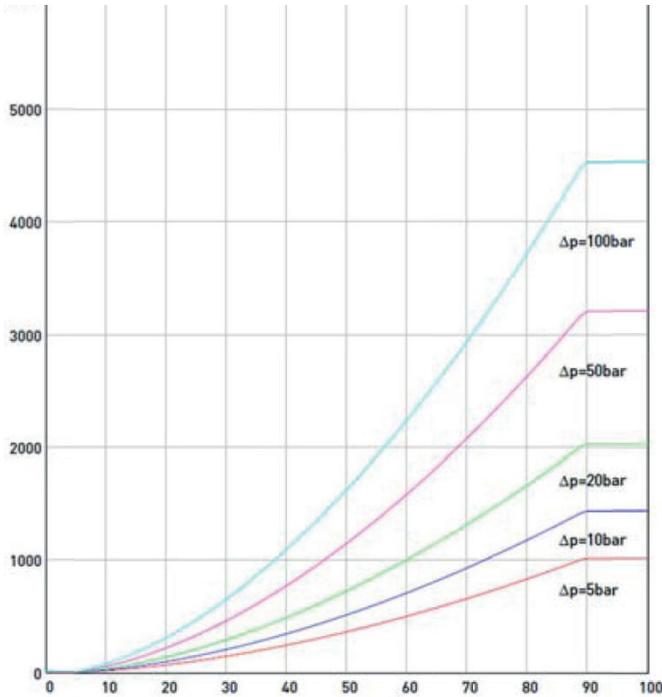
Δp - q_v characteristic curves DN32



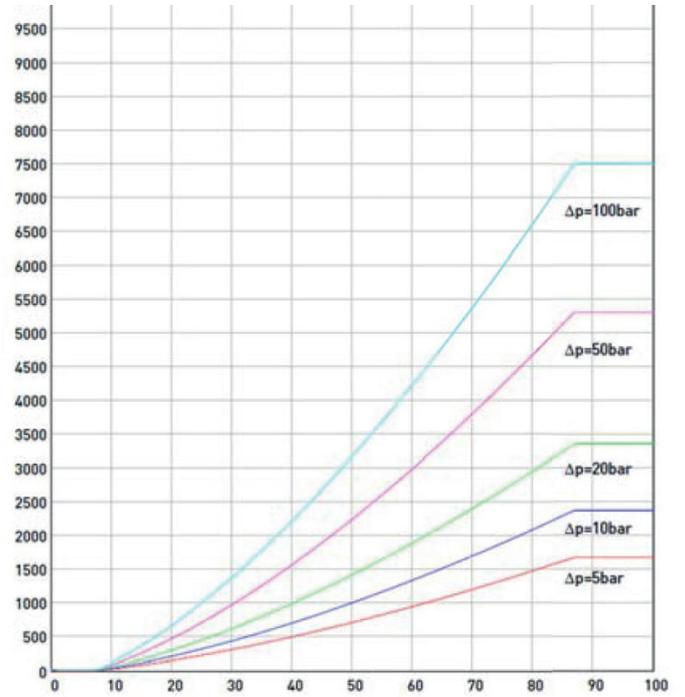
Δp - q_v characteristic curves DN40



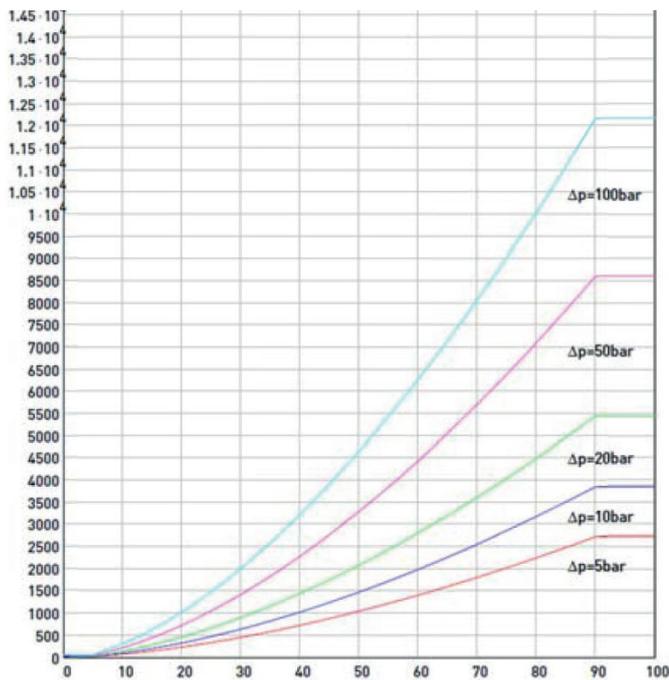
$\Delta p - q_v$ characteristic curves DN50



