coax® data sheet - coaxial valve

type MK 50 DR FK 50 DR



08/2022



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

details needed

- orifice
- port
 function NC/NO
- operating pressure
- inlet pressure at A, B or C
- flow rate
- media
- media temperature
- ambient temperature
- nominal voltage

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

3/2 way valve
pressure range
orifice
connection
function

operating principle body material

valve seat seal materials

function
pressure range

Kv value

Kv value vacuum pressure-vacuum back pressure media

abrasive media damping flow direction switching cycles

switching time

media temperature

ambient temperature

limit switches
manual override
approvals
mounting
weight
additional equipment

nominal voltage

actuation

insulating rating protection energized duty rating connection

optional additional equipment current consumption

explosion proof

limit switches

direct acting

PN 0-16 bar

DN 50 mm thread/flange

valve

normally closed (A ▶B)

symbol **NC**

valve normally open (A ►B)

4 steel, nickel plated

symbol **NO**

a a b W

pressure balanced, with spring return, intersecting switch-over

1

② steel galvanized

(3)

stainless steel

synthetic materials on metal

PTFE, FPM, CR, EPDM

general s	specifications	options
MK	threads G 2	special threads
FK	flanges PN 16	special flanges
	NC	NO
bar	0-16	
	A ⇒ B max. 16 / B ⇒ A max. 10 / A ⇒	C max. 16 / C ⇒ A max. 16
m³/h	28.2	
leak rate		< 10 ⁻⁶ mbar•l•s ⁻¹
P1⇔ P2		upon request
P2 > P1	see pressure range	
	gaseous - liquid - highly viscous -	
	gelatinous - contaminated	
		upon request
opening		
closing		
	see pressure range	
1/min	40	
ms	opening 400	
	closing 400	
°C	DC: -20 to +80	-20 to +120
	AC: -20 to +80	-20 to +120
°C	DC: -20 to +80	
	AC: -20 to +80	
		inductive
		available
	·	LR/DNV/WAZ
		mounting brackets
kg	MK 31.5 FK 38.5	

electrical	pecifications	options
Un	DC 24 V +5%/-10%	special voltage upon request
Un	AC 230 V +5%/-10% 40-60 Hz	special voltage upon request
DC	direct-current magnet	
AC	direct-current magnet with integrated rectifier	above 100 °C with separate rectifier
Н	180°C	

upon request

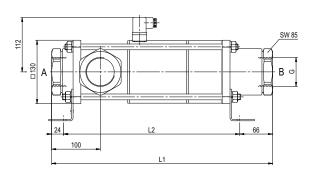
	rectifier
Н	180°C
IP65	
ED	100%
	plug acc. DIN EN 175301-803 form A, 4 terminal box M16x1,5 positions x90° / wire diameter 6-8 mm
	illuminated plug with varistor
N1:1	DC 2/V 2 FF A

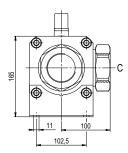
	illuminated plug with varistor		
N-coil	DC 24 V 2.55 A		
	AC 230 V 40-60 Hz 0.29 A		
H-coil		DC 24 V 3.29 A	
		AC 230 V 40-60 Hz 0.43 A	
		terminal box M16x1,5	
		II 3G Ex ec IIC T3 Ta -20+80°C Gc	
	inductive (I)	normally open-PNP	
	inductive (B)	normally open-PNP	

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function: NC closed when not energized (A \blacktriangleright B)





constructive length	L1	L2	L3
standard	453	363	553
with inductive limit switches	453	363	553
with manual override / inductive limit switches	453	363	553

flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	165	125	18

function: **NO** open when not energized (A ►B)

