

03/2022



**!** 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
- operating pressure
- 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.

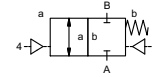
specifications not highlighted are standard  
 specifications highlighted in grey are optional

**2/2-way valve**

**pressure range**  
**orifice<sup>1)</sup>**  
**connection**  
**function**

**externally controlled**

PN 0-40 bar  
 DN 65 / 80 / 100 / 125 mm  
 flange  
 valve  
 normally closed  
 symbol **NC**



**operating principle**

**body material**

pressure balanced, with spring return

- |                                    |  |
|------------------------------------|--|
| <input type="checkbox"/> aluminium | <input type="checkbox"/> steel galvanized (upon request) |
| <input type="checkbox"/>           | <input type="checkbox"/>                                 |
| <input type="checkbox"/>           | <input type="checkbox"/> stainless steel (upon request)  |

**valve seat**

**seal materials**

synthetic materials on metal

NBR, PU PTFE, FPM, PE

**ports**

**function**  
**pressure range**

FCF-K flanges PN 16 / 40  
 NC  
 0-16 / 0-40

**Kv value<sup>2)</sup>**  
**vacuum**  
**pressure-vacuum**

see table  
 $< 10^{-4} \text{ mbar} \cdot \text{L} \cdot \text{s}^{-1}$   
 pressure side max. 40 bar  
 vacuum side leak rate upon request  
 available (max. 16 bar)  
 other medias upon request

**back pressure**  
**media**

$P_2 > P_1$   
 emulsion - oil - neutral gases

**abrasive media**  
**damping**

opening  
 closing by throttles on pilot valve  
 A  $\leftrightarrow$  B as marked  
 see table  
 see table

**flow direction**  
**switching cycles<sup>3)</sup>**  
**switching time<sup>4)</sup>**

bi-directional upon request

**media temperature**  
**ambient temperature**  
**flush ports**  
**leak ports**  
**limit switches**  
**manual override**  
**approvals**  
**mounting**  
**weight<sup>5)</sup>**  
**additional equipment**

$^{\circ}\text{C}$  direct mounted pilot valve 60  $> 60^{\circ}\text{C}$  upon request  
 $^{\circ}\text{C}$  direct mounted pilot valve 50  $> 50^{\circ}\text{C}$  upon request  
 via pilot valve  
 upon request  
 see table

**nominal voltage**

**power consumption**

**protection**  
**energized duty rating**  
**connection**

**electrical specifications**

$U_n$	DC 24 V	<span style="background-color: #e0e0e0;">special voltage upon request</span>
$U_n$	AC 230 V 50 Hz	<span style="background-color: #e0e0e0;">special voltage upon request</span>
DC	4,8 W	
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, 4 positions x90° / wire diameter 6-8 mm	
M12x1	connector acc. DESINA	<span style="background-color: #e0e0e0;">connector acc. VDMA</span>
	illuminated plug with varistor	
media ambient	60°C	
	50°C	
E Ex e II T5	nominal voltage $U_n$	DC 24 V <span style="background-color: #e0e0e0;">3,25 W</span>
	power consumption	AC 230 V 50 Hz <span style="background-color: #e0e0e0;">2,90 W</span>

**optional additional equipment**  
**max. temperature**

**explosion proof**

**pneumatic specifications**

bar	4-10	
	see table	
	main valve speed variable by throttles on pilot valve	
	preferably 5/2 way pilot valve	
	NAMUR acc. VDI / VDE 3845	
2/4	G 1/4	<span style="background-color: #e0e0e0;">NPT 1/4</span>

**actuation pressure range**  
**air consumption<sup>6)</sup>**  
**cycle speed**  
**control**  
**pilot valve interface**  
**actuator ports**

**hydraulic specifications**

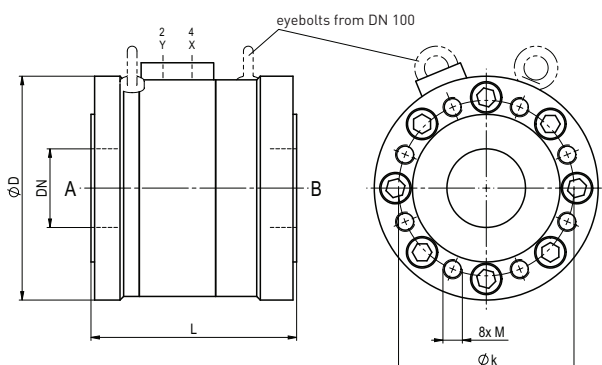
bar	30-60	
	preferably 4/2 way control valve	
X/Y	G 1/4	<span style="background-color: #e0e0e0;">NPT 1/4</span>

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

# coax® data sheet - coaxial valve

type FCF-K 65 - FCF-K 125

function: **NC**  
closed when not energized



type		FCF-K 65	FCF-K 80	FCF-K 100	FCF-K 125
<sup>1</sup> orifice		DN 65 mm	DN 80 mm	DN 100 mm	DN 125 mm
<sup>2</sup> Kv value	m <sup>3</sup> /h	98	122	220	315
<sup>3</sup> switching cycles	1/min	50	50	40	30
<sup>4</sup> switching time	ms opening	250-3000	350-3000	450-3000	700-3000
	ms closing	400-3000	350-3000	300-3000	450-3000
<sup>5</sup> weight	kg	10	12	20	31
<sup>6</sup> air consumption	cm <sup>3</sup> /Hub	75	105	235	495
constructive length	L	170	180	240	300
flanges PN 16	ØD	185	200	230	260
DIN EN 1092-1	Øk	145	160	180	210
	M	M16	M16	M16	M16
flanges PN 40	ØD	185	200	235	270
DIN EN 1092-1	Øk	145	160	190	220
	M	M16	M16	M20	M24

## pneumatic specifications