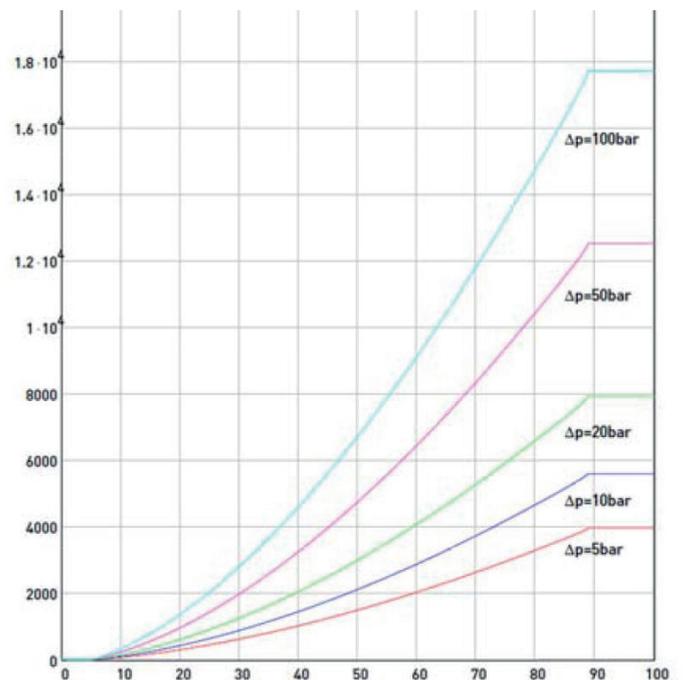
$\Delta p - q_v$ characteristic curves DN65



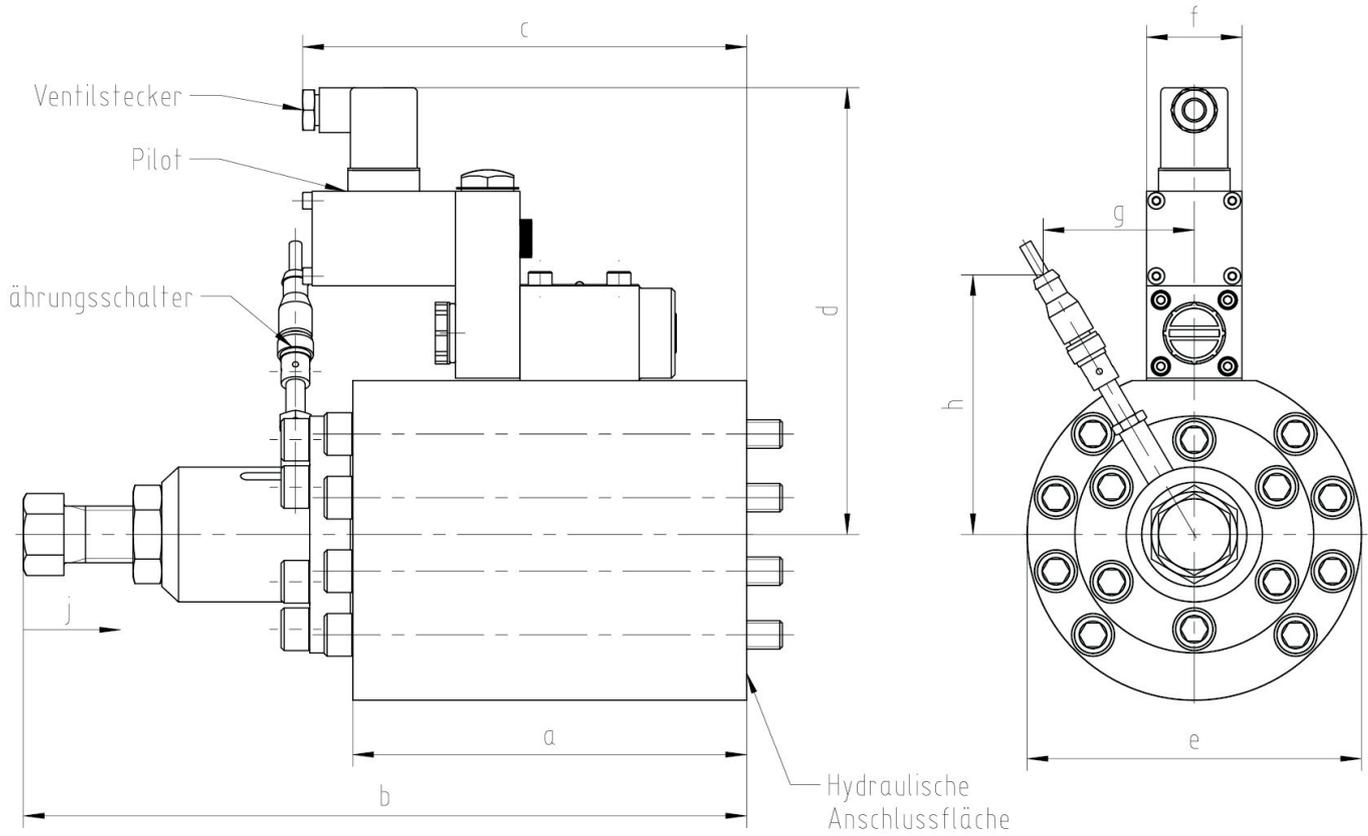
$\Delta p - q_v$ characteristic curves DN80



