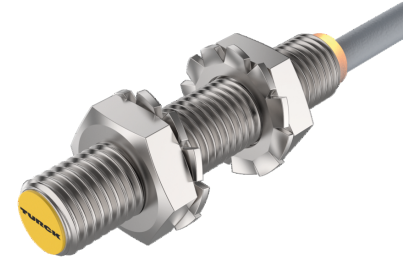
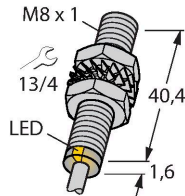


BI2U-EG08-AP6X

Inductive Sensor – With Extended Switching Distance



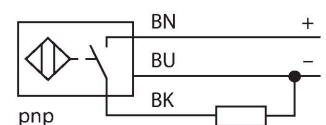
Technical data

| | |
|--|--|
| Type | BI2U-EG08-AP6X |
| ID | 4602032 |
| General data | |
| Rated switching distance | 2 mm |
| Mounting conditions | Flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Repeat accuracy | $\leq 2 \%$ of full scale |
| Temperature drift | $\leq \pm 10 \%$ $\leq \pm 20 \%, \leq -25 \text{ °C} \vee \geq +70 \text{ °C}$ |
| Hysteresis | 3...15 % |
| Electrical data | |
| Operating voltage U_B | 10...30 VDC |
| Ripple U_{ss} | $\leq 10 \%$ U_{Bmax} |
| DC rated operating current I_o | ≤ 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_o | ≤ 1.8 V |
| Wire break/reverse polarity protection | yes/Complete |
| Output function | 3-wire, NO contact, PNP |
| DC field stability | 200 mT |
| AC field stability | 200 mT _{ss} |
| Insulation class | □ |
| Switching frequency | 1 kHz |
| Mechanical data | |
| Design | Threaded barrel, M8 x 1 |

Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- High switching frequency
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

| | |
|---------------------------------------|---|
| Dimensions | 42 mm |
| Housing material | Stainless steel, 1.4427 SO |
| Active area material | Plastic |
| End cap | Plastic, PA12-GF30 |
| Max. tightening torque of housing nut | 5 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 4 mm, LifY-11Y, PUR, 2 m |
| Core cross-section | 3 x 0.25 mm ² |
| Environmental conditions | |
| Ambient temperature | -30...+85 °C |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP68 |
| MTTF | 874 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state | LED, Yellow |

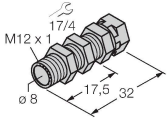
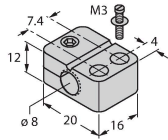
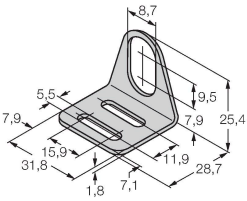
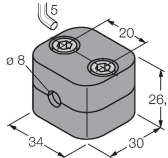
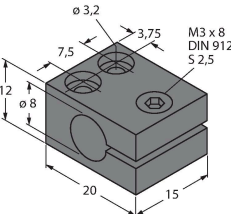
Mounting instructions

Mounting instructions/Description

| | |
|------------------------|--------|
| Distance D | 16 mm |
| Distance W | 6 mm |
| Distance T | 24 mm |
| Distance S | 12 mm |
| Distance G | 12 mm |
| Diameter active area B | Ø 8 mm |

All flush mountable uprox+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

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 |
|  | | |  | | |
| 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 | | | |
|  | | | | | |