

5-VMK 20
5-VFK 20

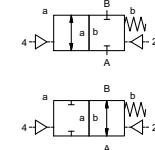
valve type with pilot valve



coaxial valve

type **VMK 20**
VFK 20

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
	⑦ aluminium	

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

general specifications

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

electrical specifications

nominal voltage	U _n DC 24 V	options
U _n	AC 230 V 50 Hz	special voltage upon request
power consumption	4,8 W	special voltage upon request
DC	2,5 W	
protection	AC pick up 1,1 VA holding 8,5 VA	
energized duty rating	IP65 (P54) acc. DIN 40050	
connection	ED 100%	
optional	plug acc. DIN EN 175301-803 form B, 4 positions x90° / wire diameter 6-8 mm	
additional equipment	M12x1 connector acc. DESINA	connector acc. VDMA
max. temperature	illuminated plug with varistor	
media	60°C	
ambient	50°C	
explosion proof	E Ex e II T5 nominal voltage U _n	DC 24 V 3,25 W
	power consumption	AC 230 V 50 Hz 2,90 W

pneumatic specifications

actuation pressure range	bar 4-10	options
air consumption	cm ³ /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	ISO 1
actuator ports	2/4 G 1/8	G 1/4

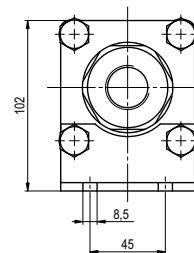
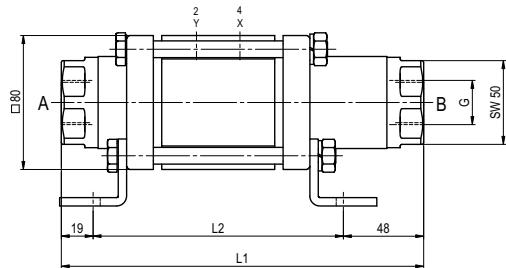
hydraulic specifications

actuation pressure range	bar 15-30 / 30-60	options
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

type VMK 20

function: **NC**
closed when not energized

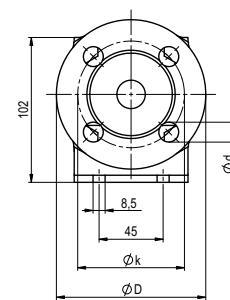
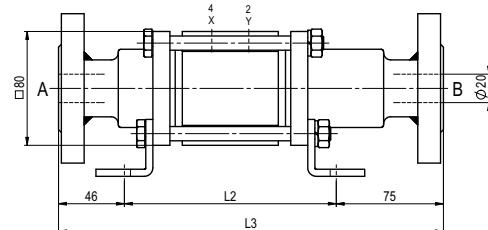


constructive length	L ₁	L ₂	L ₃
standard	216	149	270
with inductive limit switches	235	168	289
with force-feed lubrication nipple	254	187	308
with mechanical limit switches	237	170	291

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

type VFK 20

function: **NO**
open when not energized



pneumatic specifications

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