

5-VMK 20 DR

5-VFK 20 DR

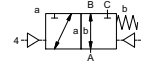
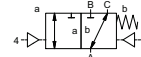
valve type with pilot valve

coaxial valve

type VMK 20 DR VFK 20 DR



3/2 way valve
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, switching overlap
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.

general specifications		options
ports	VMK threads G 3/4 - G 1 1/4 VFK flanges PN 16 / 40 / 100	special threads 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	m ³ /h 8,3	
vacuum	leak rate < 10 ⁻⁶ mbar·l·s ⁻¹	
pressure-vacuum	P ₁ ⇔ P ₂	pressure side max. 100 bar vacuum side leak rate upon request
back pressure	P ₂ > P ₁ see pressure range	
media	gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
abrasive media		version available
damping	opening by throttles on pilot valve closing see pressure range	
flow direction	see pressure range	
switching cycles	1/min 200	
switching time	ms opening 50-3000 closing 50-3000	
media temperature	°C direct mounted pilot valve 60	remote mounted pilot valve outside temper-
ambient 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 5,8 VFK 7,2	
additional equipment		upon request

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

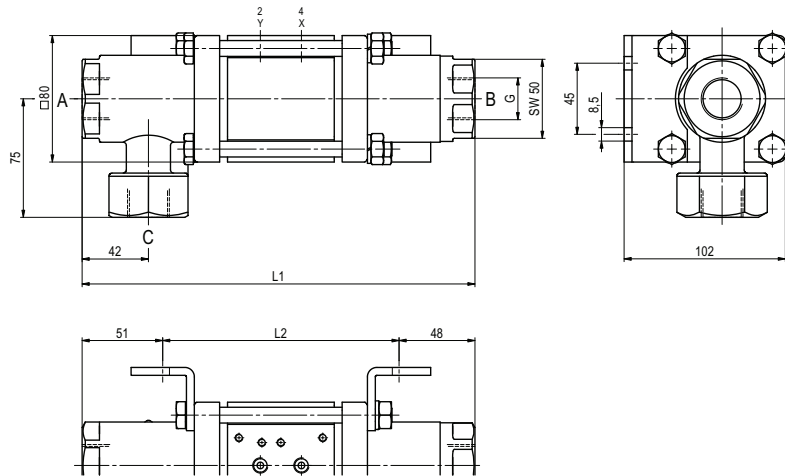
pneumatic specifications		options
actuation pressure range	bar 4-10	
air consumption	cm ³ /stroke 11	
cycle speed	main valve speed variable by throttleson pilot valve	
control	preferably 5/2 way pilot valve	
pilot valve interface	co-ax / NAMUR	ISO 1
actuator ports	2/4 G 1/8	G 1/4

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
by media		

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

type VMK 20 DR

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

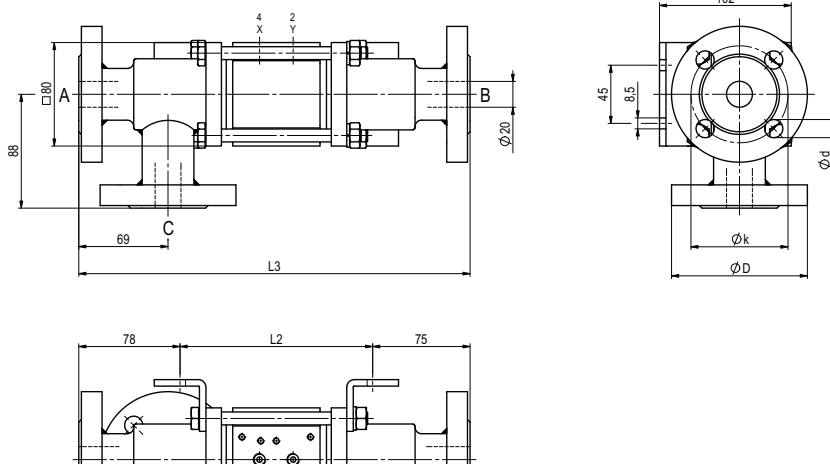


constructive length	L1	L2	L3
standard	248	149	302
with 1/2 inductive limit switches	267	168	321
with force-feed lubrication nipple	286	187	340
with mechanical limit switches	269	170	323

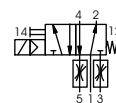
flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	105	75	14
40	EN 1092-1	105	75	14
100	EN 1092-1	130	90	18

type VFK 20 DR

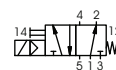
function: **NO**
open when not energized (A ► B)



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