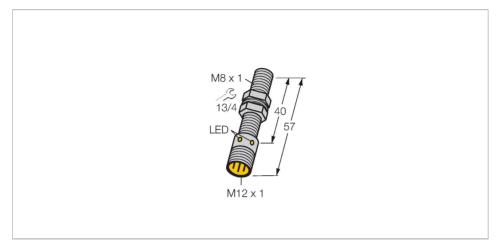


# BI2-EGT08-AP6X-H1341/S100/S1589 Inductive Sensor – With Increased Temperature Range





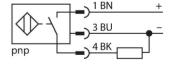
#### Technical data

Туре	BI2-EGT08-AP6X-H1341/S100/S1589
ID	4602079
Special version	Maximum ambient temperature = 100 °C WeldGuard™ coating
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
	≤ ± 20 %, ≥ +70 °C
Hysteresis	315 %
Electrical data	
Operating voltage U <sub>B</sub>	1030 VDC
Ripple U <sub>ss</sub>	≤ 10 % U <sub>Bmax</sub>
DC rated operating current I <sub>e</sub>	≤ 150 mA
Rated operational current	See derating curve
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 <sub>e</sub>	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP

#### **Features**

- ■Threaded barrel, M8 x 1
- Stainless steel, PTFE-coated
- Coated housing suited for welding facilities
- ■Temperatures up to +100 °C
- ■DC 3-wire, 10...30 VDC
- ■NO contact, PNP output
- M12 x 1 male connector

### Wiring diagram





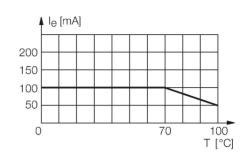
### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



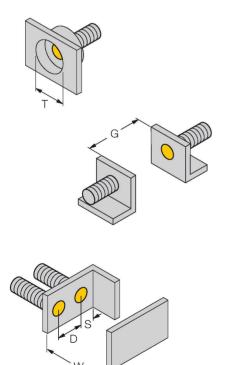
## Technical data

Switching frequency	1 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-GF20, PTFE-coated
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 × 1
Electrical connection  Environmental conditions	Connector, M12 × 1
	Connector, M12 × 1  -25+100 °C
Environmental conditions	
Environmental conditions  Ambient temperature	-25+100 °C
Environmental conditions  Ambient temperature  Vibration resistance	-25+100 °C 55 Hz (1 mm)



# Mounting instructions

### Mounting instructions/Description



Distance D	3 × 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

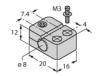
QM-08 6945100

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



69479

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

