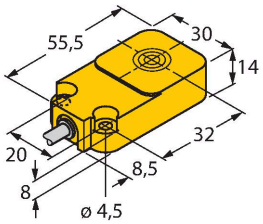
BI10-Q14-LIU
Inductive Sensor – With Analog Output



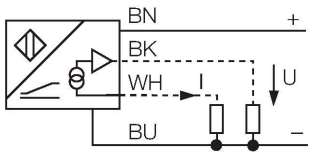
Technical data

Type	BI10-Q14-LIU
Ident. no.	1534602
Measuring range	3…8 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 1 % of measuring range |A - B|
	0.5 %, after warm-up 0.5 h
Reproducibility	≤ 50 µm
	≤ 25 µm, after a warm-up time of 0.5 h
Linearity deviation	≤ 3 %
Temperature drift	≤ ± 0.06 % / K
Ambient temperature	-25…+70 °C
Operating voltage	15…30 VDC
Residual ripple	≤ 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	4-wire, Analog output
Voltage output	0…10 V
Current output	0…20 mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance, current output	≤ 0.4 kΩ

Features

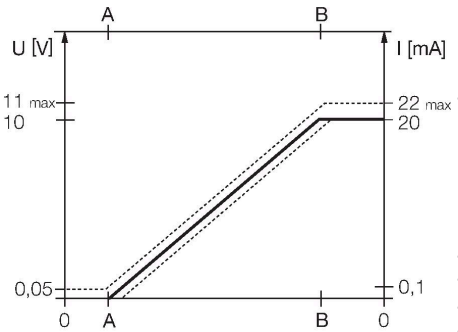
- Rectangular, height 14 mm
- Active face on top
- Plastic, PBT-GF30-V0
- 4-wire, 15…30 VDC
- Analog output
- 0…10 V and 0…20 mA
- Cable connection

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.



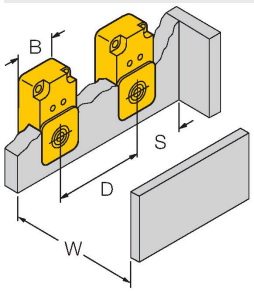
BI10-Q14-LIU| 12/03/2020 03-16 | technical changes reserved

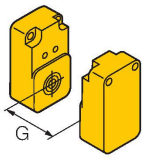
Technical data

Measuring sequence frequency	140 Hz
Design	Rectangular, Q14
Dimensions	52 x 30 x 14 mm
Housing material	Plastic, PBT-GF30-V0
Active area material	PBT-GF30-V0
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY-11Y, PUR, 2 m
Core cross-section	4 x 0.34 mm²
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

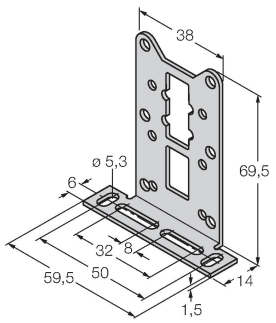




Distance D	45 mm
Distance W	24 mm
Distance S	30 mm
Distance G	48 mm
Width active area B	30 mm

Accessories

MW-Q14/Q20	6945006



Mounting bracket for rectangular Q14 or Q20; material VA 1.4301

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