

type MK 20 DR
FK 20 DR

03/2022



! 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.

3/2 way valve

pressure range

orifice

connection

function

direct acting

PN 0-40 bar

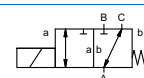
DN 20 mm

thread/flange

valve

normally closed (A ► B)

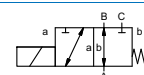
symbol **NC**



valve

normally open (A ► B)

symbol **NO**



operating principle

body material

pressure balanced, with spring return, intersecting switch-over

- | | |
|------------------------|----------------------------|
| ① brass | ② steel galvanized |
| ③ brass, nickel plated | ⑤ without non-ferr. Metals |
| ④ steel, nickel plated | ⑥ stainless steel |

valve seat

synthetic materials on metal

seal materials

NBR PTFE, FPM, CR, EPDM

ports

MK threads G 3/4 - G 1 1/4

FK flanges PN 16 / 40

NC

options

special threads

special flanges

NO

function

0-16 / 0-40

pressure range

A ⇒ B max. 40 / B ⇒ A max. 16 / A ⇒ C max. 40 / C ⇒ A max. 40

Kv value

m³/h 6,7

vacuum

leak rate < 10⁻⁶ mbar•L•s⁻¹

pressure-vacuum

P₁ ⇔ P₂ upon request

back pressure

P₂ > P₁ see pressure range
gaseous - liquid - highly viscous -
gelatinous - contaminated

media

upon request

abrasive media

opening

closing

see pressure range

damping

1/min 150

flow direction

ms opening 110

switching cycles

closing 110

switching time

°C DC: -20 to +80 -40 to +160

media temperature

AC: -20 to +80 -40 to +160

ambient temperature

°C DC: -20 to +80

AC: -20 to +80

limit switches

inductive / mechanical

manual override

available

approvals

LR/DNV/WAZ

mounting

mounting brackets

weight

kg MK 6,0 FK 8,4

additional equipment

upon request

nominal voltage

U_n DC 24 V +5%/-10%

special voltage upon request

U_n AC 230 V +5%/-10% 40-60 Hz

special voltage upon request

actuation

DC direct-current magnet

AC direct-current magnet with integrated rectifier above 100 °C with separate rectifier

insulating rating

H 180°C

protection

IP65

energized duty rating

ED 100%

connection

plug acc. DIN EN 175301-803 form A, 4 terminal box M16x1,5
positions x90° / wire diameter 6-8 mm

optional

M12x1 connector acc. DESINA

connector acc. VDMA

additional equipment

illuminated plug with varistor

current consumption

N-coil DC 24 V 1,56 A
AC 230 V 40-60 Hz 0,16 A

explosion proof

- | | |
|--------|---|
| H-coil | DC 24 V 2,24 A |
| | AC 230 V 40-60 Hz 0,28 A |
| | terminal box M16x1,5 |
| | Ⓜ II 3G Ex nA IIC T3 Ta -20...+80°C Gc |
| | Ⓜ II 3D Ex tc IIIC T195°C Ta -20...+80°C Dc |
| | Ⓜ II 3G Ex h IIC T3 Gc |
| | Ⓜ II 3D Ex h IIIC T195°C Dc |

limit switches

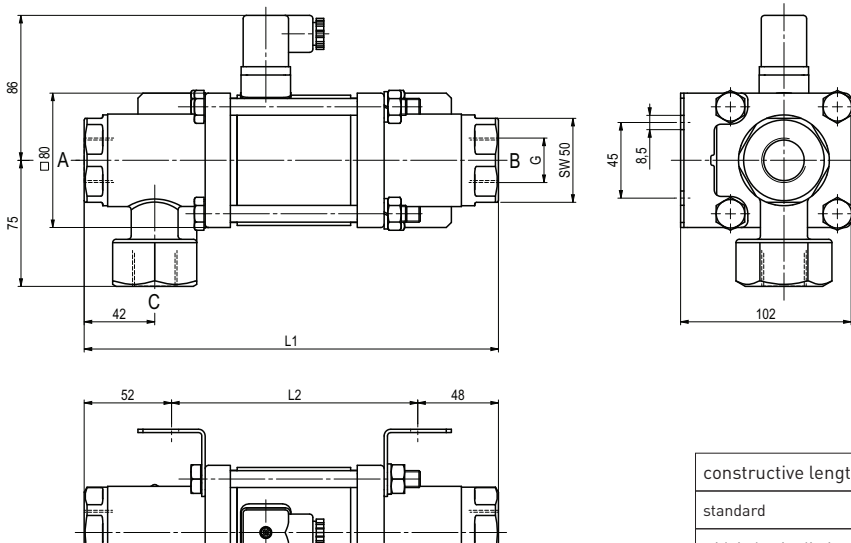
- | | |
|---------------|-------------------------------|
| inductive (I) | normally open-PNP |
| inductive (B) | normally open-PNP |
| mechanical | single pole double throw-SPDT |

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

coax® data sheet - coaxial valve

type MK 20 DR
FK 20 DR

function: **NC**
closed when not energized (A ► B)



constructive length	L1	L2	L3
standard	247	148	301
with inductive limit switches	291	192	345
with manual override / inductive limit switches	291	192	345
with mechanical limit switches	291	192	345

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

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

