coax® data sheet - coaxial valve

type VMK 25 VFK 25



09/2022



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.

specifications not highlighted are standard specifications highlighted in grey are optional 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

abrasive media damping

flow direction switching cycles switching time

media temperature ambient temperature flush ports leak ports limit switches manual override approvals mounting

nominal voltage

power consumption

additional equipment

protection energized duty rating connection optional additional equipment max. temperature

explosion proof

actuation pressure range air consumption cycle speed pilot valve interface actuator ports

actuation pressure ra actuator ports by media

externally controlled

PN 0-100 bar DN 25 mm

normally closed symbol NC

valve normally open symbol NO

leak rate

opening

kg

thread/flange

pressure balanced, with spring return

① brass ② steel galvanized ③ brass, nickel plated

(5) without non-ferr. Metals

< 10⁻⁶ mbar•l•s⁻¹

4 steel, nickel plated 6 stainless steel ① aluminium

synthetic materials on metal

PTFE, FPM, CR, EPDM

options general specifications

VMK	threads G 1 - G 1 1/2	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	13.3	

pressure side max. 100 bar vacuum side leak rate upon request P2 > P1 available (max. 16 bar)

gaseous - liquid - highly viscous gelatinous - pasty - contaminated available

by throttles on pilot valve closing as marked 200 bi-directional upon request A ⇒ B 1/min 50-3000 ms opening 50-3000 closing direct mounted pilot valve 60 remote mounted pilot valve outside temperatur range of media max. 160 °C direct mounted pilot valve 50

available inductive / mechanical upon reques via pilot valve LR/DNV/WAZ

mounting brackets VMK 6.7 VFK 9.0 upon request

electrical specifications options

Un	DC 24 V	special voltage upon request		
Un	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, 2	DIN EN 175301-803 form B, 2 positions x180° / 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 Un	DC 24 V 3.25 W		
	power consumption	AC 230 V 50 Hz 2.90 W		

pneumatic specifications options

bar	4-8		
cm³/stroke	18		
	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	

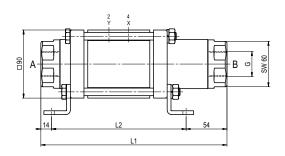
hvdra	ulic specifications	options	
2/4	G 1/8	G 1/4	

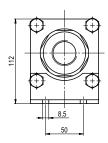
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inge	bar	15-30 / 30-60		
		preferably 4/2 way control valve		
	X/Y	G 1/4	NPT 1/4	

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function: **NC** closed when not energized

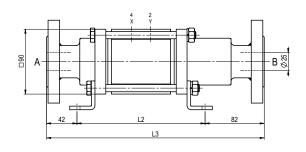


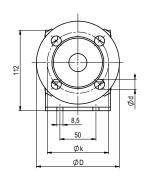


constructive length	L1	L2	L3
standard	246	178	302
with inductive limit switches	260	192	316
with force-feed lubrication nipple	276	208	332
with mechanical limit switches	270	202	326

flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	115	85	14
40	EN 1092-1	115	85	14
100	EN 1092-1	140	100	18

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