coax® data sheet - coaxial valve

type VMK-H 10



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	

externally controlled

PN 0-200 bar DN 10 mm

thread

normally closed symbol NC

valve normally open symbol NO



2

pressure balanced, with spring return

1 brass

(3) (4) (5) 6 stainless steel

ontions

valve seat seal materials

operating principle

body material

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

optional additional equipment

power consumption protection energized duty rating connection

max. temperature

explosion proof

synthetic	materials	on	metal
NDD			

PTFE, FPM NBR

general s	pecifications	options
VMK	threads G 3/8 - G 1/2	special threads
	NC	NO
bar	0-200	
m³/h	3.5	
leak rate		< 10 ⁻⁶ mbar•l•s ⁻¹
P₁⇔ P₂		pressure side max. 200 bar
		vacuum side leak rate upon request
P2 > P1		available (max. 16 bar)
	gaseous - liquid - highly viscous	

upon request opening by throttles on pilot valve closing bi-directional upon request A ⇒ B as marked 1/min 680 30-3000 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 inductive via pilot valve LR/DNV/WAZ

electrical specifications

kg

VMK-H 2.6

0	р	tı	0	n	s

upon request

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

actuation pressure range	bar	4-8
air consumption	cm³/stroke	5
cycle speed		main valve speed variable by throttleson pilot valve
control		preferably 5/2 way pilot valve
pilot valve interface	-	co-ax / Namur
actuator ports	2/4	G 1/8

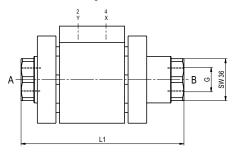
actuation pressure range actuator ports by media

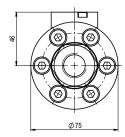
hydraulic specifications options 4-10 preferably 4/2 way control valve X/Y G 1/8

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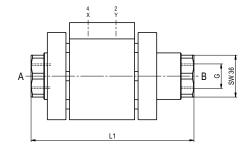
function: **NC** closed when not energized

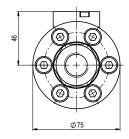




constructive length	L1
standard	140
with inductive limit switches	160

function: **NO** open when not energized





pneumatic specifications

