

coaxial valve

5-VMK 15 5-VFK 15

valve type with pilot valve

type VMK 15 **VFK 15**

2/2 way valve externally controlled pressure range PN 0-100 bar

> orifice DN 15 mm connection thread/flange function valve

normally closed NC symbol

valve normally open

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

design pressure balanced, with spring return

body materials 2 steel, galvanized 1 brass

> 3 brass, nickel plated (5) without non-ferr. metals 4 steel, nickel plated 6 stainless steel

valve seat synthetic resin on metal

symbol

seal materials NBR PTFE, FPM, CR, EPDM

NO

details needed for main valve

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

details needed for pneumatic actuation

- nominal voltage
- type of protection
- actuation pressure range min/max
- low wattage coil, actuation pressure range 4-7 bar
- 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.

| | general | specifications | options |
|----------------------|---------------------------------|-------------------------------------|---|
| ports | VMK | threads G 3/8 - G 3/4 | special threads |
| | VFK | flanges PN 16/40/100 | special flanges |
| function | | NC | NO |
| pressure range | bar | 0-16/0-40/0-64/0-100 | > 100 bar upon request |
| | | | |
| Kv value | m³/h | 5,7 | |
| vacuum | leak rate | | < 10 ⁻⁶ mbar•l•s ⁻¹ |
| pressure-vacuum | P₁⇔ P₂ | | pressure side max. 100 bar |
| | | | vacuum side leak rate upon request |
| back pressure | P ₂ > P ₁ | | available (max. 16 bar) |
| media | | gaseous - liquid - highly viscous - | |
| | | gelatinous - pasty - contaminated | |
| abrasive media | | | version available |
| damping | opening | | |
| | closing | by throttles on pilot valve | |
| flow direction | A ⇒ B | as marked | bi-directional upon request |
| switching cycles | 1/min | 200 | |
| switching time | ms | opening 50-3000 closing 50-3000 | |
| media temperature | °C | direct mounted pilot valve 60 | remote mounted pilot valve outside tempe |
| ambient temperature | °C | direct mounted pilot valve 50 | rature range of media max.160°C |
| flush ports | | | available |
| leak ports | | | available |
| limit switches | | | inductive/mechanical upon request |
| manual override | | via pilot valve | |
| approvals | | | LR/GL/WAZ |
| mounting | | | mounting brackets |
| weight | kg | VMK 3,4 VFK 5,0 | |
| additional equipment | | | upon request |
| | | | |

| | electrica | I specifications | options | |
|-----------------------|-------------|---------------------------------------|--|---|
| nominal voltage | Un | DC 24V | special voltage upon request | |
| | Un | AC 230V 50 Hz | special voltage upon request | |
| power consumption | DC | 4,8 W | 2,5 W | |
| | AC | pick up 11,0 VA holding 8,5 VA | | |
| protection | IP 65 (P54) | acc. DIN 40 050 | | Ī |
| energized duty rating | ED | 100% | | Ī |
| connection | | plug acc. DIN EN 175301-803 form B, 4 | 4 positions x 90° / wire diameter 6-8 mm | Ī |
| additional equipment | | illuminated plug with varistor | | |
| optional | M12x1 | connector acc. DESINA | connector acc. VDMA | |
| max. temperature | media | 60°C | | |
| | ambient | 50°C | | Ī |
| explosion proof | EEx m II T5 | nominal voltage Un | direct current 24 V 3,25 W | Ī |
| | | power consumption | alternating current 230 V 50 Hz 2,90 W | Ī |

| pneumatic specifications | | options |
|--------------------------|--|---------|
| | | |

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

4-10 cm³/stroke 11 main valve speed variable by throttles on pilot valve preferably 5/2-way pilot valve co-ax / NAMUR G 1/8

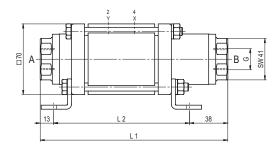
hydraulic specifications

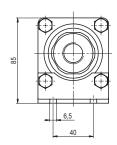
actuation pressure range control actuator ports

10-30 / 30-60 preferably 4/2-way control valve NPT 1/4 G 1/4

options

specifications not highlighted are standard specifications highlighted in grey are optional



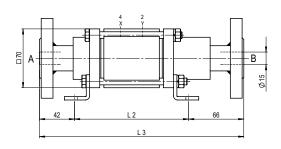


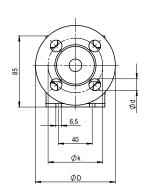
| constructive length | L ₁ | L2 | Lз |
|------------------------------------|----------------|-----|-----|
| standard | 186 | 135 | 243 |
| with 1/2 inductive limit switches | 212 | 161 | 269 |
| with force-feed lubrication nipple | 219 | 168 | 276 |
| with mechanical limit switches | 212 | 161 | 269 |

| flanges PN | DIN | øD | øk | ød |
|------------|------|-----|----|----|
| 16 | 2633 | 95 | 65 | 14 |
| 40 | 2635 | 95 | 65 | 14 |
| 100 | 2637 | 105 | 75 | 14 |

type VFK 15

function: **NO** open when not energized





pneumatic actuation (separately)



5/2-way-pilot valve flow rate 700 l/min pressure range 3-10 bar G 1/8



5/2-way-pilot valve ISO 1 flow rate 700 l/min pressure range 3-10 bar G 1/4