

5-VMK 10 DR

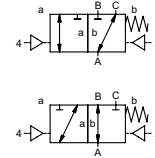
valve type with pilot valve


coaxial valve

type VMK 10 DR



3/2 way valve externally controlled
pressure range PN 0-100 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, intersecting switch-over
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

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 / 0-100 A ► B max. 100 / B ► A max. 16 / A ► C max. 100 / C ► A max. 64	
Kv value	m³/h	2,5 (> 64 bar = 2,1)	
vacuum	leak rate		< 10 ⁻⁶ mbar·l·s ⁻¹
pressure-vacuum	P1 ► P2		pressure side max. 100 bar vacuum side leak rate upon request
back pressure	P2 > P1	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	
media temperature	°C	direct mounted pilot valve 60	remote mounted pilot valve outside temperature range of media max. 160 °C
ambient temperature	°C	direct mounted pilot valve 50	
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
power consumption	U _n	AC 230 V 50 Hz	special voltage upon request
	DC	4,8 W	2,5 W
protection	AC	pick up 11,0 VA holding 8,5 VA	
energized duty rating	IP65 (P54)	acc. DIN 40050	
connection	ED	100%	
optional		plug acc. DIN EN 175301-803 form B, 4 positions x90° / wire diameter 6-8 mm	
additional equipment	M12x1	connector acc. DESINA	connector acc. VDMA
max. temperature		illuminated plug with varistor	
	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	cm³/stroke	7	
cycle speed		main valve speed variable by throttles on pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface		co-ax	NAMUR acc. VDI / VDE 3845
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			

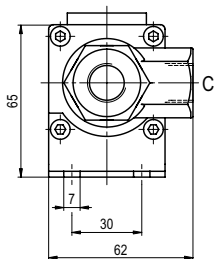
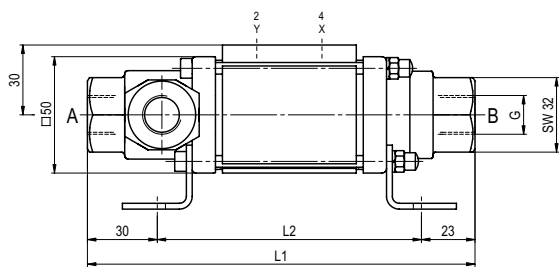
 The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

 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.

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

type **VMK 10 DR**

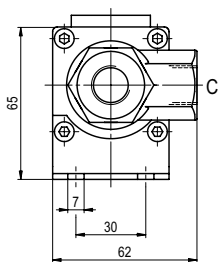
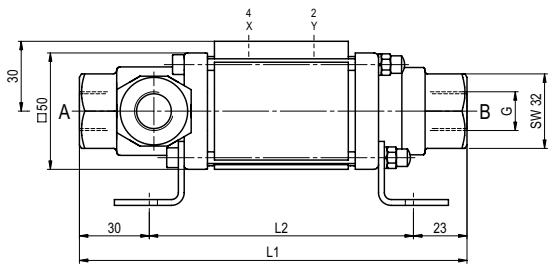
function: **NC**
closed when not energized (A ► B)



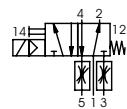
constructive length	L ₁	L ₂
standard	166,5	113,5
with inductive limit switches	186,5	133,5

type **VMK 10 DR**

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