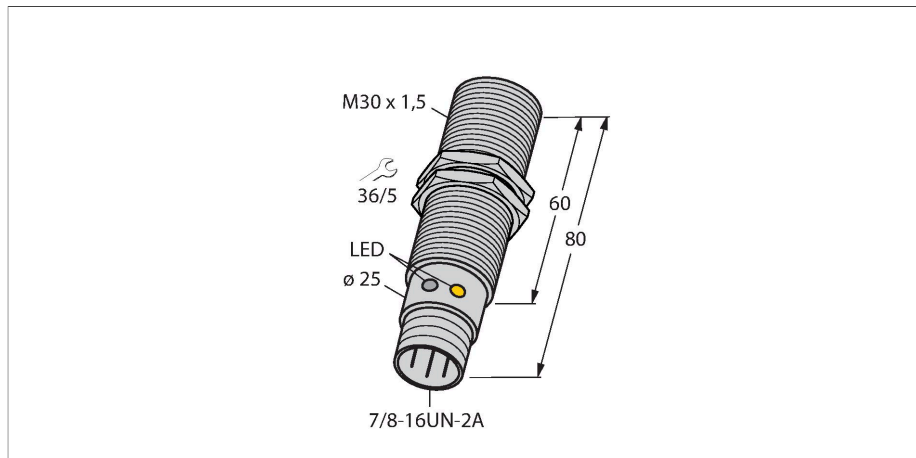


BI10U-G30-ADZ30X2-B1131

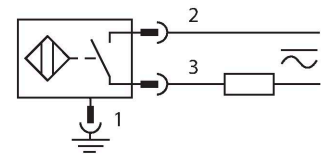
Inductive Sensor



Features

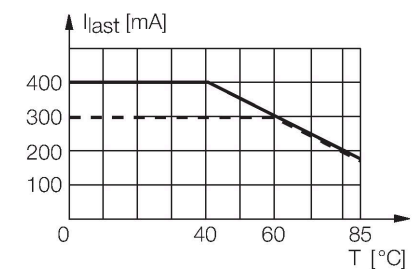
- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- 7/8" male connector

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. Prox Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.



Technical data

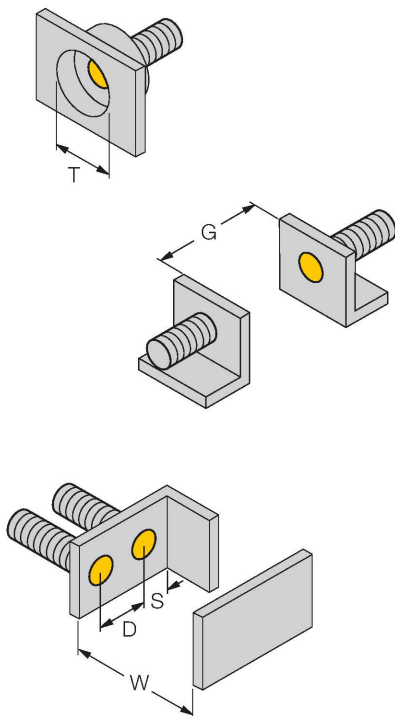
| | |
|---|--|
| Type | BI10U-G30-ADZ30X2-B1131 |
| ID | 4281612 |
| General data | |
| Rated switching distance | 10 mm |
| Mounting conditions | Flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | $\leq \pm 10$ % |
| | $\leq \pm 15$ %, -25 °C $\leq T \leq +70$ °C |
| Hysteresis | 3...15 % |
| Electrical data | |
| Operating voltage | 20...250 VAC |
| Operating voltage | 10...300 VDC |
| AC rated operational current | ≤ 400 mA |
| DC rated operational current | ≤ 300 mA |
| Frequency | ≥ 50 ... ≤ 60 Hz |
| Residual current | ≤ 1.7 mA |
| Isolation test voltage | ≤ 1.5 kV |
| Surge current | ≤ 3 A (≤ 20 ms max. 5 Hz) |
| Short-circuit protection | yes / Latching |
| Voltage drop at I _o | ≤ 6 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 2-wire, NO contact, 2-wire |
| DC field stability | 300 mT |
| AC field stability | 300 mT _{ss} |
| Smallest operating current | ≥ 3 mA |
| Switching frequency | 0.01 kHz |

Technical data

| Mechanical data | |
|---------------------------------------|---|
| Design | Threaded barrel, M30 x 1.5 |
| Dimensions | 80 mm |
| Housing material | Metal, CuZn, Chrome-plated |
| Active area material | Plastic, PBT |
| Max. tightening torque of housing nut | 75 Nm |
| Electrical connection | Connector, 7/8" |
| 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 |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |

Mounting instructions

Mounting instructions/Description

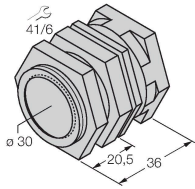


| | |
|------------------------|---------|
| Distance D | 2 x B |
| Distance W | 3 x Sn |
| Distance T | 3 x B |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Diameter active area B | Ø 30 mm |

Accessories

QM-30

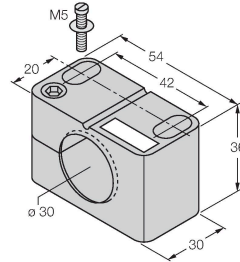
6945103



Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BST-30B

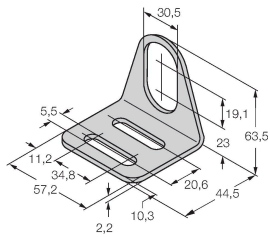
6947216



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

MW-30

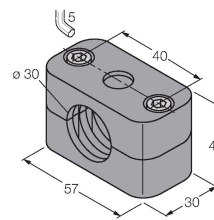
6945005



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

BSS-30

6901319



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