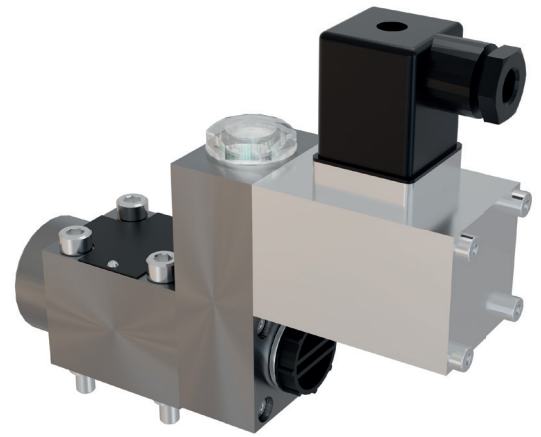


Directly actuated seat valves

2/2- and 3/2-way

Features

- Directly actuated directional seat valve controlling pressurised media.
- The valve seat seals hermetically preventing internal leaks.
- All parts are made of corrosion-resistant materials, and they are easily replaceable.
- Valve design in a structural plate form
- On request, the valve can be equipped with other actuations than the electromagnet, e.g. hydraulic or pneumatic cylinder actuation, manual pushbutton operation
- In addition, the individual actuations can be supplemented with a maintained-contact function

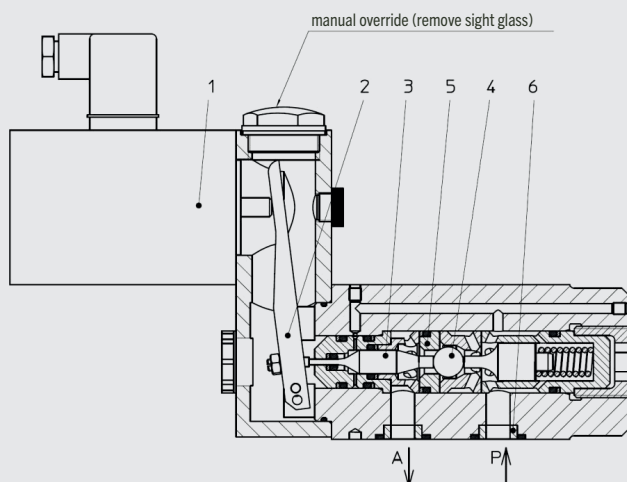


Function of 2/2-way valve

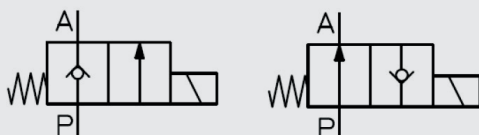
The force (1), generated by the actuation, acts through the lever (2), the tappet (3) on the ball (4) and presses it out of the valve seat (5). This is used to connect lines P and A, see Example. The ring (6) supports the flange seal from the inside. The volume flow is limited by the entire flow resistance.

Depending on the arrangement of the valve seat (5) and ball (4) the valve will have the basic position normally closed (NC) or normally open (NO).

Example 2/2-way valve



Symbol



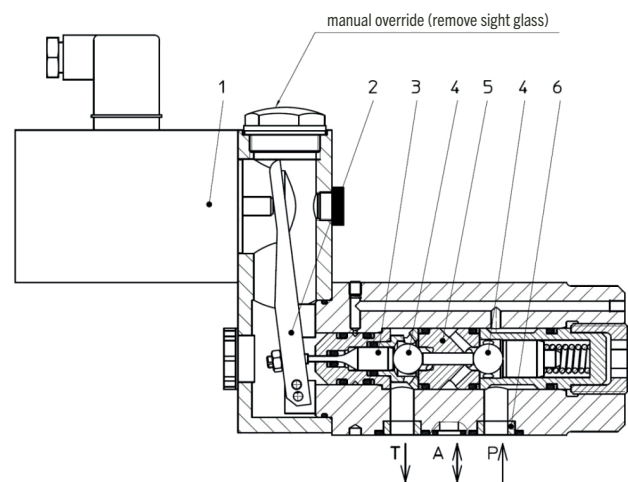
Function of 3/2-way valve

The force (1), generated by the actuation, acts through the lever (2), the tappet (3) on the ball(s) (4) and presses it out of the right valve seat (5) and into the left valve seat (5). This is used to connect lines P and A and shut off line T, see Example. The ring (6) supports the flange seal from the inside. The volume flow is limited by the entire flow resistance.

The 3/2-way valve is provided with a „negative overlap“. During the changeover process, connections P, A and T are briefly connected with each other. The changeover occurs so fast that the hydraulic effects are negligible. By design, a 3/2-way valve always requires the connection of a T-connector; only then a proper switching function can be ensured.

Depending on the design of the valve insert a valve with the basic position „A→T NO“ (lines A and T are connected) or „P→A NO“ (lines P and A are connected) is provided.

