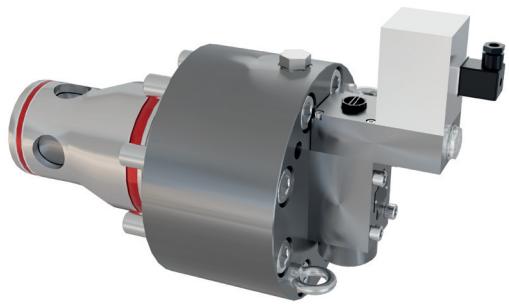


# Descaling valves insert

2/2-way valve insert X, Y controlled, DN50 - DN125, PN420



## Features

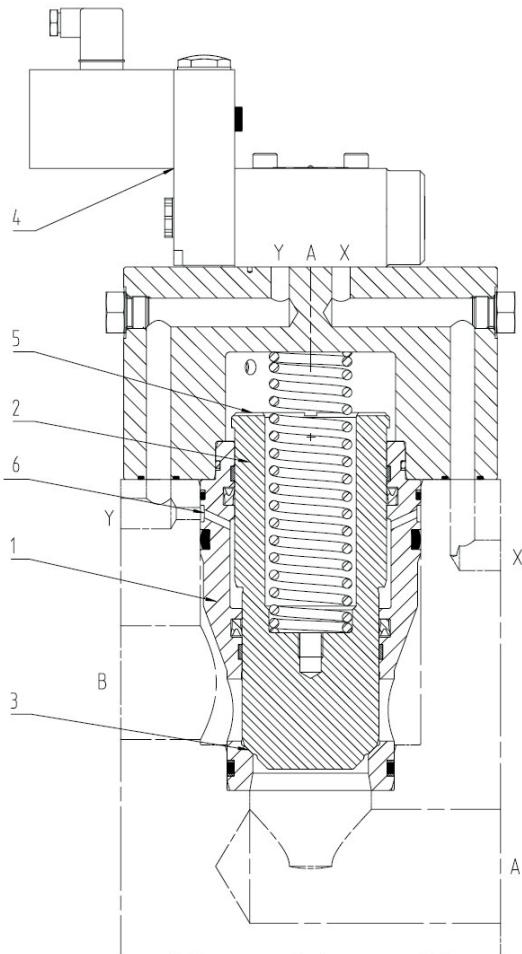
- Hydraulically actuated directional seat valve controlling liquid media
- Passively controllable 2/2-way valve with 1-stage control logic
- Valve seat sleeve equipped with a low-friction seal
- Valve piston and seat are coupled and close hydraulically „leak-free“
- The valve is actuated via a 3/2-way pilot valve
- The switching position can optionally monitored by a proximity switch for open and close position
- Installation space according Hauhinco standard

## Function 2/2-way valve insert

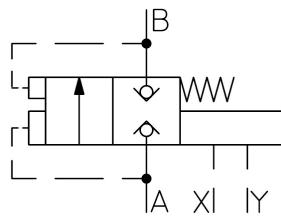
The valve piston (2) guided within the Valve seat sleeve (1) is pressed into the valve seat (3) by the hydraulic power and the spring force generated by the control pressure (X) on the control surface (5). Thus, the lines (A, B) are separated.

By switching the pilot valve (4), the control surface (5) is depressurised and the hydraulic power along the lines (A, B) can be used to lift the valve piston (2) off the valve seat (3), i.e. as soon as the hydraulic pressure is applied to the lines (A, B), the valve piston (2) moves into the opened position up to the mechanical end position. Thus, the lines (A, B) are connected. The ring-surface (6) of the valve piston (2) must be connected to the leakage line (Y) of the manifold.