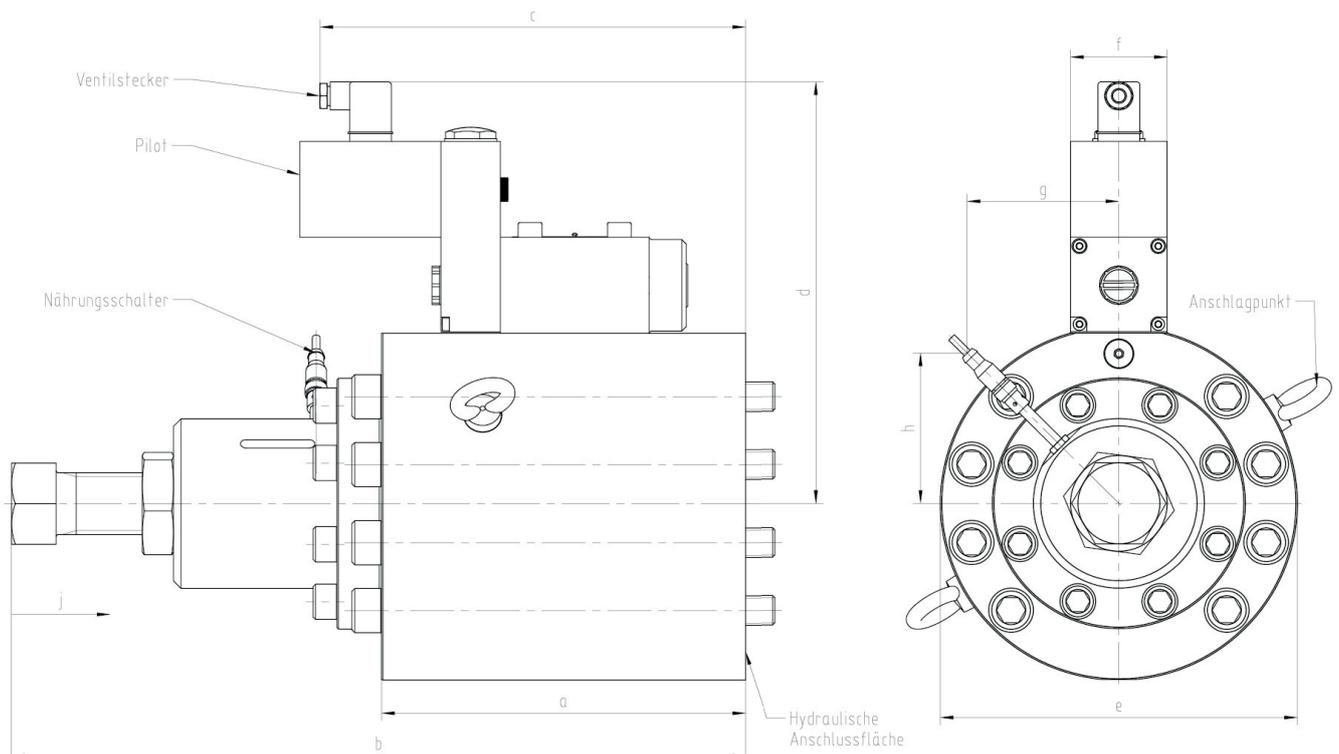
$\Delta p - q_v$ characteristic curves DN100