Example 3/2-way valve

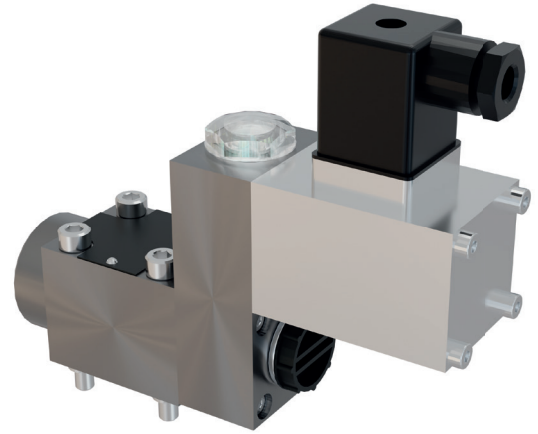


Symbol



Directly actuated seat valves DN3 | PN320 | 10l/min

2/2- and 3/2-ways



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 except electromagnet
Material Seals	NBR, PTFE

Hydraulic

max. operating pressure of connector P	320bar
max. operating pressure of connector A	320bar
max. operating pressure of connector T	50bar
max./min. control pressure of connector Z	see Order information
max. volume flow P→A	10 l/min
max. volume flow A→T	10 l/min
specified direction of flow	P→A, A→T
Pressure fluid	water, HFA
- Medium - Temperature range	5 to 50°C
- Medium - Quality	see Hauhinco requirements on water and HFA media
- Cleanliness class, filter fineness	class 20/18/15, filter fineness 25µm
- Viscosity	0,6 bis 100 mm ² /s
Pressure fluid	mineral oil, HLP
- Medium - Temperature range	-10 bis 50°C
- Medium - Quality	acc. to DIN 51524
- Cleanliness class, filter fineness	Class 20/18/15, filter fineness 25µm
- Viscosity	0,6 bis 100 mm ² /s
Use of other pressure fluids on request.	

Electric

Voltage	24 VDC, 110 VAC (96 VDC), 230 VAC (205 VDC)
AC grid, admissible tolerance	± 10%
AC grid, admissible frequency	50 to 60 Hz
Power consumption	21 W
Operating time	100% ED
Degree of protection acc. to EN60529	IP65
max. switching rate	1 Hz

Order information

Included in the scope of supply

Mounting screws of the valve	Cheese-head screw M6
Cable socket of the valve solenoid - Supply voltage 24 VDC - Supply voltage 110 VAC - Supply voltage 230 VAC	according to DIN 43650 – type of design A max. 100 VA, LED-Anzeige + Z-diode, IP65 max. 1.5 A, bridge rectifier, LED display, IP65 max. 1.5 A, bridge rectifier, LED display, IP65

2/2-way valve DN3 | PN320 | 10l/min

Designation	Basic position	Voltage	Article number
2/2 -way valve DN3 PN320, solenoid actuation, weight: 1,9kg	NC	24 VDC	6545572
	NC	110 VAC	6545610
	NC	230 VAC	6545653
2/2 -way valve DN3 PN320, solenoid actuation, weight: 1,9kg	NO	24 VDC	6545580
	NO	110 VAC	6545629
	NO	230 VAC	6545661
2/2 Wegeventil DN3 PN320, solenoid actuation with a catch, weight: 3,5kg	NC	24VDC	6574831
	NO	24VDC	6574858

Designation	Basic position	approx. manual force	Article number
2/2 -way valve DN3 PN320, pushbutton control with a catch, weight: 2,8kg	NC	30N	6568343
	NO	30N	6568351

