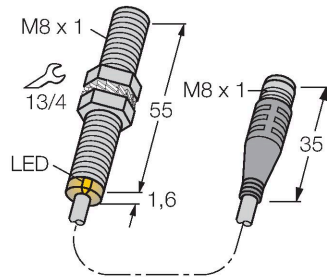


BI2-G08-AP6X-0.2-PSG3M

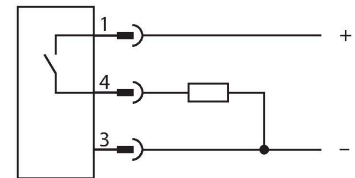
Inductive Sensor



Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4404
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end M8 x 1

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

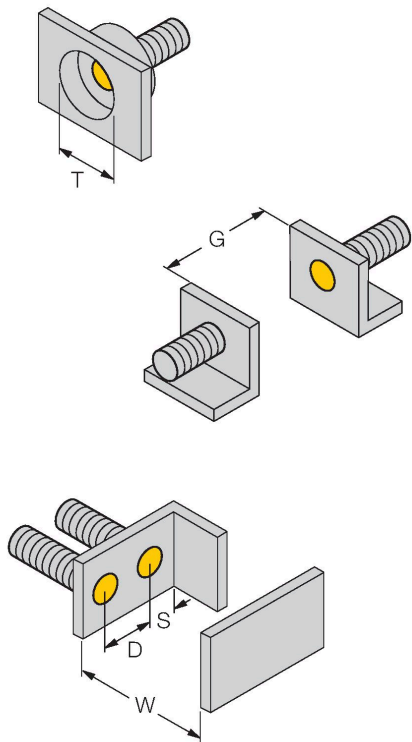
Type	BI2-G08-AP6X-0.2-PSG3M
ID	46020852
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_o	≤ 150 mA
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_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	3 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1

Technical data

Dimensions	56.6 mm
Housing material	Metal, 1.4404 (AISI 316L)
Active area material	Plastic, PA12-GF20
End cap	Plastic, PP
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable with connector, M8 × 1
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 0.2 m
Core cross-section	3 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

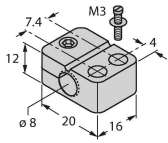
BI2-G08-AP6X-0.2-PSG3M| 02/21/2025 13:54 | technical changes reserved

Accessories

BST-08B

6947210

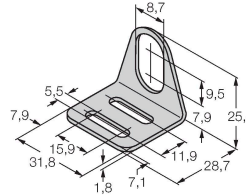
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



MW08

6945008

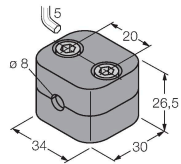
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



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

