

Directly actuated seat valves 2/2- and 3/2-way

DN3
PN700
10 l/min

Features:

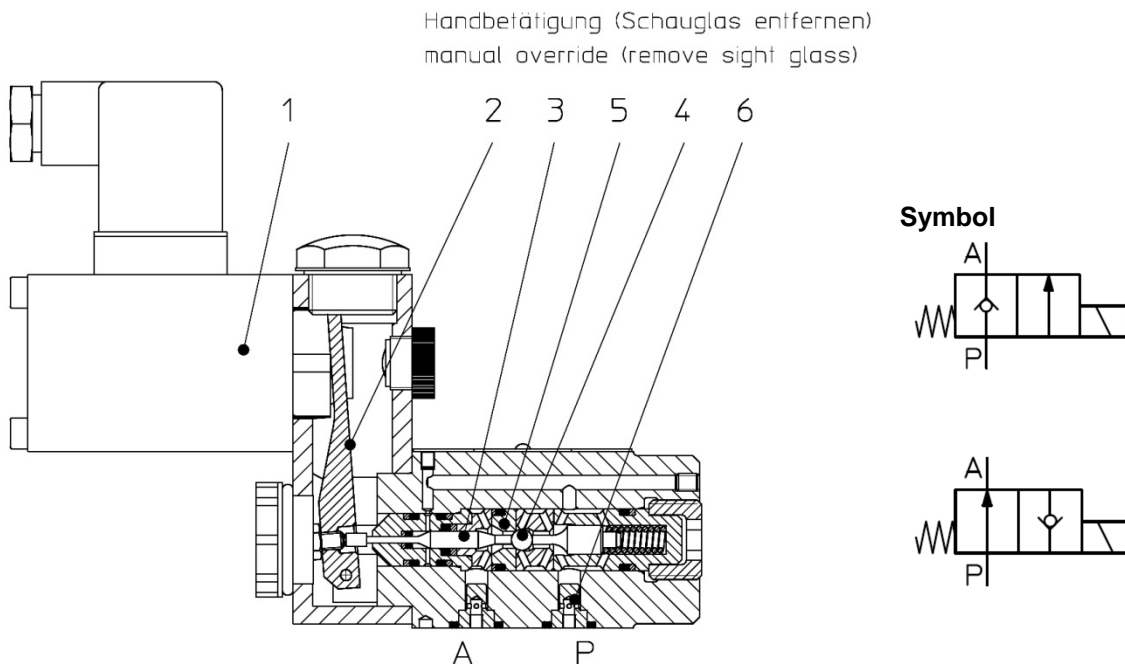
- Directly actuated directional seat valve controlling pressurised media
- The valve seat seals hermetically preventing internal leaks
- All parts are made of corrosion-resistant materials, and they are easily replaceable
- Valve design in a structural plate form
- FKM (Viton) seals
- On request, the 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 covers (6) support the flange seals from the inside and limit the volume flow to the admissible value.

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:



