

# coaxial valve

#### type VMK 40 DR 5-VMK 40 DR 5-VFK 40 DR VFK 40 DR

valve type with pilot valve



3/2 way valve externally controlled

pressure range PN 0-100 bar orifice DN 40 mm connection thread/flange

body materials

function valve

normally closed (A ►B)

symbol NC

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, switching overlap

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.

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	general	specifications	options	
ports	VMK	threads G 1 1/2 - G 2	special threads	
	VFK	flanges PN 100	special flanges	
function		NC	NO	
pressure range	bar	0-64 / 0-100	> 100 bar	
		A ⇒ B max. 100 / B ⇒ A max. 16 / A ⇒	C max. 100 / C ⇒ A max. 100	
Kv value	m³/h	31,0		
vacuum	leak rate		< 10 <sup>-6</sup> mbar•l•s <sup>-1</sup>	
pressure-vacuum	P₁⇔ P₂		pressure side max. 100 bar	
			vacuum side leak rate upon request	
back pressure	P <sub>2</sub> > P <sub>1</sub>	see pressure range		
media		gaseous - liquid - highly viscous -		
		gelatinous - pasty - contaminated		
abrasive media			version available	
damping	opening			
	closing	by throttles on pilot valve		
flow direction		see pressure range		
switching cycles	1/min	150		
switching time	ms	opening 100-3000 closing 100-3000		
media temperature	°C	direct mounted pilot valve 60	remote mounted pilot valve outside tempe	
mbient temperature		direct mounted pilot valve 50	ratur range of media max. 160 °C	
flush ports	°C		available	
leak ports			available	
limit switches			inductive / mechanical upon request	
manual override		via pilot valve		
approvals			LR/GL/WAZ	
mounting			mounting brackets	
weight	kg	VMK 18,5 VFK 26,5		
dditional equipment			upon request	
	electrica	al specifications	options	

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

	p			
actuation pressure range	bar	4-10		
air consumption	cm³/stroke	65		
cycle speed		main valve speed variable by throttleso	on pilot valve	
control		preferably 5/2 way pilot valve		
pilot valve interface		co-ax / NAMUR	ISO 1	
actuator ports	2/4	G 1/8	G 1/4	

pneumatic specifications

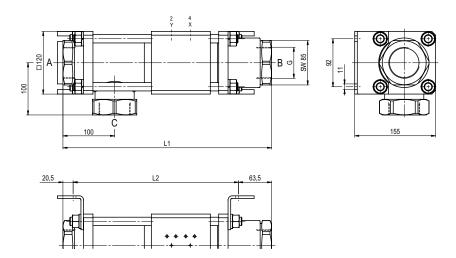
actuation pressure range control actuator ports by media

#### hydraulic specifications options

10-30 / 30-60 preferably 4/2 way control valve NPT 1/4

options

specifications not highlighted are standard specifications highlighted in grey are optional



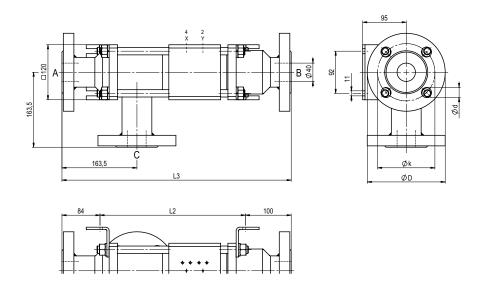
constructive length	L <sub>1</sub>	L2	Lз
standard	400	316	500
with 1/2 inductive limit switches	400	316	500
with force-feed lubrication nipple	400	316	500
with mechanical limit switches	-	-	-

flanges PN	DIN	ØD	Øk	Ød
100	EN 1092-1	170	125	22

# type VFK 40 DR

function: NO

open when not energized (A ►B)



# 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