

5-VMK-H 20 DR

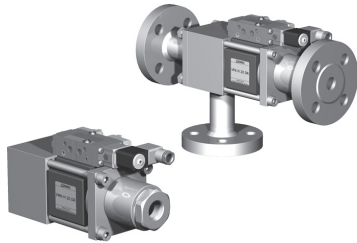
5-VFK-H 20 DR

valve type with pilot valve

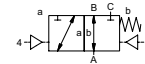
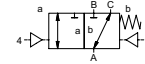
# coaxial valve

## type VMK-H 20 DR

## VFK-H 20 DR



**3/2 way valve**  
**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
<b>ports</b>	VMK-H threads G 3/4 VFK-H flanges PN 160/250	special threads special flanges
<b>function</b>	NC	NO
<b>pressure range</b>	bar 0-200 A ⇒ B max.200 / B ⇒ A max.100 / A ⇒ C max.200 / C ⇒ A max.200	
<b>Kv value</b>	m <sup>3</sup> /h 7,6	
<b>vacuum</b>	leak rate < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>	
<b>pressure-vacuum</b>	P <sub>1</sub> ⇔ P <sub>2</sub>	pressure side max. 200 bar vacuum side leak rate < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>
<b>back pressure</b>	P <sub>2</sub> > P <sub>1</sub> see pressure range	
<b>media</b>	gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
<b>abrasive media</b>		version available
<b>damping</b>	opening by throttles on pilot valve closing see pressure range	
<b>flow direction</b>	1/min 200	
<b>switching cycles</b>	ms opening 50-3000 closing 50-3000	
<b>switching time</b>	°C direct mounted pilot valve 60	remote mounted pilot valve outside temperature range of media max.160°C
<b>media temperature</b>	°C direct mounted pilot valve 50	available
<b>ambient temperature</b>		available
<b>flush ports</b>		inductive/mechanical upon request
<b>leak ports</b>		
<b>limit switches</b>	via pilot valve	LR/GL/WAZ
<b>manual override</b>		mounting brackets
<b>approvals</b>	kg VMK-H 7,8 VFK-H 9,2	
<b>mounting</b>		upon request
<b>weight</b>		
<b>additional equipment</b>		

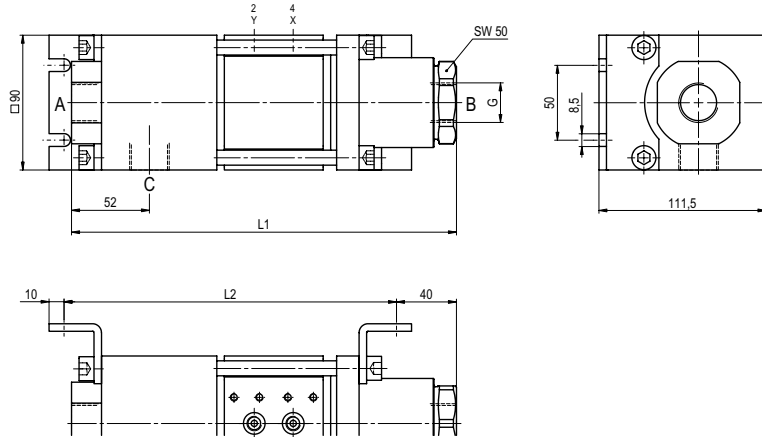
electrical specifications		options
<b>nominal voltage</b>	U <sub>n</sub> DC 24V	special voltage upon request
	U <sub>n</sub> AC 230V 50 Hz	special voltage upon request
<b>power consumption</b>	DC 4,8 W	2,5 W
	AC pick up 11,0 VA holding 8,5 VA	
<b>protection</b>	IP 65 (P54) acc. DIN 40 050	
<b>energized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

pneumatic specifications		options
<b>actuation pressure range</b>	bar 4-10	
<b>air consumption</b>	cm <sup>3</sup> /stroke 11	
<b>cycle speed</b>	main valve speed variable by throttles on pilot valve	
<b>control</b>	preferably 5/2-way pilot valve	
<b>pilot valve interface</b>	co-ax / NAMUR	ISO 1
<b>actuator ports</b>	2/4 G 1/8	G 1/4

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

# type VMK-H 20 DR

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

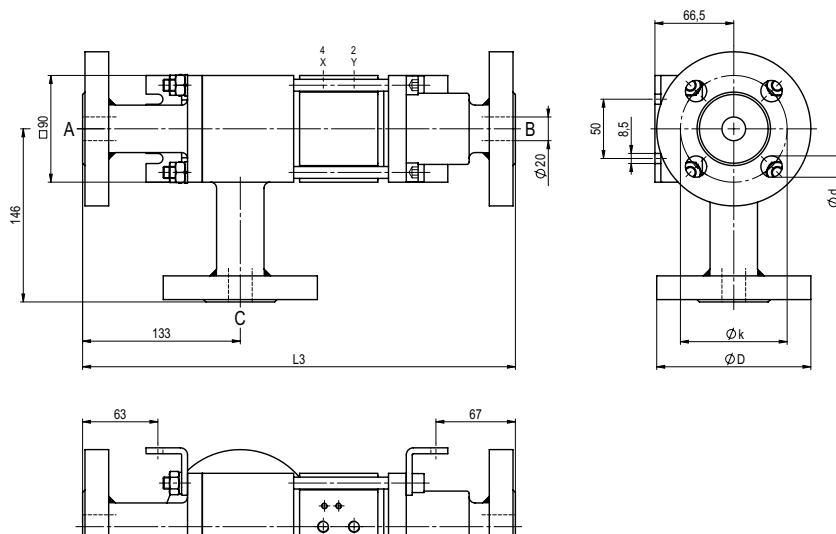


constructive length	L1	L2	L3
standard	257	222	365
with 1/2 inductive limit switches	287	252	395
with force-feed lubrication nipple	287	252	395
with mechanical limit switches	-	-	-

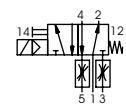
flanges PN	DIN	øD	øk	ød
160	2638	130	90	18
250	2628	135	95	18

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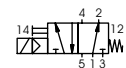
function: **NO**  
open when not energized (A ► B)



### 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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