Beispiel 2/2-Wege Einbauventil X, Y gesteuert



Symbol



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

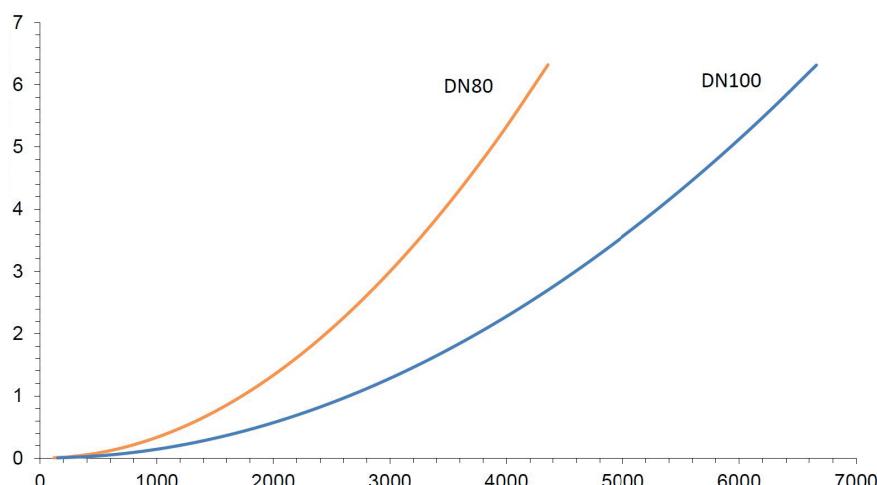
# Technical data

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<br>Material Seals   | Stainless steel, bronze<br>NBR, PTFE, PUR                  |
| Hydraulic                                |  |
| Hydraulic pressure connector A, B        | ≥ 20 bar ≤ 420 bar   |
| Hydraulic pressure connector X           | ≥ 20bar ≥ hydr. Druck am Anschluss A, B ≤ 420bar           |
| Hydraulic pressure connector Y           | ≤ 10 bar   |
| Direction of flow                        | any  |
| Area sum                                 | A1+A2 = A3   |
| Pressure fluid                           | Water, HFA   |
| - Medium - Temperature range             | 5 to 40°C  |
| - Medium - Quality                       | see Hauhinco media requirement, water, HFA                 |
| - min. filter fineness connection A, B   | Filter fineness 100µm                                      |
| - min. filter fineness connection X      | Filter fineness 25µm                                       |
| Use of other pressure fluids on request. |  |
| Electric                                 |  |
| Magnet                                   |  |
| - Voltage                                | 24 VDC, andere Voltageen auf Anfrage                       |
| - Power consumption                      | see Order information                                      |
| - Operating time                         | 100% OT  |
| - Degree of protection acc. to EN60529   | IP65   |
| - max. switching rate                    | 1Hz  |
| Inductive proximity switch               |  |
| - Output                                 | NO contact, PNP  |
| - Voltage                                | 10 - 30 VDC  |
| - Current                                | 0,200 A  |
| - Switching distance                     | 1,5 mm   |
| - Electrical connection                  | Three wire, plug connection M12x1                          |

