

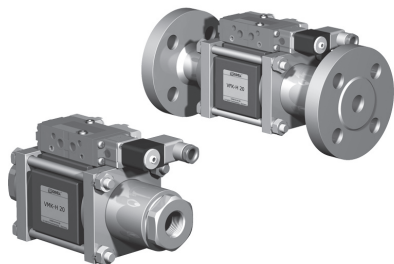
**5-VMK-H 20****5-VFK-H 20**

valve type with pilot valve

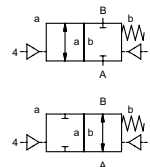
# coaxial valve


## type VMK-H 20

## VFK-H 20



**2/2 way valve** externally controlled  
**pressure range** PN 0-200 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 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
- 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**

<b>ports</b>	VMK-H threads G 3/4	<b>options</b>	special threads
	VFK-H flanges PN 160/250		special flanges
<b>function</b>	NC		NO
<b>pressure range</b>	bar 0-200		
<b>Kv value</b>	m³/h 7,7		
<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 available (max. 16 bar)
<b>back pressure</b>	P <sub>2</sub> > P <sub>1</sub>		
<b>media</b>	gaseous - liquid - highly viscous - gelatinous - pasty - contaminated		
<b>abrasive media</b>			version available
<b>damping</b>	opening closing		by throttles on pilot valve
<b>flow direction</b>	A ⇄ B		as marked
<b>switching cycles</b>	1/min 200		bi-directional upon request
<b>switching time</b>	ms opening 50-3000 closing 50-3000		
<b>media temperature</b>	°C direct mounted pilot valve 60		remote mounted pilot valve outside temperature range of media max. 160°C
<b>ambient temperature</b>	°C direct mounted pilot valve 50		
<b>flush ports</b>			available
<b>leak ports</b>			available
<b>limit switches</b>			inductive/mechanical upon request
<b>manual override</b>	via pilot valve		
<b>approvals</b>			LR/GL/WAZ
<b>mounting</b>			mounting brackets
<b>weight</b>	kg VMK-H 6,7 VFK-H 8,7		
<b>additional equipment</b>			upon request

**electrical specifications**

<b>nominal voltage</b>	U <sub>n</sub> DC 24V	<b>options</b>	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		
<b>optional</b>	M12x1 connector acc. DESINA		connector acc. VDMA
<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**

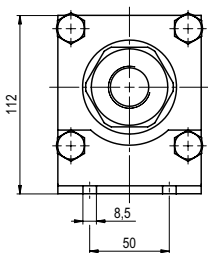
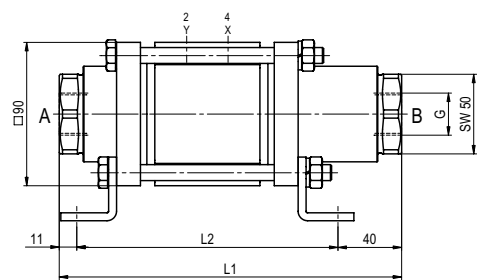
<b>actuation pressure range</b>	bar 4-10	<b>options</b>	
<b>air consumption</b>	cm³/stroke 11		
<b>cycle speed</b>	main valve speed variable by throttles on pilot valve		
<b>control</b>	preferably 5/2-way pilot valve		
<b>pilot valve interface</b>	co-ax / NAMUR		ISO 1
<b>actuator ports</b>	2/4 G 1/8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

**hydraulic specifications**

<b>actuation pressure range</b>	bar 10-30 / 30-60	<b>options</b>	
<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**

function: **NC**  
closed when not energized

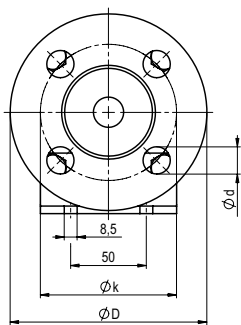
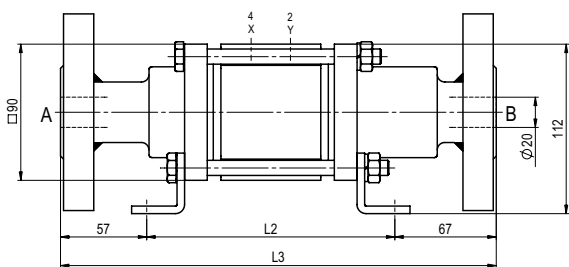


constructive length	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>
standard	215	164	288
with 1/2 inductive limit switches	245	194	318
with force-feed lubrication nipple	245	194	318
with mechanical limit switches	-	-	-

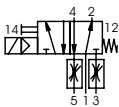
flanges PN	DIN	øD	øk	ød
160	2638	130	90	18
250	2628	135	95	18

type **VFK-H 20**

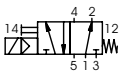
function: **NO**  
open when not energized



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