### coaxial valve
definition

**type**

MK 50 DR

FK 50 DR

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### 3/2 way valve

**direct acting**

**pressure range**

PN 0-16 bar

**connection**

DN 50 mm

**function**

thread/fitting valve

normally closed (A ▶ B)

symbol NC

valve normally open (A ▶ B)

symbol NO

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### design

**body materials**

pressure balanced, with spring return, switching overlap

1. steel, galvanized

2. steel, nickel plated

3. without non-ferr. metals

4. stainless steel

**valve seat**

synthetic resin on metal

**seal materials**

NBR

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### general specifications

**ports**

MK

threads G 2

FK

flanges PN 16

NC

NO

**pressure range**

Bar

0-16

A ▶ B max. 16 / B ▶ A max.

10 / A ▶ C max.

16 / C ▶ A max.

**Kv value**

28.2

**vacuum pressure-vacuum back pressure media**

\( P_1 \) / \( P_2 \)

on request

\( P_2 > P_1 \) see pressure range

\( gaseous - liquid - highly viscous - gelatinous - contaminated \)

**abrasive media damping**

opening / closing

upon request

**flow direction**

see pressure range

**switching cycles**

1/min

40

**switching time**

opening

400

closing

400

**ambient temperature**

°C

DC: -20 to +80

AC: -20 to +80

**limit switches**

manual override

available

inductive mounting brackets

**weight**

kg

MK 31.5

FK 38.5

upon request

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### electrical specifications

**nominal voltage**

Un

DC 24 V

special voltage upon request

AC 230 V 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 energized duty rating connection**

IP65

100%

ED

plug acc. DIN EN 176301-803

form A, 4 positions x 90° / wire diameter 6-8 mm

terminal box M16x1,5

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### optional additional equipment

**current consumption**

**R-coil**

DC 24 V

2.80 A

AC 230 V 40-60 Hz 0.33 A

**H-coil**

DC 24 V

3.30 A

AC 230 V 40-60 Hz 0.43 A

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### limit switches

inductive (I)

normally open-PNP

inductive (B)

normally open-PNP

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### 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.

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### 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.

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### Above stated body materials refer to the valve port connections that get in contact with the media only!
**type MK 50 DR**

**function:** NC

closed when not energized (A ➔ B)

![Diagram of MK 50 DR]

<table>
<thead>
<tr>
<th>constructive length</th>
<th>L₁</th>
<th>L₂</th>
<th>L₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>standard</td>
<td>453</td>
<td>363</td>
<td>553</td>
</tr>
<tr>
<td>with 1/2 inductive limit switches</td>
<td>453</td>
<td>363</td>
<td>553</td>
</tr>
<tr>
<td>with manual emergency (Hd) Hd and 1/2 ind. limit switches</td>
<td>453</td>
<td>363</td>
<td>553</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>flanges PN</th>
<th>DIN</th>
<th>ØD</th>
<th>Øk</th>
<th>Ød</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>EN 1092-1</td>
<td>165</td>
<td>125</td>
<td>18</td>
</tr>
</tbody>
</table>

**type FK 50 DR**

**function:** NO

open when not energized (A ➔ B)

![Diagram of FK 50 DR]