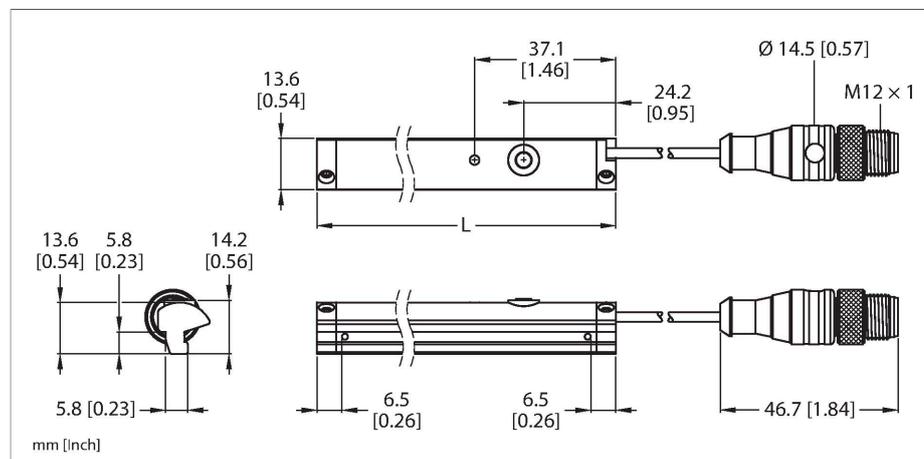


# WIM160-UNTL-IOL-0.3-RS4

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



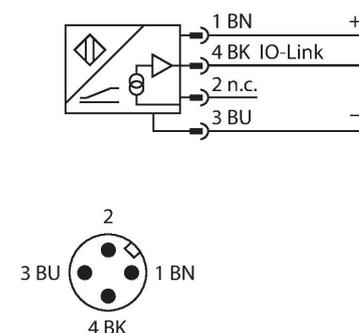
### Technical data

Type	WIM160-UNTL-IOL-0.3-RS4
ID	100034310
Remark to product	1 mm corresponds to 128 values in the IO-Link process data
Measuring principle	Magnetic
<b>General data</b>	
Measuring range	160 mm
Resolution	15 bit
Repeatability	≤ 0.06 % of measuring range  A — B
Linearity deviation	< 0.3 mm
Temperature drift	≤ ± 0.006 %/K
<b>Electrical data</b>	
Operating voltage	15...30 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
No-load current	25 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage/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: 160 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	173 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