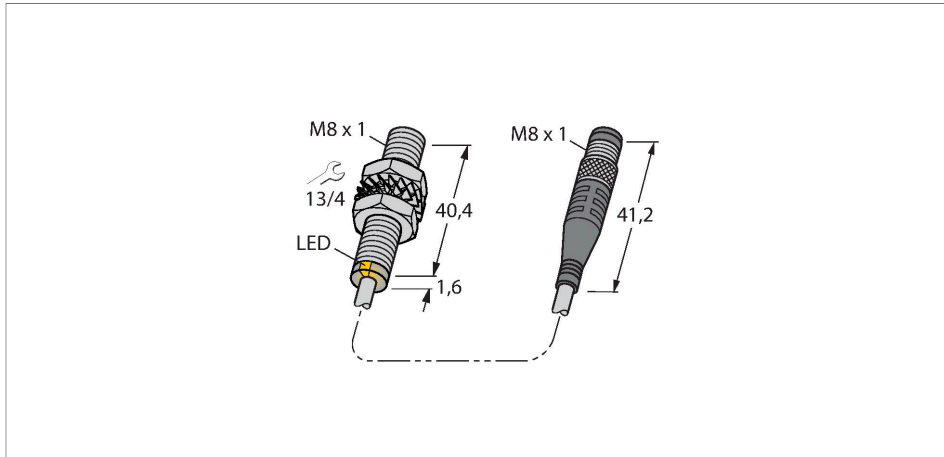


BI2U-EG08-AP6X-0.3-PSG3M

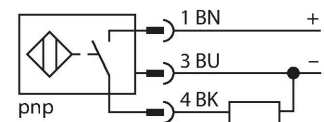
Inductive Sensor – With Extended Switching Distance



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
- Pigtail with male end M8 x 1

Wiring diagram



Technical data

| | |
|-------------------------------------------|---------------------------------------------------------------|
| Type | BI2U-EG08-AP6X-0.3-PSG3M |
| ID | 46020321 |
| 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 |
| | $\leq \pm 20\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Hysteresis | 3...15 % |
| Electrical data | |
| Operating voltage | 10...30 VDC |
| Residual ripple | $\leq 10\%$ U_{ss} |
| 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_o | ≤ 1.8 V |
| Wire breakage/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 |

Functional principle

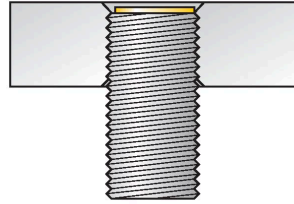
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

| Mechanical data | |
|---------------------------------------|-------------------------------------------|
| Design | Threaded barrel, M8 x 1 |
| Dimensions | 42 mm |
| Housing material | Stainless steel, 1.4427 SO |
| Active area material | Plastic, PA12-GF30 |
| End cap | Plastic, PA12-GF30 |
| Material coupling nut | metal, CuZn, nickel-plated |
| Max. tightening torque of housing nut | 5 Nm |
| Electrical connection | Cable with connector, M8 × 1 |
| Cable quality | Ø 4 mm, LifY-11Y, PUR, 0.3 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 | $2 \times B$ |
| 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 | $\varnothing 8 \text{ mm}$ |

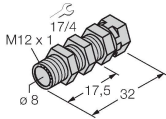
All flush-mountable uprox+ threaded barrel types can also be mounted recessed. Safe operation is ensured if it is mounted recessed by half a screw turn.

Accessories

QM-08

6945100

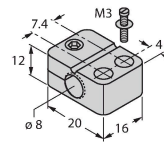
Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.



BST-08B

6947210

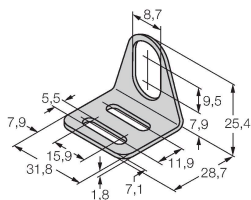
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



MW-08

6945008

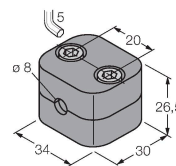
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

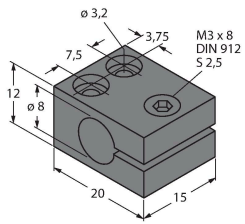


BSS-08

6901322

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



MBS80**69479**

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