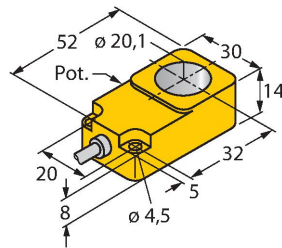


BI20R-Q14-LU

Inductive Sensor – With Analog Output



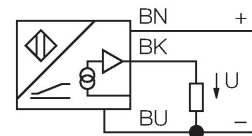
Features

- 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
- Cable connection

Technical data

Type	BI20R-Q14-LU
ID	1535546
General data	
Inside ring diameter D	20.1 mm
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
Repeatability	$\leq 1 \%$ of measuring range A - B
	0.5 %, after warm-up 0.5 h
Temperature drift	$\leq \pm 0.06 \%$ /K
Electrical data	
Operating voltage U_B	15...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
No-load current	$\leq 8 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes
Wire break/reverse polarity protection	no/Complete
Output function	3-wire, Analog output
Voltage output	0...10 V
Load resistance voltage output	$\geq 4.7 \text{ k}\Omega$
Measuring sequence frequency	80 Hz
Mechanical data	
Design	Ring sensor, Q14
Dimensions	52 x 30 x 14 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Cable

Wiring diagram

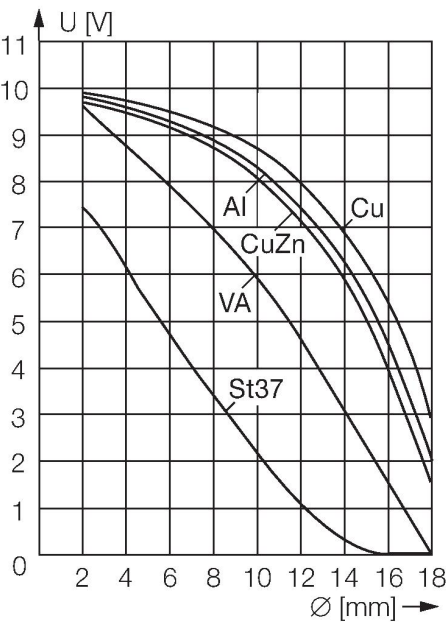


Functional principle

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

Cable quality	Ø 5.2 mm, LifYY-11Y, PUR, 2 m
Core cross-section	3 x 0.34 mm ²
Coil body	plastic, POM
Environmental conditions	
Ambient temperature	-25...+70 °C
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