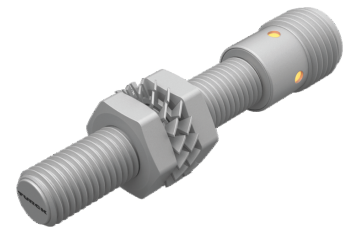
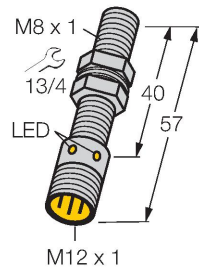


# BI2-EGT08-AP6X-H1341/S100

## Inductive Sensor – With Increased Temperature Range



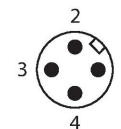
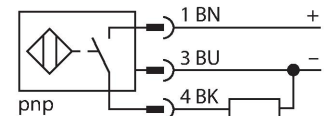
### Technical data

|                                        |                                                           |
|----------------------------------------|-----------------------------------------------------------|
| Type                                   | BI2-EGT08-AP6X-H1341/S100                                 |
| ID                                     | 4602257                                                   |
| Special version                        | S100 Corresponds to: Maximum ambient temperature = 100 °C |
| <b>General data</b>                    |                                                           |
| 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                      | $\leq \pm 10 \%$                                          |
|                                        | $\leq \pm 20 \%, \geq +70 \text{ °C}$                     |
| Hysteresis                             | 3...15 %                                                  |
| <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                                             |
| Rated operational current              | See derating curve                                        |
| 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                                              |

### Features

- Threaded barrel, M8 x 1
- Stainless steel, PTFE-coated
- Temperatures up to +100 °C
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

### Wiring diagram

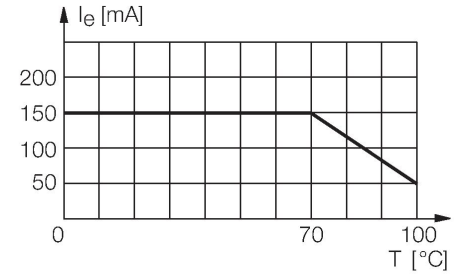


### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit. Special versions are available for ambient temperatures between -60°C and +250°C.

## Technical data

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Output function                       | 3-wire, NO contact, PNP                    |
| Switching frequency                   | 1 kHz                                      |
| <b>Mechanical data</b>                |                                            |
| Design                                | Threaded barrel, M8 x 1                    |
| Dimensions                            | 57 mm                                      |
| Housing material                      | Stainless steel, 1.4427 SO, PTFE-coated    |
| Active area material                  | Plastic, PA12-GF20, PTFE-coated            |
| Max. tightening torque of housing nut | 5 Nm                                       |
| Electrical connection                 | Connector, M12 × 1                         |
| <b>Environmental conditions</b>       |                                            |
| Ambient temperature                   | -25...+100 °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

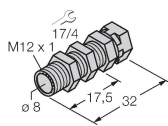


|                        |                            |
|------------------------|----------------------------|
| Distance D             | $3 \times B$               |
| Distance W             | $3 \times S_n$             |
| Distance T             | $3 \times B$               |
| Distance S             | $1.5 \times B$             |
| Distance G             | $6 \times S_n$             |
| Diameter active area B | $\varnothing 8 \text{ mm}$ |

## Accessories

QM-08

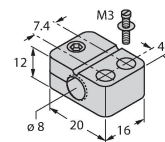
6945100



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

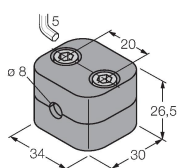
6947210



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

BSS-08

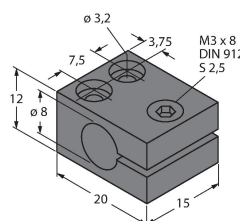
6901322



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

MBS80

69479



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