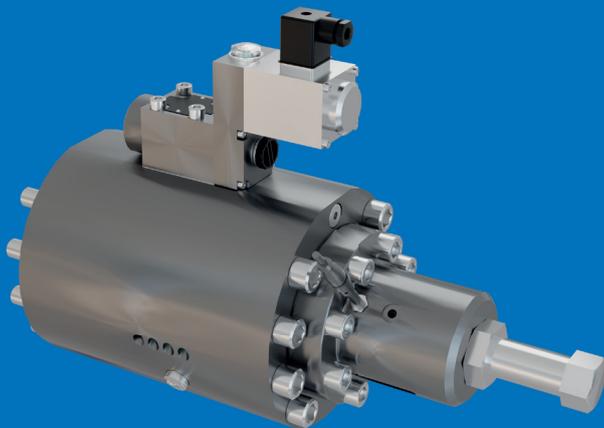
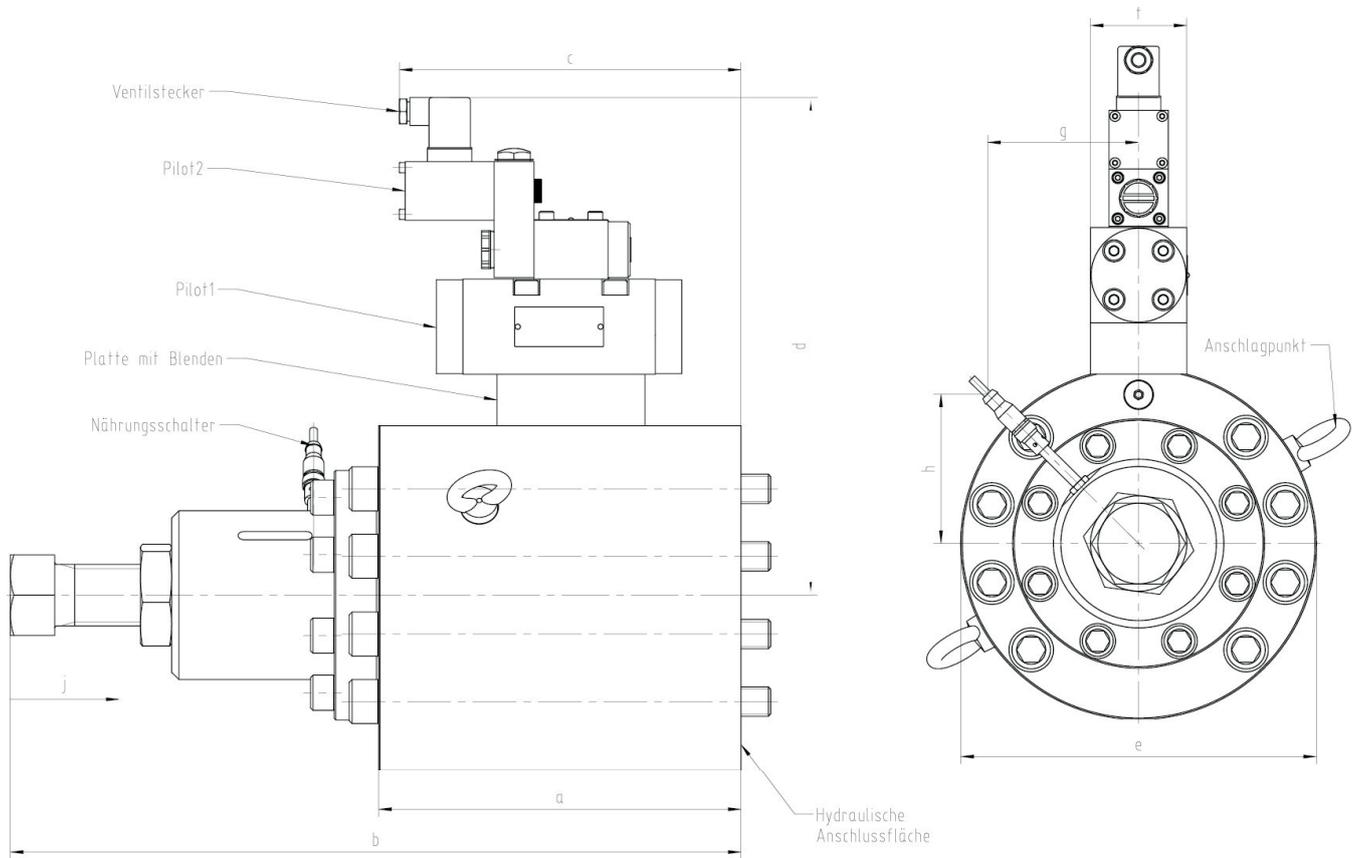
Single-stage pilot control, 2/2-way valve C3, X, Y actuated, PN 500, DN16 - DN32



