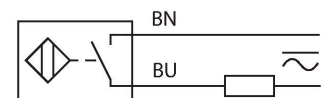


BI2-EG08-AZ14X Inductive Sensor

Features

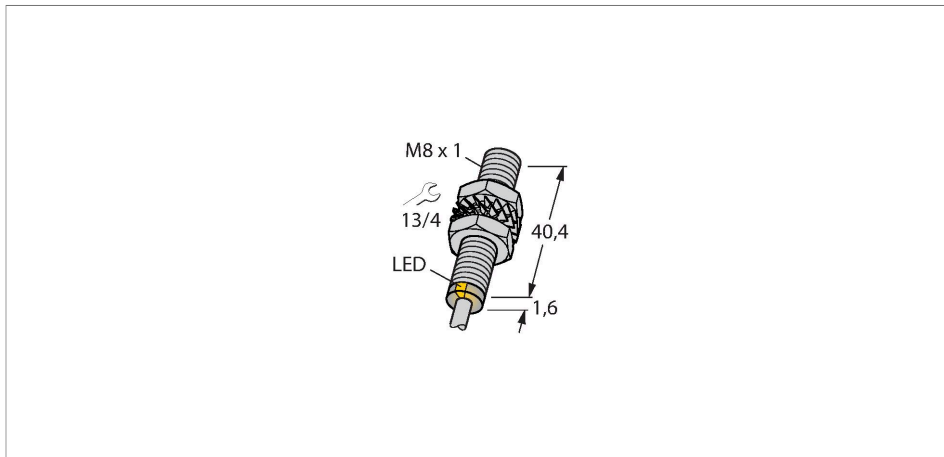
- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- AC 2-wire, 20...132 VAC
- DC 2-wire, 10...140 VDC
- NO contact
- Cable connection

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



Technical data

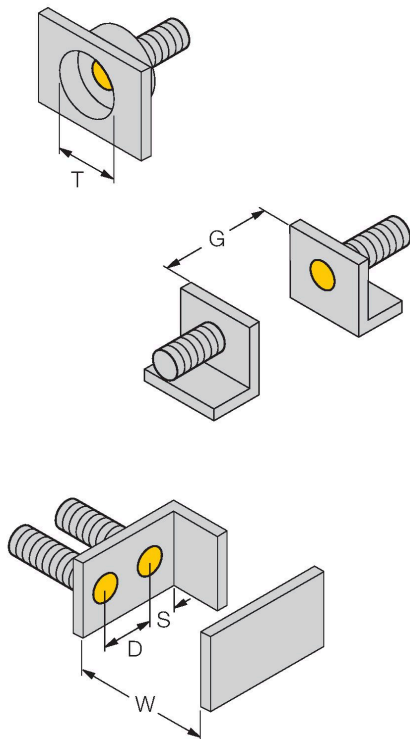
| | |
|------------------------------|---|
| Type | BI2-EG08-AZ14X |
| Ident. no. | 4100001 |
| Rated switching distance | 2 mm |
| Mounting conditions | Flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | $\leq 2\%$ of full scale |
| Temperature drift | $\leq \pm 10\%$ |
| Hysteresis | 1...15 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 20...132 VAC |
| Operating voltage | 10...140 VDC |
| AC rated operational current | ≤ 100 mA |
| DC rated operational current | ≤ 100 mA |
| Frequency | $\geq 50 \dots \leq 60$ Hz |
| Residual current | ≤ 0.6 mA |
| Isolation test voltage | ≤ 1.5 kV |
| Surge current | ≤ 0.2 A (...10 ms max. 0.2 A) |
| Voltage drop at I_e | ≤ 6 V |
| Output function | 2-wire, NO contact |
| Smallest operating current | ≥ 3 mA |
| Switching frequency | 0.02 kHz |
| Design | Threaded barrel, M8 x 1 |
| Dimensions | 42 mm |

Technical data

| | |
|------------------------------------|--|
| Housing material | Stainless steel, 1.4427 SO |
| Active area material | Plastic, PA12-GF30 |
| End cap | Plastic, PA12-GF30 |
| Max. tightening torque housing nut | 5 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 5.2 mm, Gray, LifYY-11Y, PUR, 2 m |
| Core cross-section | 2 x 0.34 mm ² |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state | LED, Yellow |

Mounting instructions

Mounting instructions/Description

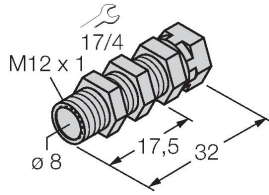


| | |
|---------------------------|---------|
| Distance D | 2 x B |
| Distance W | 3 x Sn |
| Distance T | 3 x B |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Diameter active area B | Ø 8 mm |

Accessories

QM-08

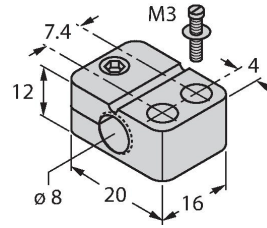
6945100



Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.

BST-08B

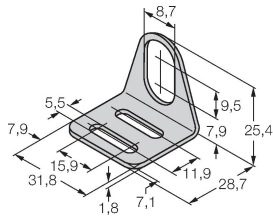
6947210



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW08

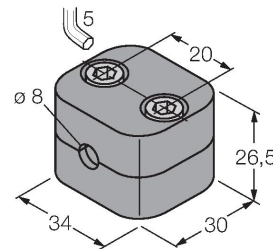
6945008



Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-08

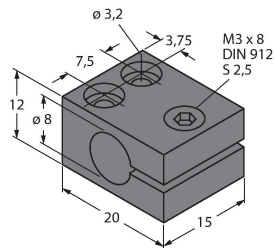
6901322



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

MBS80

69479



Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum