# coax® data sheet - coaxial valve

# type VMK 15 VFK 15



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
- low 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
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 15 mm
thread/flange

normally closed symbol **NC** 

valve normally open symbol **NO** 

# a B b W

### pressure balanced, with spring return

① brass

② steel galvanized

3 brass, nickel plated

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

4 steel, nickel plated

① aluminium

synthetic materials on metal

PTFE, FPM, CR, EPDM

# general specifications options

VMK	threads G 3/8 - G 3/4 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	5.7		

 leak rate
 < 10<sup>-6</sup> mbar • l • s<sup>-1</sup>

 P1 ⇔ P2
 pressure side max. 100 bar

 vacuum side leak rate upon request

 P2 > P1
 available [max. 16 bar]

gaseous - liquid - highly viscous gelatinous - pasty - contaminated

direct mounted pilot valve 60
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direct mounted pilot valve outside max. 160 °C
direct

VMK 3.4 VFK 5.0 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 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	11	
	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 options

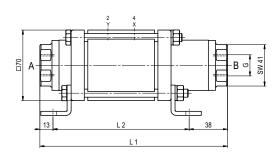
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ure range	bar	15-30 / 30-60		
		preferably 4/2 way control valve		
	X/Y	G 1/4	NPT 1/4	

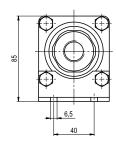
kg

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type VMK 15 VFK 15

function: **NC** closed when not energized

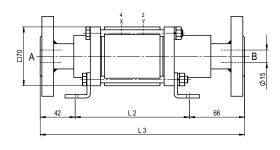


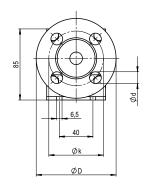


constructive length	L1	L2	L3
standard	186	135	243
with inductive limit switches	212	161	269
with force-feed lubrication nipple	219	168	276
with mechanical limit switches	212	161	269

flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	95	65	14
40	EN 1092-1	95	65	14
100	EN 1092-1	105	75	14

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