## coax<sup>®</sup> data sheet - coaxial valve

limit switches

## type MK 25 DR Ex FK 25 DR Ex

08/2021



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.

specifications not highlighted are standard specifications highlighted in grey are optional

| 3/2 way valve                   | direct ac           | ting   |   |  |  |  |  |
|---------------------------------|---------------------|--|---|--|--|--|--|
| pressure range                  | PN 0-40             | bar  |   |  |  |  |  |
| orifice                         | DN 25 m             | m  |   |  |  |  |  |
| connection                      | thread/fl           |  |   |  |  |  |  |
| function                        | valve               | ange   | BC  |  |  |  |  |
| lunction                        |                     | (closed (A B)  |   |  |  |  |  |
|                                 | ,                   | normally closed (A ► B)<br>symbol NC                   |   |  |  |  |  |
|                                 |                     | No   | A   |  |  |  |  |
|                                 | valve               | (  | a T J L L L L L L L L L L L L L L L L L L                 |  |  |  |  |
|                                 | ,                   | normally open (A ▶B)                                   |   |  |  |  |  |
|                                 | symbol NO           |  |   |  |  |  |  |
| lesign                          | pressure            | e balanced, with spring return                         | n, intersecting switch-over                               |  |  |  |  |
| ody materials                   | ① brass             | i  | ② steel galvanized  |  |  |  |  |
|                                 | ③ brass             | , nickel plated  | ⑤ without non-ferr. Metals                                |  |  |  |  |
|                                 | ~                   | nickel plated  | ④ stainless steel   |  |  |  |  |
|                                 | 0 0000              | menterplated   |   |  |  |  |  |
| alve seat                       | synthetic           | resin on metal   |   |  |  |  |  |
| eal materials                   | NBR                 |  | PTFE, FPM, CR, EPDM                                       |  |  |  |  |
|                                 |                     |  | · · · · · · · · · · · · · · ·                             |  |  |  |  |
|                                 | general             | specifications   | options   |  |  |  |  |
| orts                            | MK                  | threads G 1 - G 1 1/2                                  | special threads   |  |  |  |  |
|                                 | FK                  | flanges PN 16 / 40                                     | special flanges   |  |  |  |  |
| unction                         |                     | NC<br>0-16/0-40  | NO  |  |  |  |  |
| ressure range                   | bar                 |  | 6 / A ⇔ C max. 40 / C ⇔ A max. 16                         |  |  |  |  |
| v value                         | m³/h                | 11,2   |   |  |  |  |  |
| acuum<br>ressure-vacuum         | leak rate<br>P1⇔ P2 |  | < 10 <sup>-6</sup> mbar•l•s <sup>-1</sup><br>upon reguest |  |  |  |  |
| ack pressure                    | $P_2 > P_1$         | see pressure range                                     | upon request  |  |  |  |  |
| nedia                           | _                   | gaseous - liquid - highly visco                        | us -  |  |  |  |  |
| brasive media                   |                     | gelatinous - contaminated                              | upon request  |  |  |  |  |
| amping                          | opening             |  | aponrequest   |  |  |  |  |
|                                 | closing             |  |   |  |  |  |  |
| ow direction<br>witching cycles | 1/min               | see pressure range<br>130                              |   |  |  |  |  |
| witching time                   | ms                  | opening 130  |   |  |  |  |  |
| nedia temperature               | °C                  | closing 130<br>DC: -20 to +40                          | -20 to +70  |  |  |  |  |
| leula temperature               | C                   | AC: -20 to +40   | -20 to +70  |  |  |  |  |
| mbient temperature              | °C                  | DC: -20 to +40   | -20 to +70  |  |  |  |  |
| mit switches                    |                     | AC: -20 to +40   | -20 to +70<br>inductive                                   |  |  |  |  |
| nanual override                 |                     |  |   |  |  |  |  |
| pprovals                        |                     |  | LR/GL/WAZ   |  |  |  |  |
| rounting<br>reight              | kg                  | MK 9,2 FK 12,0   | mounting brackets   |  |  |  |  |
| dditional equipment             |                     |  | upon request  |  |  |  |  |
|                                 |                     |  |   |  |  |  |  |
|                                 | electrica           | al specifications                                      | options   |  |  |  |  |
| ominal voltage                  | Un                  | DC 24 V +5%/-10%                                       | special voltage upon request                              |  |  |  |  |
| ctuation                        |                     | AC 230 V +5%/-10% 40-60 Hz<br>direct-current magnet    | z special voltage upon request                            |  |  |  |  |
| ctudtion                        | AC                  | direct-current magnet<br>direct-current magnet with se | eparate sand sealed rectifier                             |  |  |  |  |
|                                 | -                   | rectifier outside of the explosi                       |   |  |  |  |  |
| culating rating                 | - <u>H</u>          | area<br>180°C  |   |  |  |  |  |
| sulating rating                 | н<br>IP65           | 100 6  |   |  |  |  |  |
| nergized duty rating            | ED                  | 100%   |   |  |  |  |  |
| onnection                       | M16x1,5             | terminal box   |   |  |  |  |  |
|                                 |                     |  |   |  |  |  |  |
| ptional                         |                     |  |   |  |  |  |  |
| dditional equipment             | Un                  | V-DC 24 200  | <u>60 00 110 000</u>                                      |  |  |  |  |
| urrent consumption              | Un<br>In            | V-DC 24 200<br>A 1,79 0,21                             | <u>48 98 110 220</u><br>0,95 0,47 0,40 0,19               |  |  |  |  |
|                                 |                     |  |   |  |  |  |  |
| valacion procf                  |                     | II 2 C Ex mb c II T /                                  |   |  |  |  |  |
| explosion proof                 |                     | II 2 G Ex mb e II T4                                   |   |  |  |  |  |

II 2 D Ex tD A21 IP65 T130 °C PTB 03 ATEX 2022 X

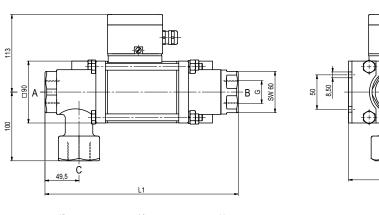
inductive NAMUR

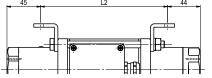
circuit amplifier

## coax<sup>®</sup> data sheet - coaxial valve

## type MK 25 DR Ex FK 25 DR Ex

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

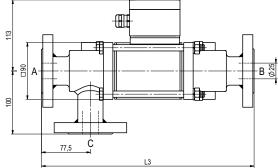


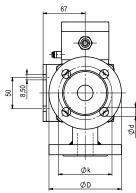


| constructive length           | L1  | L2  | L3  |
|-------------------------------|-----|-----|-----|
| standard                      | 281 | 192 | 337 |
| with inductive limit switches | 334 | 245 | 390 |

| flanges PN | DIN       | ØD  | Øk | Ød |
|------------|-----------|-----|----|----|
| 16         | EN 1092-1 | 115 | 85 | 14 |
| 40         | EN 1092-2 | 115 | 85 | 14 |

function: **NO** open when not energized (A  $\triangleright$ B)





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