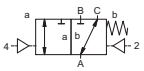
coaxial valve
type VMK 10 DR

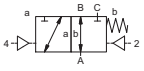
5-VMK 10 DR

valve type with pilot valve

3/2 way valve	**externally controlled**
pressure range	PN 0-100 bar
orifice	DN 10 mm
connection	thread
function	valve normally closed (A ►B) symbol **NC**



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



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

⚠ 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
- 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	P_1 ⇔ P_2		pressure side max. 100 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 closing	by throttles on pilot valve	
flow direction		see pressure range	
switching cycles	1/min	680	
switching time	ms	opening 30-3000 closing 50-3000	
media temperature	°C	direct mounted pilot valve 60	remote mounted pilot valve outside tempe-
ambient temperature	°C	direct mounted pilot valve 50	ratur range of media max. 160 °C
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		iluminated 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

⚠ 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.

pneumatic specifications

			options
actuation pressure range	bar	4-10	
air consumption	cm³/stroke	7	
cycle speed		main valve speed variable by throttleson 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

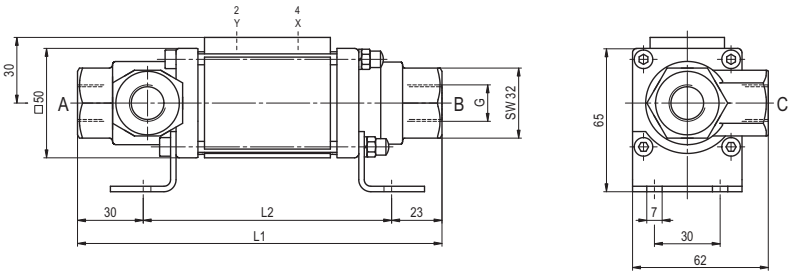
			options
actuation pressure range	bar	4-10	
control		preferably 4/2 way control valve	
actuator ports	X/Y	G 1/8	
by media			

- specifications not highlighted are standard

specifications highlighted in grey are optional

type **VMK 10 DR**

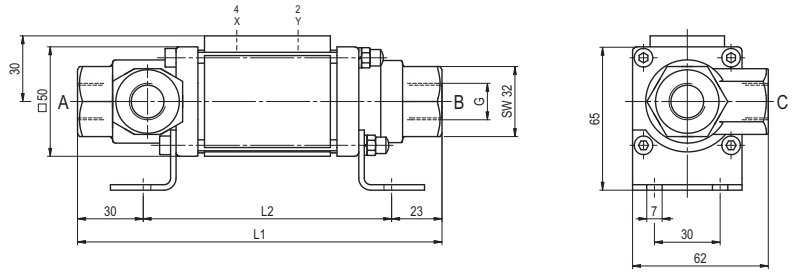
function: **NC**
closed when not energized (A ►B)



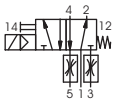
constructive length	L_1	L_2
standard	166,5	113,5
with inductive limit switches	186,5	133,5

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