

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**

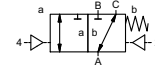
**actuation pressure range**  
**air consumption**  
**cycle speed**  
**control**  
**pilot valve interface**  
**actuator ports**

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

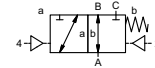
**externally controlled**

PN 0-100 bar  
DN 25 mm  
thread/flange

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 steel galvanized         |
| ③ brass, nickel plated | ⑤ without non-ferr. Metals |
| ④ steel, nickel plated | ⑥ stainless steel          |

synthetic materials on metal

NBR PTFE, FPM, CR, EPDM

**general specifications**

VMK	threads G 1 - G 1 1/2	special threads
VFK	flanges PN 16 / 40 / 100	special flanges
	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. 100	
m³/h	13.3	
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	available
opening		
closing	by throttles on pilot valve	
	see pressure range	
1/min	200	
ms	opening 50-3000	
	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
		available
		available
		inductive / mechanical upon request
	via pilot valve	
		LR/DNV/WAZ
		mounting brackets
kg	VMK 8.0 VFK 9.6	upon request

**electrical specifications**

U <sub>n</sub>	DC 24 V	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	60°C	
ambient	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	
cm³/stroke	18	
	main valve speed variable by throttleson pilot valve	
	preferably 5/2 way pilot valve	
	co-ax / Namur	ISO 1
2/4	G 1/8	G 1/4

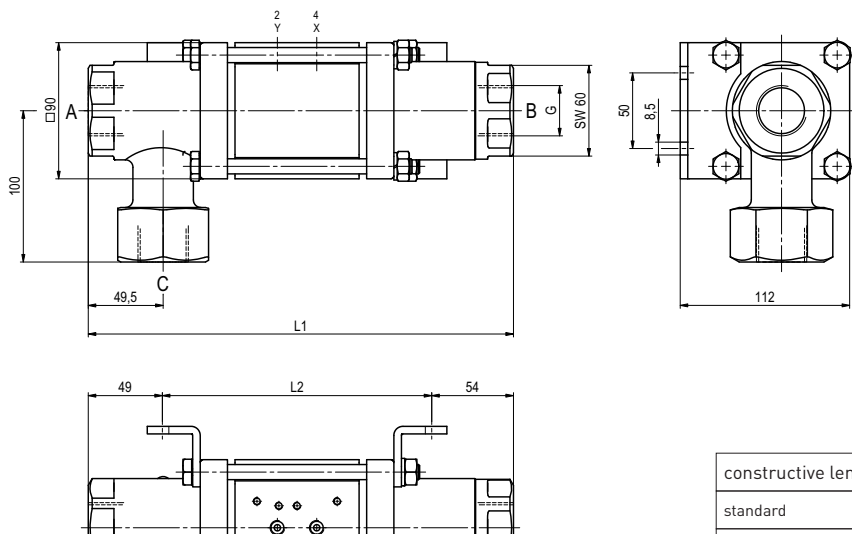
**hydraulic specifications**

bar	15-30 / 30-60	
	preferably 4/2 way control valve	
X/Y	G 1/4	NPT 1/4

# coax® data sheet - coaxial valve

type VMK 25 DR  
VFK 25 DR

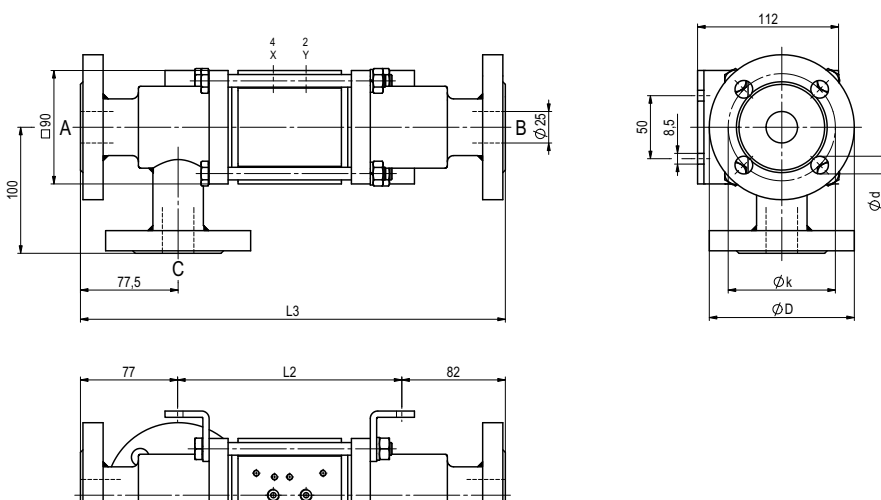
function: **NC**  
closed when not energized (A ►B)



constructive length	L1	L2	L3
standard	281	178	337
with inductive limit switches	295	192	351
with force-feed lubrication nipple	311	208	367
with mechanical limit switches	305	202	361

flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	115	85	14
40	EN 1092-1	115	85	14
100	EN 1092-1	140	100	18

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



## pneumatic specifications