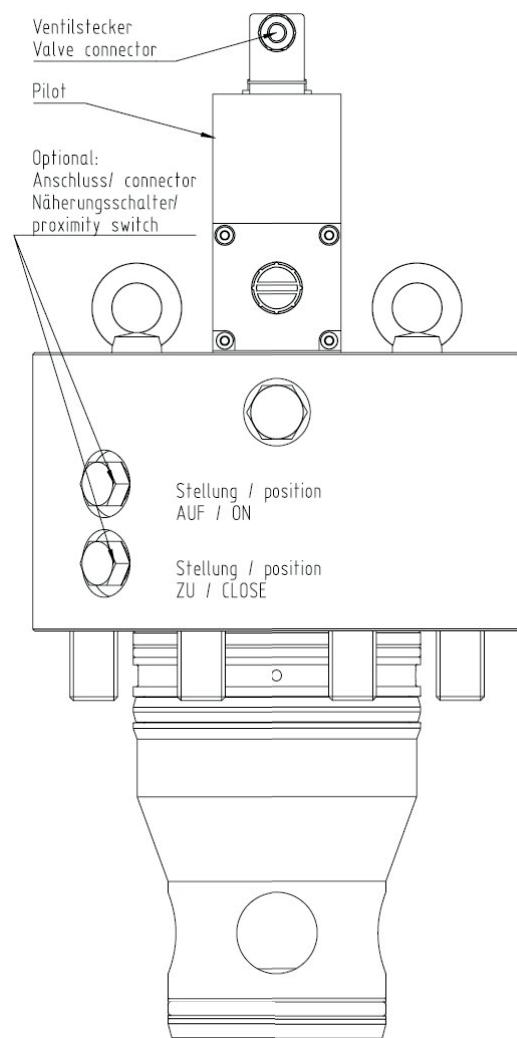
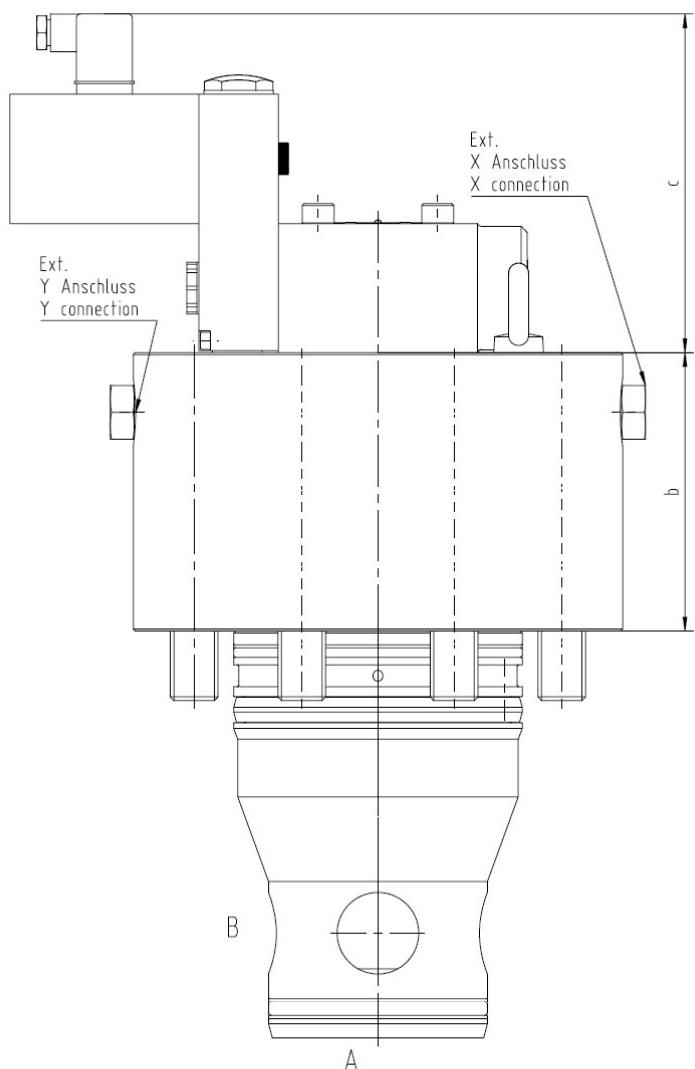
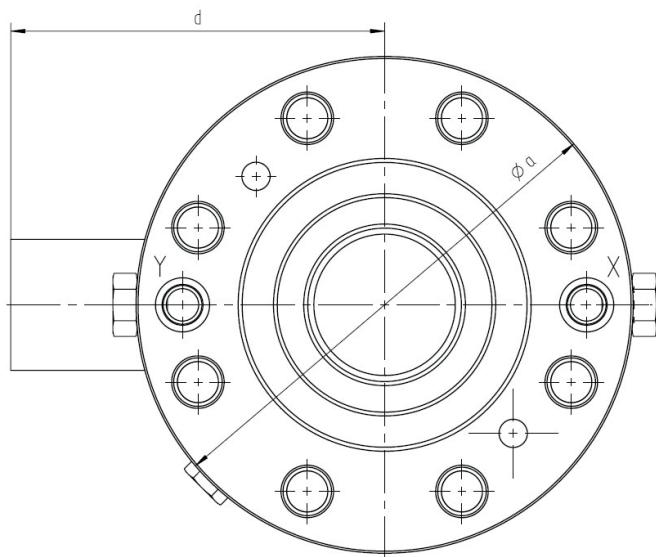
Δp –qv characteristic curves DN80 - DN100

