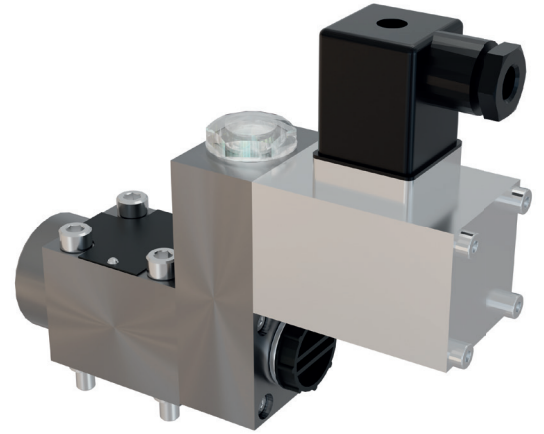


# Directly actuated seat valves

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

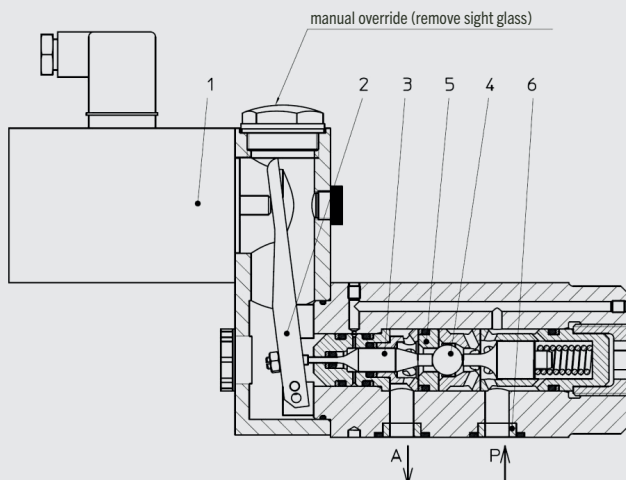


## Function of 2/2-way valve

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



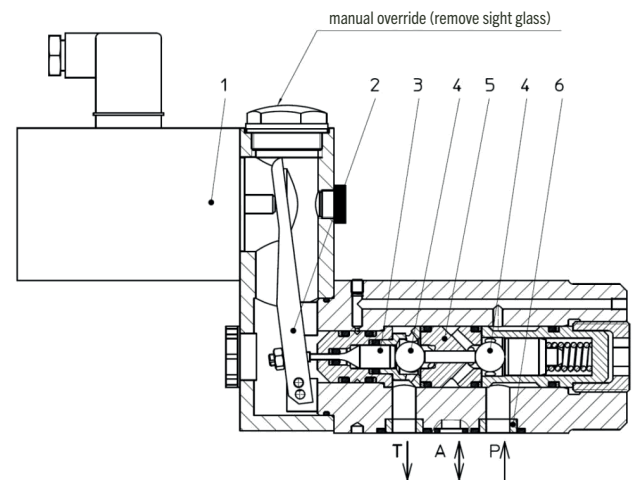
## Function of 3/2-way valve

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

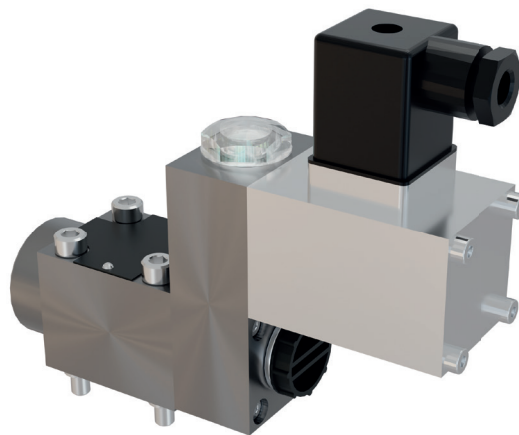


#### Symbol



# Directly actuated seat valves DN6 | PN320 | 15l/min

2/2- and 3/2-ways



## Technical data

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

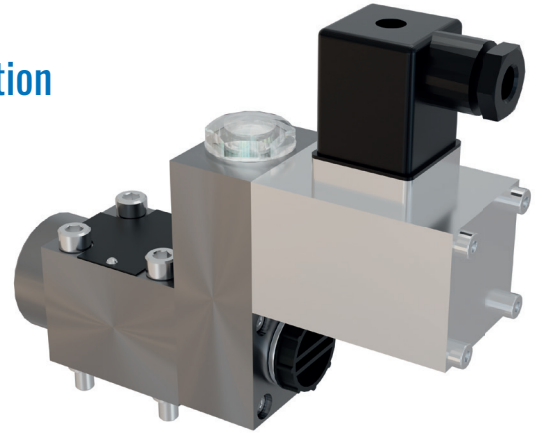
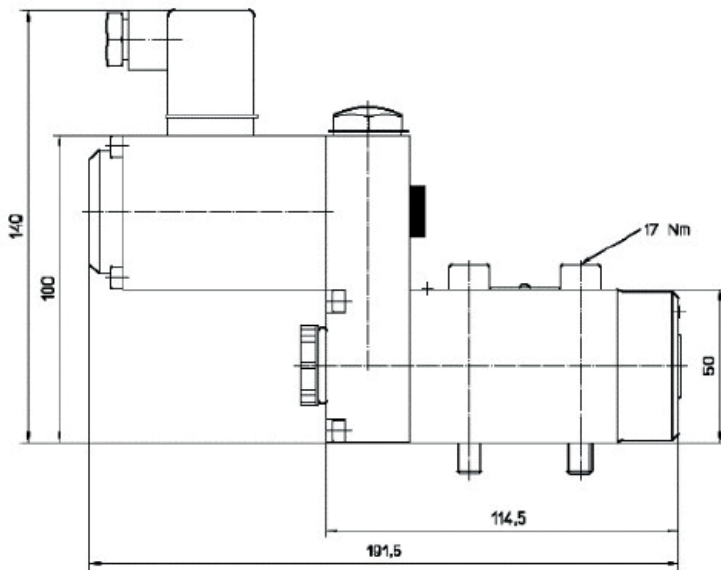
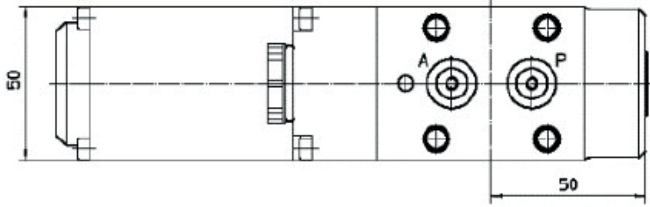
| General                                   |  |
|---|--|
| Weight                                    | see Order information                                      |
| Installation position                     | any  |
| Ambient temperature                       | -10 to 50°C (hydraulic fluids, heed standard 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                      | 15 l/min   |
| max. volume flow A→T                      | 15 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 acc.   |
| - Medium - Quality                        | 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.  |  |
| 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                         | 36 W   |
| Operating time                            | 100% ED  |
| Degree of protection acc. to EN60529      | IP65   |
| max. switching rate                       | 1 Hz   |

## Order information

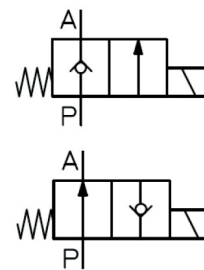
| Included in the scope of supply   |   |                           |                |
|---|---|---------------------------|----------------|
| Mounting screws of the valve  | Cheese-head screw M8  |                           |                |
| Cable socket of the valve solenoid<br>- Supply voltage 24 VDC<br>- Supply voltage 110 VAC<br>- Supply voltage 230 VAC | according to DIN 43650 – type of design A<br>max. 100 VA, LED-display + Z-diode, IP65<br>max. 1.5 A, bridge rectifier, LED display, IP65<br>max. 1.5 A, bridge rectifier, LED display, IP65 |                           |                |
| Designation   | Basic position  | Voltage                   | Article number |
| 2/2-way valve DN6 PN320, solenoid actuation<br>weight: 3,5kg  | NC  | 24 VDC                    | 6546684        |
|   | NC  | 110 VAC                   | 6546692        |
|   | NC  | 230 VAC                   | 6546706        |
| 2/2-way valve DN6 PN320, solenoid actuation<br>weight: 3,5kg  | NO  | 24 VDC                    | 6546714        |
|   | NO  | 110 VAC                   | 6546722        |