3/2 -way valve DN3 | PN320 | 10l/min

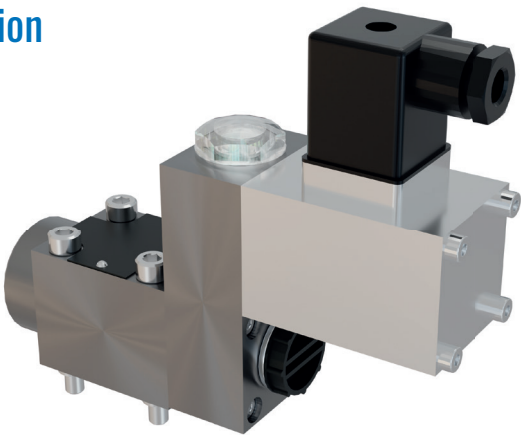
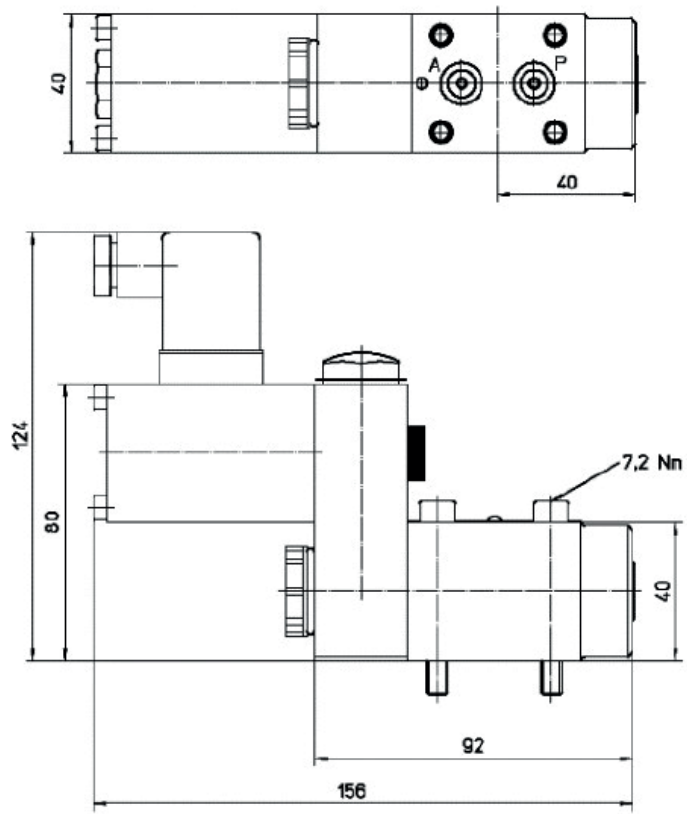
Designation	Basic position	Voltage	Article number
3/2-way valve DN3 PN320, solenoid actuation, weight: 1,9kg	A→T NO	24 VDC	6545599
	A→T NO	110 VAC	6545637
	A→T NO	230 VAC	6545688
3/2 -way valve DN3 PN320, solenoid actuation, weight: 1,9kg	P→A NO	24 VDC	6545602
	P→A NO	110 VAC	6545645
	P→A NO	230 VAC	6545696
3/2 -way valve DN3 PN320, solenoid actuation with a catch, weight: 3,5kg	A→T NO	24 VDC	6574866
	P→A NO	24 VDC	6574874
	P→A NO	230 VAC	6577938

Designation	Basic position	adm. control pressure „Z“	Article number
3/2 -way valve DN3 PN320, cylinder actuation pneumatic, hydraulic, weight: 1,6kg	A→T NO	3-320bar	6547818
	P→A NO	3-320bar	6547834

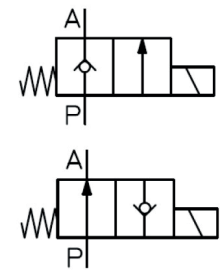
approx. manual force	Basic position	approx. manual force	Article number
3/2 -way valve DN3 PN320, pushbutton control, weight: 1,6kg	A→T NO	30N	6570976
	P→A NO	30N	6570984
3/2 Wegeventil DN3 PN320, pushbutton control with a catch, weight: 2,8kg	A→T NO	30N	6568378
	P→A NO	30N	6568386

2/2-way valve DN3 | PN320 | 10l/min, solenoid actuation

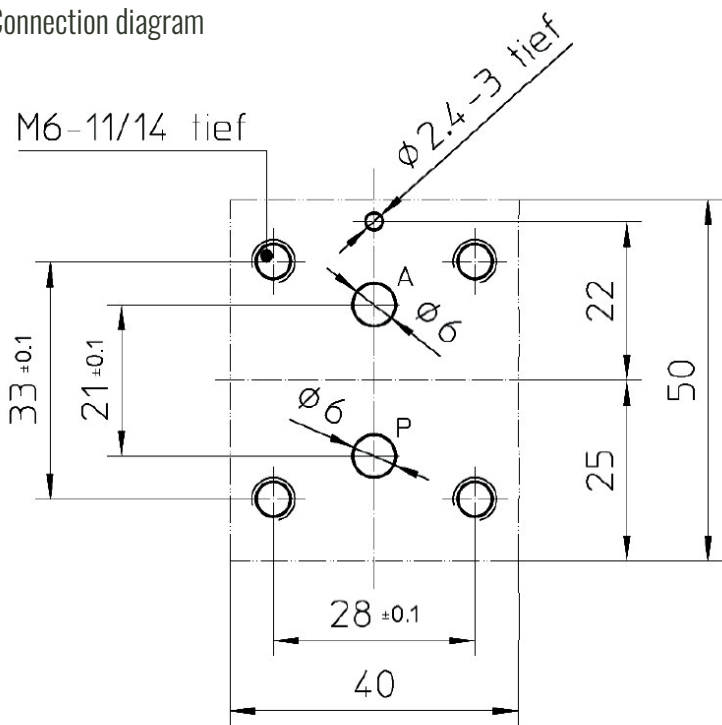
Dimensions



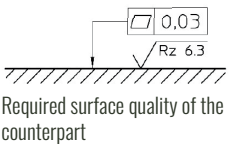
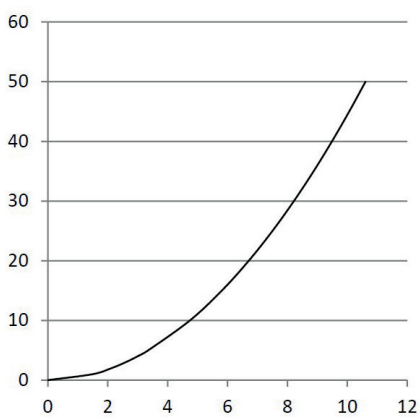
Symbol



