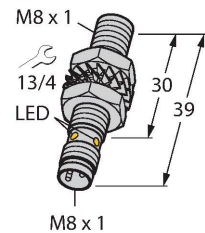


BI3U-EM08-AN6X-V1131

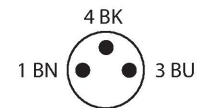
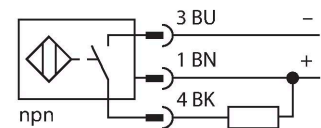
Inductive Sensor



Features

- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M8 x 1 male connector

Wiring diagram



Technical data

Type	BI3U-EM08-AN6X-V1131
ID	4602423
General data	
Rated switching distance	3 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 150 mA
No-load current	≤ 20 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, NPN
DC field stability	200 mT
AC field stability	200 mT _{ss}
Insulation class	□
Switching frequency	1 kHz

Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox3 sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

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
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M8 x 1
Environmental conditions	
Ambient temperature	0...+60 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description

Diagram showing the side view of the mounting bracket. Dimension T is indicated as the distance from the bottom edge of the bracket to the center of the active area (yellow circle).

Diagram showing the top view of the mounting bracket. Dimension G is indicated as the distance from the bottom edge of the bracket to the center of the active area (yellow circle).

Diagram showing the front view of the mounting bracket. Dimensions D, S, and W are indicated. D is the distance from the bottom edge of the bracket to the center of the active area (yellow circle). S is the distance from the center of the active area to the center of the mounting hole. W is the distance from the bottom edge of the bracket to the center of the mounting hole.

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

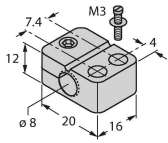
BI3U-EM08-AN6X-V1131 | 02/21/2025 14-23 | technical changes reserved

Accessories

BST-08B

6947210

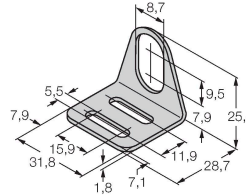
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



MW08

6945008

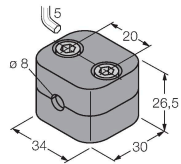
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



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