|   | NO  | 230 VAC                   | 6546730        |
| 2/2-way valve DN6 PN320, solenoid actuation with a<br>catch, weight: 5,0kg  | NC  | 24VDC                     | 6569986        |
|   | NO  | 24VDC                     | 6569994        |
| Designation   | Basic position  | approx. manual force      | Article number |
| 2/2-way valve DN6 PN320, pushbutton control with a<br>catch, weight: 4,0kg  | NO  | 70N                       | 6568106        |
|   | NC  | 70N                       | 6568114        |
| Designation   | Basic position  | adm. control pressure „Z“ | Article number |
| 2/2-way valve DN6 PN320, cylinder actuation<br>pneumatic, hydraulic, weight: 3,2kg                                    | NC  | 3-320bar                  | 6547923        |
|   | NO  | 3-320bar                  | 6547958        |
| Designation   | Basic position  | Voltage                   | Article number |
| 3/2-way valve DN6 PN320, solenoid actuation<br>weight: 3,5kg  | A→T NO  | 24 VDC                    | 6546749        |
|   | A→T NO  | 110 VAC                   | 6546757        |
|   | A→T NO  | 230 VAC                   | 6546765        |
| 3/2-way valve DN6 PN320, solenoid actuation<br>weight: 3,5kg  | P→A NO  | 24 VDC                    | 6546773        |
|   | P→A NO  | 110 VAC                   | 6546781        |
|   | P→A NO  | 230 VAC                   | 6546803        |
| 3/2-way valve DN6 PN320, solenoid actuation with a<br>catch, weight: 5,0kg  | A→T NO  | 24 VDC                    | 6570003        |
|   | P→A NO  | 24 VDC                    | 6576990        |
|   | A→T NO  | 110 VAC                   | 6570008        |
|   | P→A NO  | 110 VAC                   | 6570016        |
| Designation   | Basic position  |                           | Article number |
| 3/2-way valve DN6 PN320, roller actuation<br>weight: 3,3kg  | A→T NO  |                           | 6548032        |
|   | P→A NO  |                           | 6548040        |
| Designation   | Basic position  | adm. control pressure „Z“ | Article number |
| 3/2-way valve DN6 PN320, cylinder actuation<br>pneumatic, hydraulic, weight: 3,2kg                                    | A→T NO  | 3-320bar                  | 6547974        |
|   | P→A NO  | 3-320bar                  | 6547990        |
| Designation   | Basic position  | approx. manual force      | Article number |
| 3/2-way valve DN6 PN320, pushbutton control<br>weight: 2,9kg  | A→T NO  | 70N                       | 6570992        |
|   | P→A NO  | 70N                       | 6571018        |
| 3/2-way valve DN6 PN320, pushbutton control with a<br>catch, weight: 4,0kg  | A→T NO  | 70N                       | 6568122        |
|   | P→A NO  | 70N                       | 6568130        |

