

## coaxial valve

## type FCF 65

## 5-FCF 65

valve type with pilot valve



2/2 way valve externally controlled

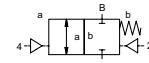
pressure range PN 0-40 bar

orifice DN 65 mm

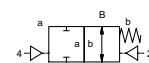
connection flange

function valve

normally closed symbol NC



valve normally open symbol NO



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

## general specifications

## options

## details needed for main valve

- orifice
- port
- function NC/NO
- 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

ports FCF flanges PN 16/40

function NC

NO

pressure range bar 0-16/0-40

Kv value m<sup>3</sup>/h 107,0vacuum leak rate < 10<sup>-4</sup> mbar·l·s<sup>-1</sup>pressure-vacuum P<sub>1</sub> ↔ P<sub>2</sub>

pressure side max. 40 bar

vacuum side leak rate < 10<sup>-4</sup> mbar·l·s<sup>-1</sup>back pressure P<sub>2</sub> > P<sub>1</sub>

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

bi-directional upon request (max. 16 bar)

switching cycles 1/min 50

switching time ms opening 250-3000 closing 400-3000

media temperature °C direct mounted pilot valve 60

&gt;60°C upon request

ambient temperature °C direct mounted pilot valve 50

&gt;50°C upon request

flush ports

leak ports

limit switches

manual override

inductive

approvals

mounting via pilot valve

upon request

weight kg FCF 12,5

additional equipment sensor / manometer connection G 1/4

## electrical specifications

## options

nominal voltage U<sub>n</sub> DC 24V

special voltage upon request

U<sub>n</sub> AC 230V 50 Hz

special voltage upon request

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

max. temperature media 60°C

ambient 50°C

explosion proof EEx m II T5 nominal voltage U<sub>n</sub>

direct current 24 V 3,25 W

power consumption power consumption alternating current 230 V 50 Hz 2,90 W

## pneumatic specifications

## options

actuation pressure range bar 4-10

3-10 upon request

air consumption cm<sup>3</sup>/stroke 77

main valve speed variable by throttles on pilot valve

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

## hydraulic specifications

## options

actuation pressure range bar 30-60

by media preferably 4/2-way control valve

control X/Y G 1/4

NPT 1/4

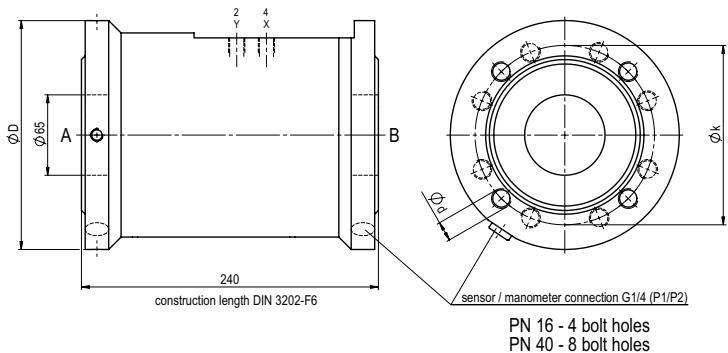
**⚠** The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

**⚠** 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

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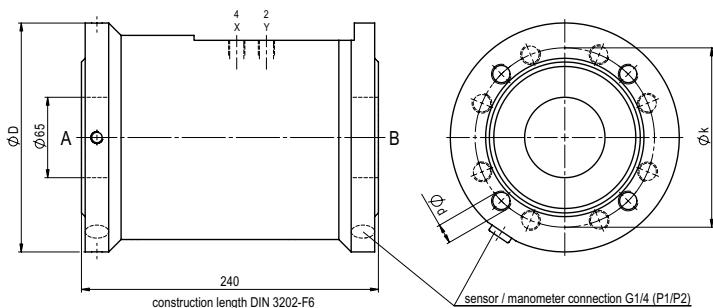
function: NC  
closed when not energized



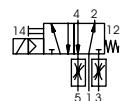
flanges PN	DIN	$\phi D$	$\phi k$	$\phi d$
16	2633	185	145	M16
40	2635	185	145	M16

## type FCF 65

function: NO  
open when not energized



### pneumatic actuation (separately)



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.