

coaxial valve

5-VMK 32 DR 5-VFK 32 DR

valve type with pilot valve

type VMK 32 DR VFK 32 DR



3/2 way valve externally controlled pressure range PN 0-100 bar

orifice DN 32 mm connection thread/flange function valve

normally closed (A ►B)

symbol NC

valve normally open (A ►B)

symbol NO





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

design pressure balanced, with spring return, switching overlap

1) brass

3 brass, nickel plated

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

valve seat synthetic resin on metal

seal materials NBR

body materials

PTFE, FPM, CR, EPDM

2) steel, galvanized

details needed for main valve

- orifice
- port
- function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- 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 1 1/4 - G 1 1/2 | special threads | |
| • | VFK | flanges PN 16 / 40 / 100 | special flanges | |
| function | | NC | NO | |
| pressure range | bar | 0-16 / 0-40 / 0-64 / 0-100 | | |
| | | A ⇒ B max. 100 / B ⇒ A max. 16 / A ⇒ | C max. 100 / C ⇒ A max. 100 | |
| Kv value | m³/h | 18,9 | | |
| 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 | see pressure range | | |
| media | | gaseous - liquid - highly viscous - | | |
| | | gelatinous - pasty - contaminated | | |
| abrasive media | | | version available | |
| damping | opening | | | |
| | closing | by throttles on pilot valve | | |
| flow direction | | see pressure range | | |
| switching cycles | 1/min | 150 | | |
| switching time | ms | opening 100-3000 closing 100-3000 | | |
| media temperature | °C | direct mounted pilot valve 60 | remote mounted pilot valve outside tempe | |
| ambient temperature | | direct mounted pilot valve 50 | ratur range of media max. 160 °C | |
| flush ports | °C | | 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 8,5 VFK 10,2 | | |
| additional equipment | | | upon request | |
| | electric | al specifications | options | |

| | electrical specifications | | options | | | |
|-----------------------|---------------------------|---|------------------------------|--|--|--|
| nominal voltage | Un | DC 24 V | special voltage upon request | | | |
| | Un | AC 230 V 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 | IP65 (P54) | acc. DIN 40050 | | | | |
| energized duty rating | ED | 100% | | | | |
| connection | | plug acc. DIN EN 175301-803 form B, 4 positions x90° / wire diameter 6-8 mm | | | | |
| optional | M12x1 | connector acc. DESINA | connector acc. VDMA | | | |
| additional equipment | | iluminated plug with varistor | | | | |
| max. temperature | media | 60°C | | | | |
| | ambient | ient 50°C | | | | |
| explosion proof | E Ex e II T5 | nominal voltage Un | DC 24 V 3,25 W | | | |
| | | power consumption | AC 230 V 50 Hz 2,90 W | | | |
| | - | | | | | |

| | pneuma | tic specifications | options |
|--------------------------|------------|--|----------------|
| actuation pressure range | bar | 4-10 | |
| air consumption | cm³/stroke | 23 | |
| cycle speed | | main valve speed variable by throttles | on pilot valve |
| control | | preferably 5/2 way pilot valve | |

co-ax / NAMUR

control pilot valve interface actuator ports

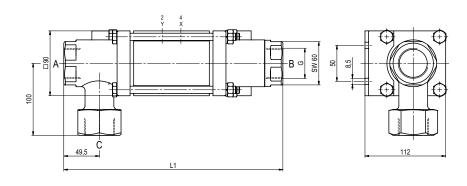
options hydraulic specifications

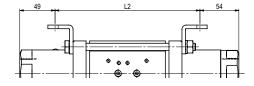
actuation pressure range control actuator ports by media

| - | • | • | |
|-----|----------------------------------|---------|--|
| bar | 10-30 / 30-60 | | |
| | preferably 4/2 way control valve | | |
| X/Y | G 1/4 | NPT 1/4 | |
| | | | |

ISO 1

specifications not highlighted are standard specifications highlighted in grey are optional



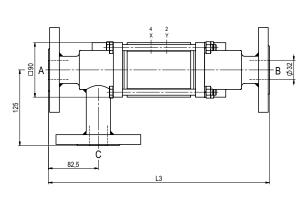


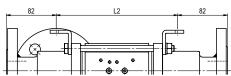
| constructive length | L ₁ | L2 | Lз |
|------------------------------------|----------------|-----|-----|
| standard | 304 | 201 | 365 |
| with 1/2 inductive limit switches | 311 | 208 | 372 |
| with force-feed lubrication nipple | 341 | 238 | 402 |
| with mechanical limit switches | 339 | 236 | 400 |

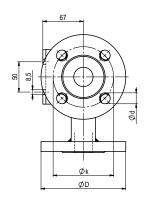
| flanges PN | DIN | ØD | Øk | Ød |
|------------|-----------|-----|-----|----|
| 16 | EN 1092-1 | 140 | 100 | 18 |
| 40 | EN 1092-1 | 140 | 100 | 18 |
| 100 | EN 1092-1 | 155 | 110 | 22 |

type VFK 32 DR

function: **NO** open when not energized (A \triangleright B)







pneumatic actuation



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