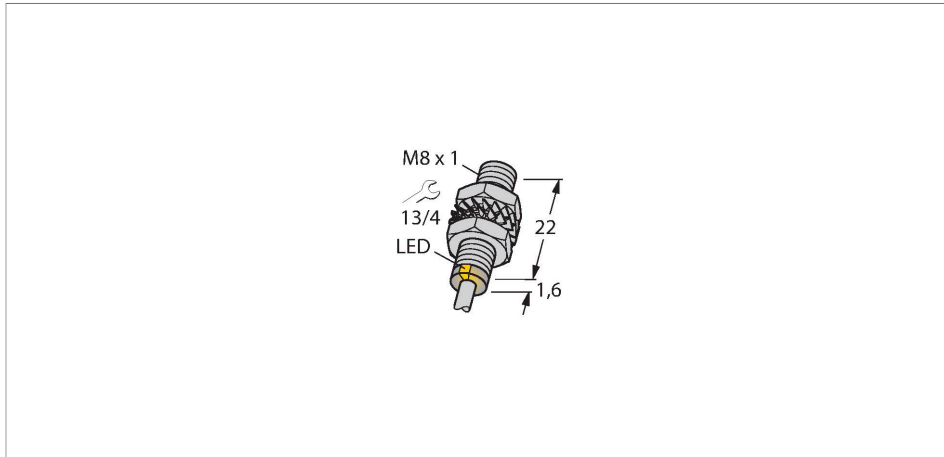


# BI2-EG08K-AG41X/S1589

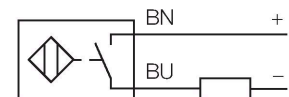
## Inductive Sensor – With Weldguard® coating



### Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- DC 2-wire, 10...55 VDC
- Polarized version
- NO contact
- Cable connection

### Wiring diagram



### Technical data

Type	BI2-EG08K-AG41X/S1589
ID	4562091
Special version	S1589 corresponds to: With weldguard coating
<b>General data</b>	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × S <sub>n</sub> ) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Hysteresis	1...15 %
<b>Electrical data</b>	
Operating voltage	10...55 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 100 mA
Residual current	≤ 0.6 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>o</sub>	≤ 3.5 V
Wire breakage/Reverse polarity protection	Polarized
Output function	NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.3 kHz

### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

## Technical data

Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	23.6 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF20
End cap	Plastic, PP
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 2 m
Core cross-section	2 x 0.25 mm <sup>2</sup>
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

## Mounting instructions

### Mounting instructions/Description



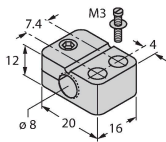
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 8 mm

## Accessories

BST-08B

6947210

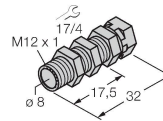
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



QM-08

6945100

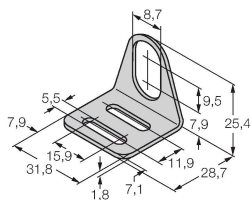
Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.



MW-08

6945008

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

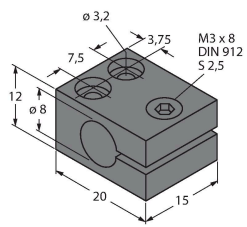


BSS-08

6901322

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



**MBS80****69479**

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