Connection diagram

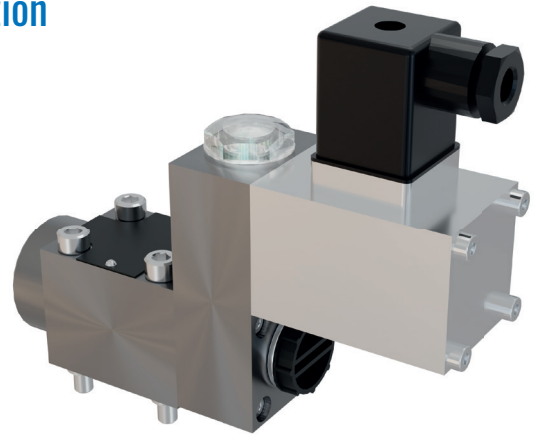
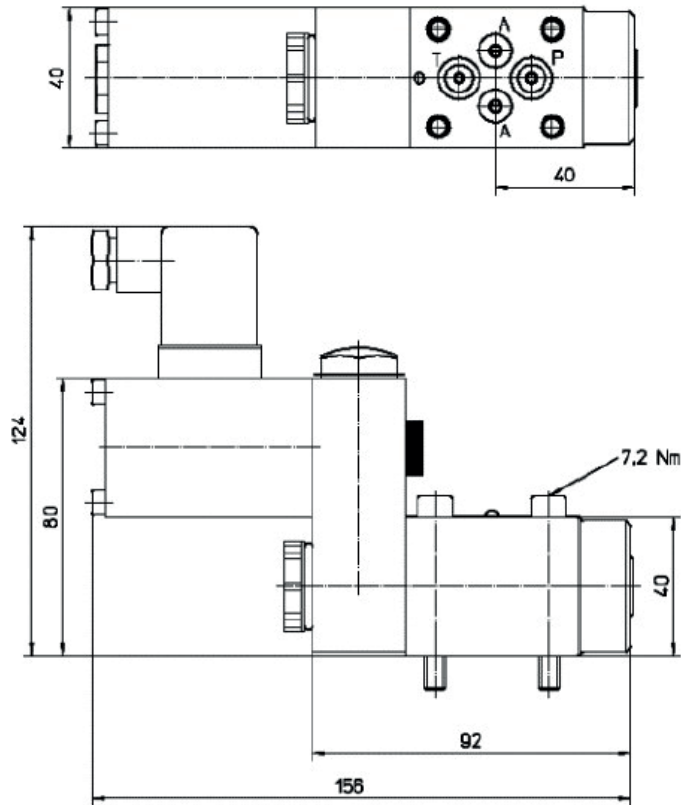


$\Delta p - qV$ characteristic curve

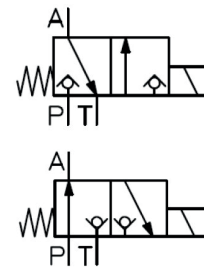


3/2-way valve DN3 | PN320 | 10l/min, solenoid actuation

Dimensions

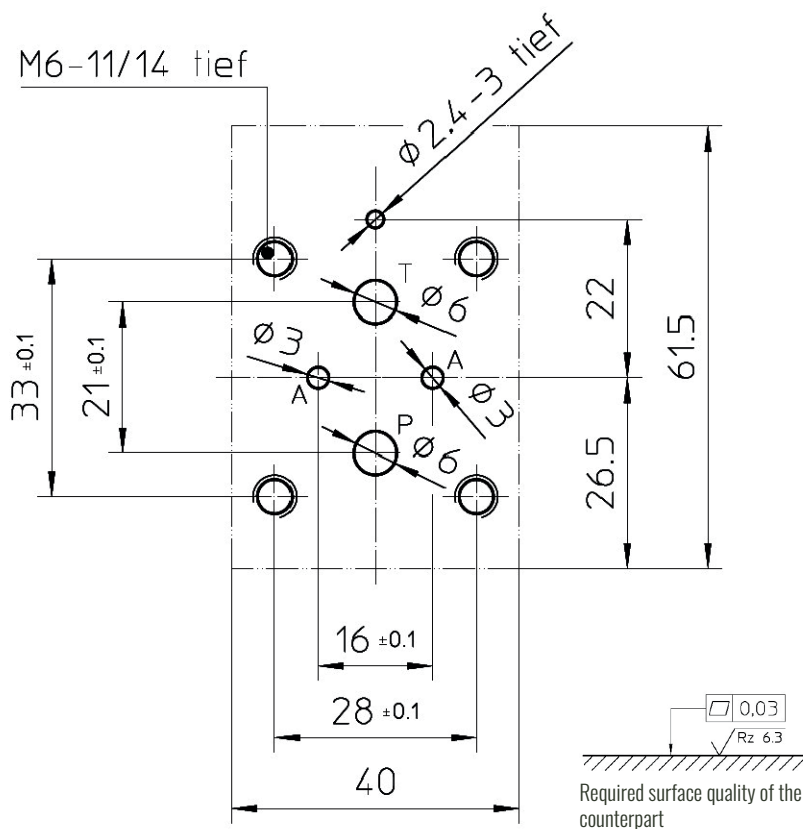
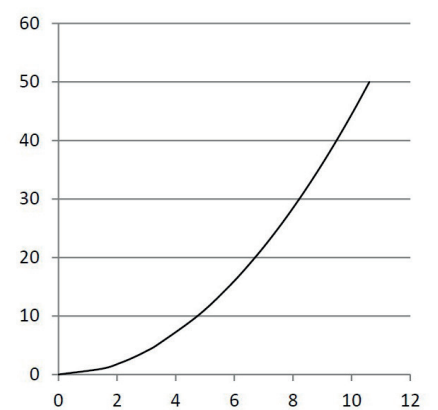


