

type VMK 40 DR  
VFK 40 DR

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**

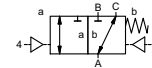
**actuation pressure range**  
**air consumption**  
**cycle speed**  
**control**  
**pilot valve interface**  
**actuator ports**

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

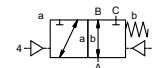
**externally controlled**

PN 0-100 bar  
DN 40 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                      | ② steel galvanized         |
| ③                      | 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 1/2 - G 2	<b>options</b>	special threads
VFK	flanges PN 100		special flanges
	NC		NO
bar	0-63 / 0-100		> 100 bar upon request
	A ⇒ B max. 100 / B ⇒ A max. 16 / A ⇒ C max. 100 / C ⇒ A max. 100		
m <sup>3</sup> /h	31.0		
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		
1/min	see pressure range		
ms	opening 100-3000 closing 100-3000		
°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 18.5 VFK 26.5		upon request

**electrical specifications**

U <sub>n</sub>	DC 24 V	<b>options</b>	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	<b>options</b>	
cm <sup>3</sup> /stroke	65		
	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

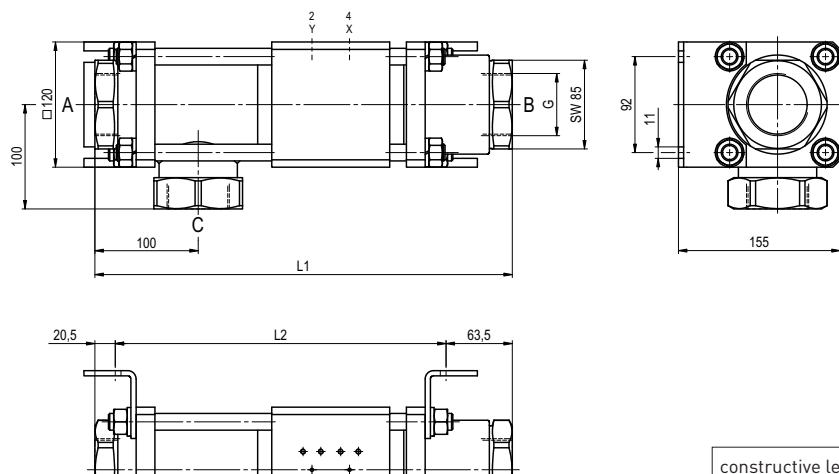
**hydraulic specifications**

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

# coax® data sheet - coaxial valve

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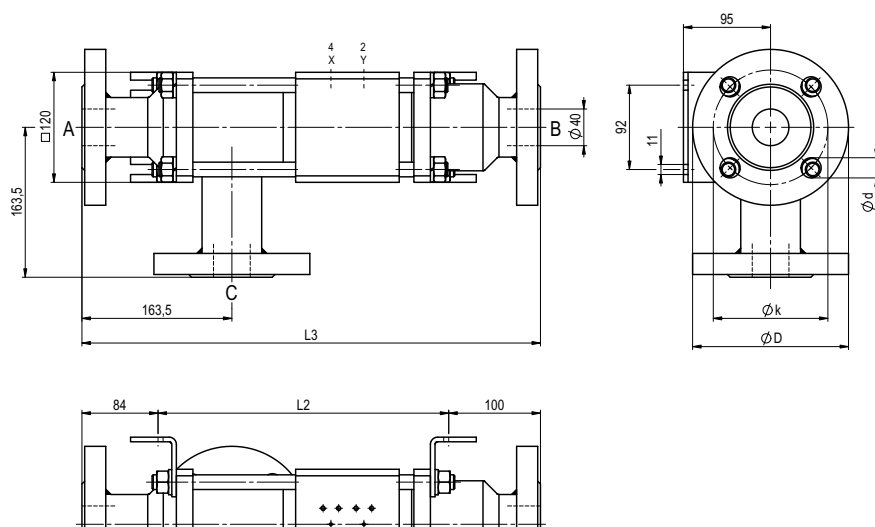
function: **NC**  
closed when not energized (A ► B)



constructive length	L1	L2	L3
standard	400	316	500
with inductive limit switches	400	316	500
with force-feed lubrication nipple	400	316	500
with mechanical limit switches	-	-	-

flanges PN	DIN	ØD	Øk	Ød
100	EN 1092-1	170	125	22

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



## pneumatic specifications

