

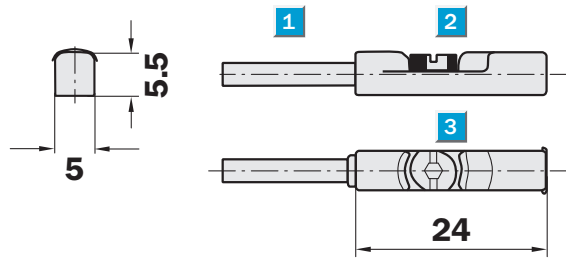
## MZT8

### Magnetic cylinder sensor



- Very compact/short housing design 24 mm
- Easy handling – “one hand” mounting possible
- Undetachably mounting screw
- Suitable for harsh environment – resistances and tightness

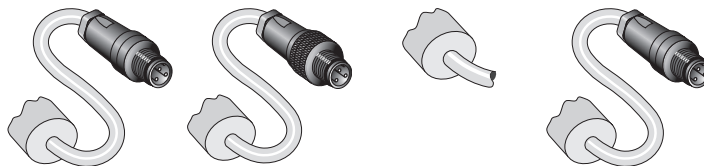
#### Dimensional drawing



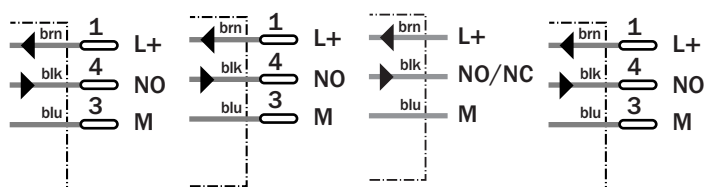
- 1 Connection
- 2 Mounting screw
- 3 LED

#### Connection types

|               |               |   |               |
|---------------|---------------|---|---------------|
| MZT8-03VPSKPO | MZT8-03VPSKRO | MZT8-03VPSKUB<br>MZT8-03VPSKW0<br>MZT8-03VPSKU0 | MZT8-03VPSKQ0 |
|---------------|---------------|---|---------------|



|           |                       |                          |            |
|-----------|-----------------------|--------------------------|------------|
| M8, 3-pin | M8, 3-pin, w/kn. scr. | 3 x 0.14 mm <sup>2</sup> | M12, 3-pin |
|-----------|-----------------------|--------------------------|------------|



| Technical data                          |   | MZT8- | 03VPS<br>KPO | 03VPS<br>KQO | 03VPS<br>KRO | 03VPS<br>KUB | 03VPS<br>KWO | 03VPS<br>KUO |  |  |  |  |
|---|---|-------|--------------|--------------|--------------|--------------|--------------|--------------|--|--|--|--|
| Sensing face                            | Front   |       |              |              |              |              |              |              |  |  |  |  |
| <b>Electrical configuration</b>         | DC 3-wire   |       |              |              |              |              |              |              |  |  |  |  |
| <b>Supply voltage V<sub>s</sub></b>     | 10 ... 30 V DC  |       |              |              |              |              |              |              |  |  |  |  |
| Response sensitivity                    | 2.6 mT  |       |              |              |              |              |              |              |  |  |  |  |
| Overrun distance typ.                   | 3 mm  |       |              |              |              |              |              |              |  |  |  |  |
| Ripple U <sub>pp</sub>                  | ≤ 10 %  |       |              |              |              |              |              |              |  |  |  |  |
| Voltage drop U <sub>d</sub>             | ≤ 2.2 V   |       |              |              |              |              |              |              |  |  |  |  |
| Power consumption                       | ≤ 10 mA <sup>1)</sup>                                 |       |              |              |              |              |              |              |  |  |  |  |
| <b>Continuous current I<sub>a</sub></b> | ≤ 200 mA  |       |              |              |              |              |              |              |  |  |  |  |
| Hysteresis H typ.                       | > 0.5 mT  |       |              |              |              |              |              |              |  |  |  |  |
| Repeatability R                         | ≤ 0.1 mT (U <sub>b</sub> and T <sub>a</sub> constant) |       |              |              |              |              |              |              |  |  |  |  |
| EMC                                     | According to EN 60947-5-2                             |       |              |              |              |              |              |              |  |  |  |  |
| <b>Switching output</b>                 | PNP   |       |              |              |              |              |              |              |  |  |  |  |
| <b>Output function</b>                  | Normally open   |       |              |              |              |              |              |              |  |  |  |  |
| <b>Connection type</b>                  |   |       |              |              |              |              |              |              |  |  |  |  |
| Cable with plug                         | M8, 3-pin, PUR, 0.3 m                                 |       |              |              |              |              |              |              |  |  |  |  |
|   | M12, 3-pin, PUR, 0.3 m                                |       |              |              |              |              |              |              |  |  |  |  |
|   | M8, 3-pin, w. knurled screws, PUR, 0.5 m              |       |              |              |              |              |              |              |  |  |  |  |
| Cable                                   | PUR, 5 m  |       |              |              |              |              |              |              |  |  |  |  |
|   | PVC, 2 m  |       |              |              |              |              |              |              |  |  |  |  |
|   | PUR, 2 m  |       |              |              |              |              |              |              |  |  |  |  |
| <b>Enclosure rating</b>                 | IP 69K <sup>2)</sup>                                  |       |              |              |              |              |              |              |  |  |  |  |
|   | IP 68   |       |              |              |              |              |              |              |  |  |  |  |
| Max. switching frequency                | 1,000 Hz  |       |              |              |              |              |              |              |  |  |  |  |
| <b>Wire-break protection</b>            | ✓   |       |              |              |              |              |              |              |  |  |  |  |
| <b>Short-circuit protection</b>         | ✓ <sup>3)</sup>                                       |       |              |              |              |              |              |              |  |  |  |  |
| <b>Reverse polarity protection</b>      | ✓   |       |              |              |              |              |              |              |  |  |  |  |
| <b>Power-up pulse suppression</b>       | ✓   |       |              |              |              |              |              |              |  |  |  |  |
| Shock/vibration stress                  | 30 g, 11 ms/10 ... 55 Hz, 1 mm                        |       |              |              |              |              |              |              |  |  |  |  |
| Ambient temperature T <sub>a</sub>      | -30 °C ... +80 °C                                     |       |              |              |              |              |              |              |  |  |  |  |
| <b>Housing material</b>                 | Plastic   |       |              |              |              |              |              |              |  |  |  |  |

1) Without load  
 2) According to DIN 40050 part 9  
 3) Pulsed

| Order information |           |
|-------------------|-----------|
| Type              | Order no. |
| MZT8-03VPSKPO     | 1044458   |
| MZT8-03VPSKQO     | 1044460   |
| MZT8-03VPSKRO     | 1044459   |
| MZT8-03VPSKUB     | 1044470   |
| MZT8-03VPSKWO     | 1044349   |
| MZT8-03VPSKUO     | 1044469   |

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