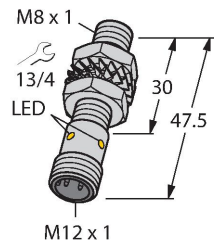


BI3U-EM08-AP6X-H1341

Inductive Sensor



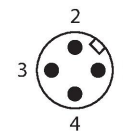
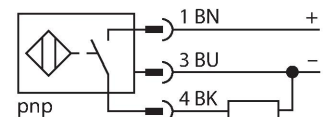
Technical data

Type	BI3U-EM08-AP6X-H1341
ID	4602412
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, PNP
DC field stability	200 mT
AC field stability	200 mT _{ss}
Insulation class	□
Switching frequency	1 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	47.5 mm

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, PNP output
- M12 x 1 male connector

Wiring diagram



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

Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 × 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

Mounting instructions

Mounting instructions/Description

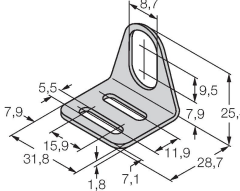
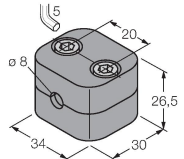
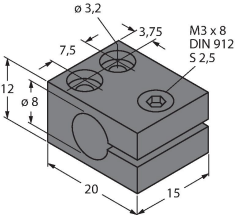
A side view of a square mounting bracket with a central circular hole. A dimension line labeled 'T' indicates the thickness of the bracket.

Two square mounting brackets are shown, one in front of the other, with a dimension line labeled 'G' indicating the distance between their centers.

Two square mounting brackets are shown side-by-side. A dimension line labeled 'D' indicates the distance between the centers of the two holes. A dimension line labeled 'S' indicates the distance from the edge of the bracket to the center of the hole. A dimension line labeled 'W' indicates the width of the bracket.

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	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
					

Accessories

Dimension drawing	Type	ID	
	RKC4T-2/TEL	6625010	Connection cable, M12 female connector, straight, 3-pin, cable length: 2 m, jacket material: PVC, black; cULus approval