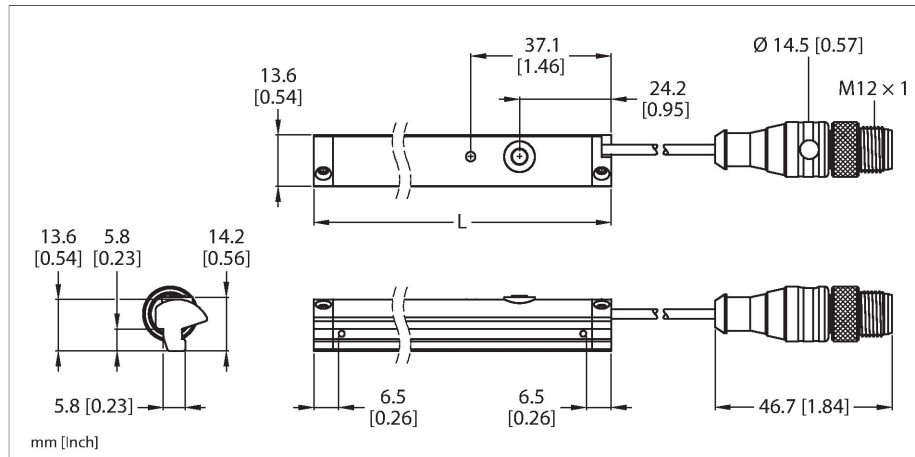


# WIM32-UNTL-IOL-0.3-RS4

## Magnetic Inductive Linear Position Sensor – For Analog Monitoring of Pneumatic Cylinders



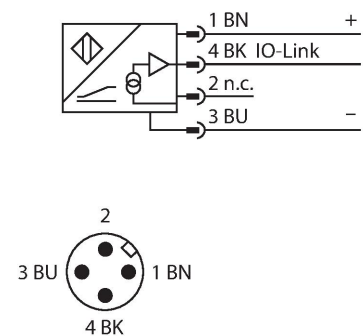
### Technical data

|                                        |                                                            |
|----------------------------------------|------------------------------------------------------------|
| Type                                   | WIM32-UNTL-IOL-0.3-RS4                                     |
| ID                                     | 100034306                                                  |
| Remark to product                      | 1 mm corresponds to 128 values in the IO-Link process data |
| Measuring principle                    | Magnetic                                                   |
| <b>General data</b>                    |                                                            |
| Measuring range                        | 32 mm                                                      |
| Resolution                             | 15 bit                                                     |
| Repeatability                          | ≤ 0.06 % of measuring range  A — B                         |
| Linearity deviation                    | With non-rotatable piston rod and at 25 °C<br>< 0.3 mm     |
| Temperature drift                      | ≤ ± 0.006 %/K                                              |
| <b>Electrical data</b>                 |                                                            |
| Operating voltage $U_B$                | 15...30 VDC                                                |
| Ripple $U_{ss}$                        | ≤ 10 % $U_{Bmax}$                                          |
| No-load current                        | ≤ 25 mA                                                    |
| Isolation test voltage                 | 0.5 kV                                                     |
| Short-circuit protection               | yes                                                        |
| Wire break/reverse polarity protection | yes/Complete                                               |
| Communication protocol                 | IO-Link                                                    |
| Output function                        | 4-wire                                                     |
| <b>IO-Link</b>                         |                                                            |
| IO-Link specification                  | V 1.1                                                      |
| IO-Link port type                      | Class A                                                    |
| Minimum cycle time                     | 2.3 ms                                                     |

### Features

- Plastic, PA66-GF25
- For direct mounting on pneumatic T-groove cylinders
- Measuring range: 32 mm
- 4-wire, 15...30 VDC
- IO-Link 1.1
- COM2
- Teachable via IO-Link or button
- Cable with M12 × 1 male connector

### Wiring diagram



### Functional principle

The linear position sensors operate according to the Hall principle and provide an output signal proportional to the position of the piston rod of a pneumatic cylinder. This signal can be used to accomplish control tasks. The polarity of the magnet has no effect on the output signal. The rugged sensors deliver optimal repeatability, resolution and linearity and offer a high level of electromagnetic compatibility, as well as a wide temperature range.

Technical data

| Mechanical data                |                                                                                    |
|--------------------------------|------------------------------------------------------------------------------------|
| Design                         | Rectangular, UNTL                                                                  |
| Dimensions                     | 45 x 13.6 x 14.2 mm                                                                |
| Housing material               | Plastic, PA66-GF25                                                                 |
| Tightening torque fixing screw | 0.25 Nm                                                                            |
| Electrical connection          | Cable with connector, M12 × 1                                                      |
| Cable quality                  | Ø 2.6 mm, Black, TPE, 0.3 m                                                        |
|                                | Halogen free, flame retardant acc. to VDE, below 0 °C stationary mounting of cable |
| Core cross-section             | 4 x 0.25 mm <sup>2</sup>                                                           |
| Environmental conditions       |                                                                                    |
| Ambient temperature            | -20...+70 °C                                                                       |
| Vibration resistance           | 55 Hz (1 mm)                                                                       |
| Shock resistance               | 30 g (11 ms)                                                                       |
| Protection class               | IP67                                                                               |
| Display magnetic-field status  | LED, yellow                                                                        |