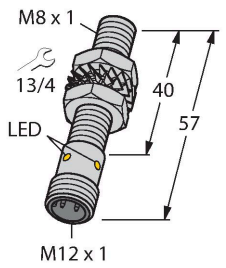
BI2U-EGT08-AP6X-H1341/S1589
Inductive Sensor – With WeldGuard™ coating



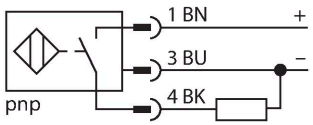
Technical data

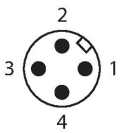
Type	BI2U-EGT08-AP6X-H1341/S1589
ID	46020702
Special version	S1589 Corresponds to:With weldguard coating
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3…15 %
Electrical data	
Operating voltage U_B	10…30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_e	≤ 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_e	≤ 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}

Features

- Threaded barrel, M8 x 1
- Stainless steel, PTFE-coated
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Wiring diagram





Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox Factor 1 sensors have significant advantages due to their patented ferrite-coreless 3-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

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Technical data

Switching frequency	2 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	57 mm
Housing material	Stainless steel, 1.4427 SO, PTFE-coated
Active area material	Plastic, PA12-GF30 + WeldGuard™, PTFE-coated
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 × 1
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

Turck WeldGuard sensors for use in welding systems are equipped with a thin coating made of thermosetting plastic. This high-tech coating is resistant to abrasion and withstands mechanical stress.

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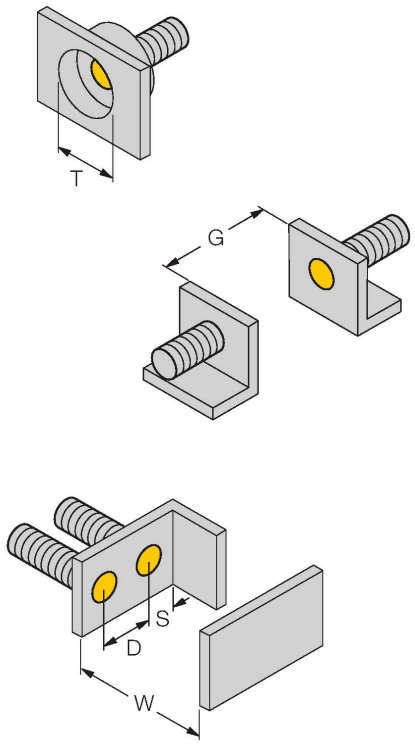
Mounting instructions

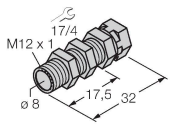
Mounting instructions/Description



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

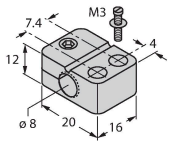
Accessories

QM-08	6945100



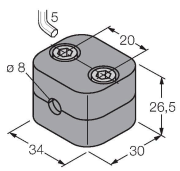
Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.

BST-08B	6947210



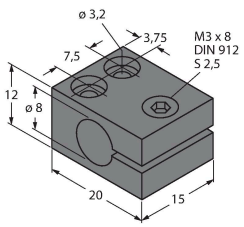
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

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

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