

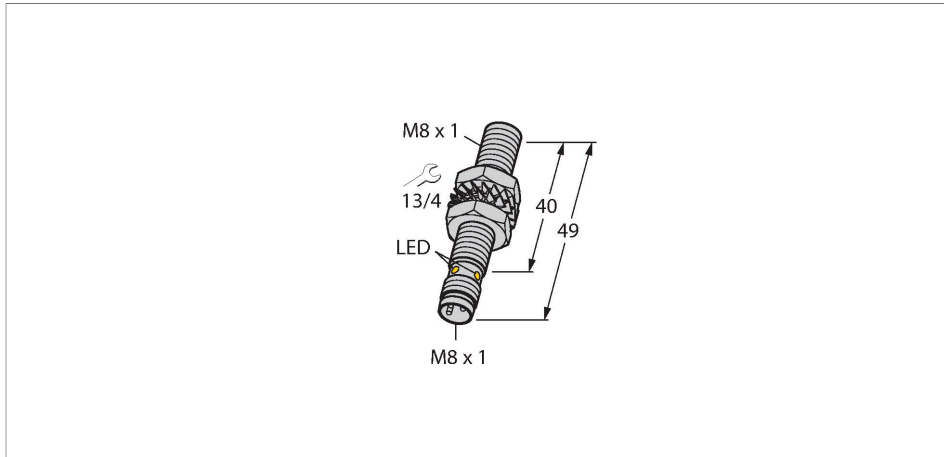
BI2U-EG08-AN6X-V1131

Inductive Sensor – With Extended Switching Distance

Features

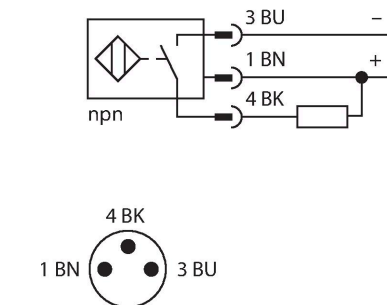
- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- High switching frequency
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M8 x 1 male connector

Wiring diagram



Technical data

Type	BI2U-EG08-AN6X-V1131
ID	4602036
General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 20 \%$, $\leq -25 \text{ }^\circ\text{C}$ v $\geq +70 \text{ }^\circ\text{C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_e	≤ 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_e	≤ 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	□



Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. approx+ 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

Switching frequency	1 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	49 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M8 x 1
Environmental conditions	
Ambient temperature	-30...+85 °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

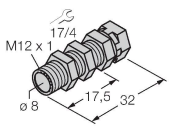
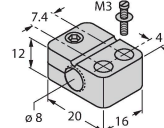
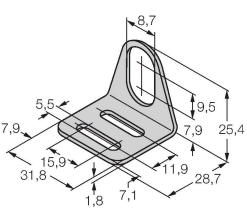
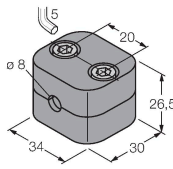
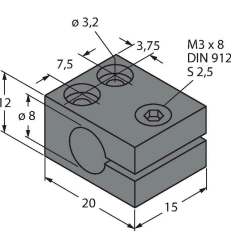
Mounting instructions/Description




Distance D	16 mm
Distance W	6 mm
Distance T	24 mm
Distance S	12 mm
Distance G	12 mm
Diameter active area B	Ø 8 mm

All flush mountable uprox+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in by half a turn.

Accessories

<p>QM-08</p> 	<p>6945100</p> <p>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.</p>	<p>BST-08B</p> 	<p>6947210</p> <p>Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6</p>
<p>MW08</p> 	<p>6945008</p> <p>Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)</p>	<p>BSS-08</p> 	<p>6901322</p> <p>Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene</p>
<p>MBS80</p> 	<p>69479</p> <p>Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum</p>		

Wiring accessories

Dimension drawing	Type	ID	
	<p>PKGV3M-2/TEL</p>	<p>6625385</p>	<p>Connection cable, M8 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, black; cULus approval</p>