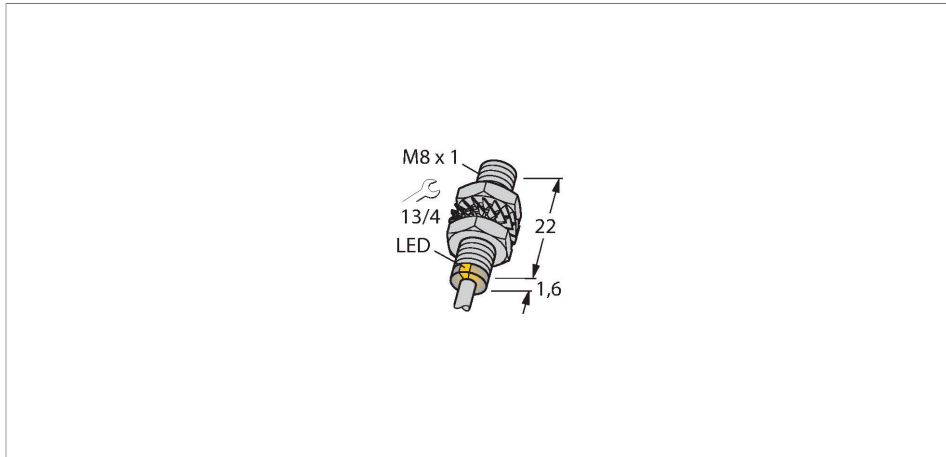


BI2-EG08K-AP6X/S97-S1367

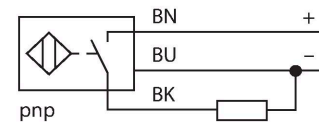
Inductive Sensor – With Increased Temperature Range



Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Temperatures up to -40 °C
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Technical data

Type	BI2-EG08K-AP6X/S97-S1367
Ident. no.	100021796
Remark to product	This sensor corresponds to our design status before 2019 and can be purchased if the current sensor 4669413 cannot be used.
Special version	S1367
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$ $\leq \pm 20\%, \leq -25\text{ °C}$
Hysteresis	3...15 %
Ambient temperature	-40...+70 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 150\text{ mA}$
No-load current	$\leq 15\text{ mA}$
Residual current	$\leq 0.1\text{ mA}$
Isolation test voltage	$\leq 0.5\text{ kV}$
Short-circuit protection	yes / Cyclic
Voltage drop at I_e	$\leq 1.8\text{ V}$
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP

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.

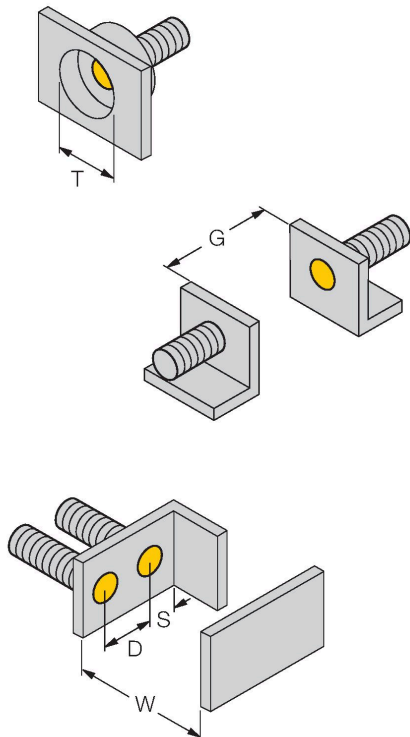
Special versions are available for ambient temperatures between -60°C and +250°C.

Technical data

Switching frequency	3 kHz
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 housing nut	5 Nm
Electrical connection	Cable
Cable quality	Ø 3 mm, Gray, Lif12Y33Y, TPE, 2 m halogen-free
Core cross-section	3 x 0.14 mm ²
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

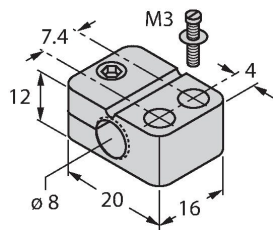


Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 8 mm

Accessories

BST-08B

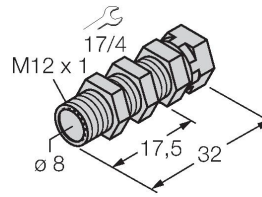
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Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

QM-08

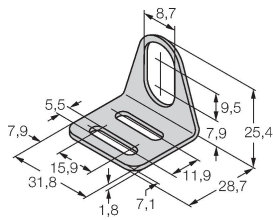
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Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.

MW-08

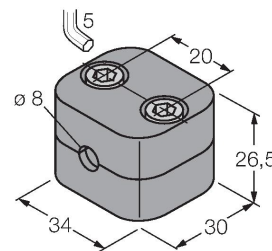
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Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-08

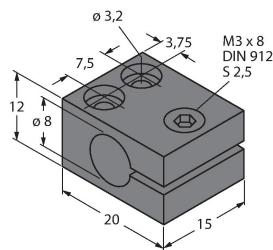
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Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

MBS80

69479



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