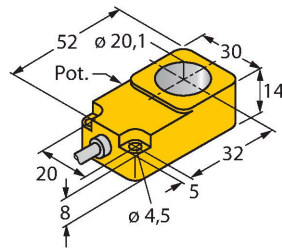


# BI20R-Q14-LU

## Inductive Sensor – With Analog Output



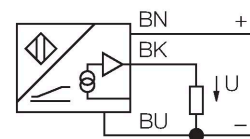
### Features

- 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
Ident. no.	1535546
Inside ring diameter D	20.1 mm
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	$\leq 8$ mA
Isolation test voltage	$\leq 0.5$ 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	$\geq 4.7$ k $\Omega$
Measuring sequence frequency	80 Hz
<b>Design</b>	Ring sensor, Q14
Dimensions	52 x 30 x 14 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Cable
Cable quality	$\varnothing$ 5.2 mm, LifYY-11Y, PUR, 2 m
Core cross-section	3 x 0.34 mm <sup>2</sup>

### Wiring diagram

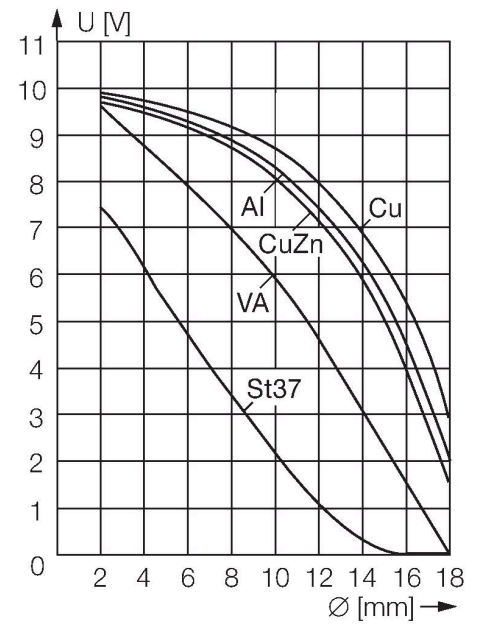


### Functional principle

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.

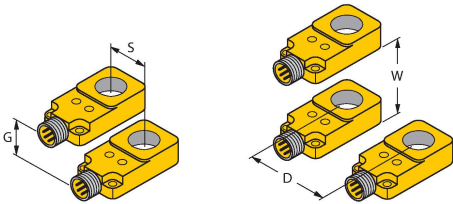
## Technical data

Coil body	plastic, POM
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