

coaxial valve

type VMK 10 DR

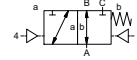
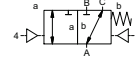
5-VMK 10 DR

valve type with pilot valve



3/2 way valve externally controlled
pressure range PN 0-64 bar
orifice DN 10 mm
connection thread
function valve normally closed (A ► B)
 symbol **NC**

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



Above stated body materials refer to the valve port connections that get in contact with the media only!

design pressure balanced, with spring return, switching overlap

body materials ① brass ②
 ③ brass, nickel plated ⑤
 ④ ⑥ stainless steel

valve seat synthetic resin on metal
seal materials NBR PTFE, FPM, CR, EPDM

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
- low wattage coil, actuation pressure range 4-7 bar
- 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.

general specifications		options
ports	VMK threads G 1/4 - G 3/4	special threads
function	NC	NO
pressure range	bar 0-16 / 0-40 / 0-64 A ⇒ B max. 64 / B ⇒ A max. 16 / A ⇒ C max. 64 / C ⇒ A max. 64	
Kv value	m ³ /h 2,5	
vacuum	leak rate < 10 ⁻⁶ mbar·l·s ⁻¹	
pressure-vacuum	P ₁ ⇔ P ₂	pressure side max. 64 bar vacuum side leak rate upon request
back pressure	P ₂ > P ₁ see pressure range	
media	gaseous - liquid - highly viscous - gelatinous - pasty - contaminated	
abrasive media		upon request
damping	opening by throttles on pilot valve closing see pressure range	
flow direction	1/min 680	
switching cycles	ms opening 30-3000 closing 50-3000	
switching time	°C direct mounted pilot valve 60	remote mounted pilot valve outside temper-
media temperature	°C direct mounted pilot valve 50	ratur range of media max. 160 °C
ambient temperature		
flush ports		
leak ports		
limit switches		inductive
manual override	via pilot valve	
approvals		LR/GL/WAZ
mounting		mounting brackets
weight	kg VMK 1,8	
additional equipment		upon request

electrical specifications		options
nominal voltage	U _n DC 24 V	special voltage upon request
	U _n AC 230 V 50 Hz	special voltage upon request
power consumption	DC 4,8 W	2,5 W
	AC pick up 11,0 VA holding 8,5 VA	
protection	IP65 (P54) acc. DIN 40050	
energized duty rating	ED 100%	
connection	plug acc. DIN EN 175301-803 form B, 4 positions x90° / wire diameter 6-8 mm	
optional	M12x1 connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor
max. temperature	media 60°C ambient 50°C	
explosion proof	E Ex e II T5 nominal voltage U _n	DC 24 V 3,25 W
	power consumption	AC 230 V 50 Hz 2,90 W

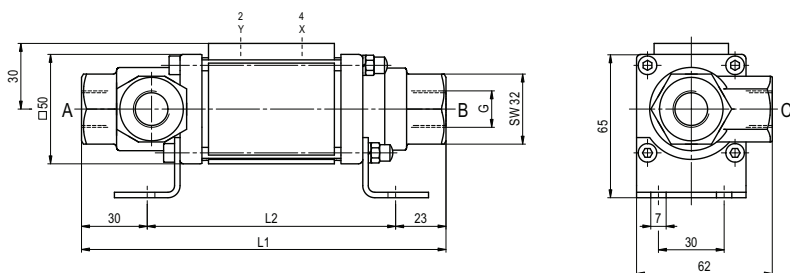
pneumatic specifications		options
actuation pressure range	bar 4-10	
air consumption	cm ³ /stroke 7	
cycle speed	main valve speed variable by throttleson pilot valve	
control	preferably 5/2 way pilot valve	
pilot valve interface	standard / NAMUR	
actuator ports	2/4 G 1/8	

hydraulic specifications		options
actuation pressure range	bar 4-10	
control	preferably 4/2 way control valve	
actuator ports	X/Y G 1/8	
by media		

■ specifications not highlighted are standard
 ■ specifications highlighted in grey are optional

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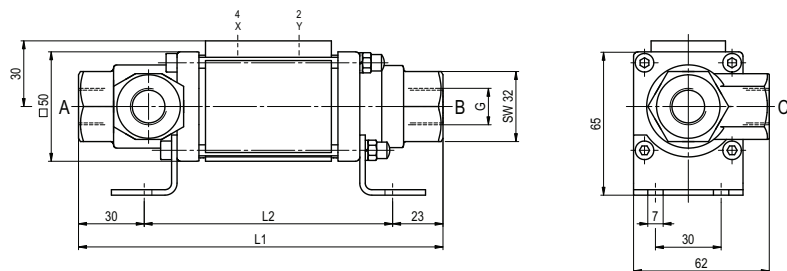
function: **NC**
closed when not energized (A ► B)



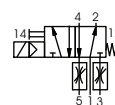
constructive length	L1	L2
standard	166,5	113,5
with 1/2 inductive limit switches	186,5	133,5

type VMK 10 DR

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



pneumatic actuation



5/2 way pilot valve
flow rate 700 l/min
pressure range 3-10 bar G 1/8