max. open valve, dyn. viscosity 1mm<sup>2</sup>/s



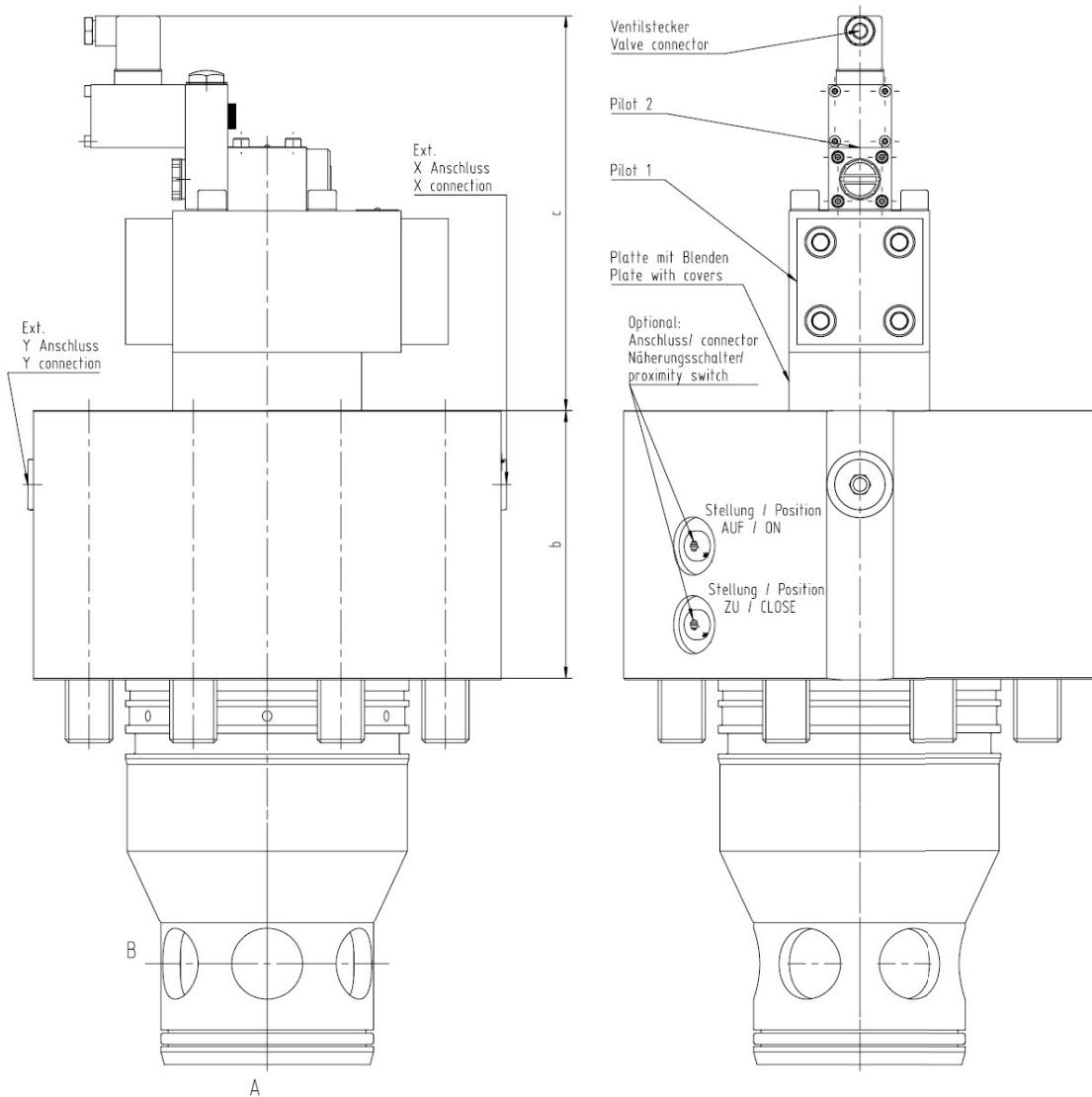
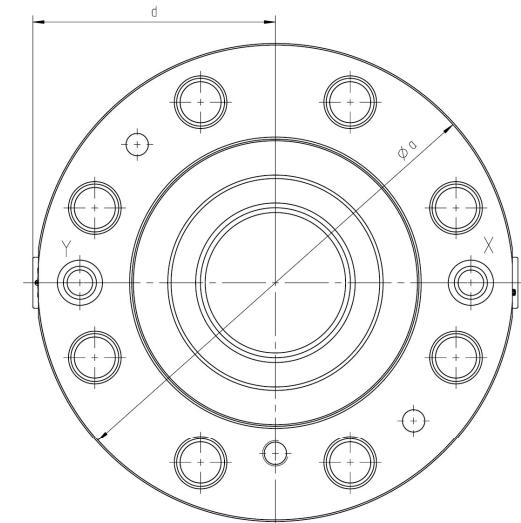
## Dimension sheet 2/2-way valve insert, single-stage pilot control

