

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.

**3/2 way valve**

**pressure range**

**orifice**

**connection**

**function**

**direct acting**

PN 0-16 bar

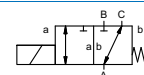
DN 40 mm

thread/flange

valve

normally closed (A ► B)

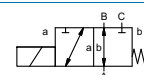
symbol **NC**



valve

normally open (A ► B)

symbol **NO**



**operating principle**

**body material**

pressure balanced, with spring return, intersecting switch-over

- |                        |                            |
|------------------------|----------------------------|
| ①                      | ② steel galvanized         |
| ③                      | 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 1 1/2 - G 2

**options**

FK flanges PN 16

special threads

bar 0-16

special flanges

A ⇌ B max. 16 / B ⇌ A max. 16 / A ⇌ C max. 16 / C ⇌ A max. 16

NO

**Kv value**

m<sup>3</sup>/h 18.4 [A ⇌ B] 11.5 [A ⇌ C]

**vacuum**

leak rate < 10<sup>-6</sup> mbar•L•s<sup>-1</sup>

**pressure-vacuum**

P<sub>1</sub> ⇌ P<sub>2</sub> upon request

**back pressure**

P<sub>2</sub> > P<sub>1</sub> see pressure range

**media**

gaseous - liquid - highly viscous - gelatinous - contaminated

upon request

**abrasive media**

opening

**damping**

closing

**flow direction**

see pressure range

**switching cycles**

1/min 90

**switching time**

ms opening 520  
closing 150

**media temperature**

°C DC: -20 to +100 -40 to +160  
AC: -20 to +100 -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 18.5 FK 23.0

**additional equipment**

upon request

**nominal voltage**

U<sub>n</sub> DC 24 V +5%/-10% special voltage upon request  
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**

illuminated plug with varistor

**additional equipment**

N-coil DC 24 V 2.07 A  
AC 230 V 40-60 Hz 0.28 A

**current consumption**

H-coil DC 24 V 3.24 A  
AC 230 V 40-60 Hz 0.44 A

**explosion proof**

- terminal box M16x1,5
- Ⓜ II 3G Ex ec 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**

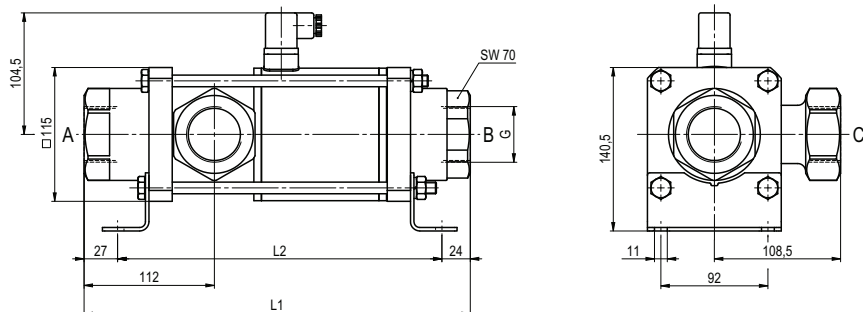
- inductive (I) normally open-PNP
- inductive (B) normally open-PNP
- mechanical single pole double throw-SPDT

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

# coax® data sheet - coaxial valve

type MK 40 DR  
FK 40 DR

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



constructive length	L1	L2	L3
standard	332	281	394
with inductive limit switches	373	322	435
with manual override / inductive limit switches	373	322	435
with mechanical limit switches	373	322	435

flanges PN	DIN	ØD	Øk	Ød
16	EN 1092-1	150	110	18

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

