

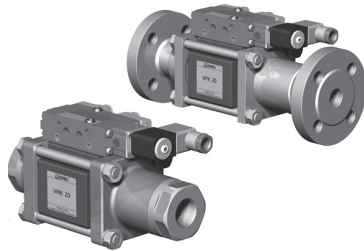
# coaxial valve

type **VMK 20**  
**VFK 20**

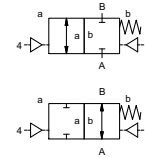
5-VMK 20

5-VFK 20

valve type with pilot valve



**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
<b>ports</b>	VMK threads G 3/4 - G 1 1/4 VFK flanges PN 16/40/100	special threads special flanges
<b>function</b>	NC	NO
<b>pressure range</b>	bar 0-16/0-40/0-64/0-100	> 100 bar upon request
<b>Kv value</b>	m <sup>3</sup> /h 8,8	
<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. 100 bar vacuum side leak rate upon request
<b>back pressure</b>	P <sub>2</sub> > P <sub>1</sub>	available (max. 16 bar)
<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	bi-directional upon request
<b>switching cycles</b>	1/min 200	
<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 temper.
<b>ambient temperature</b>	°C direct mounted pilot valve 50	ature range of media max.160°C
<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 4,7 VFK 6,7	
<b>additional equipment</b>		upon request

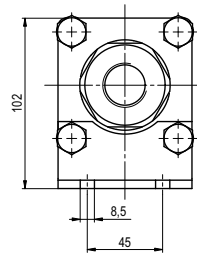
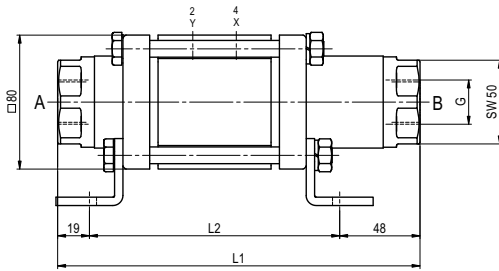
electrical specifications		options
<b>nominal voltage</b>	U <sub>n</sub> DC 24V	special voltage upon request
	U <sub>n</sub> AC 230V 50 Hz	special voltage upon request
<b>power consumption</b>	DC 4,8 W	2,5 W
	AC pick up 11,0 VA holding 8,5 VA	
<b>protection</b>	IP 65 (P54) acc. DIN 40 050	
<b>energized 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	
<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		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 20

function: **NC**  
closed when not energized

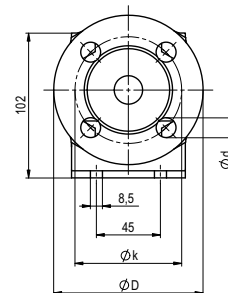
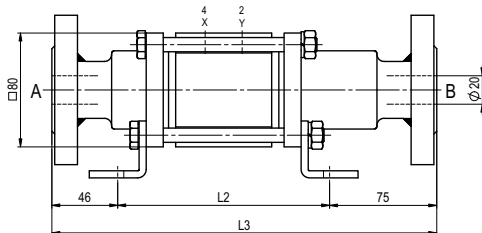


constructive length	L1	L2	L3
standard	216	149	270
with 1/2 inductive limit switches	235	168	289
with force-feed lubrication nipple	254	187	308
with mechanical limit switches	237	170	291

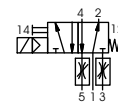
flanges PN	DIN	øD	øk	ød
16	2633	105	75	14
40	2635	105	75	14
100	2637	130	90	18

# type VFK 20

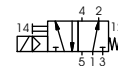
function: **NO**  
open when not energized



## pneumatic actuation



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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