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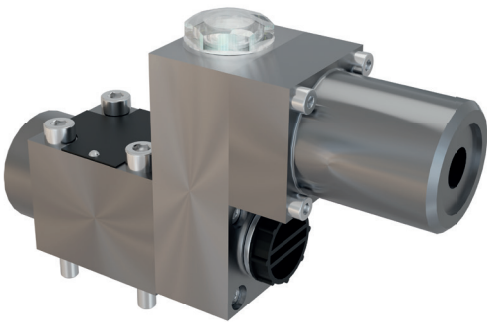
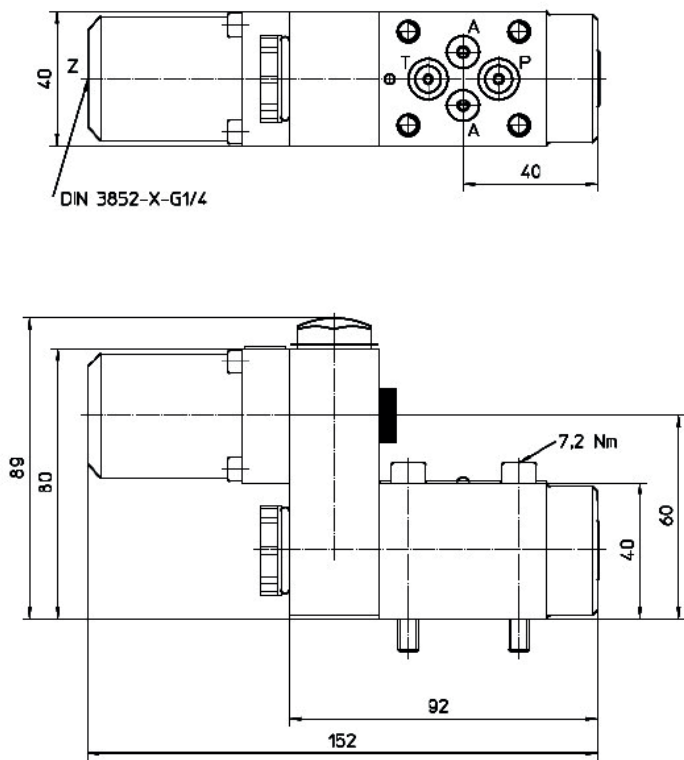
Connection diagram

