coax® data sheet - coaxial valve

type VMK-H 15 DR VFK-H 15 DR



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
- inlet pressure at A, B or C
- 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

3/2 way valve	
pressure range	
orifice	
connection	
function	

operating principle

body material

valve seat seal materials

ports

function pressure range Kv value 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 15 mm thread/flange

1

(3)

normally closed (A ►B)

symbol NC

valve normally open (A ►B)

symbol NO



pressure balanced, with spring return, intersecting switch-over

② steel galvanized

(5) without non-ferr. Metals 4 steel, nickel plated 6 stainless steel

synthetic materials on metal

PTFE, FPM, CR, EPDM

general s	specifications	options
VMK-H	threads G 1/2	special threads
VFK-H	flanges PN 160 / 250	special flanges
	NC	NO
bar	0-200	
	A ⇒ B max. 200 / B ⇒ A max. 100 / A	A ⇒ C max. 200 / C ⇒ A max. 200
m³/h	4.4	
leak rate		< 10 ⁻⁶ mbar•l•s ⁻¹
P1⇔ P2		pressure side max. 200 bar
		vacuum side leak rate upon request
P2 > P1	see pressure range	
	gaseous - liquid - highly viscous	
		available
opening		
closing	by throttles on pilot valve	
	see pressure range	
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	
	·	I R/DNV/WA7

electrical specifications options

VMK-H 6.5 VFK-H 7.3

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 I	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
	nower consumption	AC 230 V 50 Hz 2 90 W

mounting brackets

upon request

options pneumatic specifications

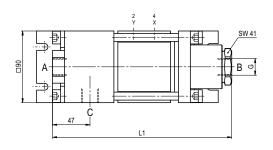
Dai	4-0	
cm³/stroke	24	
	main valve speed variable by thrott	tleson pilot valve
	preferably 5/2 way pilot valve	·
	co-ax / Namur	ISO 1
2/4	G 1/8	G 1/4

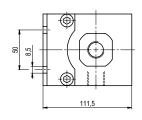
nyarau	lic specifications	options	
bar	15-30 / 30-60		
	preferably 4/2 way control valve		
X/Y	G 1/4	NPT 1/4	

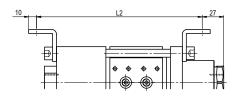
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function: NC closed when not energized (A \triangleright B)



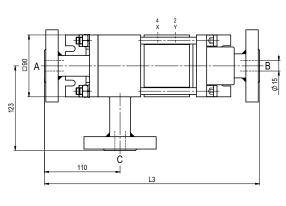


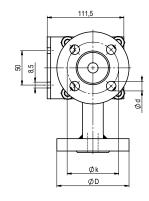


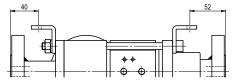
constructive length	L1	L2	L3
standard	225	208	313
with inductive limit switches	255	238	343
with force-feed lubrication nipple	255	238	343
with mechanical limit switches	-	-	-

flanges PN	DIN	ØD	Øk	Ød
160	EN 1092-1	105	75	14
250	EN 1092-1	130	90	18

function: **NO** open when not energized (A ►B)







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