

coax® data sheet - coaxial valve

type VMK 20
VFK 20



03/2022



⚠ Above stated body materials refer to the valve port connections that get in contact with the media only!

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
- 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. To avoid hydraulic shocks in pipelines, the flow velocities must be taken into account when designing valves for liquids.

2/2-way valve

pressure range

orifice

connection

function

operating principle

body material

valve seat

seal materials

ports

function

pressure range

Kv value

vacuum

pressure-vacuum

back pressure media

abrasive media damping

flow direction

switching cycles

switching time

media temperature ambient temperature

flush ports

leak ports

limit switches

manual override

approvals

mounting

weight

additional equipment

nominal voltage

power consumption

protection

energized duty rating

connection

optional

additional equipment

max. temperature

explosion proof

actuation pressure range

air consumption

cycle speed

control

pilot valve interface

actuator ports

actuation pressure range

control

actuator ports

by media

externally controlled

PN 0-100 bar

DN 20 mm

thread/flange

valve

normally closed

symbol **NC**

valve

normally open

symbol **NO**

pressure balanced, with spring return

① brass

③ brass, nickel plated

④ steel, nickel plated

⑩ aluminium

② steel galvanized

⑤ without non-ferr. Metals

⑥ stainless steel

synthetic materials on metal

NBR

PTFE, FPM, CR, EPDM

general specifications

VMK	threads G 3/4 - G 1 1/4	special threads
VFK	flanges PN 16 / 40 / 100	special flanges
	NC	NO
bar	0-16 / 0-40 / 0-63 / 0-100	> 100 bar upon request
m³/h	8,8	
leak rate		< 10 ⁻⁶ mbar•L•s ⁻¹
P ₁ ⇄ P ₂		pressure side max. 100 bar
		vacuum side leak rate upon request
P ₂ > P ₁		available (max. 16 bar)
		gaseous - liquid - highly viscous -
		gelatinous - pasty - contaminated
		available
opening		
closing	by throttles on pilot valve	
A ⇄ B	as marked	bi-directional upon request
1/min	200	
ms	opening 50-3000	
	closing 50-3000	
°C	direct mounted pilot valve 60	remote mounted pilot valve outside
°C	direct mounted pilot valve 50	temperatur range of media max. 160 °C
		available
		available
		inductive / mechanical upon request
	via pilot valve	
		LR/DNV/WAZ
		mounting brackets
kg	VMK 4,7 VFK 6,7	
		upon request

electrical specifications

U _n	DC 24 V	special voltage upon request
AC	AC 230 V 50 Hz	special voltage upon request
DC	4,8 W	2,5 W (actuation pressure range 4-7 bar)
AC	pick up 11,0 VA holding 8,5 VA	
IP65 (P54)	acc. DIN 40050	
ED	100%	
	plug acc. DIN EN 175301-803 form B, 4 positions x90° / wire diameter 6-8 mm	
M12x1	connector acc. DESINA	connector acc. VDMA
	illuminated plug with varistor	
media	60°C	
ambient	50°C	
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

bar	4-10	
cm³/stroke	11	
	main valve speed variable by throttleson pilot valve	
	preferably 5/2 way pilot valve	
	co-ax / Namur	ISO 1
2/4	G 1/8	G 1/4

hydraulic specifications

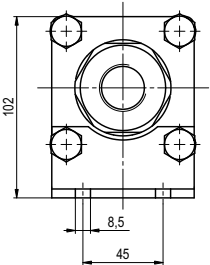
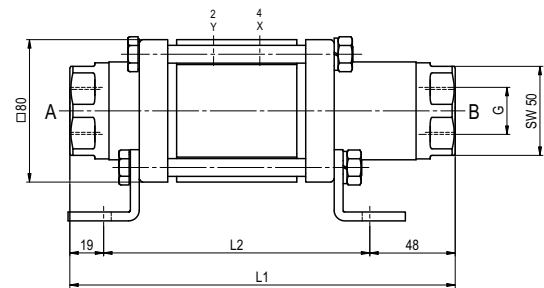
bar	15-30 / 30-60	
	preferably 4/2 way control valve	
X/Y	G 1/4	NPT 1/4

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

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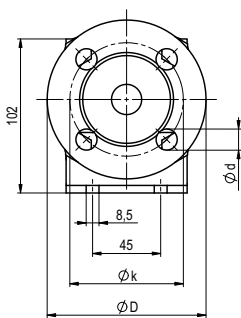
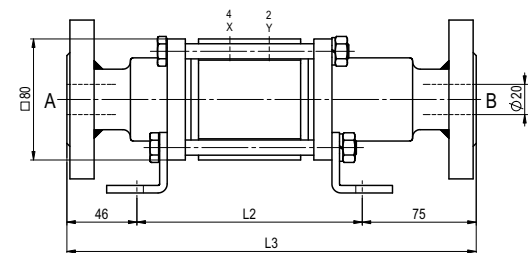
function: **NC**
closed when not energized



constructive length	L1	L2	L3
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

function: **NO**
open when not energized



pneumatic specifications

