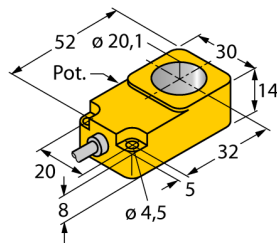


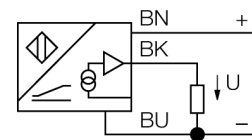
**Inductive sensor
with analog output
BI20R-Q14-LU**



- 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

Type code	BI20R-Q14-LU
Ident no.	1535546
Inside ring diameter D	20.1 mm
Repeatability	≤ 1 % of measuring range A - B ≤ 0.5 %, after warm-up 0.5 h
Temperature drift	≤ ± 0.06 % / K
Ambient temperature	-25...+70 °C
Operating voltage	15...30VDC
Residual ripple	≤ 10 % U _s
No-load current I ₀	≤ 8 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, analog output
Voltage output	0...10V
Load resistance voltage output	≥ 4.7 kΩ
Measuring sequence frequency	80 Hz
Design	ring sensor, Q14
Dimensions	52 x 30 x 14 mm
Housing material	plastic, PBT
Connection	cable
Cable quality	5.2 mm, LiYY-11Y, PUR, 2 m
Cable cross section	3 x 0.34 mm ²
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

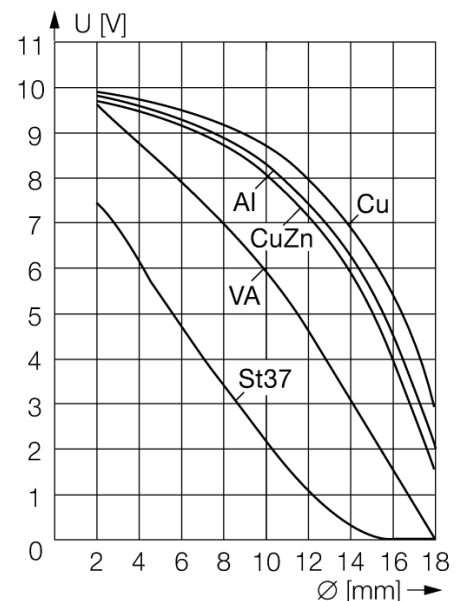
Wiring diagram



Functional principle

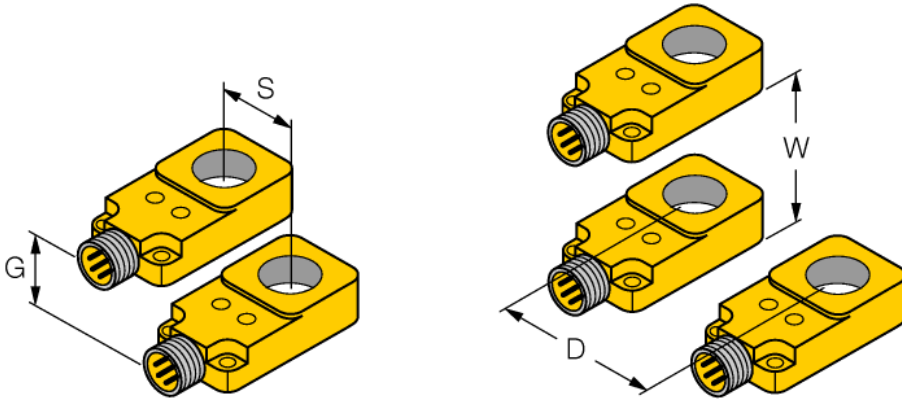
Inductive TURCK sensors with analog output accomplish simple control tasks. They provide a current, voltage or frequency signal proportional to the target's distance. The output signal is linear to the distance of the target over the entire sensing range.

Measuring range



**Inductive sensor
with analog output
BI20R-Q14-LU**

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



**Inductive sensor
with analog output
BI20R-Q14-LU**

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
IM43-13-SR	7540041	Limit value monitor; 1-channel; input 0/4...20 mA or 0/2...10 V; supply of 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one NO contact each; removable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further limit value monitors are described in our "Interface Technology" catalog.	