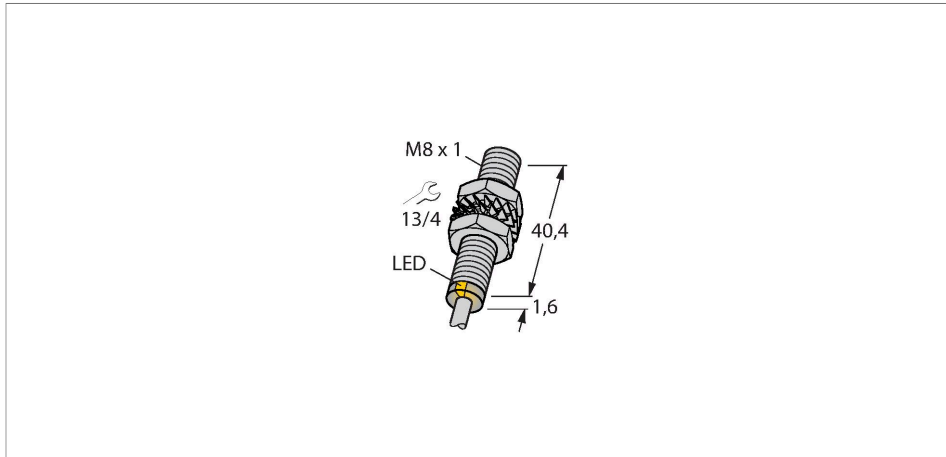


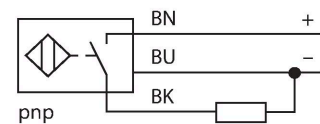
BI1.5U-EG08-AP6X 7M Inductive Sensor



Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Technical data

| | |
|---|---|
| Type | BI1.5U-EG08-AP6X 7M |
| ID | 4600501 |
| General data | |
| Rated switching distance | 1.5 mm |
| Mounting conditions | Flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Repeat accuracy | $\leq 2\%$ of full scale |
| Temperature drift | $\leq \pm 10\%$ |
| | $\leq \pm 15\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Hysteresis | 3...15 % |
| Electrical data | |
| Operating voltage | 10...30 VDC |
| Residual ripple | $\leq 10\% U_{ss}$ |
| DC rated operational current | $\leq 150\text{ mA}$ |
| No-load current | 15 mA |
| Residual current | $\leq 0.1\text{ mA}$ |
| Isolation test voltage | $\leq 0.5\text{ kV}$ |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I_o | $\leq 1.8\text{ V}$ |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 3-wire, NO contact, PNP |
| DC field stability | 200 mT |
| AC field stability | 200 mT _{ss} |
| Insulation class | □ |

Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. Approx Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Technical data

| | |
|---------------------------------------|---|
| Switching frequency | 2 kHz |
| Mechanical data | |
| Design | Threaded barrel, M8 × 1 |
| Dimensions | 42 mm |
| Housing material | Stainless steel, 1.4427 SO |
| Active area material | Plastic, PA12-GF30 |
| End cap | Plastic, PA12-GF30 |
| Max. tightening torque of housing nut | 5 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 4 mm, LifYY-11Y, PUR, 7 m |
| Core cross-section | 3 x 0.25 mm ² |
| Environmental conditions | |
| Ambient temperature | -30...+85 °C |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP68 |
| MTTF | 874 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state | LED, Yellow |

Mounting instructions

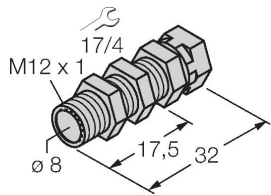
Mounting instructions/Description



| | |
|------------------------|---------|
| 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 |

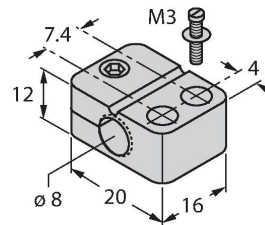
Accessories

QM-08 6945100



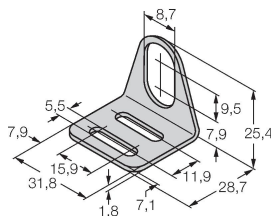
Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.

BST-08B 6947210



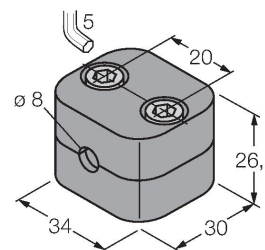
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW-08 6945008



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

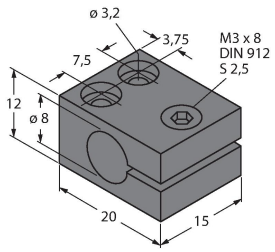
BSS-08 6901322



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

MBS80

69479



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