coax® data sheet - coaxial valve

type MK 20 DR Ex FK 20 DR Ex



12/2024



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
- **m**edia
- 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.

3/2 way valve pressure range orifice connection function

operating principle body material

valve seat seal materials

ports function pressure range

Kv value vacuum back pressure

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 draw

explosion proof

limit switches

direct acting

PN 0-40 bar

DN 20 mm thread/flange

normally closed (A ►B)

symbol NC

valve normally open (A ►B)

symbol NO

① brass

2 steel galvanized

3 brass, nickel plated

(5) without non-ferr. Metals

4 steel, nickel plated

6 stainless steel

synthetic materials on metal

electrical specifications

DC 24 V +5%/-10%

PTFE, FPM, CR, EPDM

pressure balanced, with spring return, intersecting switch-over

general s	pecifications	options		
MK	threads G 3/4 - G 1 1/4	special threads		
FK	flanges PN 16 / 40	special flanges		
	NC	NO		
bar	0-16 / 0-40			
	$A \Rightarrow B \text{ max. } 40 / B \Rightarrow A \text{ max. } 16 / A \Rightarrow C \text{ max. } 40 / C \Rightarrow A \text{ max. } 16$			
m³/h	6,7			
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	150			
ms	opening 110			
	closing 110			
°C	DC: -20 to +40	-40 to +40		
	AC: -20 to +40	-40 to +40		
°C	DC: -20 to +40	-40 to +40		
	AC: -20 to +40	-40 to +40		
		inductive		
		LR/DNV/WAZ		
		mounting brackets		
kg	MK 6,0 FK 8,4			
		upon request		

Oli	DC 24 V +3/0/-10/0	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 separate	
	rectifier outside of the explosion-proof	
	area	
Н	180°C	
IP65		
ED	100%	
M16x1,5	terminal box	

options

special voltage upon request

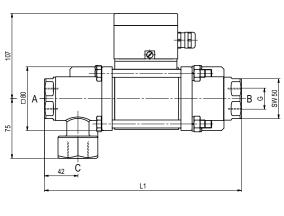
Jn	V-DC 24 200	48 98 110 220
n	A 1,21 0,14	0,66 0,29 0,24 0,12
	II 2G Ex mb e II T4	
	€ II 2G Ex h IIC T4 Gb	
	inductive NAMUR	circuit amplifier
		· · · · · · · · · · · · · · · · · · ·

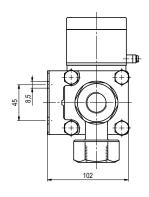
specifications not highlighted are standard specifications highlighted in grey are optional

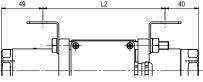
coax® data sheet - coaxial valve

type MK 20 DR Ex FK 20 DR Ex

function: NC closed when not energized [A \blacktriangleright B]







constructive length	L1	L2	L3
standard	247	158	301
with inductive limit switches	291	202	345

flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	105	75	14
40	EN 1092-2	105	75	14

function: $\mathbf{N0}$ open when not energized (A \blacktriangleright B)