# 2/2-way valve DN6 | PN320 | 15l/min, solenoid actuation

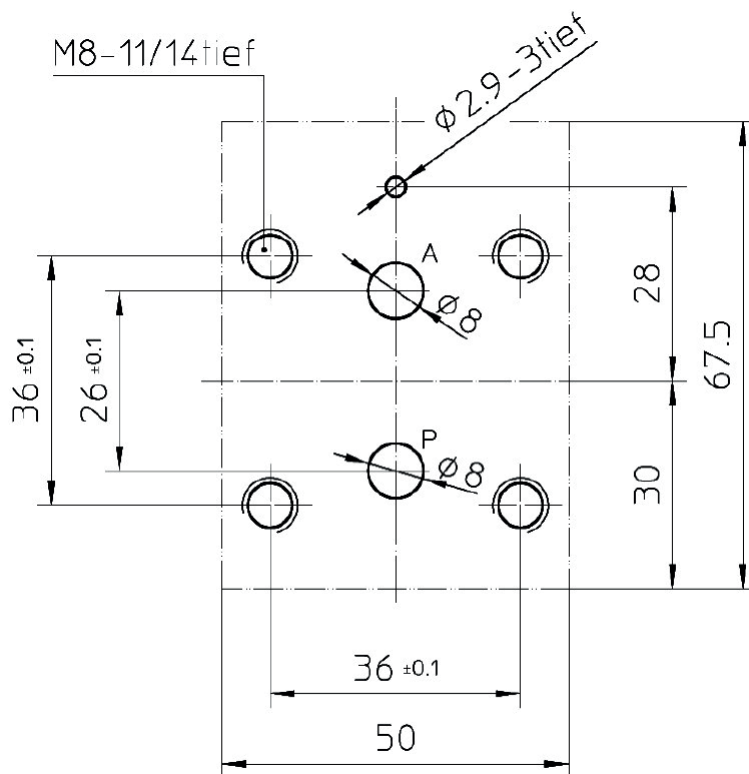
## Dimensions



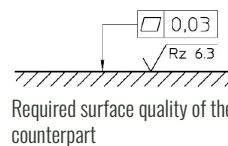
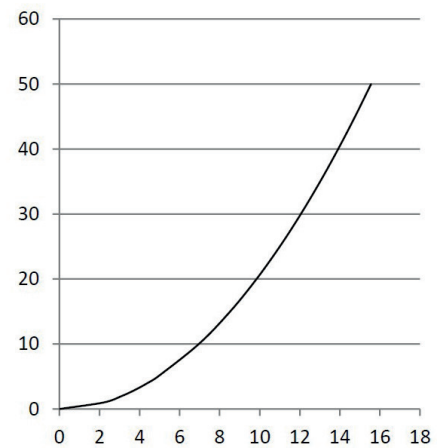
## Symbol



## Connection diagram

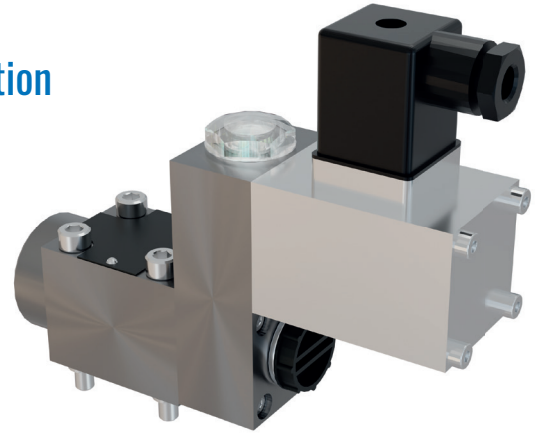
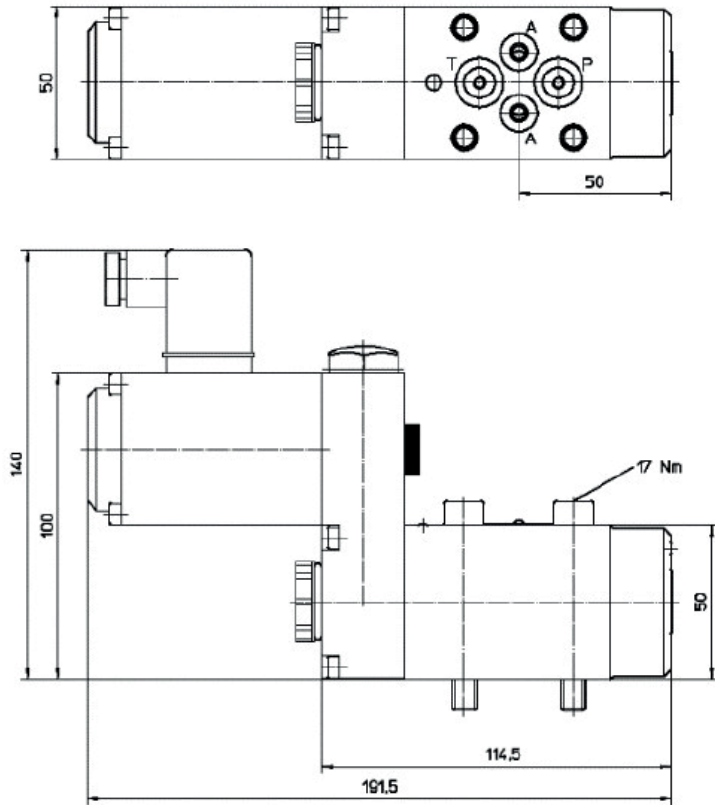


