# coax® data sheet - coaxial valve

## type FCF-K 80



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

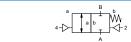
2/2-way valve	
pressure range	
orifice	
connection	
function	

### externally controlled

PN 0-40 bar DN 80 mm

flange

normally closed symbol NC



### operating principle body material

pressure balanced, with spring return

2  $@\ {\sf aluminium}\\$ (5)

(3) (4) (6)

valve seat synthetic materials on metal seal materials

NBR, PU PTFE, FPM, PE

### general specifications ports

F-K	flanges PN 16 / 40	

function		NC
pressure range	bar	0-16 / 0-40
Kv value	m³/h	122,0
vacuum	leak rate	
pressure-vacuum	P₁⇔ P₂	

abrasive media

back pressure

damping

flow direction switching cycles

switching time media temperature ambient temperature flush ports leak ports limit switches manual override

approvals mounting additional equipment

FCF-K	flanges PN 16 / 40	
	NC	
bar	0-16 / 0-40	
m³/h	122.0	
leak rate	122,0	< 10 <sup>-4</sup> mbar•l•s <sup>-1</sup>
P1⇔ P2		pressure side max. 40 bar vacuum side leak rate upon request
P2 > P1		available (max. 16 bar)
	emulsion - oil - neutral gases	other medias upon request
opening	<u> </u>	

options

opening				
closing	by throttles on pilot valve			
A⇒B	as marked	bi-directional upon request		
1/min	50			
ms	opening 350-3000			
	closing 350-3000			
°C	direct mounted pilot valve 60	> 60 °C upon request		
°C	direct mounted pilot valve 50	> 50 °C upon request		
	via pilot valve			
		upon request		

FCF-K 11,5 sensor / manometer connection G 1/4

### nominal voltage

protection energized duty rating connection optional additional equipment max. temperature

explosion proof

### power consumption

# electrical specifications

### options

Un	DC 24 V	special voltage upon request
Un	AC 230 V 50 Hz	special voltage upon request
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	connector acc. VDMA
	illuminated plug with varistor	
media	60°C	
ambient	50°C	
E Ex e II T5	nominal voltage U₁	DC 24 V 3,25 W
	power consumption	AC 230 V 50 Hz 2,90 W

actuation pressure range air consumption cycle speed

pilot valve interface actuator ports

actuation pressure range actuator ports by media

pneumatic specifications options 3-10 upon request

cm³/stroke 100 main valve speed variable by throttleson pilot valve preferably 5/2 way pilot valve NAMUR acc. VDI / VDE 3845 ISO 1 acc. DIN 5599/1 G 1/4 G 3/8

### hydraulic specifications

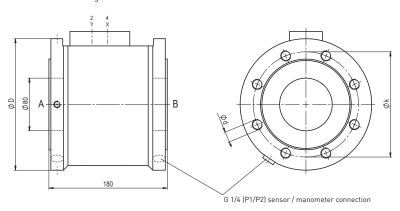
options

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

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# type FCF-K80

function: **NC** closed when not energized



flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	200	160	M16
40	EN 1092-1	200	160	M16

### pneumatic specifications



5/2 way pilot valve flow rate 700 l/min pressure range 3-10 bar G 1/8



5/2 way pilot valve ISO 1 flow rate 700 l/min pressure range 3-10 bar G 1/4