

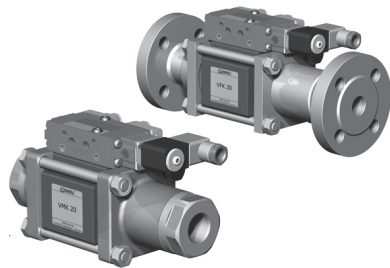
5-VMK 20

5-VFK 20

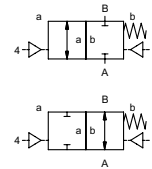
valve type with pilot valve

coaxial valve

type VMK 20 VFK 20



2/2 way valve externally controlled
pressure range PN 0-100 bar
orifice DN 20 mm
connection thread/flange
function valve normally closed symbol **NC**
 valve normally open 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
body materials ① brass ② steel, galvanized
 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 PTFE, FPM, CR, EPDM

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
- 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.

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

| general specifications | | options |
|-----------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|
| ports | VMK threads G 3/4 - G 1 1/4 VFK flanges PN 16/40/100 | special threads special flanges |
| function | NC | NO |
| pressure range | bar 0-16/0-40/0-64/0-100 | > 100 bar upon request |
| Kv value | m³/h 8,8 | |
| 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 | P2 > P1 | 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 temperature range of media max. 160°C |
| ambient temperature | °C direct mounted pilot valve 50 | |
| 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 4,7 VFK 6,7 | |
| additional equipment | | upon request |

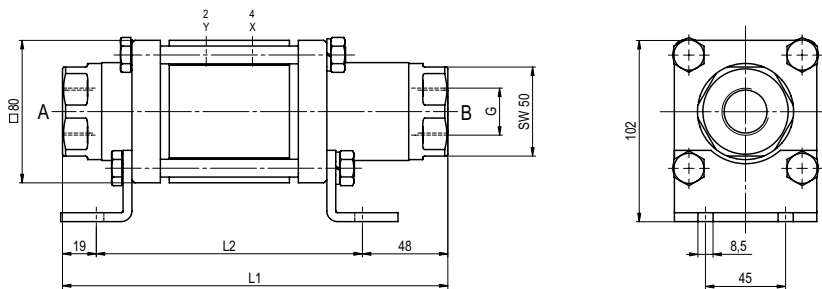
| electrical specifications | | options |
|------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------|
| nominal voltage | U _n DC 24V U _n AC 230V 50 Hz | special voltage upon request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

| pneumatic specifications | | options |
|---------------------------------|-------------------------------------------------------|---------|
| actuation pressure range | bar 4-10 | |
| air consumption | cm³/stroke 11 | |
| cycle speed | main valve speed variable by throttles on pilot valve | |
| control | preferably 5/2-way pilot valve | |
| pilot valve interface | co-ax / NAMUR | ISO 1 |
| actuator ports | 2/4 G 1/8 | G 1/4 |

| hydraulic specifications | | options |
|---------------------------------|----------------------------------|---------|
| actuation pressure range | bar 10-30 / 30-60 | |
| control | preferably 4/2-way control valve | |
| actuator ports | X/Y G 1/4 | NPT 1/4 |

type VMK 20

function: **NC**
closed when not energized

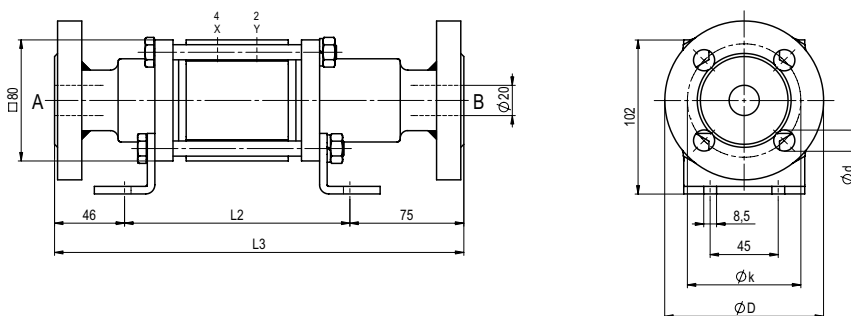


| constructive length | L ₁ | L ₂ | L ₃ |
|------------------------------------|----------------|----------------|----------------|
| standard | 216 | 149 | 270 |
| with 1/2 inductive limit switches | 235 | 168 | 289 |
| with force-feed lubrication nipple | 254 | 187 | 308 |
| with mechanical limit switches | 237 | 170 | 291 |

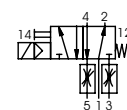
| flanges PN | DIN | øD | øk | ød |
|------------|------|-----|----|----|
| 16 | 2633 | 105 | 75 | 14 |
| 40 | 2635 | 105 | 75 | 14 |
| 100 | 2637 | 130 | 90 | 18 |

type VFK 20

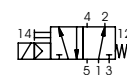
function: **NO**
open when not energized



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