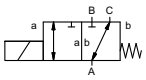
# coax® data sheet - coaxial valve

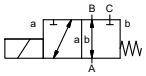
## type MK 15 DR Ex
## FK 15 DR Ex

03/2026

| | |
|---|---|
| **3/2 way valve** | **direct acting** |
| **pressure range** | PN 0-40 bar |
| **orifice** | DN 15 mm |
| **connection** | thread/flange |
| **function** | valve<br>normally closed (A ►B)<br>symbol **NC** |




valve
normally open (A ►B)
symbol **NO**




| | |
|---|---|
| **operating principle** | pressure balanced, with spring return, intersecting switch-over |
| **body material** | ① brass ② steel galvanized<br>③ brass, nickel plated ⑤ without non-ferr. Metals<br>④ steel, nickel plated ⑥ stainless steel |
| **valve seat** | synthetic materials on metal |
| **seal materials** | NBR PTFE, FPM, CR, EPDM |

⚠ 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

| | **general specifications** | **options** |
|---|---|---|
| **ports** | MK threads G 3/8 - G 3/4 | special threads |
| | FK flanges PN 16 / 40 | special flanges |
| **function** | NC | NO |
| **pressure range** | bar 0-16 / 0-40 | |
| | A ⇨ B max. 40 / B ⇨ A max. 16 / A ⇨ C max. 40 / C ⇨ A max. 16 | |
| **Kv value** | $m^3/h$ 4,3 | |
| **vacuum** | leak rate | < $10^{-6}$ mbar•l•$s^{-1}$ |
| **pressure-vacuum** | $P_1$ ⇔ $P_2$ | upon request |
| **back pressure** | $P_2$ > $P_1$ see pressure range | |
| **media** | gaseous - liquid - highly viscous - gelatinous - contaminated | |
| **abrasive media** | | upon request |
| **damping** | opening | |
| | closing | |
| **flow direction** | see pressure range | |
| **switching cycles** | 1/min 200 | |
| **switching time** | ms opening 80 | |
| | closing 80 | |
| **media temperature** | °C DC: -30 to +40 | -30 to +120 |
| | AC: -30 to +40 | -30 to +120 (≤98 V max. +100) |
| **ambient temperature** | °C DC: -30 to +40 | -30 to +120 |
| | AC: -30 to +40 | -30 to +120 (≤98 V max. +100) |
| **limit switches** | | inductive |
| **manual override** | | |
| **approvals** | | LR/DNV/WAZ |
| **mounting** | | mounting brackets |
| **weight** | kg MK 4,3 FK 5,9 | |
| **additional equipment** | | upon request |

⚠ 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.

| | **electrical specifications** | **options** |
|---|---|---|
| **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 | |
| **insulating rating** | H 180°C | |
| **protection** | IP65 | |
| **energized duty rating** | refer to ATEX / IECEx operating manual | |
| **connection** | DC terminal box M16x1,5 | |
| | AC terminal box | |
| | 3 m flying leads | |
| **optional** | | |
| **additional equipment** | | |
| **current draw** | $T_4$ $U_n$ V-DC 24 200 | 20 48 98 110 125 220 |
| | $T_4$ $I_n$ A 2,16 0,27 | 2,29 1,09 0,49 0,44 0,40 0,24 |
| | $T_3$ $U_n$ V-DC 24 200 | 20 48 98 110 125 220 |
| | $T_3$ $I_n$ A 2,16 0,27 | 2,29 1,09 0,60 0,55 0,50 0,24 |
| **explosion proof** | ⟨Ex⟩ II 2G Ex eb mb IIC T4 Gb | ⟨Ex⟩ II 2G Ex h IIC T4 Gb |
| | ⟨Ex⟩ II 2D Ex mb tb IIIC T135°C Db | ⟨Ex⟩ II 2D Ex h IIIC T130°C Db |
| | ⟨Ex⟩ II 2G Ex eb mb IIC T3 Gb | ⟨Ex⟩ II 2G Ex h IIC T3 Gb |
| | ⟨Ex⟩ II 2D Ex mb tb IIIC T185°C Db | ⟨Ex⟩ II 2D Ex h IIIC T185°C Db |
| **limit switches** | inductive NAMUR | circuit amplifier |

⚠ 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.

