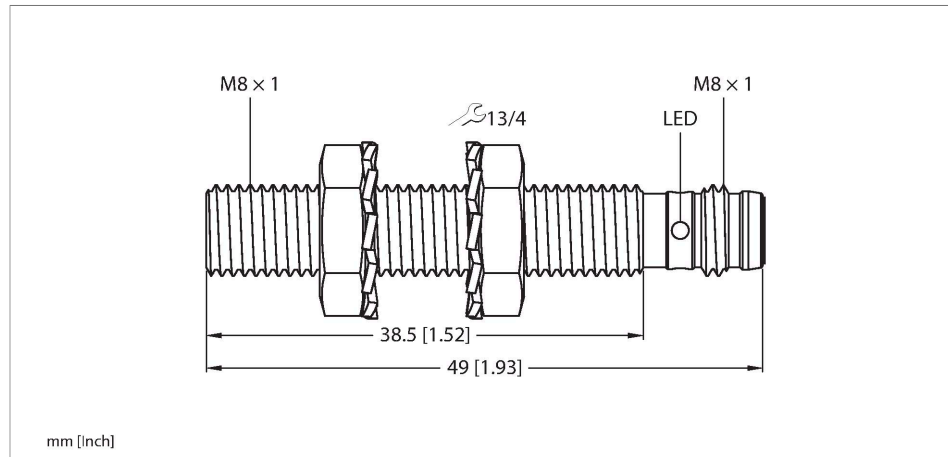


# BI2-EG08-AP6X-V1131

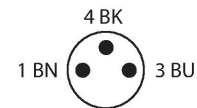
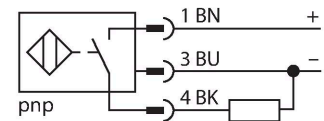
## Inductive Sensor – With Increased Switching Distance



### Features

- M8 x 1 threaded tube
- Stainless steel, 1.4305 (AISI 303)
- Large sensing range
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M8 x 1 male connector

### Wiring diagram



### Technical data

|   |   |
|---|---|
| Type                                      | BI2-EG08-AP6X-V1131                                 |
| Ident. no.                                | 4602050   |
| 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                                | 20 %  |
| Ambient temperature                       | -25...+70 °C  |
| Operating voltage                         | 10...30 VDC   |
| Residual ripple                           | $\leq 10\% U_s$                                     |
| DC rated operational current              | $\leq 150$ mA                                       |
| No-load current                           | $\leq 15$ mA  |
| Residual current                          | $\leq 0.1$ mA                                       |
| Isolation test voltage                    | $\leq 0.5$ kV                                       |
| Short-circuit protection                  | yes / Cyclic  |
| Voltage drop at $I_e$                     | $\leq 1.8$ V  |
| Wire breakage/Reverse polarity protection | yes / Complete                                      |
| Output function                           | 3-wire, NO contact, PNP                             |
| Switching frequency                       | 3 kHz   |
| Design                                    | Threaded barrel, M8 x 1                             |
| Dimensions                                | 49 mm   |
| Housing material                          | Stainless steel, 1.4305 (AISI 303)                  |

### 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

|                                    |  |
|------------------------------------|--|
| Active area material               | Plastic, PA6.6                             |
| Max. tightening torque housing nut | 5 Nm                                       |
| Electrical connection              | Connector, M8 x 1                          |
| 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

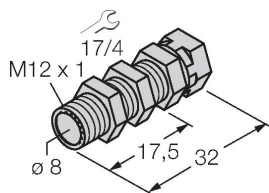


|                      |         |
|----------------------|---------|
| Distance D           | 2 x B   |
| Distance W           | 3 x Sn  |
| Distance T           | 3 x B   |
| Distance S           | 1.5 x B |
| Distance G           | 6 x Sn  |
| Diameter active area | Ø 8 mm  |
| B                 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

## Accessories

QM-08

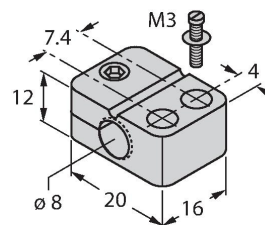
6945100



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.

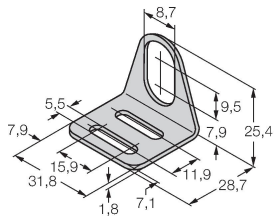
BST-08B

6947210



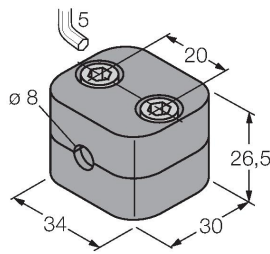
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

**MW-08** **6945008**



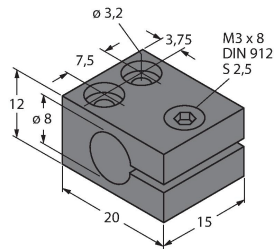
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

**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

## Wiring accessories

**Dimension drawing** **Type** **Ident. no.**

PKGV3M-2/TEL

6625385

Connection cable, female M8, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see [www.turck.com](http://www.turck.com)

