

WIM32-UNTL-IOL-0.3-RS4 Magnetic Inductive Linear Position Sensor – For Analog Monitoring of Pneumatic Cylinders





Technical data

Туре	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
General data	
Measuring range	32 mm
Resolution	15 bit
Repeatability	\leq 0.06 % of measuring range A — B
	With non-rotatable piston rod and at 25 $^\circ\mathrm{C}$
Linearity deviation	< 0.3 mm
Temperature drift	≤ ± 0.006 %/K
Electrical data	
Operating voltage U _B	1530 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
IO-Link	
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.



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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 ²
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