

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
- 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

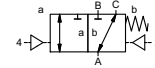
actuation pressure range
air consumption
cycle speed
control
pilot valve interface
actuator ports

actuation pressure range
control
actuator ports
by media

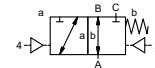
externally controlled

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	options 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 ³ /h	2.5 [> 63 bar = 2.1]	
leak rate		< 10 ⁻⁶ mbar•L•s ⁻¹
P ₁ ↔ P ₂		pressure side max. 100 bar vacuum side leak rate upon request
P ₂ > P ₁	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 _n	DC 24 V	options special voltage upon request
U _n	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 illuminated plug with varistor	connector acc. VDMA
media ambient	60°C 50°C	
E Ex e II T5	nominal voltage U _n power consumption	DC 24 V 3.25 W AC 230 V 50 Hz 2.90 W

pneumatic specifications

bar	4-8	options
cm ³ /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	

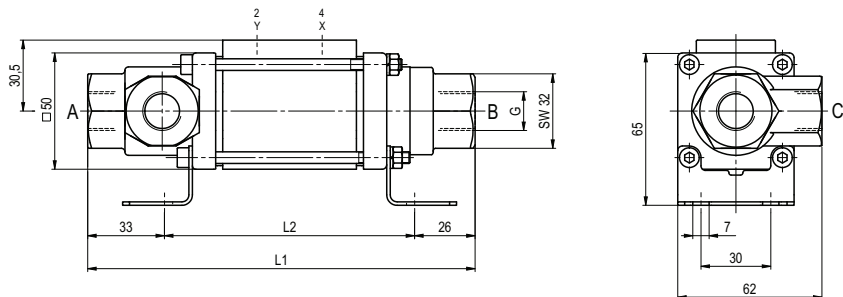
hydraulic specifications

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

coax® data sheet - coaxial valve

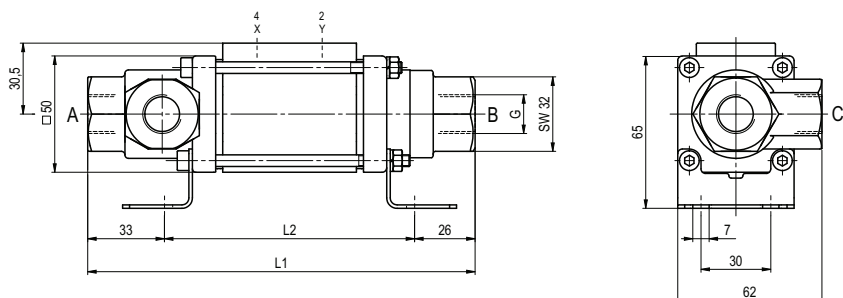
type VMK 10 DR

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



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

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



pneumatic specifications

