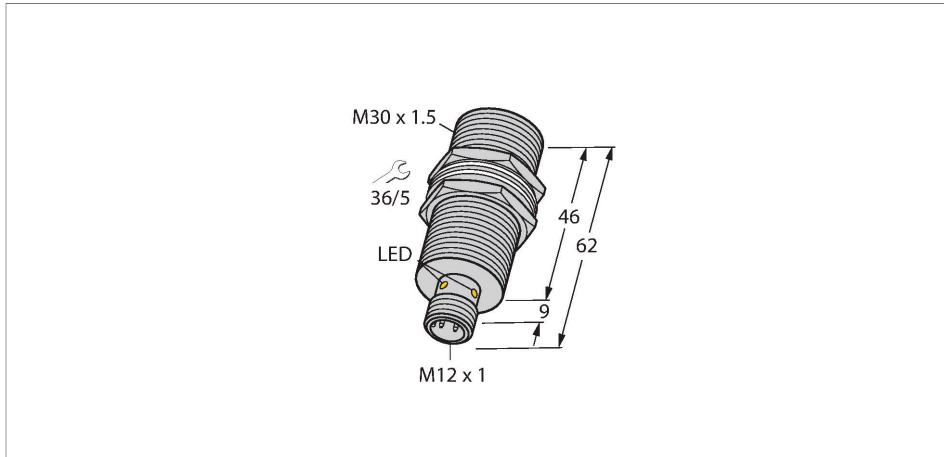


BI15U-MT30-AP6X-H1141/S1589

Inductive Sensor – With WeldGuard™ Coating



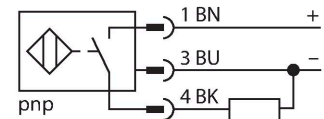
Features

- M30 × 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	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
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

Wiring diagram



Functional principle

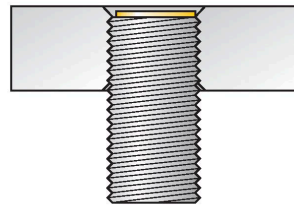
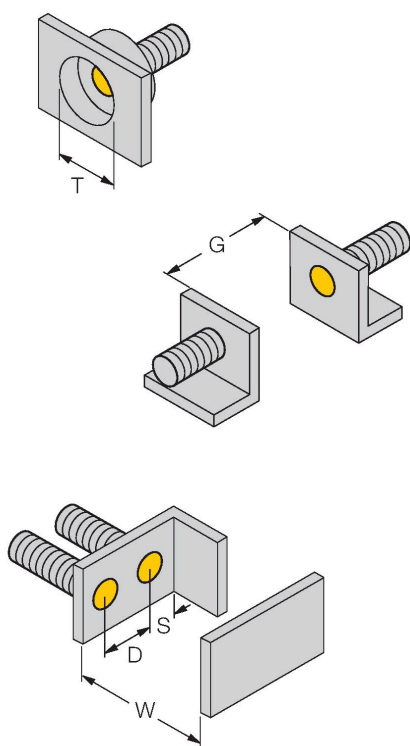
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*®+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

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
Electrical connection	Connector, M12 × 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



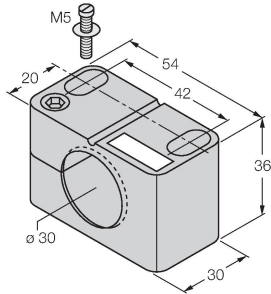
Distance D	60 mm
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 30 mm

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

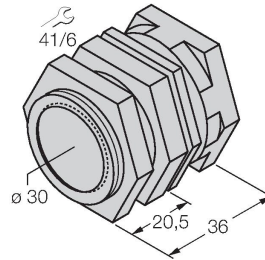
6947216



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

QMT-30

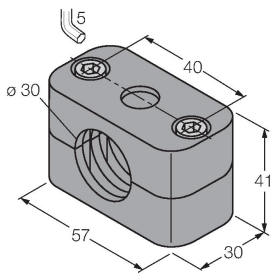
6945105



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

BSS-30

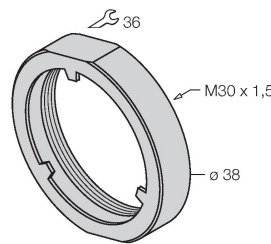
6901319



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)

Wiring 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