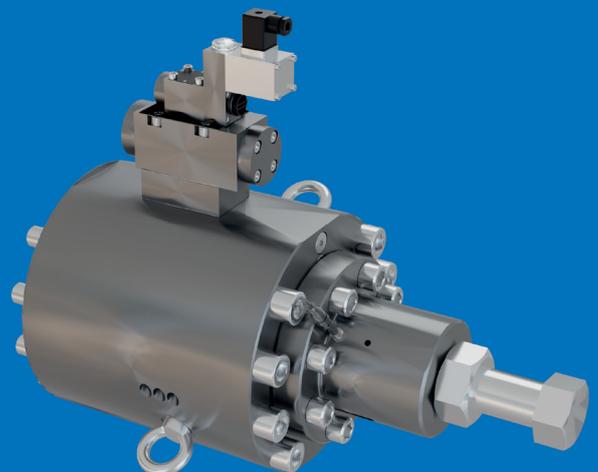
Single-stage pilot control, 2/2-way valve C3, X, Y actuated, PN 500, DN40 - DN80



Two-stage pilot control, 2/2-way valve C3, X, Y actuated, PN 500, DN16 - DN32



Single-stage pilot control



Two-stage pilot control

Order information 2/2-way valves C3 X, Y actuated

Included in the scope of supply

Mounting screws for the 2/2-way valve assembly

Mounting screws for the pilot valve

Cable socket for the magnet

Single-stage pilot control

Nominal size	Weight [kg]	max. Pressure [bar]	Basic position	Dimensions [mm]										Article number valve C3
				a	b	c	d	e	f	g	h	j		
DN16	13,0	500	NC	120	210	176	179	120	40	59	102	14,5	6600205	
DN16	13,0	500	NO	120	210	176	179	120	40	59	102	14,5	6600205	
DN25	20,0	500	NC	147	270	186	189	130	40	63	108	19	6165176	
DN25	20,0	500	NO	147	270	186	189	130	40	63	108	19	6165176	
DN32	35,0	500	NC	163	320	186	208	176	40	64	110	22	6148565	
DN32	35,0	500	NO	163	320	186	208	176	40	64	110	22	6148565	
DN40	52,0	500	NC	182	378	214	232	196	50	93	93	24	6057772	
DN40	52,0	500	NO	182	378	214	232	196	50	93	93	24	6057772	
DN50	95,0	500	NC	235	475	240	255	240	50	97	97	31,5	6057780	
DN50	95,0	500	NO	235	475	240	255	240	50	97	97	31,5	6057780	
DN65	141,0	500	NC	245	528	287	310	294	65	102	102	37	6154751	
DN65	141,0	500	NC	245	528	287	310	294	65	102	102	37	6154751	
DN80	253,0	500	NC	295	585	308	345	370	65	109	109	40	6153917	
DN80	253,0	500	NC	295	585	308	345	370	65	109	109	40	6153917	