Directly actuated seat valves DN3 | PN700

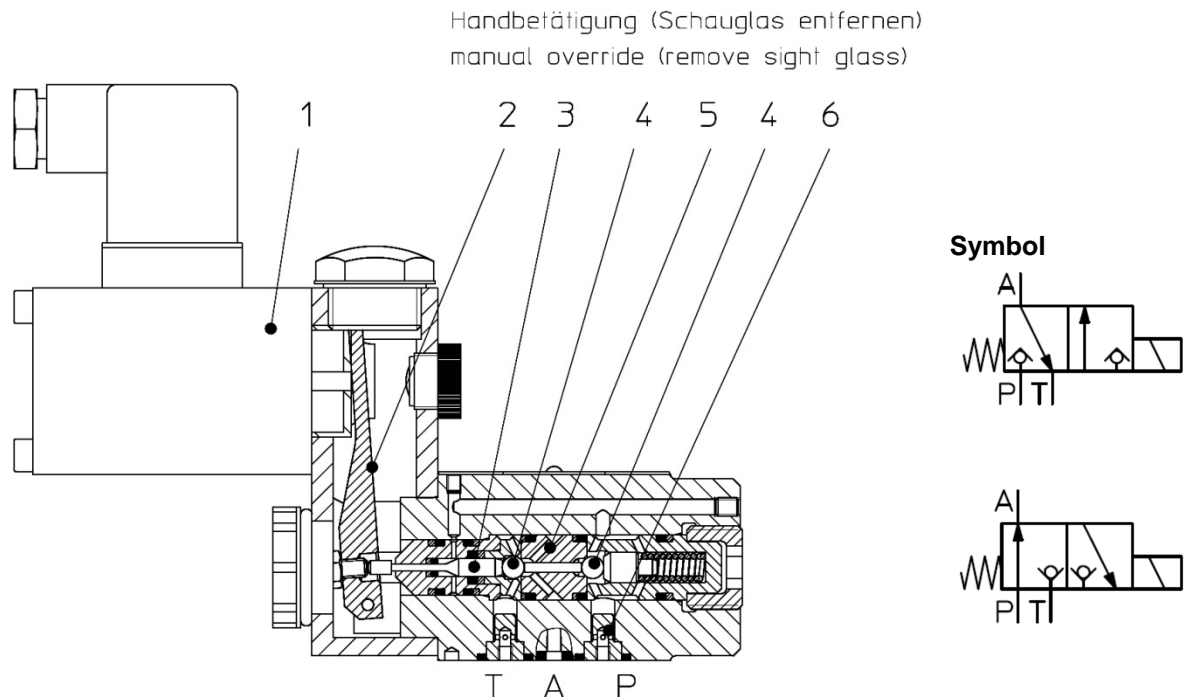
Function of 3/2-way valve:

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 covers (6) support the flange seals from the inside and limit the volume flow to the admissible value.

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:



Directly actuated seat valves DN3 | PN700

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
- Seals	FKM, PTFE

hydraulic

max. operating pressure of connector P	700 bar
max. operating pressure of connector A	700 bar
max. operating pressure of connector T	50 bar
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 to 100 mm ² /s
Pressure fluid mineral oil HLP	
- Medium - Temperature range	-10 to 50°C
- Medium - Quality	acc. to DIN 51524
- Cleanliness class, filter fineness	Class 20/18/15, filter fineness 25µm
- Viscosity	0.6 to 100 mm ² /s

Use of other pressure fluids on request.

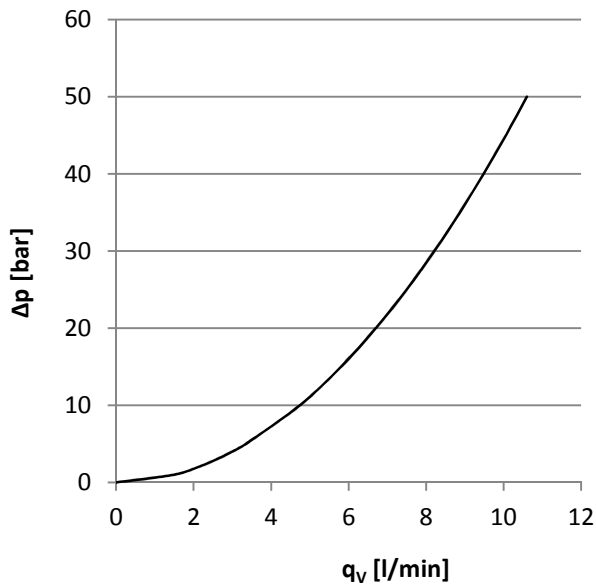
The covers (6) are designed with a viscosity of approx. 1.0 mm²/s; if a medium with a substantially different viscosity is used, the covers must be selected such that the maximum admissible volume flow is not exceeded.

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% OT
Degree of protection acc. to EN60529	IP65
max. switching rate	1 Hz