## Δp – qV characteristic curve

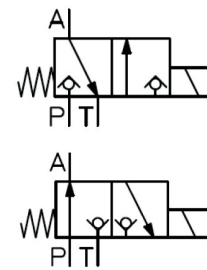


# 3/2-way valve DN6 | PN320 | 15l/min, solenoid actuation

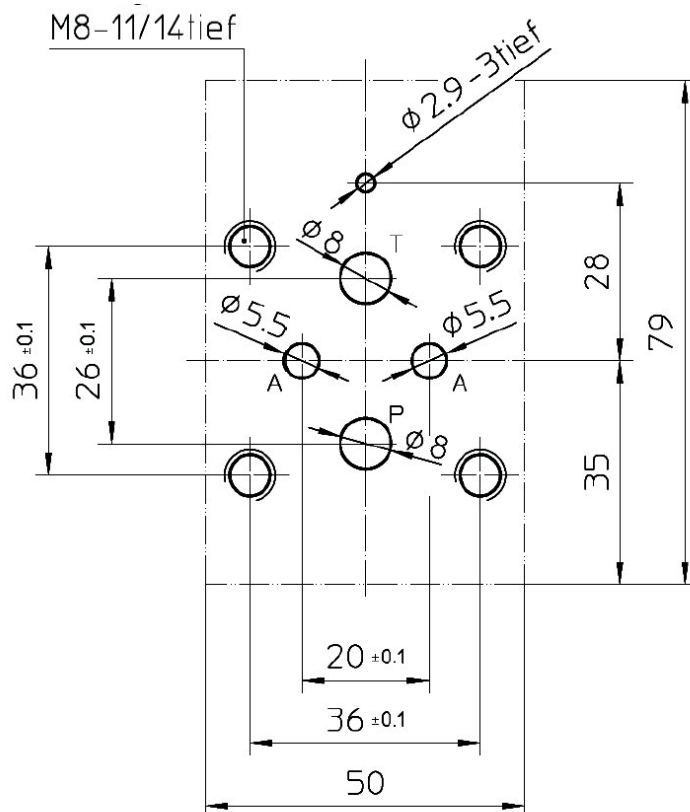
## Dimensions



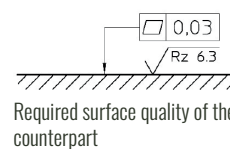
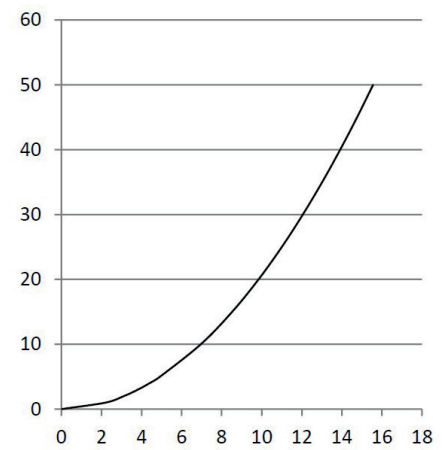
## Symbol



## Connection diagram

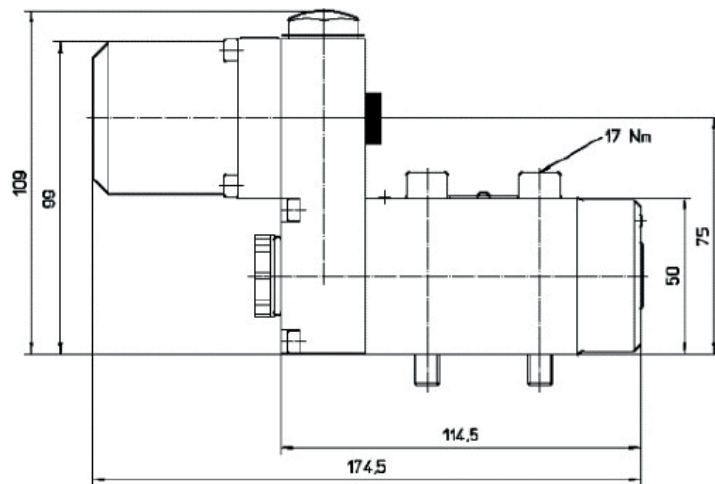
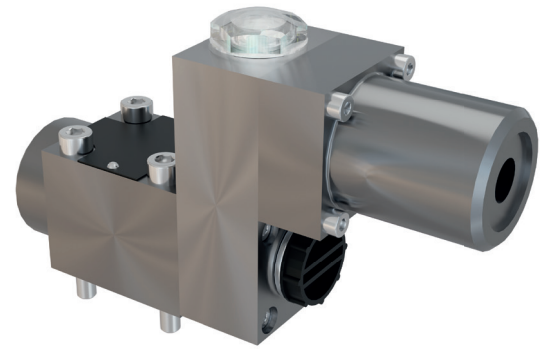
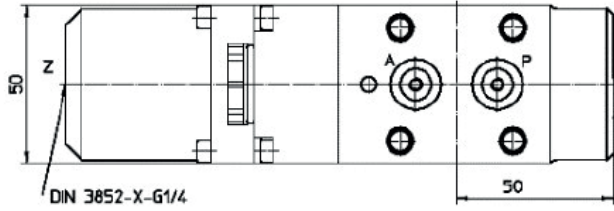