$\Delta p - q_V$ characteristic curve

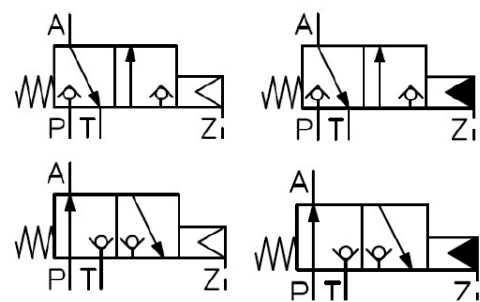


3/2-way valve DN3 | PN320 | 10l/min, cylinder actuation

Dimensions

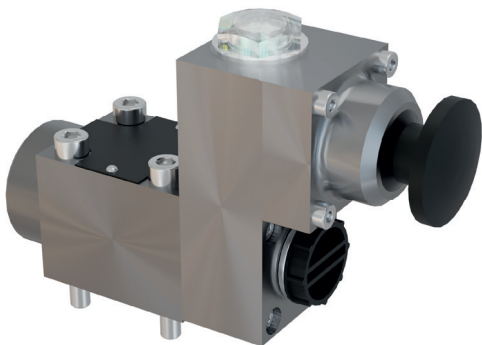
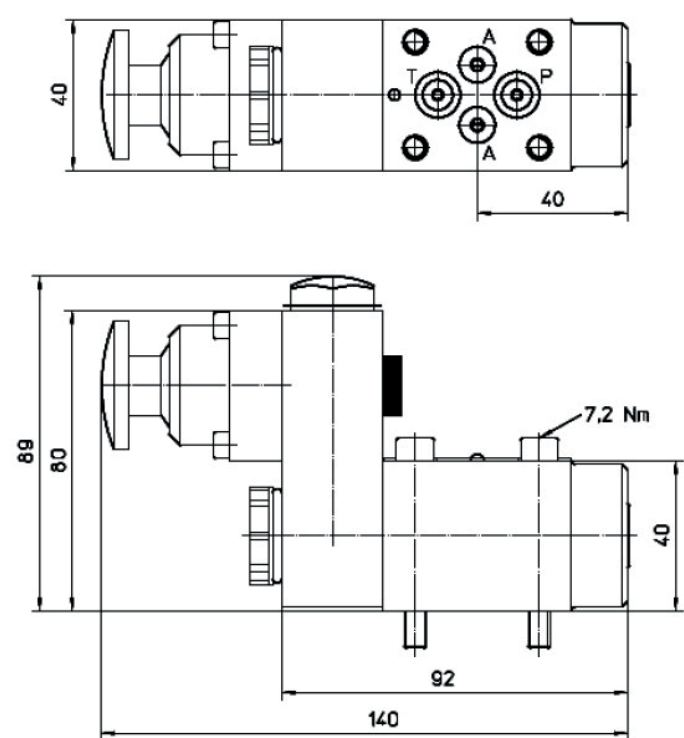


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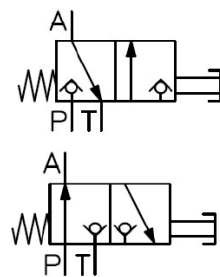


3/2-way valve DN3 | PN320 | 10l/min, pushbutton control

Dimensions

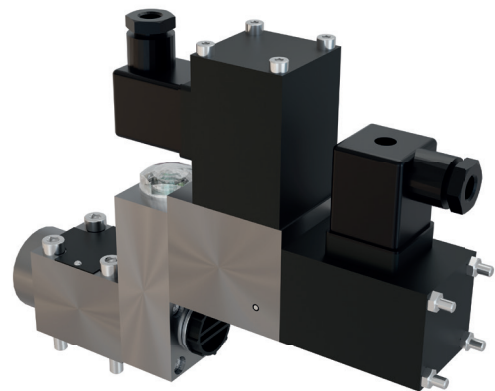
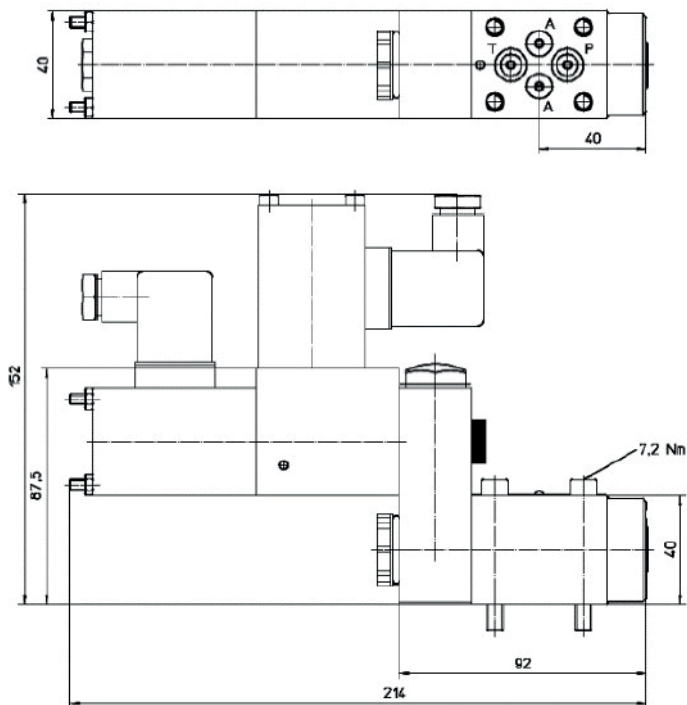


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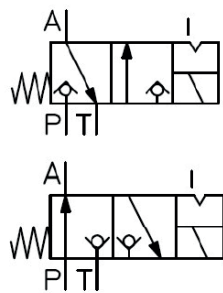


