

5-VMK 15 DR

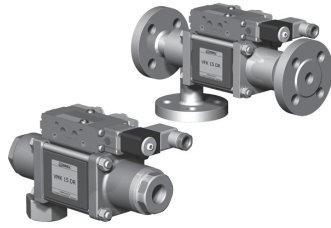
5-VFK 15 DR

valve type with pilot valve

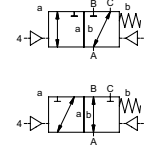
# coaxial valve

## type VMK 15 DR

## VFK 15 DR



**3/2 way valve** externally controlled  
**pressure range** PN 0-100 bar  
**orifice** DN 15 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 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
- 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.

		ports	VMK	threads G 3/8 - G 3/4	special threads
<b>function</b>		VFK	flanges PN 16/40/100	special flanges	
	<b>pressure range</b>		NC	NO	
<b>bar</b>			0-16/0-40/0-64/0-100		
	<b>Kv value</b>	m <sup>3</sup> /h	5,6		
<b>vacuum</b>				< 10 <sup>-6</sup> mbar*1s <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>	see pressure range		
	<b>media</b>		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	version available	
<b>abrasive media</b>					
	<b>damping</b>	opening	by throttles on pilot valve		
<b>flow direction</b>		closing	see pressure range		
	<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 temperature range of media max.160°C	
<b>ambient temperature</b>		°C	direct mounted pilot valve 50	available	
	<b>flush ports</b>			available	
<b>leak ports</b>				inductive/mechanical upon request	
	<b>limit switches</b>				
<b>manual override</b>			via pilot valve		
	<b>approvals</b>			LR/GL/WAZ	
<b>mounting</b>				mounting brackets	
	<b>weight</b>	kg	VMK 4,5 VFK 5,3		
<b>additional equipment</b>				upon request	

**electrical specifications**

		nominal voltage	U <sub>n</sub>	DC 24V	special voltage upon request
<b>power consumption</b>		U <sub>n</sub>	AC 230V 50 Hz	special voltage upon request	
		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>	IP 65 (P54)	acc. DIN 40 050		
<b>connection</b>		ED	100%		
	<b>additional equipment</b>		plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm illuminated plug with varistor	connector acc. VDMA	
<b>optional</b>		M12x1	connector acc. DESINA		
	<b>max. temperature</b>	media	60°C		
<b>explosion proof</b>		ambient	50°C		
		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**

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

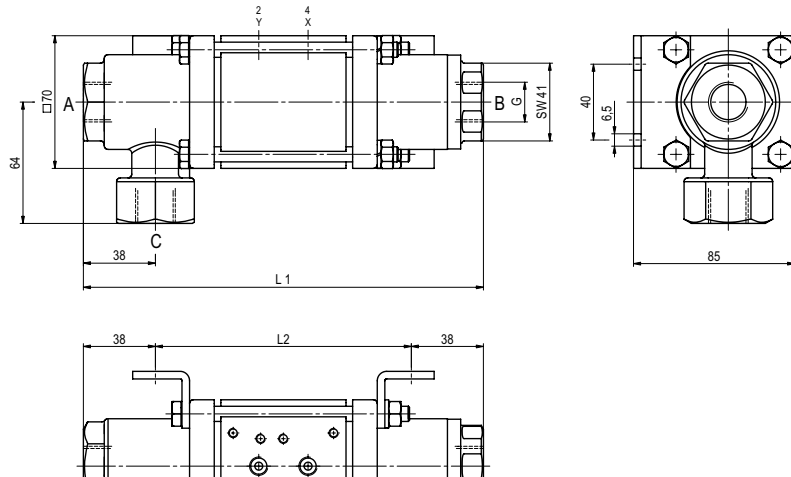
**hydraulic specifications**

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

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

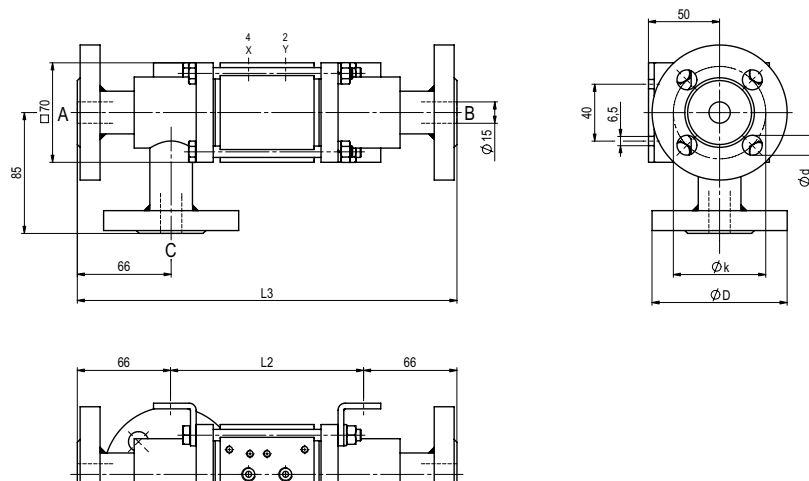


constructive length	L1	L2	L3
standard	211	135	267
with 1/2 inductive limit switches	237	161	293
with force-feed lubrication nipple	244	168	300
with mechanical limit switches	237	161	293

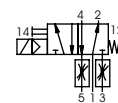
flanges PN	DIN	øD	øk	ød
16	2633	95	65	14
40	2635	95	65	14
100	2637	105	75	14

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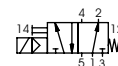
function: **NO**  
open when not energized (A ► B)



### 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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