## Δp – qV characteristic curve

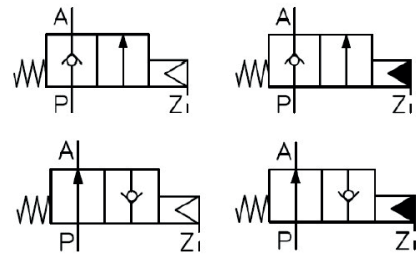


## 2/2-way valve DN6 | PN320 | 15l/min, cylinder actuation

Dimensions

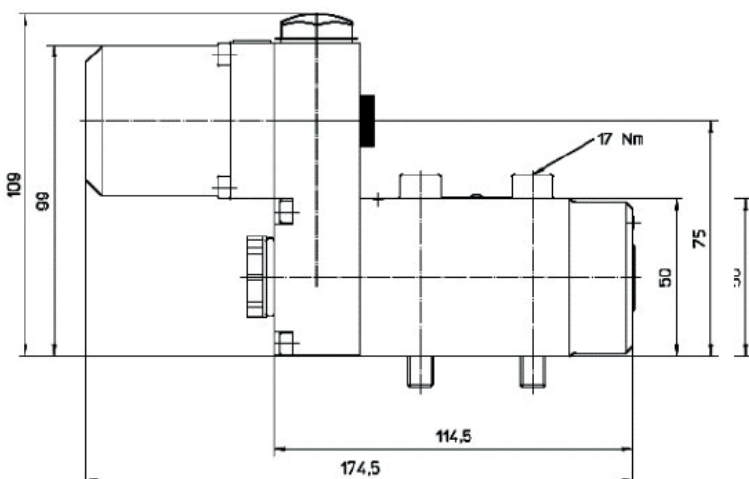
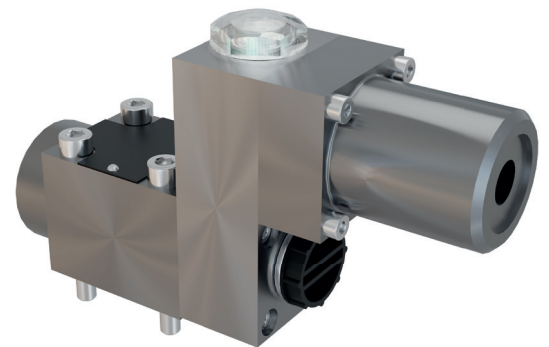
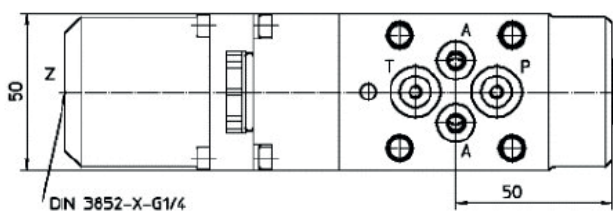


Symbol

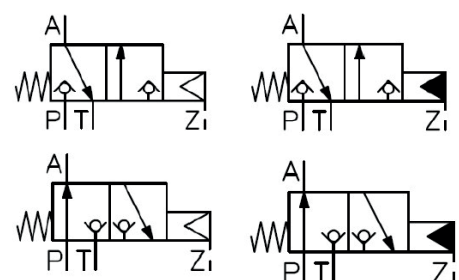


## 3/2-way valve DN6 | PN320 | 15l/min, cylinder actuation

Dimensions

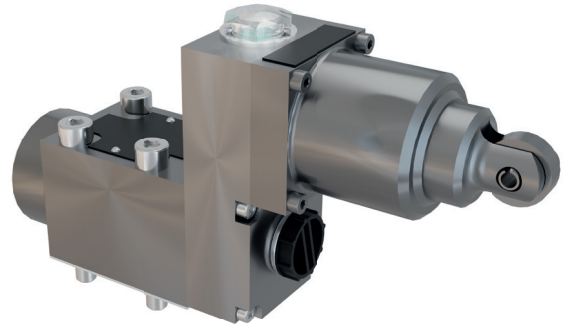
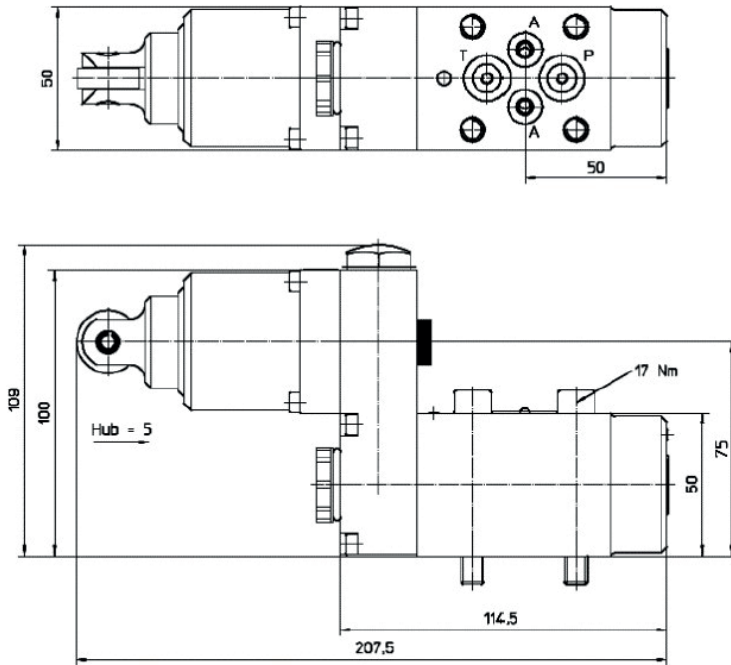


