

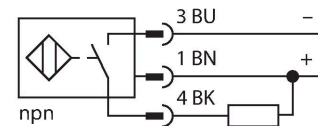
# BI2U-EG08-AN6X-V1131

## Inductive Sensor

### Features

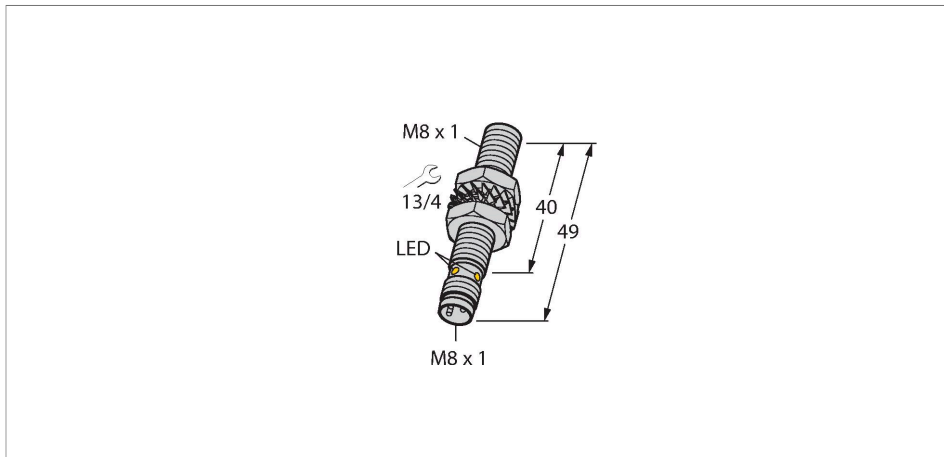
- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- High switching frequency
- Recessed mountable
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M8 x 1 male connector

### Wiring diagram



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*<sup>®</sup>+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.



### Technical data

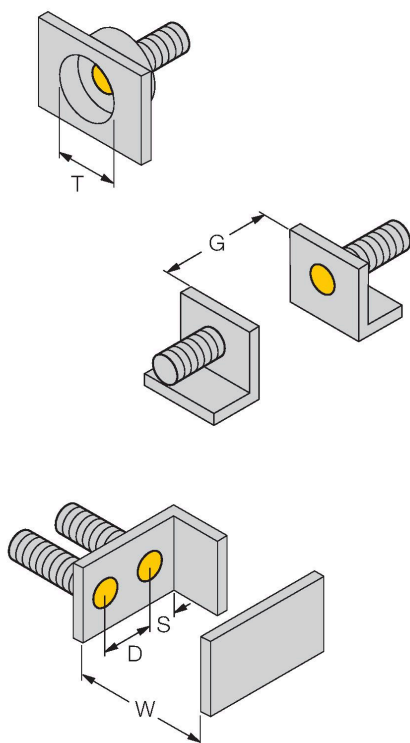
Type	BI2U-EG08-AN6X-V1131
Ident. no.	4602036
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
	$\leq \pm 20\%$ , $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_s$
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, NPN
Insulation class	□
Switching frequency	1 kHz
Design	Threaded barrel, M8 x 1
Dimensions	49 mm

## Technical data

Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF30
Max. tightening torque housing nut	5 Nm
Electrical connection	Connector, M8 × 1
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

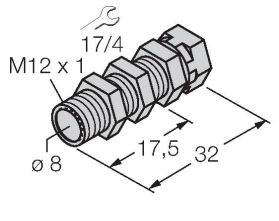
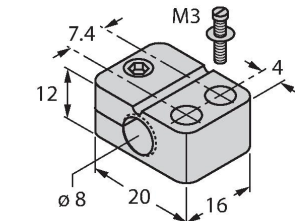
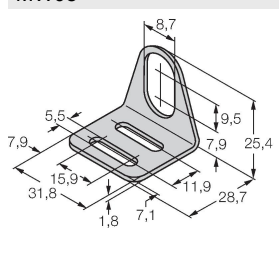
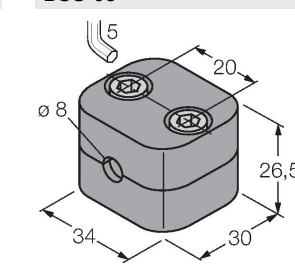
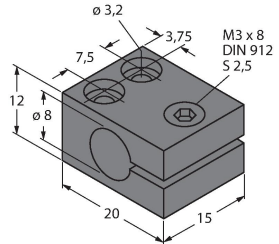
### Mounting instructions/Description



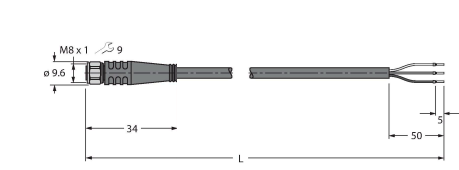
Distance D	16 mm
Distance W	6 mm
Distance T	24 mm
Distance S	12 mm
Distance G	12 mm
Diameter active area B	Ø 8 mm

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

## Accessories

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

## Wiring accessories

Dimension drawing	Type	Ident. no.	
	<p>PKGV3M-2/TEL</p>	<p>6625385</p>	<p>Connection cable, female M8, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a></p>

B12U-EG08-AN6X-V113 | 05/27/2020 12-12 | technical changes reserved