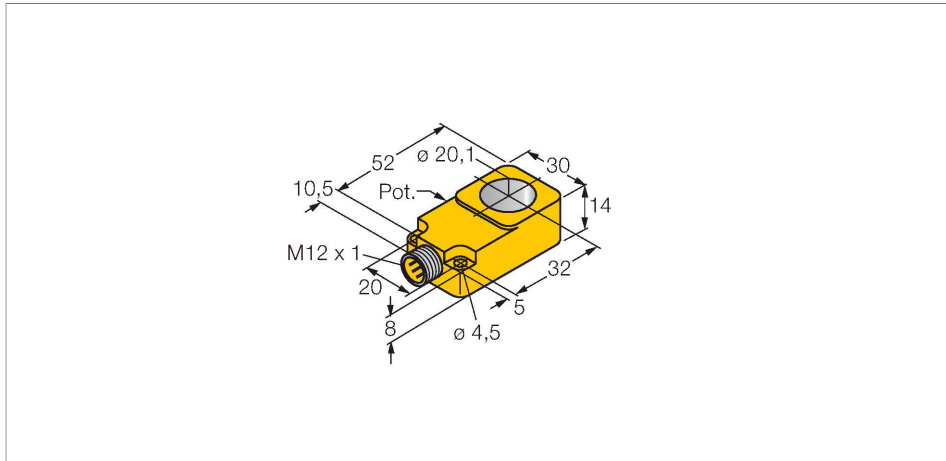


BI20R-Q14-LU-H1141

Inductive Sensor – With Analog Output



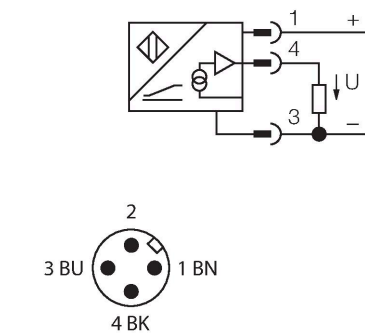
Features

- Rectangular, height 14 mm
- Plastic, PBT-GF30-V0
- Sensitivity adjusted via potentiometer
- Thickness measurement (e.g. screws, rivets, rods)
- Path measurement with conical actuator:
Measuring range freely adjustable via cone length
- 3-wire, 15...30 VDC
- Analog output
- 0...10 V
- M12 x 1 male connector

Wiring diagram

Technical data

Type	BI20R-Q14-LU-H1141
Ident. no.	1535548
Inside ring diameter D	20.1 mm
Measuring range [A...B]	depending on the length of the cone
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeatability	$\leq 1\%$ of measuring range A - B 0.5 %, after warm-up 0.5 h
Temperature drift	$\leq \pm 0.06\%$ / K
Ambient temperature	-25...+70 °C
Operating voltage	15...30 VDC
Residual ripple	$\leq 10\%$ U_{ss}
No-load current	≤ 8 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no / Complete
Output function	3-wire, Analog output
Voltage output	0...10 V
Load resistance voltage output	≥ 4.7 k Ω
Measuring sequence frequency	80 Hz
Design	Ring sensor, Q14
Dimensions	62.5 x 30 x 14 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Connector, M12 x 1
Coil body	plastic, POM

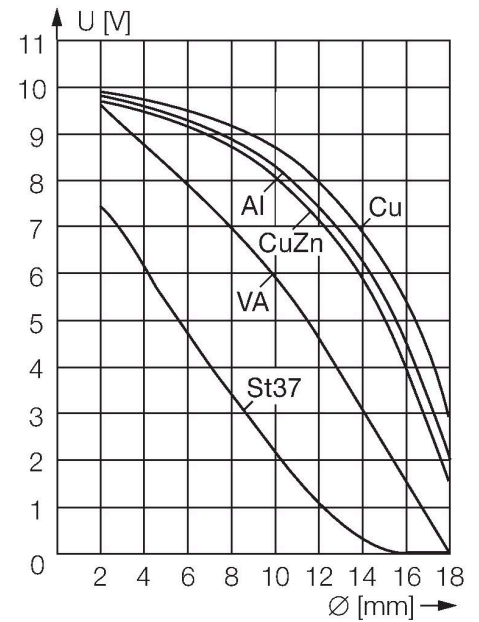


Functional principle

Inductive TURCK sensors with analog output accomplish simple control tasks. They provide a current, voltage or frequency signal proportional to the target's distance. The output signal is linear to the distance of the target over the entire sensing range.

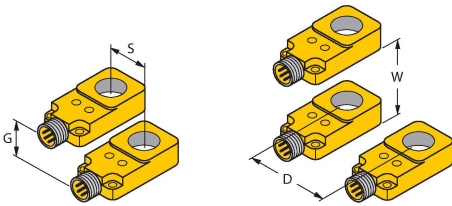
Technical data

Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	751 years acc. to SN 29500 (Ed. 99) 40 °C



Mounting instructions

Mounting instructions/Description



Distance D	45 mm
Distance W	45 mm
Distance S	14 mm
Distance G	30 mm

Wiring accessories

Dimension drawing

Type	Ident. no.
RKC4T-2/TEL	6625010

Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com



RKC4.301T-0.15-RSC4.334T/TXL	6631382
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Extension cable, M12 female/male, straight, 4-pin, cable length: 0.15m, jacket material: PUR, black; cULus approval; Adapter cable for sensors with analog output on pin 2, for connection to analog inputs of fieldbus modules with 4-wire technology

