

## Magnetic cylinder sensor

### MZT6 series

DC 3-wire, T-Slot cylinder



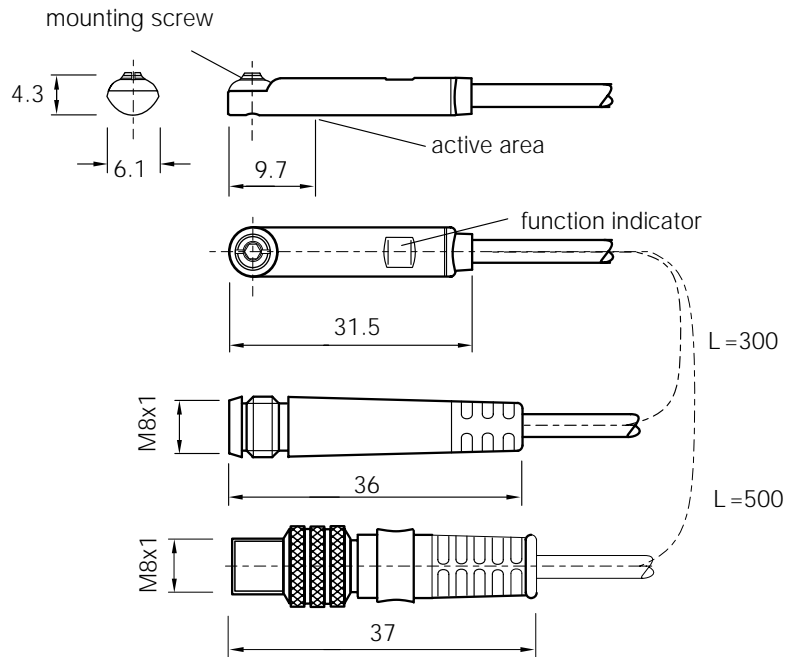
#### Features



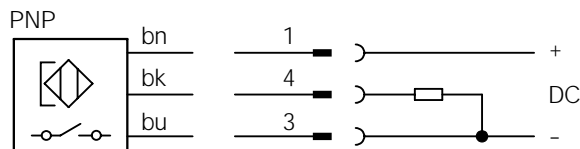
- Non-contact detection of piston position in pneumatic cylinders
- **Mountable from the top**
- For all common used T-slot cylinder e.g. Festo, SMC
- Plastic housing with nickel silver bushing and hexagon socket/slotted screw
- Connection cable or connector on cable
- Enclosure rating IP 68
- LED function indicator
- Magneto-resistive element

#### Accessories

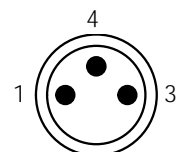
Round connector



#### Connection diagram



| Wire colour | Contact | Assignment |
|-------------|---------|------------|
| bn brown    | 1       | + V DC     |
| bk black    | 4       | NO         |
| bu blue     | 3       | - V DC     |



## Electrical and mechanical data

|   |                            |                                      |                                  |
|---|----------------------------|--------------------------------------|----------------------------------|
| <b>Operating voltage</b> $U_b$                        | 10 ... 30 V DC             | <b>Wire-break protection</b>         | yes                              |
| <b>Ripple</b> $U_{ss}$                                | $\leq 10\%$ of $U_b$       | <b>Short-circuit protection</b>      | yes                              |
| <b>Voltage drop</b> $U_d$                             | $\leq 2,5$ V               | (pulsed)                             |                                  |
| <b>Power consumption</b><br>(without load)            | $\leq 10$ mA               | <b>Reverse polarity protection</b>   | yes                              |
| <b>Continuous current</b> $I_a$                       | $\leq 100$ mA              | <b>Power-up pulse suppression</b>    | yes                              |
| <b>Hysteresis</b> H                                   | $\leq \text{min. } 0,5$ mT | <b>Enclosure rating to EN 60529</b>  | IP 68                            |
| <b>Repeatability</b> R<br>( $U_b$ and $T_a$ constant) | $\leq 0,1$ mT              | <b>Shock and vibration stress</b>    | 30 g, 11 ms<br>10 to 55 Hz, 1 mm |
| <b>EMC</b>  | to EN 60 947-5-2           | <b>Ambient temperature</b> $T_a$     | - 25 ... + 75 °C                 |
|   |                            | <b>Housing material</b>              | Plastic                          |
|   |                            | <b>Connection cable 2 m</b>          | PVC, 3 x 0,14 mm <sup>2</sup>    |
|   |                            | <b>Connection cable with M8x1 mm</b> | PUR                              |

## Selection table

| Response sensitivity in mT | Sensing face | Switching-output | Output function | Switching frequency in Hz | Connection                              | Type           | Order number |
|----------------------------|--------------|------------------|-----------------|---------------------------|---|----------------|--------------|
| 2,8                        |              | PNP              |                 | 5000                      | Cable 2 m                               | MZT6-03VPS-KWO | 1023970      |
| 2,8                        |              | PNP              |                 | 5000                      | Cable w. M8 x 1 mm                      | MZT6-03VPS-KPO | 1023971      |
| 2,8                        |              | PNP              |                 | 5000                      | Leitung m. M8 x 1 mm with knurled screw | MZT6-03VPS-KRO | 1023972      |



### Great Britain

Erwin Sick Ltd.  
 Waldkirch House  
 39 Hedley Road, St. Albans  
 Hertfordshire AL 1 5BN  
 ☎ +44 17 27-83 11 21  
 Fax +44 17 27-85 67 67  
 erwin@sick.co.uk

### USA

SICK, Inc.  
 6900 West 110th Street  
 Bloomington, MN 55438  
 ☎ +1 (952) 9 41-67 80  
 Fax +1 (952) 9 41-92 87  
 WATS 1-800-325-7425  
 info@sickoptic.com

### Australia

Erwin Sick Optic-Electronic  
 Pty. Ltd. Head Office, P.O. Box 214  
 899 Heidelberg Road  
 Ivanhoe, Vic. 3079, Australia  
 ☎ +61 39 49 74 10 0  
 (0 08) 33 48 02 - toll free  
 Fax +61 39 49 71 18 7  
 sick@werple.net.au