

**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

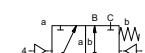
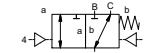
normally closed (A ▷ B)

symbol **NC**

valve

normally open (A ▷ B)

symbol **NO**



**design** pressure balanced, with spring return, switching overlap

**body materials**

- ①
- ② steel, galvanized
- ③
- ④ steel, nickel plated
- ⑤ without non-ferr. metals
- ⑥ stainless steel

**valve seat** synthetic resin on metal

**seal materials** NBR

PTFE, FPM, CR, EPDM

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

**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

**general specifications**

<b>ports</b>	VMK-H threads G 3/4	special threads
	VFK-H flanges PN 160 /250	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 upon request
<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>		
<b>flow direction</b>	opening	see pressure range
<b>switching cycles</b>	closing	by throttles on pilot valve
<b>switching time</b>	1/min 200	
<b>media temperature</b>	ms opening 50-3000 closing 50-3000	
<b>ambient temperature</b>	°C direct mounted pilot valve 60	remote mounted pilot valve outside temperature range of media max. 160 °C
<b>flush ports</b>	°C direct mounted pilot valve 50	available
<b>leak ports</b>		available
<b>limit switches</b>		inductive / mechanical upon request
<b>manual override</b>		
<b>approvals</b>	via pilot valve	LR/GL/WAZ
<b>mounting</b>		mounting brackets
<b>weight</b>	kg VMK-H 7,8 VFK-H 9,2	upon request
<b>additional equipment</b>		

**electrical specifications**

<b>nominal voltage</b>	U <sub>n</sub> DC 24 V	special voltage upon request
	U <sub>n</sub> AC 230 V 50 Hz	special voltage upon request
<b>power consumption</b>	DC 4,8 W	2,5 W
<b>protection</b>	AC pick up 11,0 VA holding 8,5 VA	
<b>energized duty rating</b>	IP65 (P54) acc. DIN 40050	
<b>connection</b>	ED 100%	
<b>optional</b>	plug acc. DIN EN 175301-803 form B, 4 positions x90° / wire diameter 6-8 mm	
<b>additional equipment</b>	M12x1 connector acc. DESINA	connector acc. VDMA
<b>max. temperature</b>	illuminated plug with varistor	
<b>explosion proof</b>	media 60°C	
	ambient 50°C	
	E Ex e II T5 nominal voltage U <sub>n</sub>	DC 24 V 3,25 W
	power consumption	AC 230 V 50 Hz 2,90 W

**pneumatic specifications**

<b>actuation pressure range</b>	bar 4-10	
<b>air consumption</b>	cm <sup>3</sup> /stroke 24	
<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

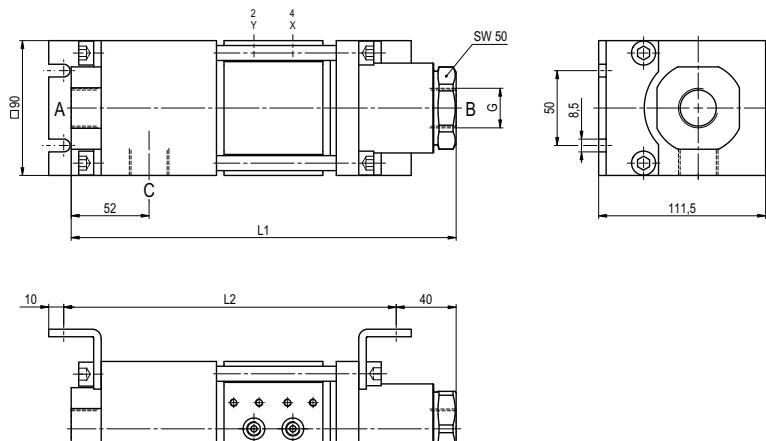
**hydraulic specifications**

<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

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

## type VMK-H 20 DR

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

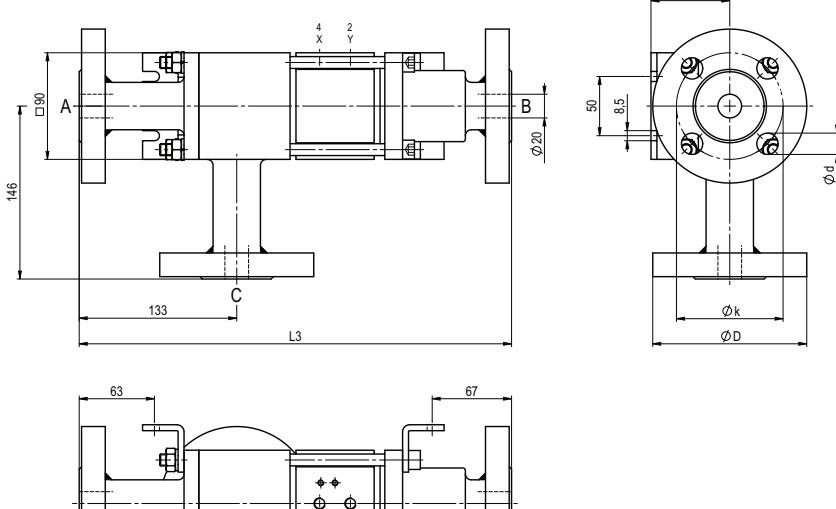


constructive length	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>
standard	257	222	365
with 1/2 inductive limit switches	287	252	395
with force-feed lubrication nipple	287	252	395
with mechanical limit switches	-	-	-

flanges PN	DIN	ØD	Øk	Ød
160	EN 1092-1	130	90	18
250	EN 1092-1	135	95	18

## type VFK-H 20 DR

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



### pneumatic actuation