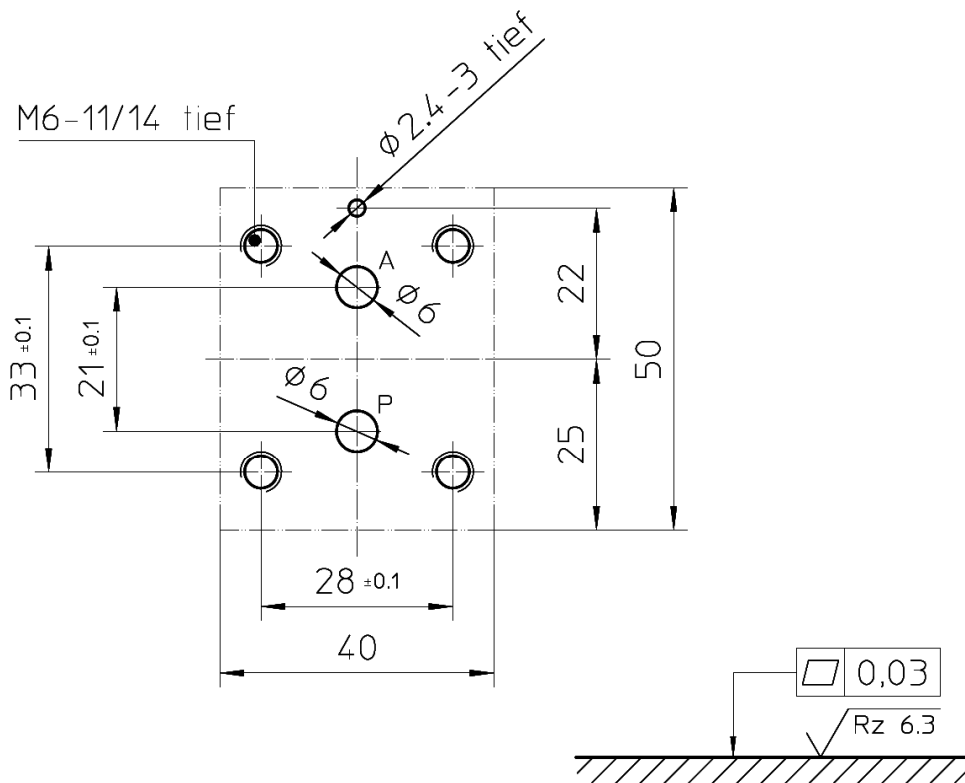
Directly actuated seat valves DN3 | PN700