Symbol

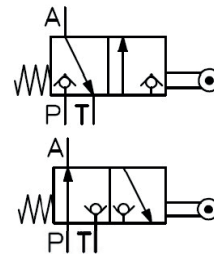


## 3/2-way valve DN6 | PN320 | 15l/min, roller actuation

### Dimensions

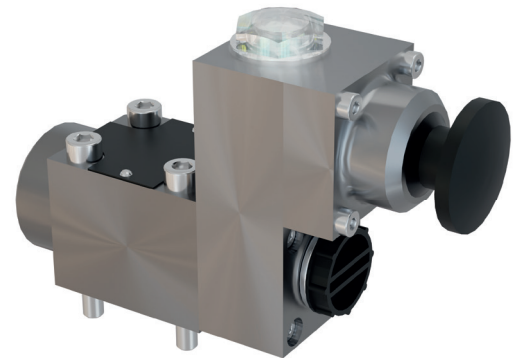
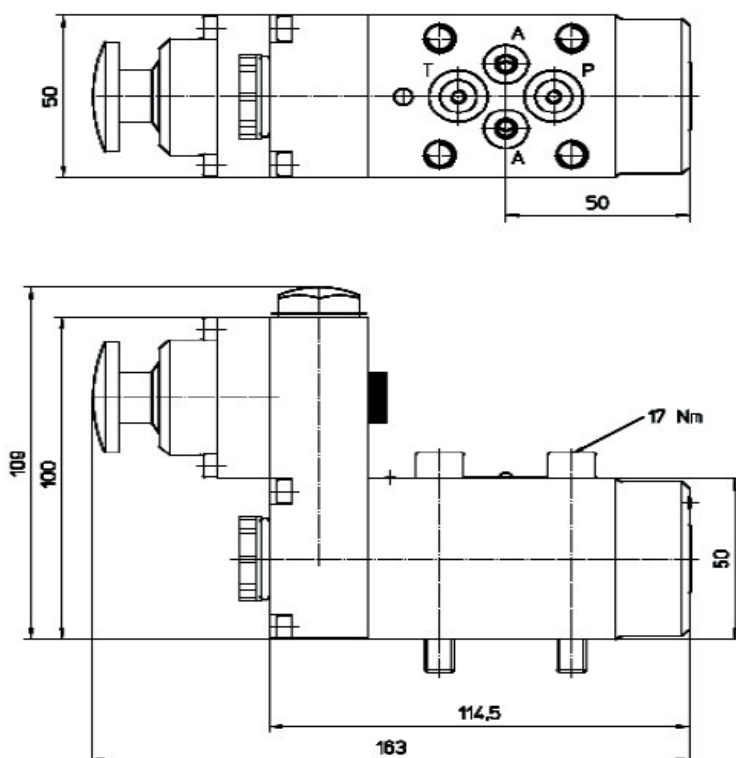


