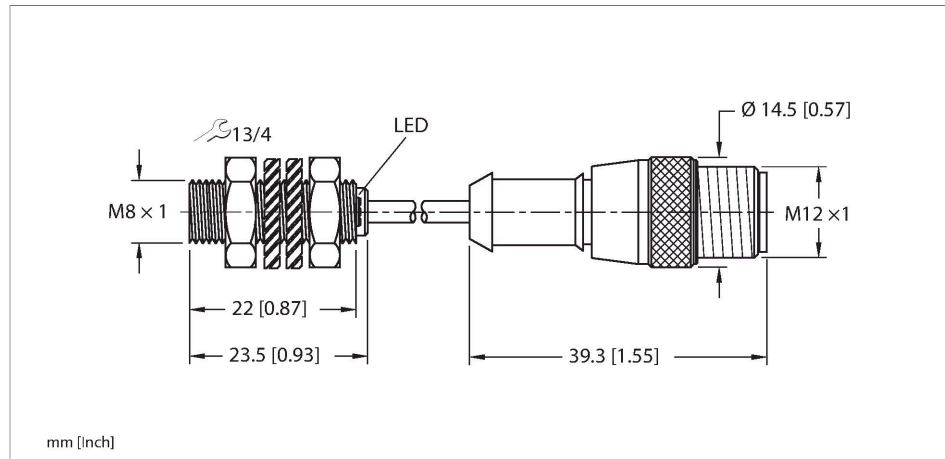


# BI1.5-EG08K-AN6X-0.2-RS4T

## Inductive Sensor



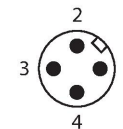
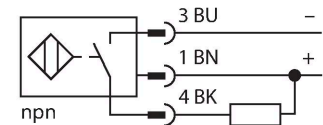
### Technical data

|                                        |                                                     |
|----------------------------------------|-----------------------------------------------------|
| Type                                   | BI1.5-EG08K-AN6X-0.2-RS4T                           |
| ID                                     | 4669191                                             |
| <b>General data</b>                    |                                                     |
| Rated switching distance               | 1.5 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                           |
| Hysteresis                             | 20 %                                                |
| <b>Electrical data</b>                 |                                                     |
| Operating voltage $U_B$                | 10...30 VDC                                         |
| Ripple $U_{ss}$                        | $\leq 10 \%$ $U_{Bmax}$                             |
| DC rated operating current $I_o$       | $\leq 150$ mA                                       |
| No-load current                        | $\leq 15$ mA                                        |
| Residual current                       | $\leq 0.1$ mA                                       |
| Isolation test voltage                 | 0.5 kV                                              |
| Short-circuit protection               | yes/Cyclic                                          |
| Voltage drop at $I_o$                  | $\leq 1.8$ V                                        |
| Wire break/reverse polarity protection | yes/Complete                                        |
| Output function                        | 3-wire, NO contact, NPN                             |
| Switching frequency                    | 3 kHz                                               |
| <b>Mechanical data</b>                 |                                                     |
| Design                                 | Threaded barrel, M8 x 1                             |

### Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4305 (AISI 303)
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Pigtail with M12 x 1 connector

### Wiring diagram



### Functional principle

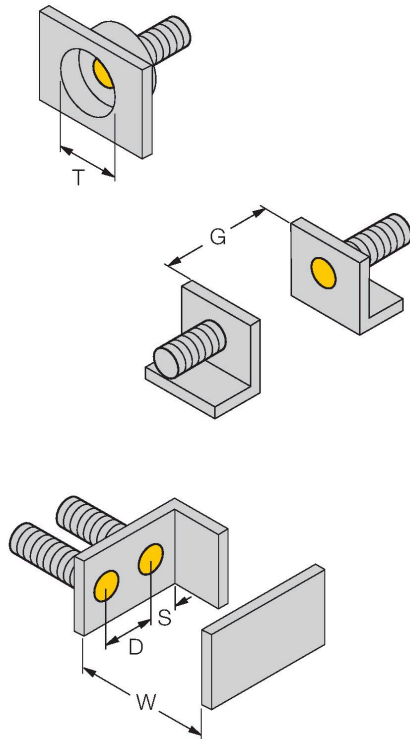
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

## Technical data

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Dimensions                            | 23.5 mm                                    |
| Housing material                      | Stainless steel, 1.4305 (AISI 303)         |
| Active area material                  | Plastic, PA6.6                             |
| End cap                               | Plastic, PP                                |
| Material coupling nut                 | CuZn, nickel-plated                        |
| Max. tightening torque of housing nut | 5 Nm                                       |
| Electrical connection                 | Cable with connector, M12 × 1              |
| Cable quality                         | Ø 3.3 mm, Gray, LifY-11Y, PUR, 0.2 m       |
| Core cross-section                    | 3 x 0.14 mm <sup>2</sup>                   |
| Environmental conditions              |                                            |
| Ambient temperature                   | -25...+70 °C                               |
| 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



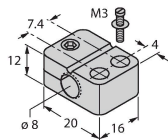
|                        |         |
|------------------------|---------|
| Distance D             | 2 x B   |
| Distance W             | 3 x Sn  |
| Distance T             | 3 x B   |
| Distance S             | 1.5 x B |
| Distance G             | 6 x Sn  |
| Diameter active area B | Ø 8 mm  |

## Accessories

### BST-08B

6947210

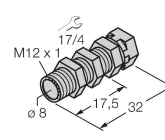
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



### QM-08

6945100

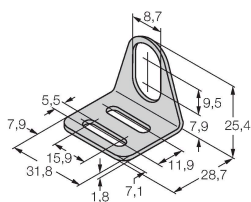
Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.



### MW08

6945008

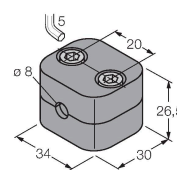
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



### 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

