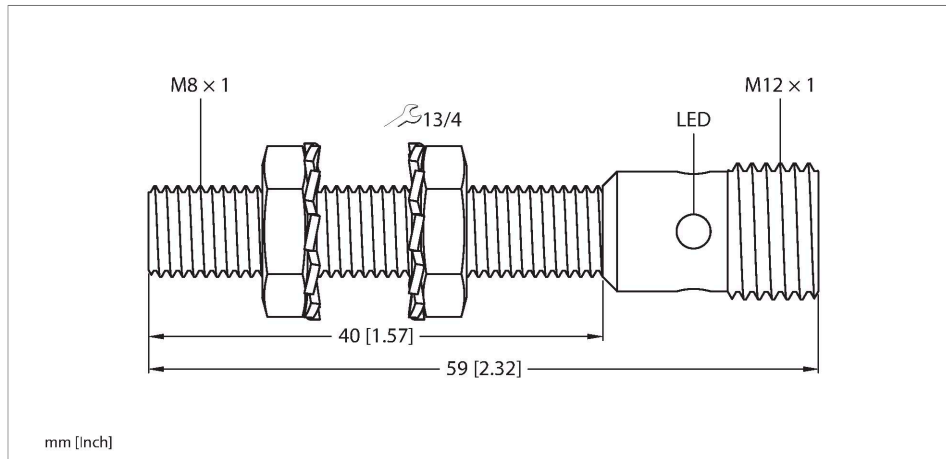


# BI1.5-EG08-AN6X-H1341

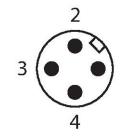
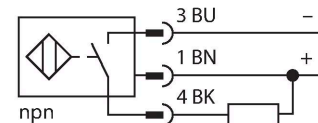
## Inductive Sensor



### Features

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

### Wiring diagram



### Technical data

|   |   |
|---|---|
| Type                                      | BI1.5-EG08-AN6X-H1341                               |
| ID  | 4602360   |
| <b>General data</b>                       |   |
| Rated switching distance                  | 1.5 mm  |
| Mounting conditions                       | Flush   |
| Secured operating distance                | ≤ (0.81 × S <sub>n</sub> ) mm                       |
| Correction factors                        | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy                           | ≤ 2 % of full scale                                 |
| Temperature drift                         | ≤ ±10 %   |
| Hysteresis                                | 20 %  |
| <b>Electrical data</b>                    |   |
| Operating voltage                         | 10...30 VDC   |
| Residual ripple                           | ≤ 10 % U <sub>ss</sub>                              |
| DC rated operational current              | ≤ 150 mA  |
| No-load current                           | 15 mA   |
| Residual current                          | ≤ 0.1 mA  |
| Isolation test voltage                    | ≤ 0.5 kV  |
| Short-circuit protection                  | yes / Cyclic  |
| Voltage drop at I <sub>o</sub>            | ≤ 1.8 V   |
| Wire breakage/Reverse polarity protection | yes / Complete                                      |
| Output function                           | 3-wire, NO contact, NPN                             |
| Switching frequency                       | 3 kHz   |

### Functional principle

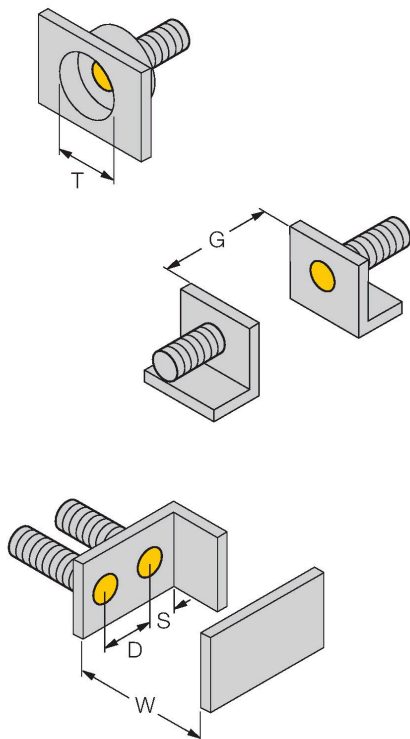
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

## Technical data

| Mechanical data                       |  |
|---------------------------------------|--|
| Design                                | Threaded barrel, M8 × 1                    |
| Dimensions                            | 59 mm                                      |
| Housing material                      | Stainless steel, 1.4305 (AISI 303)         |
| Active area material                  | Plastic, PA6.6                             |
| Max. tightening torque of housing nut | 5 Nm                                       |
| Electrical connection                 | Connector, M12 × 1                         |
| 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

**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       | ID      |   |
|-------------------|------------|---------|---|
|                   | RKH4-2/TFE | 6935482 | Connection cable, M12 female, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, gray temperature range -25...+80 °C; other cable lengths and designs available, see <a href="http://www.turck.com">www.turck.com</a>  |
|                   | RKH4-2/TFG | 6934384 | Connection cable, M12 female, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: TPE, gray temperature range -40...+105 °C; other cable lengths and designs available, see <a href="http://www.turck.com">www.turck.com</a> |

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