### Symbol

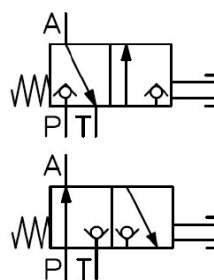


## 3/2-way valve DN6 | PN320 | 15l/min, pushbutton control

### Dimensions

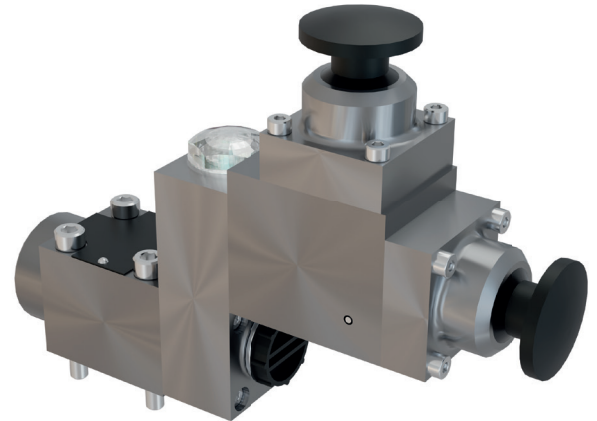
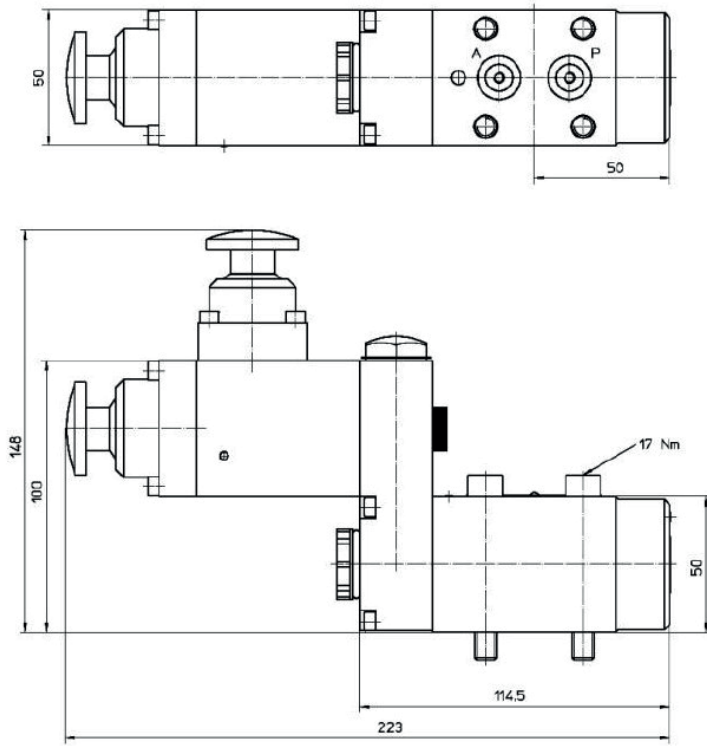


### Symbol

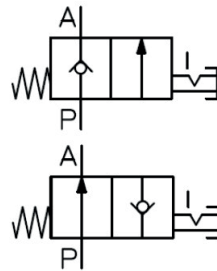


## 2/2-way valve DN6 | PN320 | 15l/min, pushbutton control with a catch

Dimensions

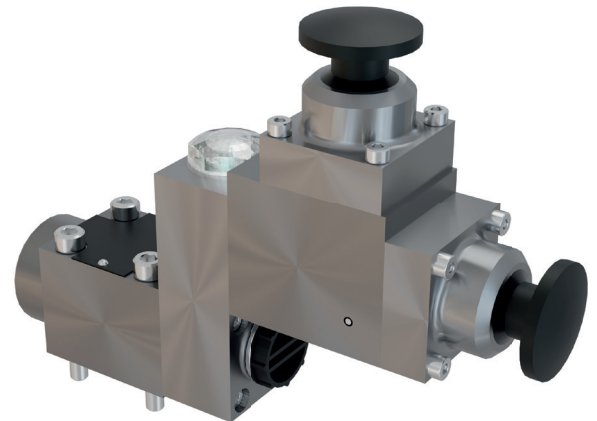
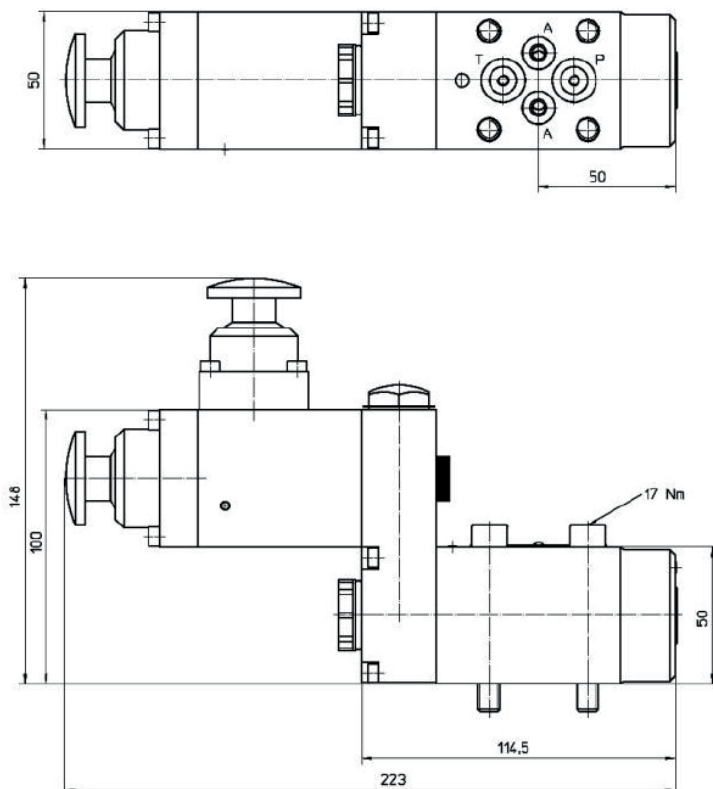


