

10/2023



**!** 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**
- 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**

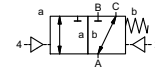
- actuation pressure range**
- air consumption**
- cycle speed**
- control**
- pilot valve interface**
- actuator ports**

- actuation pressure range**
- control**
- actuator ports**
- by media**

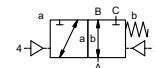
**externally controlled**

- PN 0-100 bar
- DN 10 mm
- thread

- valve normally closed (A ► B)
- symbol **NC**



- valve normally open (A ► B)
- symbol **NO**



pressure balanced, with spring return, intersecting switch-over

- ① brass
- ②
- ③ brass, nickel plated
- ⑤
- ④
- ⑥ stainless steel
- ⑦ aluminium (0-63 bar)

synthetic materials on metal

- NBR
- PTFE, FPM, CR, EPDM

**general specifications**

VMK	threads G 1/4 - G 3/4	<b>options</b>	special threads
	NC		NO
bar	0-16 / 0-40 / 0-63 / 0-100		
	A → B max. 100 / B → A max. 16 / A → C max. 100 / C → A max. 63		
m <sup>3</sup> /h	2,5 [ > 63 bar = 2,1 ]		
leak rate		< 10 <sup>-6</sup> mbar•L•s <sup>-1</sup>	
P <sub>1</sub> ↔ P <sub>2</sub>		pressure side max. 100 bar	vacuum side leak rate upon request
P <sub>2</sub> > P <sub>1</sub>	see pressure range		
	gaseous - liquid - highly viscous - gelatinous - pasty - contaminated		upon request
opening			
closing	by throttles on pilot valve		
	see pressure range		
1/min	680		
ms	opening 30-3000		
	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	
		inductive	
	via pilot valve		
		LR/DNV/WAZ	
		mounting brackets	
kg	VMK 1,8		upon request

**electrical specifications**

U <sub>n</sub>	DC 24 V	<b>options</b>	special voltage upon request
U <sub>n</sub>	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 ambient	60°C		
	50°C		
E Ex e II T5	nominal voltage U <sub>n</sub>	DC 24 V	3,25 W
	power consumption	AC 230 V 50 Hz	2,90 W

**pneumatic specifications**

bar	4-8	<b>options</b>	
cm <sup>3</sup> /stroke	2		
	main valve speed variable by throttleson pilot valve		
	preferably 5/2 way pilot valve		
	co-ax		NAMUR acc. VDI / VDE 3845
2/4	G 1/8		

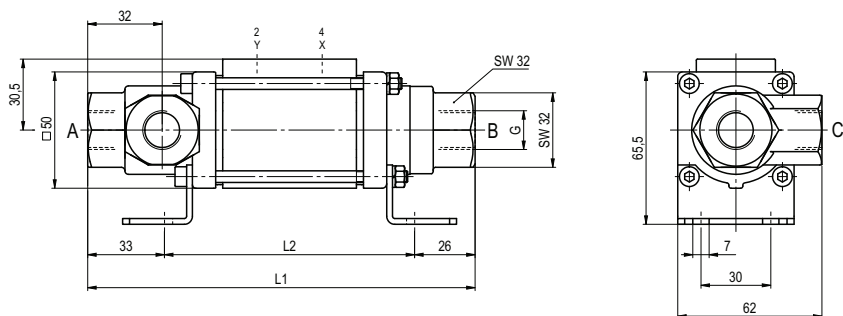
**hydraulic specifications**

bar	4-10	<b>options</b>	
	preferably 4/2 way control valve		
X/Y	G 1/8		

# coax® data sheet - coaxial valve

## type VMK 10 DR

function: **NC**  
closed when not energized (A ► B)



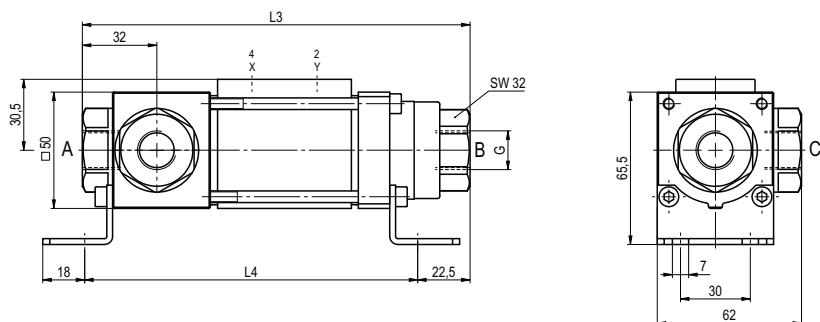
0-16 / 0-40 / 0-63 bar

constructive length	L1	L2
standard	166,5	107,5
with inductive limit switches	186,5	127,5

0-100 bar

constructive length	L3	L4
standard	166,5	143
with inductive limit switches	186,5	163

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



### pneumatic specifications

