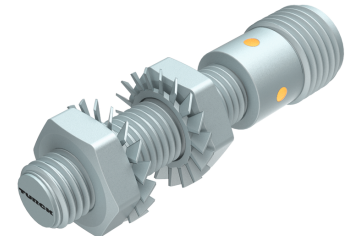
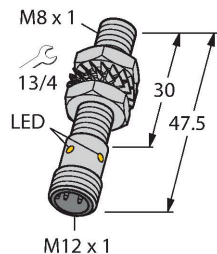


BI3U-EMT08-AP6X-H1341/S1589

Inductive Sensor – With WeldGuard™ Coating



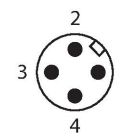
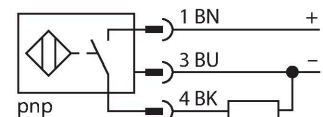
Technical data

Type	BI3U-EMT08-AP6X-H1341/S1589
ID	46021560
Special version	S1589 Corresponds to: With Weld-Guard™ Coating
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
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}
Switching frequency	1 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	47.5 mm

Features

- Threaded barrel, M8 x 1
- Stainless steel, PTFE-coated
- 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, PTFE-coated
Active area material	Plastic, PA12, PTFE-coated
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

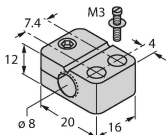
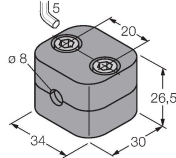
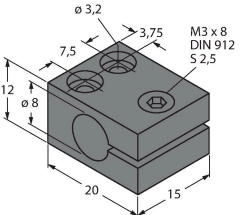
Mounting instructions

Mounting instructions/Description

The image contains three technical diagrams illustrating the mounting of a sensor. The top diagram shows a side view of a sensor mounted on a wall, with dimension T indicating the distance from the wall to the sensor's active area. The middle diagram shows two sensors mounted on a bracket, with dimension G indicating the distance between the sensors. The bottom diagram shows two sensors mounted on a plate, with dimensions D, S, and W indicating the distances between the sensors and the plate.

Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Diameter active area B	$\varnothing 8 \text{ mm}$

Accessories

BST-08B	6947210	Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6	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/TXL1001	6630249	Connection cable, M12 female connector, straight, 3-pin, cable length: 2 m, protective jacket material: aramid fibers, yellow; temperature peak: 200 °C