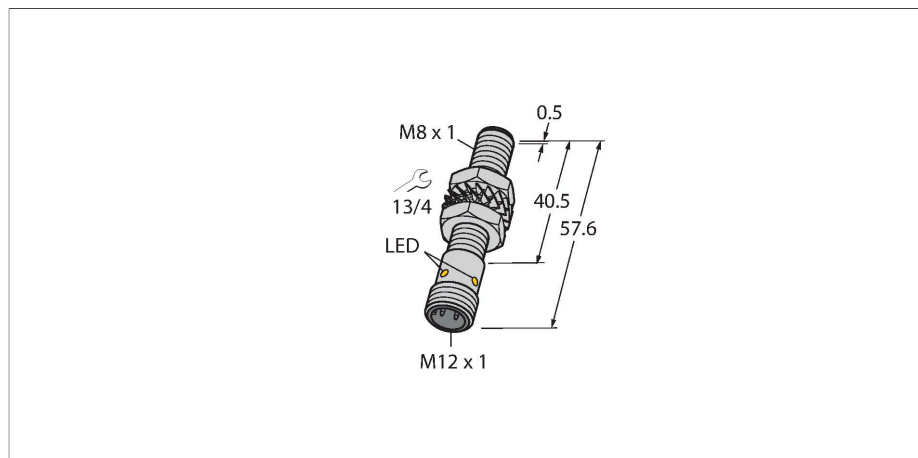


# BI2-M08E-AN6X-H1341

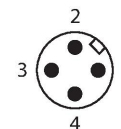
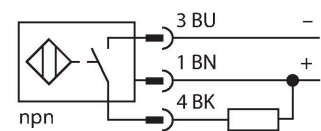
## Inductive Sensor – With Increased Switching Distance



### Features

- Threaded barrel, M8 x 1
- Nickel-plated brass
- Large sensing range
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M12 x 1 male 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

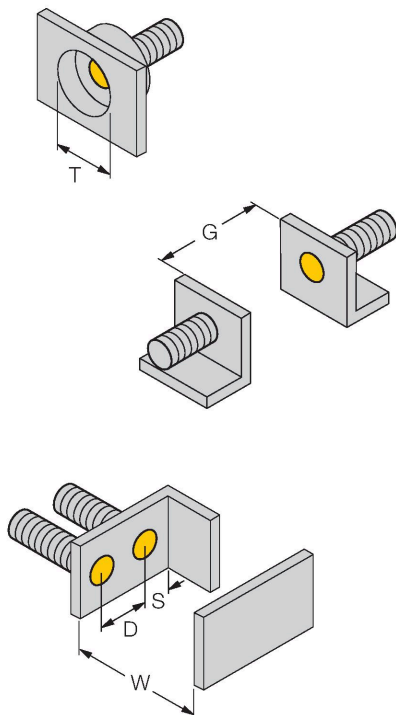
|   |   |
|---|---|
| Type                                      | BI2-M08E-AN6X-H1341                                 |
| ID  | 4602952   |
| <b>General data</b>                       |   |
| Rated switching distance                  | 2 mm  |
| Mounting conditions                       | Flush   |
| 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                         | $\leq \pm 10$ %                                     |
| Hysteresis                                | 3...15 %  |
| <b>Electrical data</b>                    |   |
| Operating voltage                         | 10...30 VDC   |
| Residual ripple                           | $\leq 10$ % $U_{ss}$                                |
| DC rated operational current              | $\leq 150$ mA                                       |
| No-load current                           | 15 mA   |
| Residual current                          | $\leq 0.1$ mA                                       |
| Isolation test voltage                    | $\leq 0.5$ kV                                       |
| Short-circuit protection                  | yes / Cyclic  |
| Voltage drop at $I_o$                     | $\leq 1.8$ V  |
| Wire breakage/Reverse polarity protection | yes / Complete                                      |
| Output function                           | 3-wire, NO contact, NPN                             |
| Switching frequency                       | 2.8 kHz   |
| <b>Mechanical data</b>                    |   |
| Design                                    | Threaded barrel, M8 x 1                             |
| Dimensions                                | 57.6 mm   |
| Housing material                          | Metal, CuZn, Nickel Plated                          |

## Technical data

|                                       |  |
|---------------------------------------|--|
| Active area material                  | Plastic, PP-GF20                           |
| Max. tightening torque of housing nut | 7 Nm                                       |
| Electrical connection                 | Connector, M12 × 1                         |
| <b>Environmental conditions</b>       |  |
| 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 |
|------------|---------|

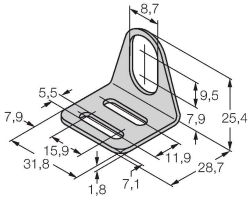
|            |        |
|------------|--------|
| Distance G | 6 x Sn |
|------------|--------|

|                        |        |
|------------------------|--------|
| Diameter active area B | Ø 8 mm |
|------------------------|--------|

Accessories

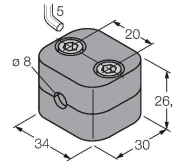
MW-08 6945008

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



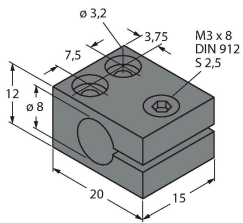
BSS-08 6901322

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



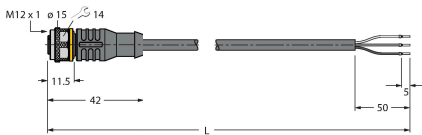
MBS80 69479

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



Accessories

| Dimension drawing | Type        | ID      |   |
|-------------------|-------------|---------|---|
|                   | RKC4T-2/TEL | 6625010 | Connection cable, M12 female connector, straight, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |



Connection cable, M12 female connector, straight, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval