

5-VMK-H 20 DR

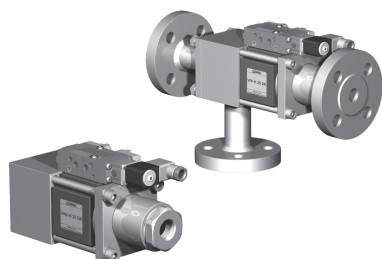
5-VFK-H 20 DR

valve type with pilot valve

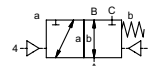
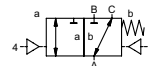
coaxial valve

type VMK-H 20 DR

VFK-H 20 DR



3/2 way valve externally controlled
pressure range PN 0-200 bar
orifice DN 20 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, intersecting switch-over
body materials ① ② steel, galvanized
 ③ 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
- inlet pressure at A, B or C
- 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-H threads G 3/4 VFK-H flanges PN 160/250 | special threads special flanges |
| function | NC | NO |
| pressure range | 0-200 bar A ⇒ B max.200 / B ⇒ A max. 100 / A ⇒ C max.200 / C ⇒ A max.200 | |
| Kv value | m³/h 7,6 | |
| vacuum | leak rate < 10 ⁻⁶ mbar•l•s ⁻¹ | |
| pressure-vacuum | P1 ⇒ P2 | pressure side max. 200 bar vacuum side leak rate upon request |
| back pressure | P2 > P1 see pressure range | |
| media | gaseous - liquid - highly viscous - gelatinous - pasty - contaminated | |
| abrasive media | | version available |
| damping | opening by throttles on pilot valve closing see pressure range | |
| flow direction | see pressure range | |
| switching cycles | 1/min 200 | |
| 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-H 7,8 VFK-H 9,2 | |
| additional equipment | | upon request |

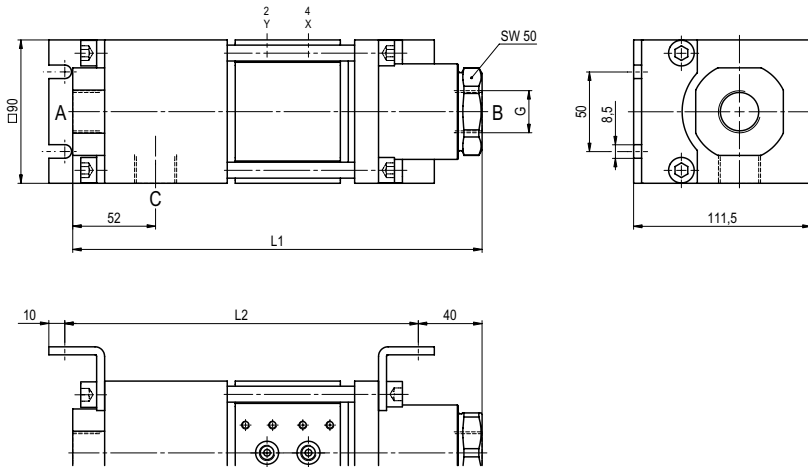
| electrical specifications | | options |
|---------------------------|--|--|
| nominal voltage | U _n DC 24V U _n AC 230V 50 Hz | special voltage upon request special voltage upon request |
| power consumption | DC 4,8 W AC pick up 11,0 VA holding 8,5 VA | 2,5 W |
| protection | IP 65 (P54) acc. DIN 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 | connector acc. DESINA | connector acc. VDMA |
| M12x1 | | |
| 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-H 20 DR

function: **NC**
closed when not energized (A ► B)

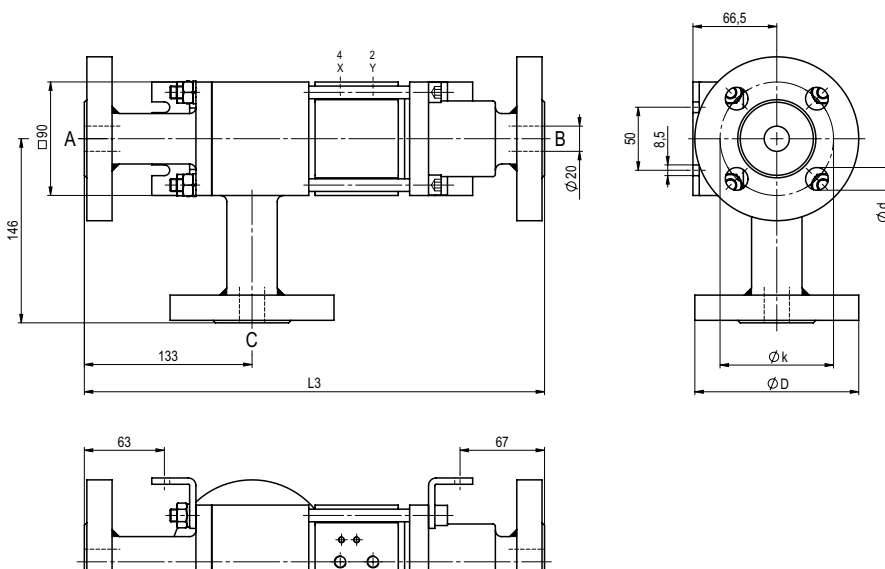


| constructive length | L1 | L2 | L3 |
|------------------------------------|-----|-----|-----|
| standard | 257 | 222 | 365 |
| with 1/2 inductive limit switches | 287 | 252 | 395 |
| with force-feed lubrication nipple | 287 | 252 | 395 |
| with mechanical limit switches | - | - | - |

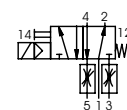
| flanges PN | DIN | øD | øk | ød |
|------------|------|-----|----|----|
| 160 | 2638 | 130 | 90 | 18 |
| 250 | 2628 | 135 | 95 | 18 |

type VFK-H 20 DR

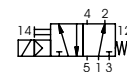
function: **NO**
open when not energized (A ► B)



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

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

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