

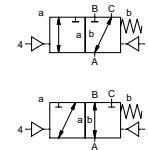
5-VMK 20 DR
5-VFK 20 DR
 valve type with pilot valve



coaxial valve

type **VMK 20 DR**
VFK 20 DR

3/2 way valve	externally controlled
pressure range	PN 0-100 bar
orifice	DN 20 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 ③ brass, nickel plated ④ steel, nickel plated ② steel, galvanized ⑤ without non-ferr. metals ⑥ stainless steel
valve seat seal materials	synthetic resin on metal 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

general specifications		options
ports	VMK threads G 3/4 - G 1 1/4	special threads
	VFK flanges PN 16/40/100	special flanges
function	NC	NO
pressure range	bar 0-16/0-40/0-64/0-100	A ⇒ B max. 100 / B ⇒ A max. 16 / A ⇒ C max. 100 / C ⇒ A max. 100
Kv value	m³/h 8,3	A ⇒ B max. 100 / B ⇒ A max. 16 / A ⇒ C max. 100 / C ⇒ A max. 100
vacuum	leak rate < 10⁻⁶ mbar·l·s⁻¹	pressure side max. 100 bar
pressure-vacuum	P₁ ⇌ P₂	vacuum side leak rate < 10⁻⁶ mbar·l·s⁻¹
back pressure	P₂ > P₁	see pressure range
media		gaseous - liquid - highly viscous - gelatinous - pasty - contaminated
abrasive media damping		version available
flow direction	opening	see pressure range
switching cycles	closing	by throttles on pilot valve
switching time	1/min 200	see pressure range
media temperature	ms opening 50-3000 closing 50-3000	remote mounted pilot valve outside temperature range of media max. 160°C
ambient temperature	°C direct mounted pilot valve 60	available
flush ports	°C direct mounted pilot valve 50	available
leak ports		inductive/mechanical upon request
limit switches		available
manual override		available
approvals		via pilot valve
mounting		LR/GL/WAZ
weight	kg VMK 5,8 VFK 7,2	mounting brackets
additional equipment		upon request

 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.

electrical specifications		options
nominal voltage	U _n DC 24V	special voltage upon request
	U _n AC 230V 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	IP 65 (P54) acc. DIN 40 050	
energized duty rating	ED 100%	
connection	plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm	
additional equipment	illuminated plug with varistor	
optional	M12x1 connector acc. DESINA	connector acc. VDMA
max. temperature	media 60°C	
	ambient 50°C	
explosion proof	EEx m II T5 nominal voltage U _n	direct current 24 V 3,25 W
	power consumption	alternating current 230 V 50 Hz 2,90 W

pneumatic specifications

options

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

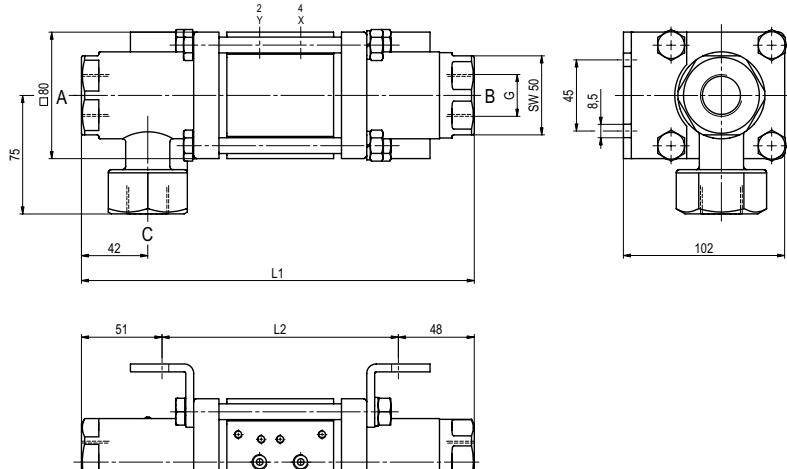
hydraulic specifications

options

actuation pressure range	bar 10-30 / 30-60
control	preferably 4/2-way control valve
actuator ports	X/Y G 1/4 NPT 1/4

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

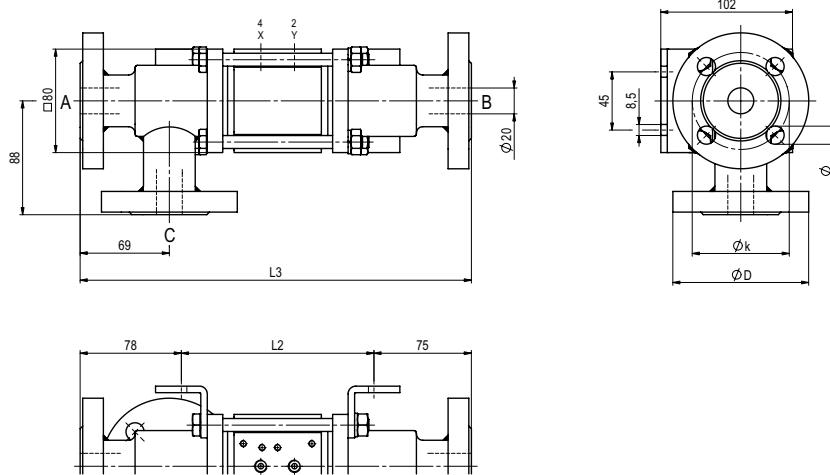
function: **NC** closed when not energized (A ▶ B)



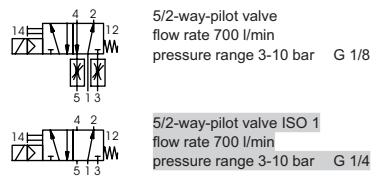
constructive length	L ₁	L ₂	L ₃
standard	248	149	302
with 1/2 inductive limit switches	267	168	321
with force-feed lubrication nipple	286	187	340
with mechanical limit switches	269	170	323

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

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



pneumatic actuation (separately)



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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