3/2-way valve DN3 | PN320 | 10l/min, solenoid actuation with a catch

Dimensions

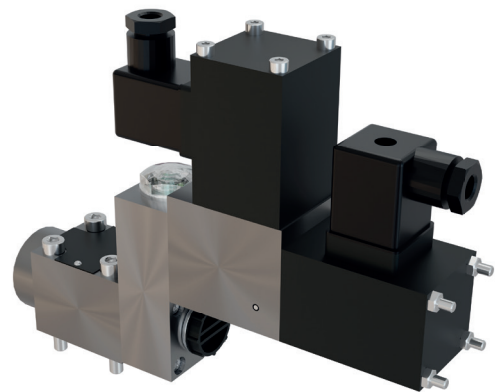
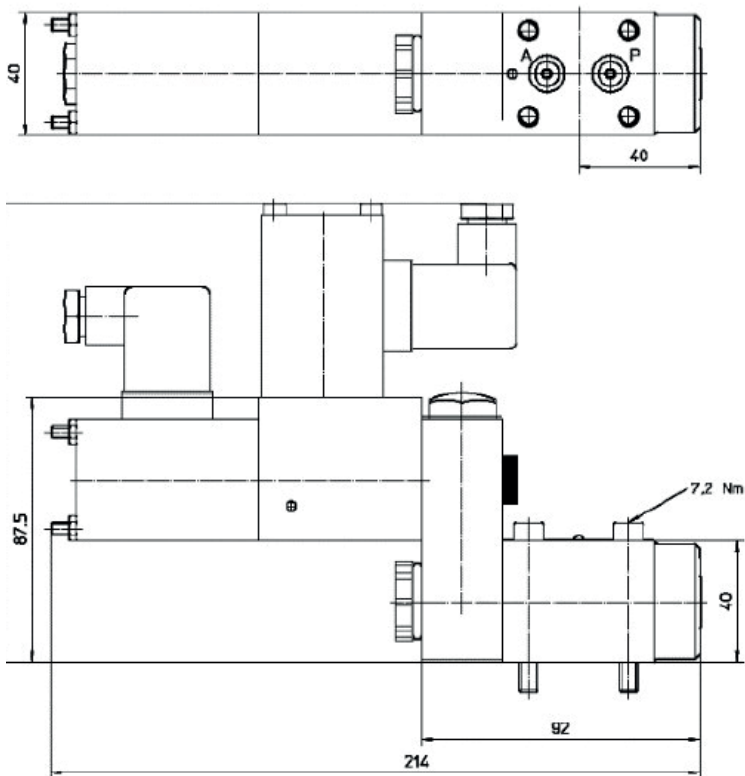


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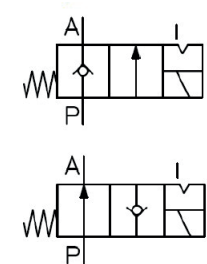


2/2-way valve DN3 | PN320 | 10l/min, solenoid actuation with a catch

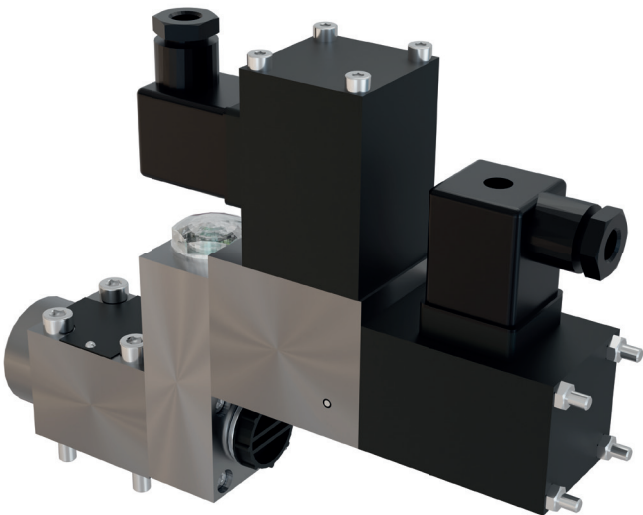
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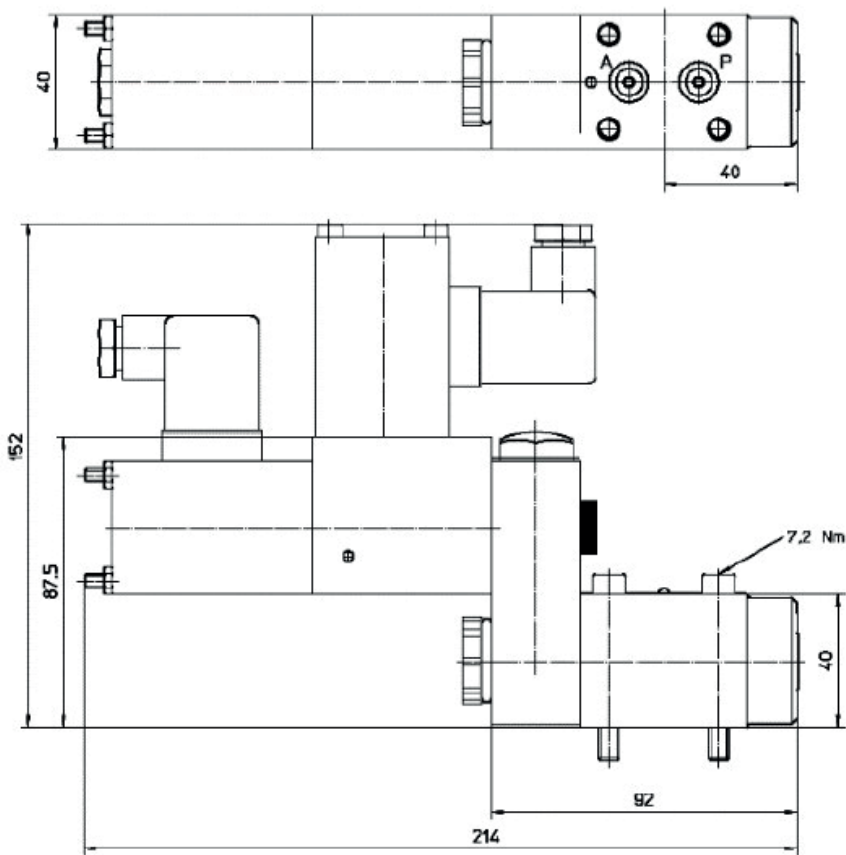
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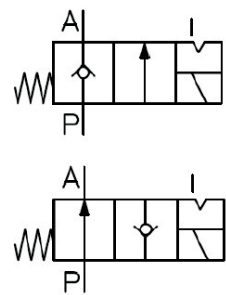
2/2-way valve DN3 | PN320 | 10l/min, solenoid actuation with a catch



