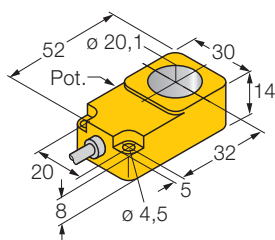
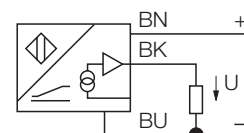


Inductive sensor with analogue output Bi20R-Q14-LU



- ring sensor, height 14 mm
- plastic, PBT-GF30-V0
- sensitivity adjustable via potentiometer
- thickness measurements (e.g. screws, rivets, rods)
- length measurement with conical target: measuring range length freely adjustable via cone length
- analogue output (voltage)
- 3-wire, 15...30 VDC
- cable connection

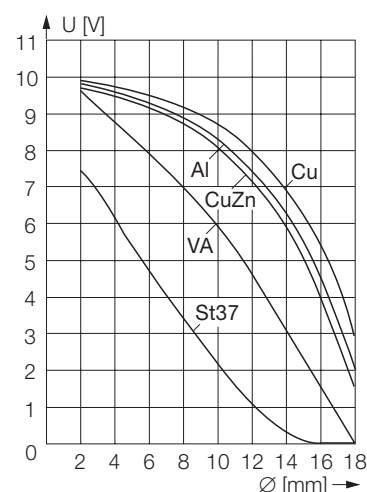
Wiring diagram



Function principles

Simple control tasks can be accomplished with inductive TURCK sensors with analogue output. They provide a current, voltage or frequency signal that is proportional to the target's distance. With TURCK's analogue sensors, this output signal is linear to the distance of the target over the entire sensing range.

Measuring range

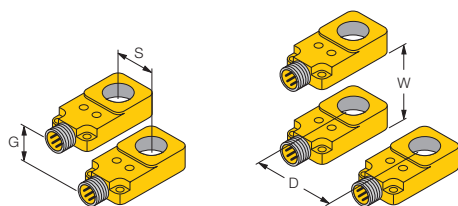


Type	Bi20R-Q14-LU
Ident-No.	1535546
Interior ring diameter	20,1 mm
Measuring range [A...B]	abhängig von der Länge des Konus
Min. repeat accuracy	≤ 1 % of measuring range A - B
Max. relative temperature drift	≤ 0,5 %, after a heating period of 0.5 h
Operating temperature	≤ ± 0,06 %/°C -10 ... + 70 °C
Rated operational voltage (DC) U_B	15... 30 VDC
Max. ripple	≤ 10 % U _{pp}
No-load current I ₀	≤ 8 mA
Rated insulation voltage	≤ 0,5 kV
Output function	3-wire, analogue output
Short-circuit protection	yes
Wire breakage / reverse polarity protection	yes / complete
Voltage output	0... 10 V
Voltage output load resistance	≥ 4,7 kΩ
Reading rate frequency	80 Hz
Recovery time on output	≤ 12 ms
Housing style	ring sensor; Q14
Dimensions	55 x 30 x 14 mm
Housing material	plastic, PBT-GF30-V0
Wiring	cable
Cable	Ø 5,2, LifYY, PVC, 2 m
Cable cross section	3 x 0,34 mm ²
Coil form	Plastic, POM
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67

Inductive sensor with analogue output Bi20R-Q14-LU

Mounting instructions

	minimum gap
Gap D	30 mm
Gap W	45 mm
Gap S	14 mm
Gap G	30 mm



Inductive sensor with analogue output Bi20R-Q14-LU

Accessories

Typ	Ident-No.	Description	Dimension drawing
IM43-13-SR	7540041	limit value monitor; single 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 normally open contact each; removeable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further limit value monitors are described in our "Interface Technology" catalogue.	