Order example

Item	Designation	Article number	Item	Designation	Article number
1	2/2-way valve DN65- PN500-X,Y actuated- 24VDC-NC single-stage pilot control	6154751	1	Inductive proximity switch, Output – PNP, NO contact, Voltage 10 – 30 VDC	5127726
1	Pilot valve DN10	6254543			

Pilot valve

Position monitoring

	Nominal size	Basic position	Actuation	Current	Article number Pilot valve	Designation	Article number monitoring
	DN3	A→T NO	Electromagnet, voltage 24V DC, Cable socket magnet DIN43650 – form A: max. 100VA, LED display + Z-diode, IP65	1,0 A	6545769	Inductive proximity switch, Output – PNP, NO contact, Voltage 10 – 30 VDC	5127726
	DN3	P→A NO		1,0 A	6545777		
	DN3	A→T NO		1,0 A	6545769		
	DN3	P→A NO		1,0 A	6545777		
	DN3	A→T NO		1,0 A	6545769		
	DN3	P→A NO		1,0 A	6545777		
	DN6	A→T NO		1,5 A	6546889		
	DN6	P→A NO		1,5 A	6546919		
	DN6	A→T NO		1,5 A	6546889		
	DN6	P→A NO		1,5 A	6546919		
	DN10	A→T NO		2,5 A	6254543		
	DN10	P→A NO		2,5 A	6254551		
	DN10	A→T NO		2,5 A	6254543		
	DN10	P→A NO		2,5 A	6254551		

Order information 2/2-way valve C3 X, Y actuated

Included in the scope of supply

Mounting screws for the 2/2-way valve assembly

Mounting screws for the pilot valves 1 and 2

Cable socket for the magnet

Two-stage pilot control

Nominal size	Weight [kg]	max. Pressure [bar]	Basic position	Dimensions [mm]										Article number valve C3
				a	b	c	d	e	f	g	h	j		
DN65	142,0	500	NC	245	528	231	364	294	65	102	102	37	6154751	
DN65	142,0	500	NO	245	528	231	364	294	65	102	102	37	6154751	
DN80	254,0	500	NC	295	585	252	400	370	65	109	109	40	6153917	
DN80	254,0	500	NO	295	585	252	400	370	65	109	109	40	6153917	
DN100	469,0	500	NC	340	705	277	451	466	65	82	142	55	6077250	
DN100	469,0	500	NO	340	705	277	451	466	65	82	142	55	6077250	

Order example

Item	Designation	Article number	Item	Designation	Article number
1	2/2-way valve DN100-PN500-X,Y actuated-24VDC-NC	6077250	2	Cover	6532292
1	Pilot valve 1, DN10	6600028	1	Pilot valve 2, DN3	6545769
1	Plate	6569714	1	Inductive proximity switch, Output – PNP, NO contact, Voltage 10 – 30 VDC	5127726

Position monitoring

Designation	Article number monitoring
Inductive proximity switch, Output – PNP, NO contact, Voltage 10 – 30 VDC	5127726

Pilot valve 1 Hydraulically actuated, X, Y internally

Pilot valve 2

	Nominal size	Basic position	Article number valve	Article number plate	Article number cover	Nominal size	Basic position	Actuation	Article number valve
	DN10	A→T NO	6271820	6569641	6569927	DN3	A→T NO	Electromagnet, voltage 24V DC, current 1.0A, Cable socket magnet DIN43650 – form A: max. 100VA, LED display + Z-diode, IP65	6545769
	DN10	P→A NO	6600028	6569641	6569927	DN3	A→T NO		6545769
	DN10	A→T NO	6271820	6569641	6569927	DN3	A→T NO		6545769
	DN10	P→A NO	6600028	6569641	6569927	DN3	A→T NO		6545769
	DN10	A→T NO	6271820	6569714	6532292	DN3	A→T NO		6545769
	DN10	P→A NO	6600028	6569714	6532292	DN3	A→T NO		6545769