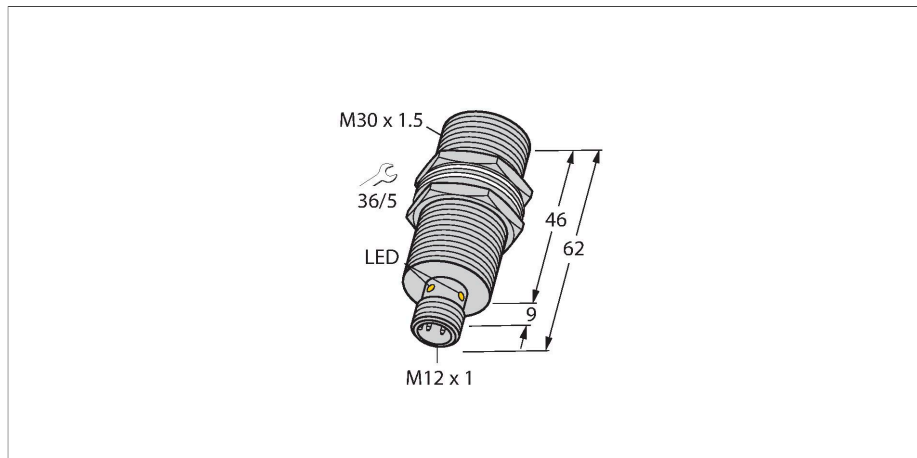


BI15U-MT30-AP6X-H1141/S1589

Inductive sensor – With WeldGuard™ coating



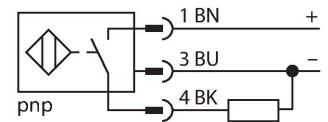
Features

- M30 x 1.5 threaded barrel
- Brass, PTFE-coated
- Front cap with special coating, very resistant to thermal and mechanical load
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Technical data

| | |
|---|--|
| Type | BI15U-MT30-AP6X-H1141/S1589 |
| Ident. no. | 1636793 |
| Special version | S1589 corresponds to: With WeldGuard™ Coating |
| Rated switching distance | 15 mm |
| Mounting conditions | Flush |
| Secured operating distance | ≤ (0.81 × Sn) mm |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | ≤ ± 10 % |
| Hysteresis | 3...15 % |
| Ambient temperature | -30...+85 °C |
| Operating voltage | 10...30 VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| DC rated operational current | ≤ 200 mA |
| No-load current | ≤ 20 mA |
| Residual current | ≤ 0.1 mA |
| Isolation test voltage | ≤ 0.5 kV |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I _e | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 3-wire, NO contact, PNP |
| Insulation class | □ |
| Switching frequency | 1 kHz |
| Design | Threaded barrel, M30 × 1.5 |
| Dimensions | 62 mm |
| Housing material | Metal, CuZn, PTFE-coated |
| Active area material | Plastic, LCP, PTFE-coated |
| Max. tightening torque housing nut | 75 Nm |

Wiring diagram



Functional principle

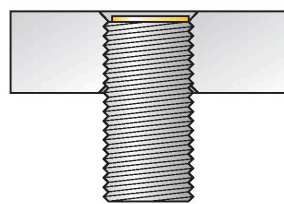
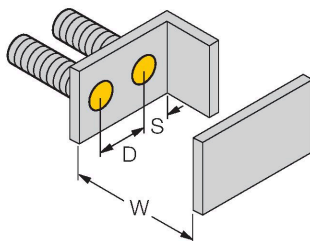
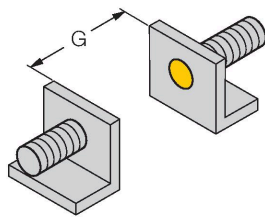
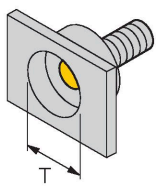
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uproX*[®]+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

| | |
|-----------------------|---|
| Electrical connection | Connectors, M12 x 1 |
| 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 | 60 mm |
| 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 |

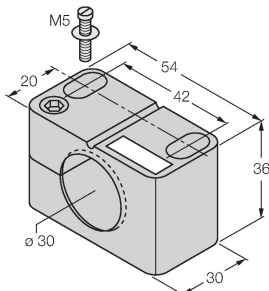
All flush mountable *uprox*[®]+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

Accessories

BST-30B

6947216

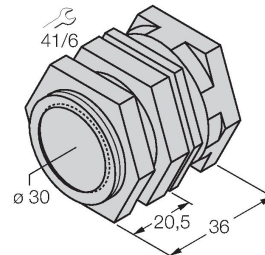
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



QMT-30

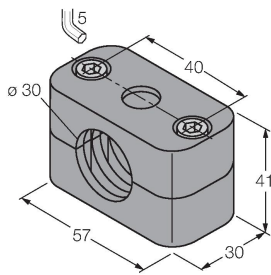
6945105

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



BSS-30

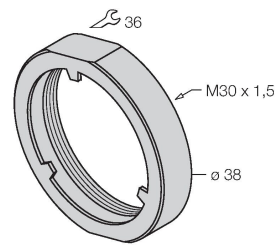
6901319



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

PN-M30

6905308



Protective nut for M30 x 1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)

Accessories

Dimension drawing

Type

Ident. no.

RKC4T-2/TXL1001

6630249

Connection cable, M12 connector, female, straight, 3-pin, cable length: 2 m, protective sheathing material: Aramid fibers, yellow; Temperature peak: 200 °C; other cable lengths and qualities available, see www.turck.com

