

09/2022



**⚠** Above stated body materials refer to the valve port connections that get in contact with the media only!

**details needed for main valve**

- orifice
- port
- function NC/NO
- operating pressure
- flow rate
- media
- media temperature
- ambient temperature
- type of actuation

**details needed for pneumatic actuation**

- nominal voltage
- type of protection
- actuation pressure range min/max
- pilot valve type

**details needed for hydraulic actuation**

- actuation pressure range min/max
- hydraulic control valve function

**⚠** The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

**⚠** If order or application specifications are incomplete or imprecise there exists a risk of an incorrect technical design of the valve for the required application. As a consequence, the physical and / or chemical properties of the materials or seals used, may not be suitable for the intended application. To avoid hydraulic shocks in pipelines, the flow velocities must be taken into account when designing valves for liquids.

■ specifications not highlighted are standard  
 ■ specifications highlighted in grey are optional

**2/2-way valve**

**pressure range**  
**orifice**  
**connection**  
**function**

**operating principle**

**body material**

**valve seat**

**seal materials**

**ports**

**function**  
**pressure range**

**Kv value**  
**vacuum**  
**pressure-vacuum**

**back pressure**  
**media**

**abrasive media**  
**damping**

**flow direction**  
**switching cycles**  
**switching time**

**media temperature**  
**ambient temperature**  
**flush ports**  
**leak ports**  
**limit switches**  
**manual override**  
**approvals**  
**mounting**  
**weight**  
**additional equipment**

**nominal voltage**  
**power consumption**

**protection**  
**energized duty rating**  
**connection**  
**optional additional equipment**  
**max. temperature**

**explosion proof**

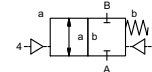
**actuation pressure range**  
**air consumption**  
**cycle speed**  
**control**  
**pilot valve interface**  
**actuator ports**

**actuation pressure range**  
**control**  
**actuator ports**  
**by media**

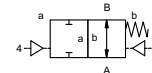
**externally controlled**

PN 0-40 bar  
 DN 100 mm  
 flange

valve normally closed  
 symbol **NC**



valve normally open  
 symbol **NO**



pressure balanced, with spring return

- |                        |                            |
|------------------------|----------------------------|
| ① aluminium            | ② steel galvanized         |
| ③                      | ⑤ without non-ferr. Metals |
| ④ steel, nickel plated | ⑥ stainless steel          |

synthetic materials on metal

NBR PTFE, FPM, CR, EPDM

**general specifications**

|                                 |                                      |  |
|---------------------------------|--------------------------------------|--|
| VSV-F                           | flanges PN 16 / 40                   | special flanges  |
|                                 | NC                                   | NO   |
| bar                             | 0-16 / 0-40                          |  |
| m³/h                            | 140.0                                |  |
| leak rate                       |                                      | < 10 <sup>-6</sup> mbar•L•s <sup>-1</sup>  |
| P <sub>1</sub> ⇔ P <sub>2</sub> |                                      | pressure side max. 40 bar<br>vacuum side leak rate upon request<br>available (max. 16 bar) |
| P <sub>2</sub> > P <sub>1</sub> |                                      | gaseous - liquid - highly viscous -<br>gelatinous - pasty - contaminated                   |
|                                 |                                      | available  |
| opening                         |                                      |  |
| closing                         | by throttles on pilot valve          |  |
| A ⇔ B                           | as marked                            | bi-directional upon request  |
| 1/min                           | 40                                   |  |
| ms                              | opening 300-3000<br>closing 300-3000 |  |
| °C                              | direct mounted pilot valve 60        | remote mounted pilot valve outside   |
| °C                              | direct mounted pilot valve 50        | temperatur range of media max. 160 °C  |
|                                 |                                      | available  |
|                                 |                                      | available  |
|                                 |                                      | inductive / mechanical upon request  |
|                                 | via pilot valve                      |  |
|                                 |                                      | LR/DNV/WAZ   |
| kg                              | VSV-F 38.0                           | upon request   |

**electrical specifications**

|                |  |  |
|----------------|--|--|
| U <sub>n</sub> | DC 24 V  | special voltage upon request             |
| U <sub>n</sub> | AC 230 V 50 Hz   | special voltage upon request             |
| DC             | 4.8 W  | 2.5 W [actuation pressure range 4-7 bar] |
| AC             | pick up 11.0 VA holding 8.5 VA   |  |
| IP65 (P54)     | acc. DIN 40050   |  |
| ED             | 100%   |  |
|                | plug acc. DIN EN 175301-803 form B, 2 positions x180° / wire diameter 6-8 mm |  |
| M12x1          | connector acc. DESINA  | connector acc. VDMA                      |
|                | illuminated plug with varistor   |  |
| media          | 60°C   |  |
| ambient        | 50°C   |  |
| E Ex e II T5   | nominal voltage U <sub>n</sub>   | DC 24 V 3.25 W                           |
|                | power consumption  | AC 230 V 50 Hz 2.90 W                    |

**pneumatic specifications**

|            |  |       |
|------------|--|-------|
| bar        | 4-8  |       |
| cm³/stroke | 135  |       |
|            | main valve speed variable by throttleson pilot valve<br>preferably 5/2 way pilot valve |       |
| 2/4        | G 1/4  | G 3/8 |

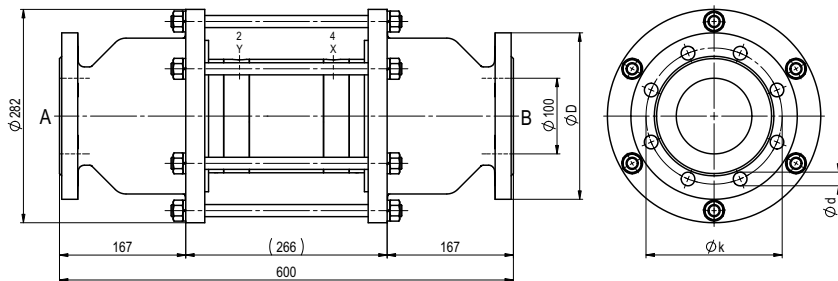
**hydraulic specifications**

|     |                                  |              |
|-----|----------------------------------|--------------|
| bar | 15-30 / 30-60                    |              |
|     | preferably 4/2 way control valve |              |
| X/Y | G 1/4                            | NPT 1/4      |
|     |                                  | upon request |

# coax® data sheet - coaxial valve

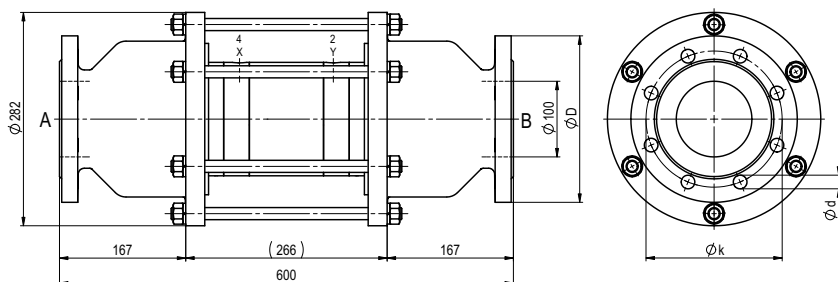
## type VSV-F 100

function: **NC**  
closed when not energized



| flanges PN | DIN       | ØD  | Øk  | Ød |
|------------|-----------|-----|-----|----|
| 16         | EN 1092-1 | 220 | 180 | 18 |
| 40         | EN 1092-1 | 235 | 190 | 22 |

function: **NO**  
open when not energized



### pneumatic specifications

