

coaxial valve

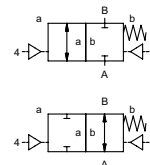
type FCF 100

5-FCF 100

valve type with pilot valve



2/2 way valve externally controlled
pressure range PN 0-40 bar
orifice DN 100 mm
connection flange
function valve normally closed symbol **NC**
 valve normally open symbol **NO**



⚠ 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/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

⚠ 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

options

ports	FCF	flanges PN 16 / 40	
function		NC	NO
pressure range	bar	0-16 / 0-40	
Kv value	m ³ /h	215,0	
vacuum	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	bi-directional upon request (max. 16 bar)
switching cycles	1/min	40	
switching time	ms	opening 450-3000 closing 300-3000	
media temperature	°C	direct mounted pilot valve 60	> 60 °C upon request
ambient temperature	°C	direct mounted pilot valve 50	> 50 °C upon request
flush ports			
leak ports			
limit switches			inductive upon request
manual override		via pilot valve	
approvals			upon request
mounting			
weight	kg	FCF 34,0	
additional equipment		sensor / manometer connection G 1/4	

electrical specifications

options

nominal voltage	U _n	DC 24 V	special voltage upon request
		AC 230 V 50 Hz	special voltage upon request
power consumption	DC	4,8 W	
	AC	pick up 11,0 VA holding 8,5 VA	
protection	IP65 (P54)	acc. DIN 40050	
energized duty rating	ED	100%	
connection		plug acc. DIN EN 175301-803 form B, 4 positions x90° / wire diameter 6-8 mm	
optional	M12x1	connector acc. DESINA	connector acc. VDMA
additional equipment		illuminated plug with varistor	
max. temperature	media	60°C	
	ambient	50°C	
explosion proof	E Ex e II T5	nominal voltage U _n	DC 24 V 3,25 W
		power consumption	AC 230 V 50 Hz 2,90 W

pneumatic specifications

options

actuation pressure range	bar	4-10	3-10 upon request
air consumption	cm ³ /stroke	250	
cycle speed		main valve speed variable by throttles on pilot valve	
control		preferably 5/2 way pilot valve	
pilot valve interface		NAMUR acc. VDI / VDE 3845	ISO 1 acc. DIN 5599/1
actuator ports	2/4	G 1/4	G 3/8

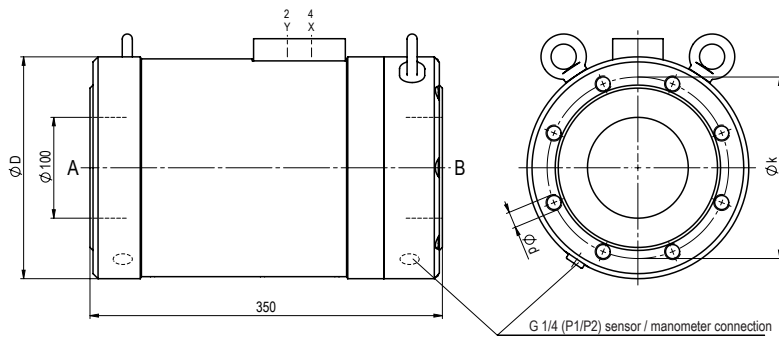
hydraulic specifications

options

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

type **FCF 100**

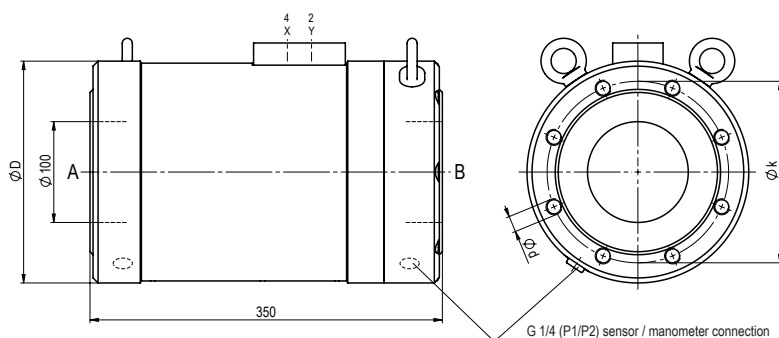
function: **NC**
closed when not energized



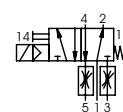
flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	220	180	M16
40	EN 1092-1	235	190	M20

type **FCF 100**

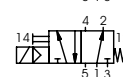
function: **NO**
open when not energized



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