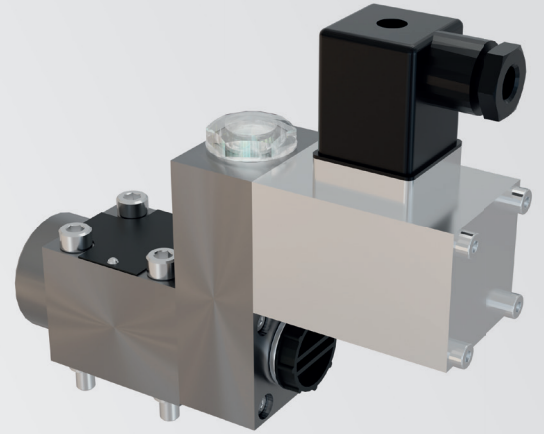


# Directly actuated seat valves

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

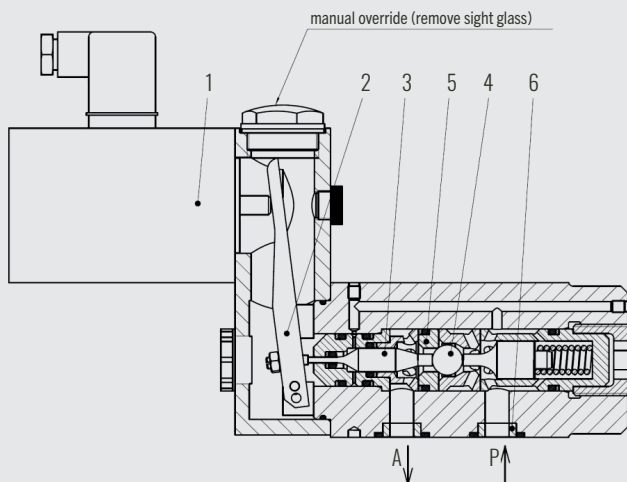


## Function of 2/2-way valve

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



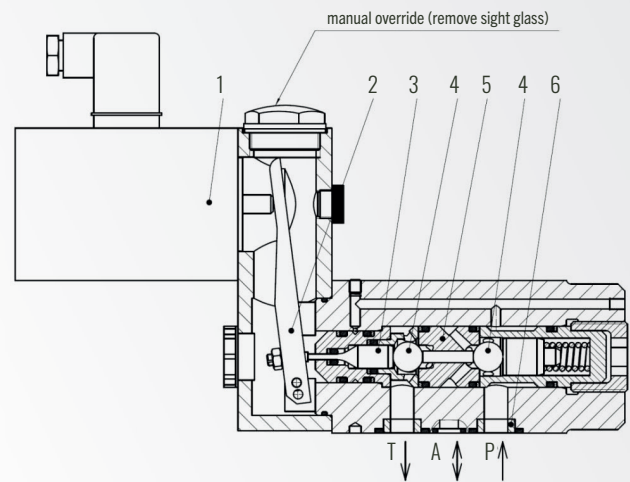
## Function of 3/2-way valve

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

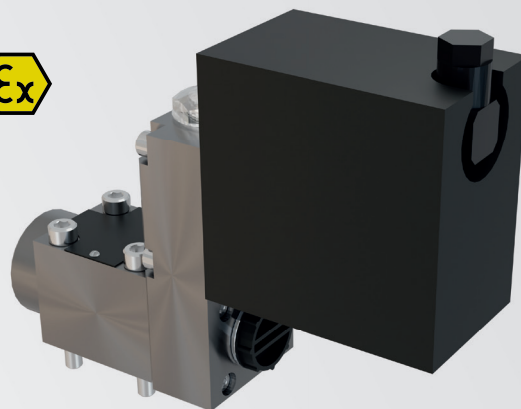


#### Symbol



# Directly actuated seat valves DN3 | PN480 | 10l/min

3/2-ways, Approval: BSV 04 ATEX E077



## Technical data

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

### General

Weight	3,9 kg
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	480bar
max. operating pressure of connector A	480bar
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 <sup>2</sup> /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 bis 100 mm <sup>2</sup> /s

Use of other pressure fluids on request.

The covers (6) are designed with a viscosity of approx. 1.0 mm<sup>2</sup>/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	12 VDC, max. 15 VDC
Current	0,2 A
Power consumption	2,24 W
Operating time	100% ED
Degree of protection acc. to EN60529	Body IP54, electrical connection IP65
Protection against ignition according to EN 50020	I 2G EEX ia II T6; I M2 EEx ia
max. switching rate	1 Hz

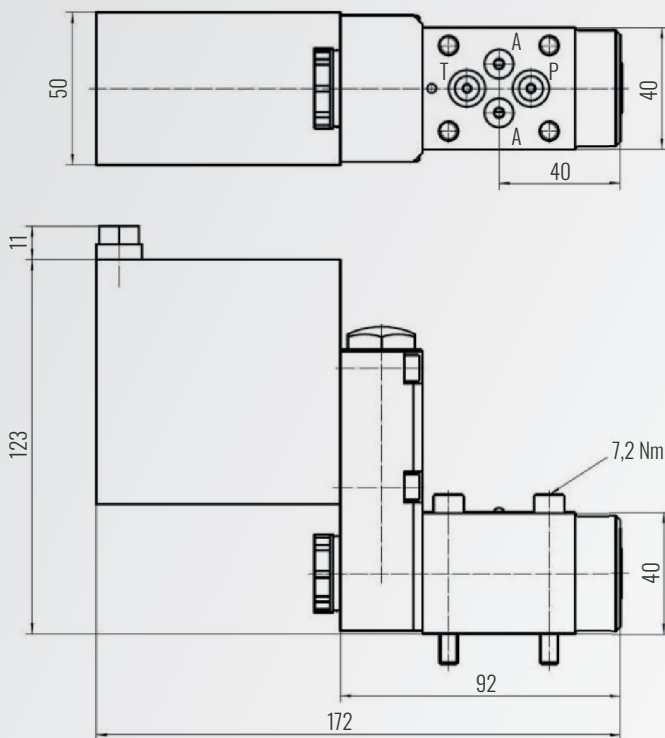
# Order information

## Included in the scope of supply

Mounting screws of the valve	Cheese-head screw M6
Cable socket of the valve solenoid	Hirschmann cable socket G - series

Designation	Basic position	Voltage	Article number
3/2-way valve DN3 PN480	A→T NO	12 VDC	6269591
3/2-way valve DN3 PN480	P→A NO	12 VDC	6269605

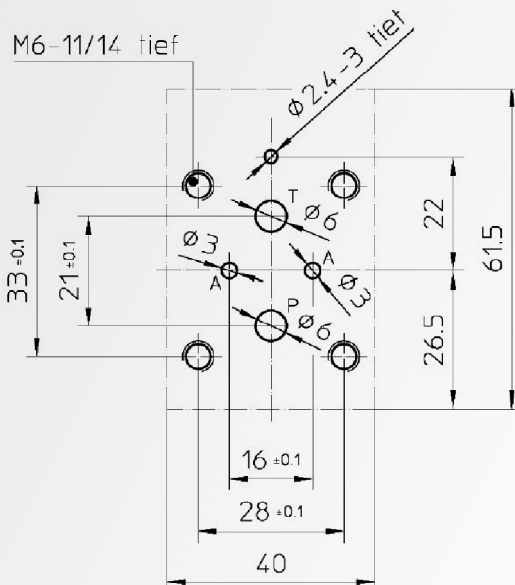
## Dimensions



## Symbol



## Connection diagram



## $\Delta p - q_v$ characteristic curve

