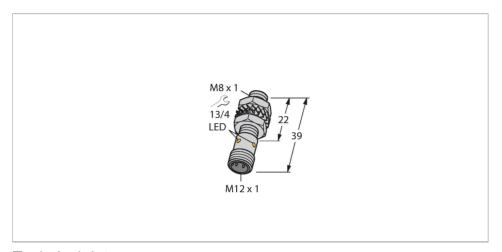


# BI2-EG08K-AG41X-H1341 Inductive Sensor – With Increased Switching Distance





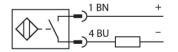
### Technical data

Туре	BI2-EG08K-AG41X-H1341
ID	4562011
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
Temperature drift	≤ ±10 %
Hysteresis	115 %
Electrical data	
Operating voltage U <sub>B</sub>	1055 VDC
Ripple U <sub>ss</sub>	≤ 10 % U <sub>Bmax</sub>
DC rated operating current I <sub>e</sub>	≤ 100 mA
Residual current	≤ 0.6 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I <sub>e</sub>	≤ 3.5 V
Wire break/reverse polarity protection	Polarized
Output function	NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.3 kHz
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#### **Features**

- ■Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Large sensing range
- ■DC 2-wire, 10...55 VDC
- Polarized version
- ■NO contact
- ■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.

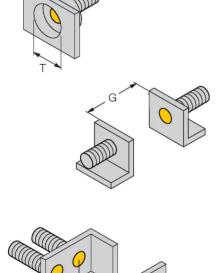


## Technical data

Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	39 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF20
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 × 1
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

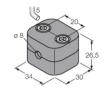


QM-08 6945100

Quick-mount bracket with 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.

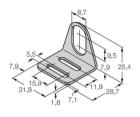


Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

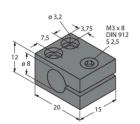


BSS-08 6901322
Mounting clamp for smooth ar

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



MBS80 69479



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