2/2-way valve insert, X, Y controlled, DN50 - DN80, PN420



## Dimension sheet 2/2-way valve insert, two-stage pilot control

2/2-way valve insert, X, Y controlled, DN100 - DN125, PN420



## Order information

### Included in the scope of supply

Mounting screws for the 2/2-way valve insert assembly

Mounting screws for the pilot valves 1 and -2

Cable socket for the magnet

## 2/2-way valve insert, single-stage pilot control DN50 – 80, PN420, X, Y

| Nominal size | Weight<br>[kg] | max. Pressure<br>[bar] | Basic position | Dimensions [mm] |     |     |     | Article number<br>valve | Installation<br>space |
|--------------|----------------|------------------------|----------------|-----------------|-----|-----|-----|-------------------------|-----------------------|
|              |                |                        |                | a               | b   | c   | d   |                         |                       |
| DN50         |                |                        |                |                 |     |     |     |                         |                       |
| DN65         |                |                        |                |                 |     |     |     |                         |                       |
| DN80         | 70,0           | 420                    | NC             | 246             | 140 | 170 | 185 | 6602296                 | 6600369               |

On demand

## 2/2-way valve insert, two-stage pilot control DN100 – 125, PN420, X, Y

| Nominal size | Weight<br>[kg] | max. Pressure<br>[bar] | Basic position | Dimensions [mm] |     |     |     | Article number<br>Einbauventil | Installation<br>space |
|--------------|----------------|------------------------|----------------|-----------------|-----|-----|-----|--------------------------------|-----------------------|
|              |                |                        |                | a               | b   | c   | d   |                                |                       |
| DN100        | 128,0          | 420                    | NC             | 300             | 171 | 251 | 150 | 66...                          | 66...                 |
| DN125        |                |                        |                |                 |     |     |     |                                |                       |

On demand

### Order example

| Item | Designation  | Article number | Item | Designation   | Article number |
|------|--|----------------|------|---|----------------|
| 1    | 2/2-way valve insert,<br>DN80-PN420-X,Y con-<br>trolled, single-stage pilot<br>control | 6602296        | 1    | Installation space  | 6600369        |
| 1    | Pilot valve DN10   | 6235549        | 1    | Inductive proximity switch<br>Output – PNP, NO contact<br>Voltage 10 – 30 VDC | 2325349        |

## Pilot valve

## Position monitoring

| Nominal size | Basic position | Actuation   | Current | Article number valve | Designation   | Article number monitoring |
|--------------|----------------|---|---------|----------------------|---|---------------------------|
| DN10         | P→A NO         | Electromagnet, voltage<br>24V DC Cable socket<br>magnet DIN43650 –<br>form A: max. 100VA,<br>LED display + Z-diode,<br>IP65 | 2,3 A   | 6235549              | Inductive proximity switch<br>Output – PNP, NO contact<br>Voltage 10 – 30 VDC | 2325349                   |

## Pilot valve 1, hydraulically actuated, X, Y internally

## Pilot valve 2

| Nominal size | Basic position | Article number plate | Article number cover | Article number valve | Nominal size | Basic position | Actuation   | Article number valve |
|--------------|----------------|----------------------|----------------------|----------------------|--------------|----------------|---|----------------------|
| DN16         | P→A NO         | 6569714              | 6532292              | 6235549              | DN3          | P→A NO         | Electromagnet, voltage<br>24V DC Cable socket<br>magnet DIN43650 –<br>form A: max. 100VA,<br>LED display + Z-diode,<br>IP65 | 6545599              |

**On demand**

## Position monitoring

| Designation   | Article number monitoring |
|---|---------------------------|
| Inductive proximity switch<br>Output – PNP, NO contact<br>Voltage 10 – 30 VDC | 2329573                   |