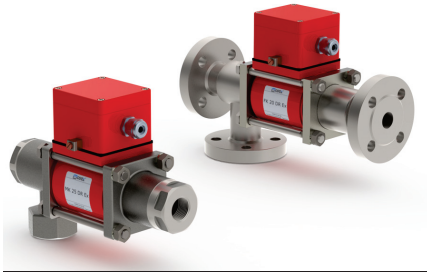
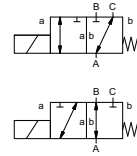


# coaxial valve

## type MK 20 DR Ex FK 20 DR Ex



**3/2 way valve** **direct acting**  
**pressure range** PN 0-40 bar  
**orifice** DN 20 mm  
**connection** thread/flange  
**function** valve normally closed (A ► B)  
 symbol **NC**  
 valve normally open (A ► B)  
 symbol **NO**



Above stated body materials refer to the valve port connections that get in contact with the media only!

**design** pressure balanced, with spring return, switching overlap  
**body materials** ① brass ② steel, galvanized  
 ③ brass, nickel plated ⑤ without non-ferr. metals  
 ④ steel, nickel plated ⑥ stainless steel  
**valve seat** synthetic resin on metal  
**seal materials** NBR PTFE, FPM, CR, EPDM

**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**

|                             |   |  |
|-----------------------------|---|--|
| <b>ports</b>                | MK threads G 3/4 - G 1 1/4                                    | <b>options</b> special threads                                   |
|                             | FK flanges PN 16 / 40   | special flanges  |
| <b>function</b>             | NC  | NO   |
| <b>pressure range</b>       | bar 0-16 / 0-40   |  |
|                             | A ⇒ B max. 40 / B ⇒ A max. 16 / A ⇒ C max. 40 / C ⇒ A max. 16 |  |
| <b>Kv value</b>             | m³/h 6,7  |  |
| <b>vacuum</b>               | leak rate   | < 10 <sup>-6</sup> mbar·l·s <sup>-1</sup>                        |
| <b>pressure-vacuum</b>      | P <sub>1</sub> ⇔ P <sub>2</sub>                               | upon request   |
| <b>back pressure</b>        | P <sub>2</sub> > P <sub>1</sub>                               | see pressure range   |
| <b>media</b>                |   | gaseous - liquid - highly viscous -<br>gelatinous - contaminated |
| <b>abrasive media</b>       |   | upon request   |
| <b>damping</b>              | opening   |  |
|                             | closing   |  |
| <b>flow direction</b>       |   | see pressure range   |
| <b>switching cycles</b>     | 1/min 150   |  |
| <b>switching time</b>       | ms opening 110 closing 110                                    |  |
| <b>media temperature</b>    | °C DC: -20 to +40   |  |
|                             | AC: -20 to +40  |  |
| <b>ambient temperature</b>  | °C DC: -20 to +40   |  |
|                             | AC: -20 to +40  |  |
| <b>limit switches</b>       |   | inductive  |
| <b>manual override</b>      |   |  |
| <b>approvals</b>            |   | LR/GL/WAZ  |
| <b>mounting</b>             |   | mounting brackets  |
| <b>weight</b>               | kg MK 6,0 FK 8,4  |  |
| <b>additional equipment</b> |   | upon request   |

**electrical specifications**

|                                      |  |                                |
|--------------------------------------|--|--------------------------------|
| <b>nominal voltage</b>               | U <sub>n</sub> DC 24 V   | <b>options</b> special voltage |
|                                      | U <sub>n</sub> AC 230 V 40-60 Hz   | special voltage                |
| <b>actuation</b>                     | DC direct-current magnet   |                                |
|                                      | AC direct-current magnet with separate rectifier outside of the explosion-proof area | sand sealed rectifier          |
| <b>insulating rating</b>             | H 180°C  |                                |
| <b>protection</b>                    | IP65   |                                |
| <b>energized duty rating</b>         | ED 100%  |                                |
| <b>connection</b>                    | M16x1,5 terminal box   |                                |
| <b>optional additional equipment</b> |  |                                |
| <b>current consumption</b>           | U <sub>n</sub> V-DC 24 200   | 48 98 110 220                  |
|                                      | I <sub>n</sub> A 1,34 0,17   | 0,68 0,32 0,28 0,14            |
| <b>explosion proof</b>               | II 2 G EEx em II T4 und II 2 D IP 65 T 130 °C<br>PTB 03 ATEX 2049 X                  |                                |
| <b>limit switches</b>                | inductive NAMUR  | circuit amplifier              |

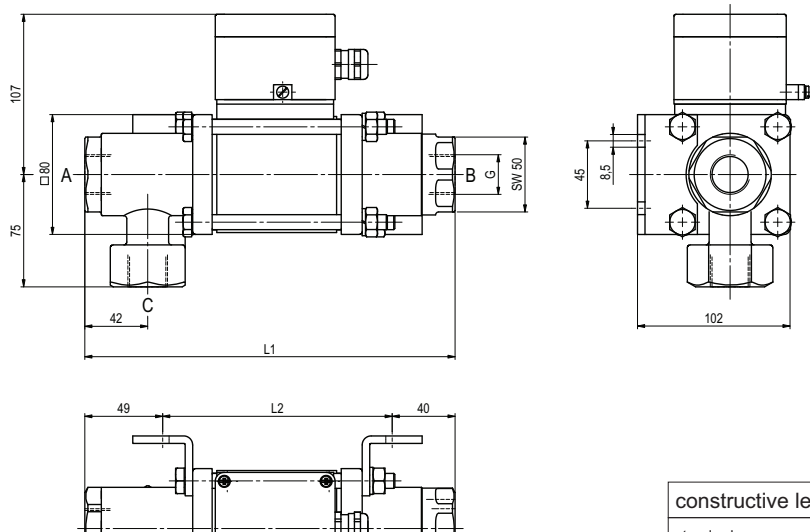
The valves' technical design is based on media and application requirements. This can lead to deviations from the general specifications shown on the data sheet with regards to the design, sealing materials and characteristics.

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

# type MK 20 DR Ex

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



| constructive length               | L1  | L2  | L3  |
|-----------------------------------|-----|-----|-----|
| standard                          | 247 | 158 | 301 |
| with 1/2 inductive limit switches | 291 | 202 | 345 |

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

# type FK 20 DR Ex

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

