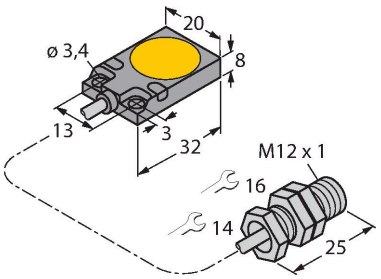
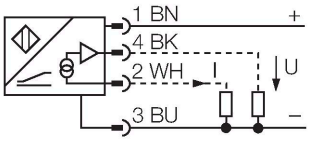
BI7-Q08-LIU-0.4-FSF4.4/S1305
Inductive Sensor – With Analog Output

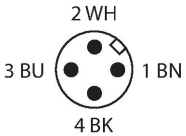


Features

- Rectangular, height 8 mm
- Active face on top
- Metall, zinc die casting
- 4-wire, 15…30 VDC
- Analog output
- 0…10 V and 0…20 mA
- Cable with connector, M12 × 1

Wiring diagram



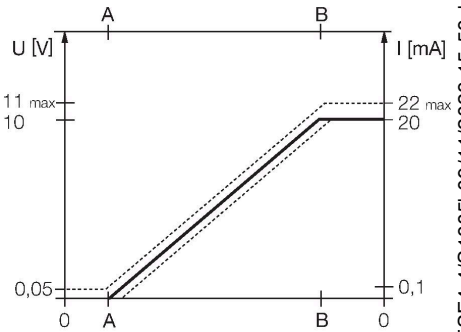


Technical data

Type	BI7-Q08-LIU-0.4-FSF4.4/S1305
ID	1534617
Special version	S1305 corresponds to: With 1x sealing ring diameter 12x1.5 and 1x hexagon nut M12 × 1
General data	
Measuring range	1…4 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	≤ 30 µm
	≤ 15 µm, after a warm-up time of 0.5 h
Linearity deviation	≤ 5 %
Temperature drift	≤ ± 0.06 %/K
Electrical data	
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

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.

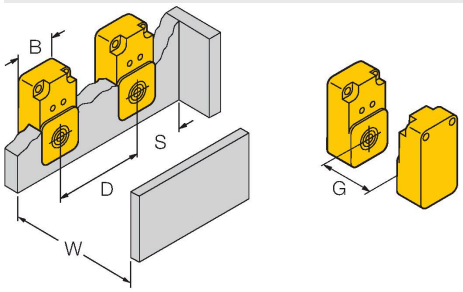


Technical data

Voltage output	0…10 V
Current output	0…20 mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance current output	≤ 0.4 kΩ
Measuring sequence frequency	200 Hz
Mechanical data	
Design	Rectangular, Q08
Dimensions	32 x 20 x 8 mm
Housing material	Metal, GD-Zn
Active area material	Plastic, PA12-GF30, yellow
Electrical connection	Connector, M12 × 1
Cable quality	Ø 3 mm, Gray, LifY-11Y, PUR, 0.4 m
Core cross-section	4 x 0.14 mm^2
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	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Width active area B	20 mm