

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**

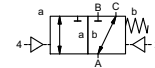
**explosion proof**  
**actuation pressure range**  
**air consumption**  
**cycle speed**  
**control**  
**pilot valve interface**  
**actuator ports**

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

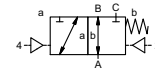
**externally controlled**

**pressure range**  
**DN**  
**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-H threads G 1 1/2  
VFK-H flanges PN 160 / 250  
NC  
bar 0-200  
A ⇒ B max. 200 / B ⇒ A max. 16 / A ⇒ C max. 200 / C ⇒ A max. 200  
m³/h 31.0  
leak rate < 10<sup>-4</sup> mbar•L•s<sup>-1</sup>  
P<sub>1</sub> ⇔ P<sub>2</sub>

**options**

special threads  
special flanges  
NO

P<sub>2</sub> > P<sub>1</sub> see pressure range  
gaseous - liquid - highly viscous

available

opening by throttles on pilot valve  
closing see pressure range  
1/min 150  
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  
via pilot valve  
LR/DNV/WAZ  
mounting brackets  
kg VMK-H 18.5 VFK-H 26.5  
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

**options**

**pneumatic specifications**

bar 4-8  
cm³/stroke 65  
main valve speed variable by throttles on pilot valve  
preferably 5/2 way pilot valve  
co-ax / Namur ISO 1  
2/4 G 1/8 G 1/4

**options**

**hydraulic specifications**

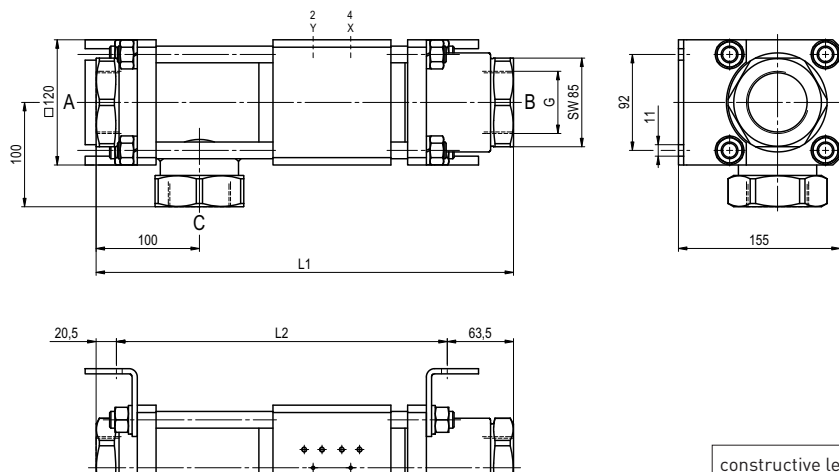
bar 15-30 / 30-60  
preferably 4/2 way control valve  
X/Y G 1/4 NPT 1/4

**options**

# coax® data sheet - coaxial valve

type VMK-H 40 DR  
VFK-H 40 DR

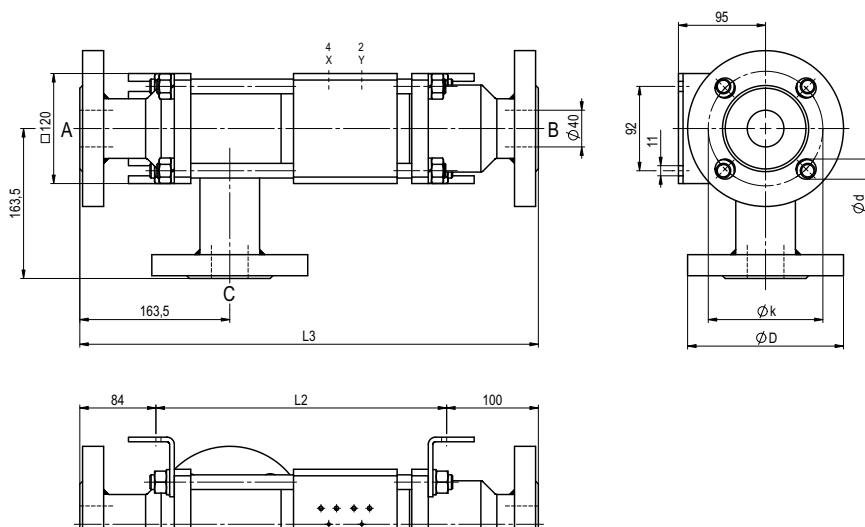
function: **NC**  
closed when not energized (A ► B)



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
160	EN 1092-1	170	125	22
250	EN 1092-1	185	135	26

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



### pneumatic specifications