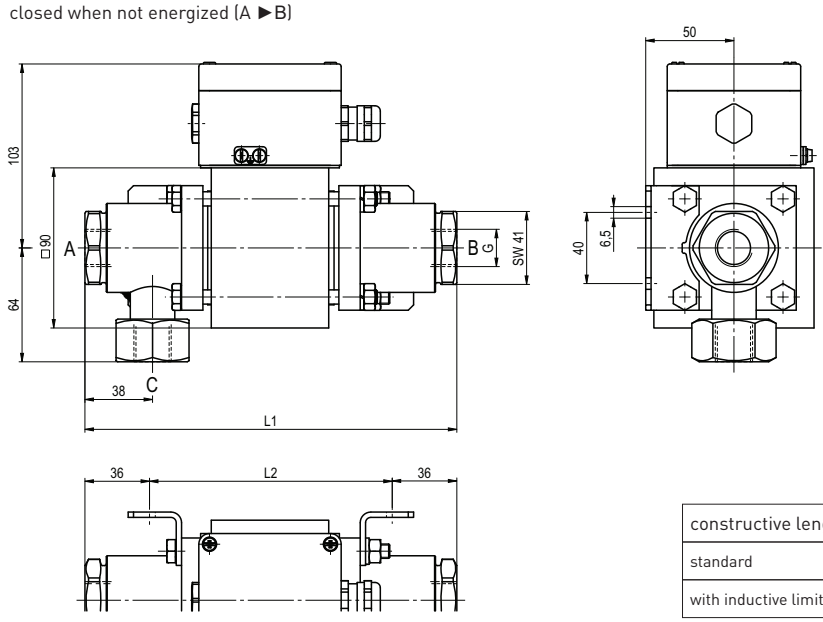
specifications not highlighted are standard
specifications highlighted in grey are optional

müller co-ax gmbh • Friedrich-Müller-Str. 1 • 74670 Forchtenberg • Germany • fon +49(0)7947/828-0 • fax +49(0)7947/828-11 • Email info@co-ax.com

# coax® data sheet - coaxial valve

## type MK 15 DR Ex
## FK 15 DR Ex

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

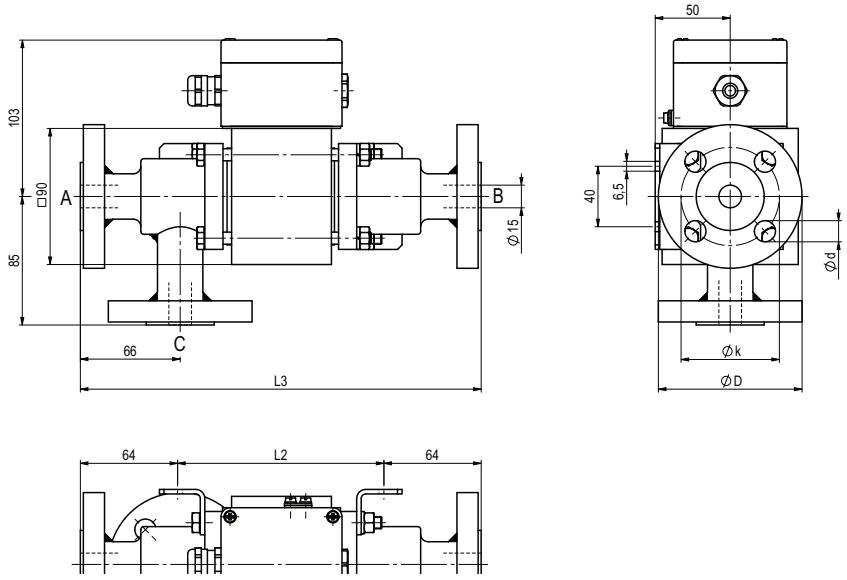



| constructive length | L1 | L2 | L3 |
|---|---|---|---|
| standard | 209 | 137 | 265 |
| with inductive limit switches | 249 | 177 | 305 |

**If the distance between two neighbouring valve surfaces is less than 100 mm, the specifications of the ATEX / IECEx operating manual for the valve row apply.**

| flanges PN | DIN | ØD | Øk | Ød |
|---|---|---|---|---|
| 16 | EN 1092-1 | 95 | 65 | 14 |
| 40 | EN 1092-2 | 95 | 65 | 14 |

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

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