coax® data sheet - coaxial valve

type VMK 32 **VFK 32**



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 media

abrasive media damping

flow direction switching cycles switching time

media temperature ambient temperature flush ports leak ports limit switches manual override approvals mounting 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 pilot valve interface actuator ports

actuation pressure range actuator ports by media

externally controlled

PN 0-100 bar DN 32 mm thread/flange

normally closed symbol NC

valve normally open symbol NO

pressure balanced, with spring return

① brass

leak rate

② steel galvanized

< 10⁻⁶ mbar•l•s⁻¹

3 brass, nickel plated

(5) without non-ferr. Metals 6 stainless steel

4 steel, nickel plated

synthetic materials on metal PTFE, FPM, CR, EPDM

general specifications options

VMK	threads G 1 1/4 - 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	
m³/h	20.0	

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 opening

by throttles on pilot valve closing as marked 150 bi-directional upon request A ⇒ B 1/min 100-3000 ms opening 100-3000 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 7.8 VFK 11.6 kg 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	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	23	
	main valve speed variable by throttleso	n pilot valve
	preferably 5/2 way pilot valve	
	co-ax / Namur	ISO 1
2/4	G 1/8	G 1/4

hydraulic specifications

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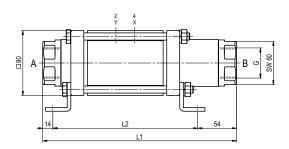
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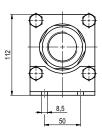
bar	15-30 / 30-60		
	preferably 4/2 way control valve		
X/Y	G 1/4	NPT 1/4	

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function: **NC** closed when not energized

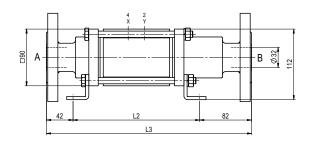


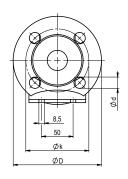


constructive length	L1	L2	L3
standard	269	201	325
with inductive limit switches	276	208	332
with force-feed lubrication nipple	306	238	362
with mechanical limit switches	304	236	360

flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	140	100	18
40	EN 1092-1	140	100	18
100	EN 1092-1	155	110	22

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