$\Delta p - q_v$ characteristic curve



Connection diagram 2/2-way DN3

Drawing number 6559751

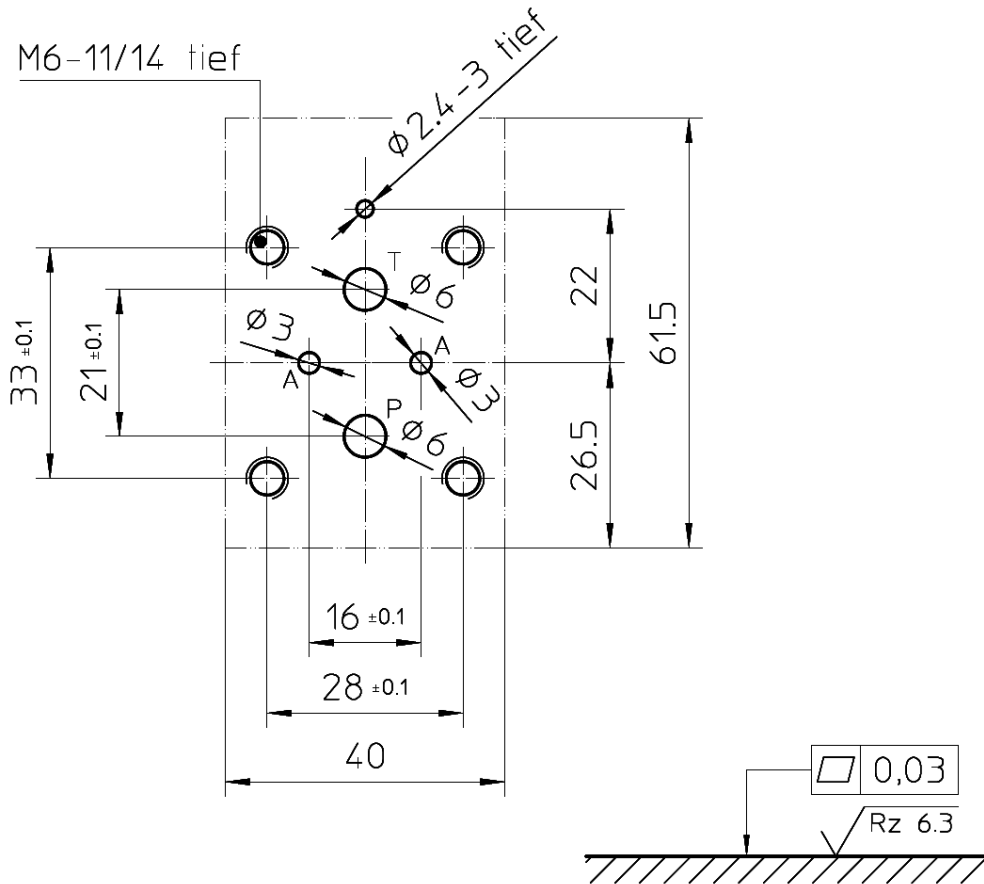


Erforderliche Oberflächengüte
des Gegenstückes

Directly actuated seat valves DN3 | PN700

Connection diagram 3/2-way DN3

Drawing number 6559778



Erforderliche Oberflächengüte
des Gegenstückes

Deutsch	Englisch
tief	depth
Erforderliche Oberflächengüte des Gegenstückes	Required surface quality of the counterpart

Included in the scope of supply

Mounting screws of the valve

Cable socket of the valve solenoid

- Supply voltage 24 VDC
- Supply voltage 110 VAC
- Supply voltage 230 VAC

Cheese-head screw M6

according to DIN 43650 – type of design A

max. 100 VA, LED display + Z-diode, IP65

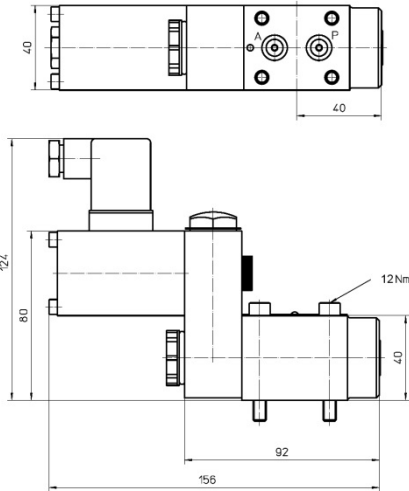
max. 1.5 A, bridge rectifier, LED display, IP65

max. 1.5 A, bridge rectifier, LED display, IP65

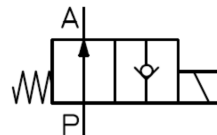
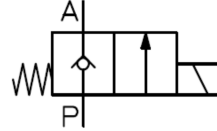
Directly actuated seat valves DN3 | PN700

2/2-way valve DN3 solenoid actuation

Dimensions:



Symbol

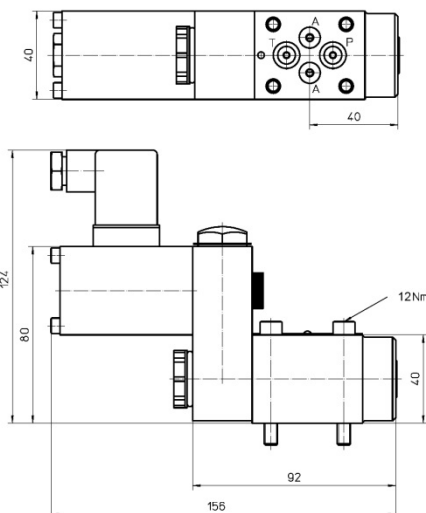


Weight: 1.9 kg

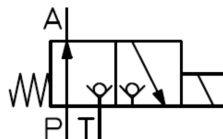
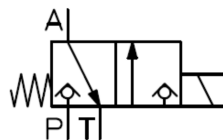
Designation	Voltage	Article number
2/2-way valve DN3 PN700 NC	24 V DC	6545742
	110 V AC	6545785
	230 V AC	6545823
2/2-way valve DN3 PN700 NO	24 V DC	6545750
	110 V AC	6545793
	230 V AC	6545831

3/2-way valve DN3 solenoid actuation

Dimensions:



Symbol



Weight: 1.9 kg

Designation	Voltage	Article number
3/2-way valve DN3 PN700 A→T NO	24 V DC	6545769
	110 V AC	6545807
	230 V AC	6546129
3/2-way valve DN3 PN700 P→A NO	24 V DC	6545777
	110 V AC	6545815
	230 V AC	6546137