

coaxial valve

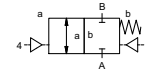
type FCF-K 80

5-FCF-K 80

valve type with pilot valve



2/2 way valve externally controlled
pressure range PN 0-40 bar
orifice DN 80 mm
connection flange
function valve normally closed
symbol NC



△ Above stated body materials refer to the valve port connections that get in contact with the media only!

design pressure balanced, with spring return

body materials ① aluminium ②
 ③ ⑤
 ④ ⑥

valve seat synthetic resin on metal

seal materials NBR, PU PTFE, FPM, PE

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.

■ specifications not highlighted are standard
 ■ specifications highlighted in grey are optional

general specifications

| | | |
|-----------------------------|---|---|
| ports | FCF-K | flanges PN 16/40 |
| function | NC | |
| pressure range | bar 0-16/0-40 | |
| Kv value | m ³ /h 122,0 | |
| leak rate | | < 10 ⁻⁴ mbar·l·s ⁻¹ |
| pressure-vacuum | P ₁ ↔ P ₂ | pressure side max. 40 bar vacuum side leak rate upon request |
| back pressure | P ₂ > P ₁ | available (max. 16 bar) |
| media | emulsions - oils - neutral gases other medias upon request | |
| abrasive media | | |
| damping | opening | |
| | closing | by throttles on pilot valve |
| flow direction | A ↔ B | as marked |
| switching cycles | 1/min | 50 |
| switching time | ms | opening 350-3000 closing 350-3000 |
| media temperature | °C | direct mounted pilot valve 60 |
| ambient temperature | °C | direct mounted pilot valve 50 |
| flush ports | | |
| leak ports | | |
| limit switches | | |
| manual override | via pilot valve | |
| approvals | upon request | |
| mounting | | |
| weight | kg | FCF-K 11,5 |
| additional equipment | sensor / manometer connection G 1/4 | |

options

electrical specifications

| | | | |
|------------------------------|----------------|--|--|
| nominal voltage | U _n | DC 24V | special voltage upon request |
| | U _n | AC 230V 50 Hz | special voltage upon request |
| power consumption | DC | 4,8 W | |
| | AC | pick up 11,0 VA holding 8,5 VA | |
| protection | IP 65 (P54) | acc. DIN 40 050 | |
| energized duty rating | ED | 100% | |
| connection | | plug acc. DIN EN 175301-803 form B, 4 positions x 90° / wire diameter 6-8 mm | |
| additional equipment | | illuminated plug with varistor | |
| optional | M12x1 | connector acc. DESINA | connector acc. VDMA |
| media | | 60°C | |
| ambient | | 50°C | |
| explosion proof | EEx m II T5 | nominal voltage U _n | direct current 24 V 3,25 W |
| | | power consumption | alternating current 230 V 50 Hz 2,90 W |

options

pneumatic specifications

| | | | |
|---------------------------------|---|-------|-------------------|
| actuation pressure range | bar | 4-10 | 3-10 upon request |
| air consumption | cm ³ /stroke | 100 | |
| cycle speed | main valve speed variable by throttles on pilot valve | | |
| control | preferably 5/2-way pilot valve | | |
| pilot valve interface | NAMUR VDI / VDE 3845 | | ISO 1 DIN 5599/1 |
| actuator ports | 2/4 | G 1/4 | G 3/8 |

options

hydraulic specifications

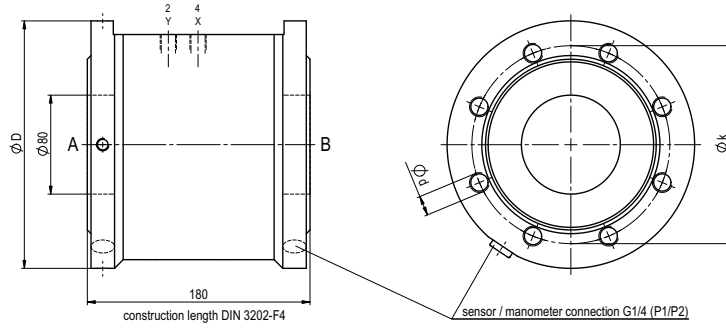
| | | |
|---------------------------------|----------------------------------|-------|
| actuation pressure range | bar | 30-60 |
| by media | | |
| control | preferably 4/2-way control valve | |
| actuator ports | X/Y | G 1/4 |

options

NPT 1/4

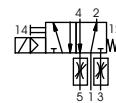
type FCF-K 80

function: **NC**
closed when not energized

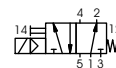


| flanges PN | DIN | øD | øk | ød |
|------------|------|-----|-----|-----|
| 16 | 2633 | 200 | 160 | M16 |
| 40 | 2635 | 200 | 160 | M16 |

pneumatic actuation



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

The application-specific layout relating to temperature, pressure conditions, switching behavior, media and its consistency may restrict the range of use or necessitate relevant modifications to materials used and seal arrangements.

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