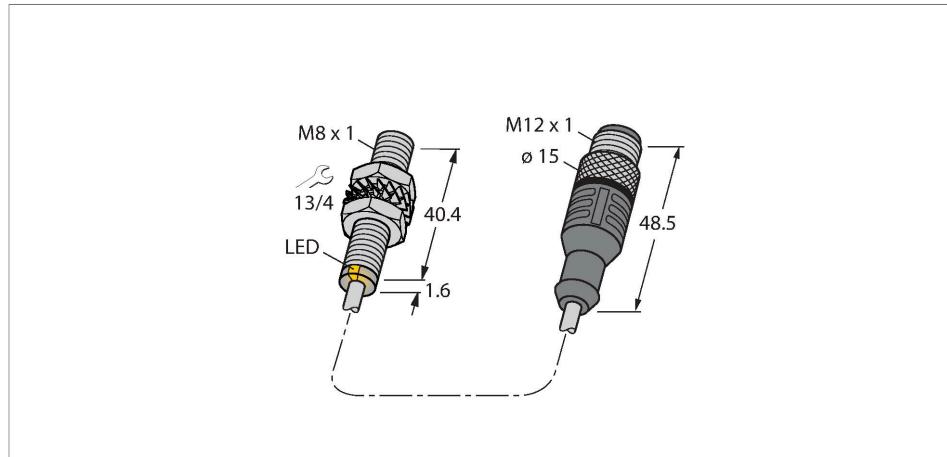


BI2-EG08-AG41X-0.3-RS4.23T/S1589

Inductive Sensor – With Weldguard® coating



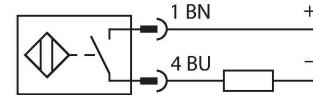
Technical data

Type	BI2-EG08-AG41X-0.3-RS4.23T/S1589
ID	45620971
Special version	S1589 Corresponds to:With weldguard coating
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2 \text{ % of full scale}$
Hysteresis	1...15 %
Electrical data	
Operating voltage U_B	10...55 VDC
Ripple U_{ss}	$\leq 10 \text{ % } U_{B\max}$
DC rated operating current I_e	$\leq 100 \text{ mA}$
Residual current	$\leq 0.6 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_e	$\leq 3.5 \text{ V}$
Wire break/reverse polarity protection	Polarized
Output function	NO contact, 2-wire
Smallest operating current	$\geq 3 \text{ mA}$
Switching frequency	0.3 kHz

Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- DC 2-wire, 10...55 VDC
- Polarized version
- NO contact
- Pigtail with male end M12 x 1

Wiring diagram



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

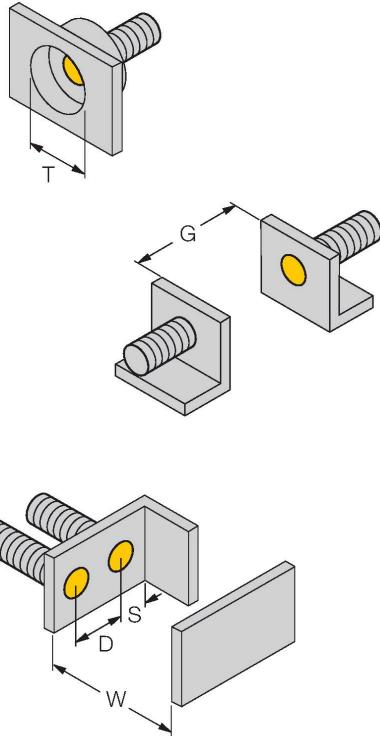
Design	Threaded barrel, M8 x 1
Dimensions	42 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
End cap	Plastic, PA12-GF30
Material coupling nut	metal, CuZn, nickel-plated
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable with connector, M12 x 1
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 0.3 m
Core cross-section	2 x 0.25 mm ²

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



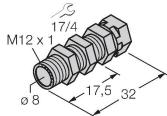
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 8 mm

Accessories

QM-08

6945100

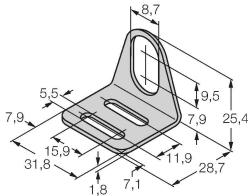
Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.



MW08

6945008

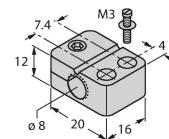
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



BST-08B

6947210

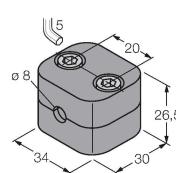
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



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

