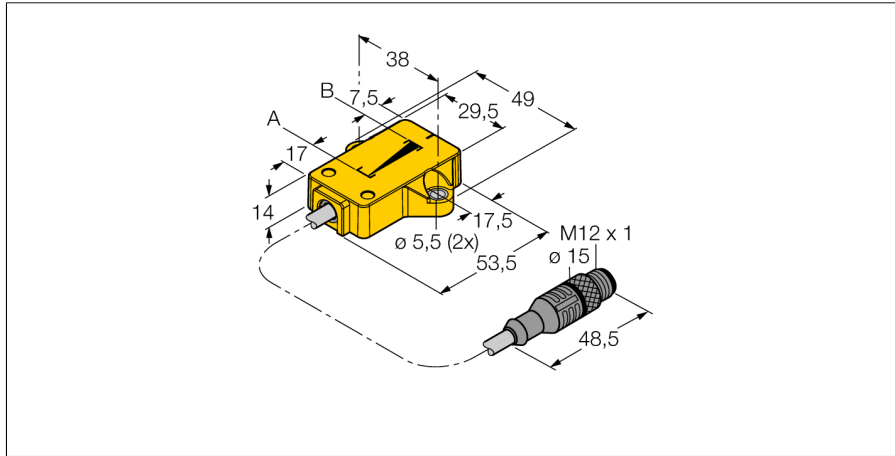


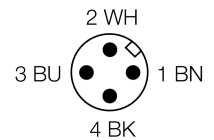
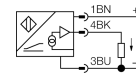
Inductive linear position sensor
Li25P1-QR14-LU4X2-0,3-RS4/S97



- Rectangular, plastic
- Many mounting possibilities
- P1-Ri-QR14/Q17L included in delivery
- LED indicates measuring range
- Immune to electromagnetic interferences
- Extremely short blind zones
- 12 bit resolution
- 4-wire, 8...30 VDC
- Analog output
- 0.5...4.5 V
- Cable with male end M12 x 1

Type code	Li25P1-QR14-LU4X2-0,3-RS4/S97
Ident no.	1590754
Measuring range [A...B]	25mm
Resolution	0,006 mm/12 bit
blind zone a	17 mm
blind zone b	7.5 mm
Linearity deviation	≤ 0.5 %
Temperature drift	≤ ± 0.01 % / K
Ambient temperature	-40...+70 °C
Operating voltage	8...30VDC
Residual ripple	≤ 10 % U _{ss}
No-load current I ₀	≤ 50 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage / Reverse polarity protection	yes/ yes (voltage supply)
Output function	3-wire, analog output
Voltage output	0.5...4.5V
Load resistance voltage output	≥ 4.7 kΩ
Sample rate	500 Hz
Design	rectangular, QR14
Dimensions	53.5 x 49 x 14 mm
Housing material	plastic, PBT
Connection	cable with connector, M12 x 1
Cable quality	5.2 mm, Lif32Y32Y, TPE, 0.3 m
Cable cross section	3 x 0.5 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	138 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED green
Measuring range display	multifunction LED, green
Included in scope of supply	positioning element P1-Li-QR14/Q17L

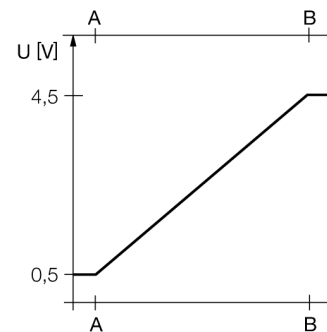
Wiring diagram



Functional principle

The measuring principle of inductive angle sensors is based on oscillation circuit coupling between the positioning element and the sensor. The output signal provided is proportional to the angle of the positioning element. The rugged sensors are wear and maintenance-free, thanks to the contactless operating principle. They convince through their excellent repeatability, resolution and linearity within a broad temperature range. Thanks to the innovative technology, electromagnetic AC and DC fields have no influence on the measured signal.

Characteristic

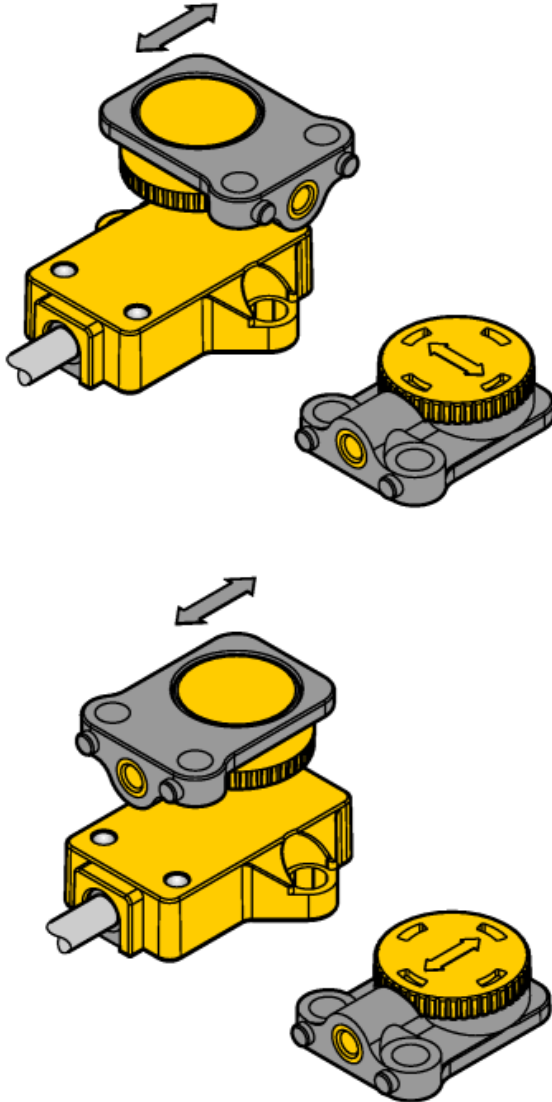


Inductive linear position sensor Li25P1-QR14-LU4X2-0,3-RS4/S97

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Mounting instructions / Description



The positioning element can be mounted offset by 90°. This provides highest mounting flexibility. Based on the functional principle of RLC coupling, the sensor is immune to magnetized metal splinters and other interferences.

LED indications:

green steady:

Positioning element is in the measuring range

green flashing:

Positioning element has reached the end of the measuring range. This is indicated by a weaker signal.

off:

Positioning element is outside the coverage.

Inductive linear position sensor
Li25P1-QR14-LU4X2-0,3-RS4/S97

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Accessories

Type code	Ident no.	Description	Dimension drawing
P1-Li-QR14/Q17L	1590724	Floating positioning element; cross and longitudinal mounting	