# coax® data sheet - coaxial valve

# type VMK-H 20 VFK-H 20



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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	
fatia	

# 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 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 0-200 bar DN 20 mm thread/flange

normally closed symbol NC

valve normally open symbol NO



pressure balanced, with spring return

1 (3)

② steel galvanized (5) without non-ferr. Metals

6 stainless steel

4 steel, nickel plated

synthetic materials on metal

PTFE, FPM, CR, EPDM

#### options general specifications

VMK-H	threads G 3/4	special threads	
VFK-H	flanges PN 160 / 250	special flanges	
	NC	NO	
bar	0-200		
m³/h	7.7		
leak rate		< 10 <sup>-6</sup> mbar•l•s <sup>-1</sup>	
P1⇔ P2		pressure side max. 200 bar	
		vacuum side leak rate upon request	
P2 > P1		available (max. 16 bar)	
	gaseous - liquid - highly viscous		

available opening 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-H 6.7 VFK-H 8.7 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	24	
	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

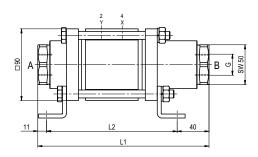
### hydraulic specifications

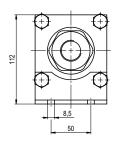
hydraulic specifications		options	
bar	15-30 / 30-60		
	preferably 4/2 way control valve		
X/Y	G 1/4	NPT 1/4	

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function: **NC** closed when not energized

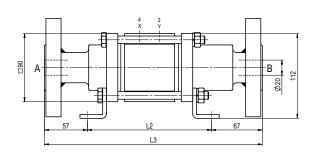


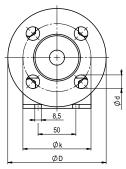


constructive length	L1	L2	L3
standard	215	164	288
with inductive limit switches	245	194	318
with force-feed lubrication nipple	245	194	318
with mechanical limit switches	-	-	-

flanges PN	DIN	ØD	Øk	Ød
160	EN 1092-1	130	90	18
250	EN 1092-1	135	95	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