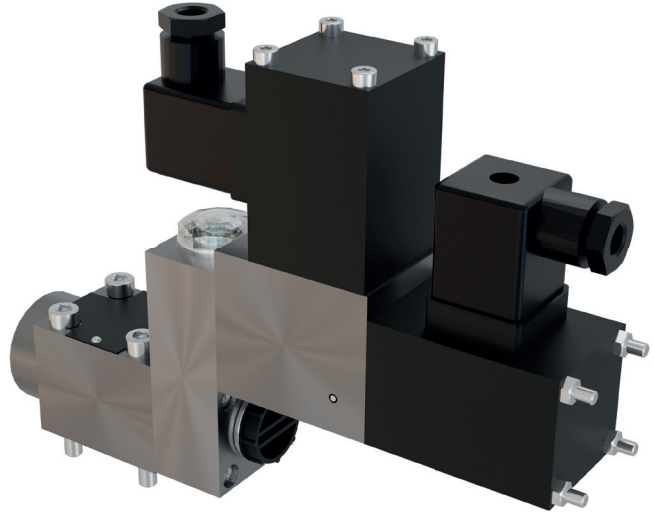
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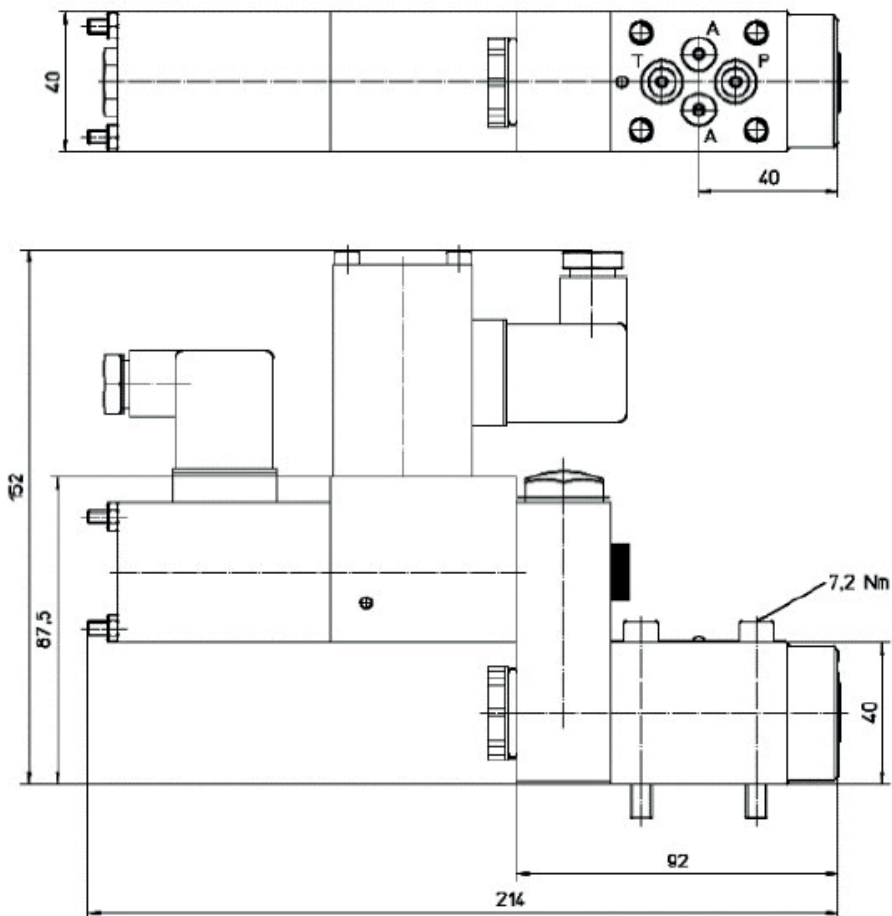
Symbol



3/2-way valve DN3 | PN320 | 10l/min, solenoid actuation with a catch



Dimensions



Symbol