Symbol

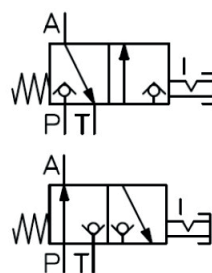


## 3/2-way valve DN6 | PN320 | 15l/min, pushbutton control with a catch

Dimensions



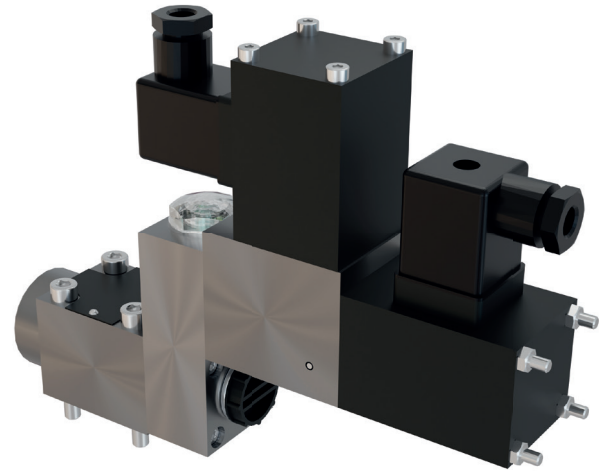
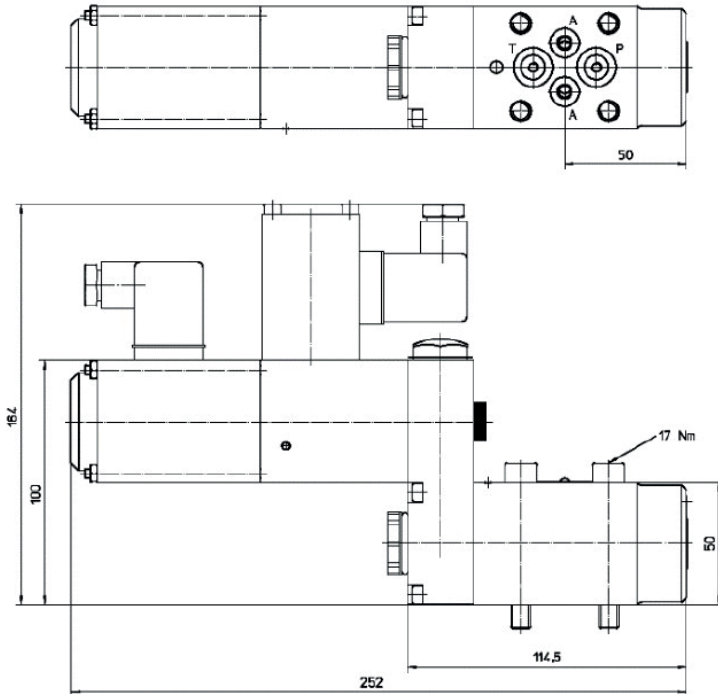
Symbol



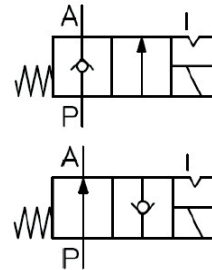


## 2/2-way valve DN6 | PN320 | 15l/min, solenoid actuation with a catch

### Dimensions

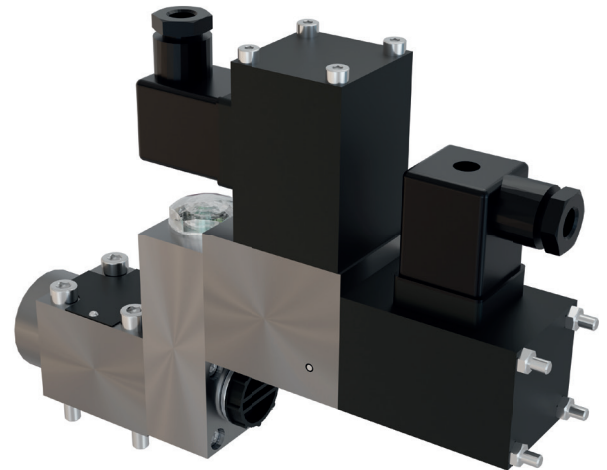
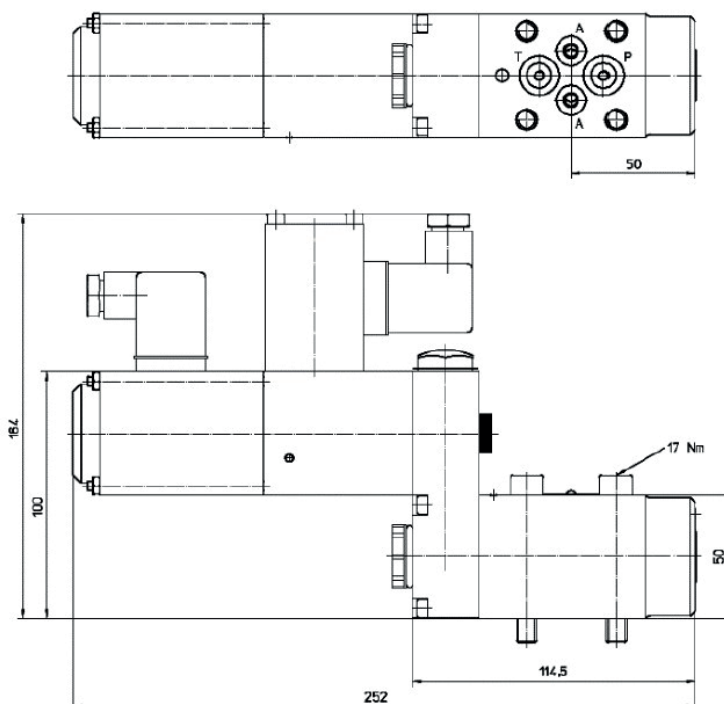


### Symbol



## 3/2-way valve DN6 | PN320 | 15l/min, solenoid actuation with a catch

### Dimensions



### Symbol

