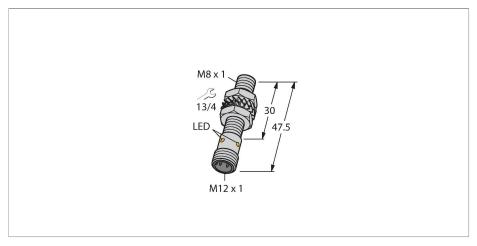


# BI3U-EMT08-AP6X-H1341/S1589 Inductive Sensor – With WeldGuard™ Coating





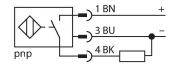
## Technical data

ID	46021560
Special version	S1589 corresponds to: With WeldGuard™ Coating
General data	
Rated switching distance	3 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Hysteresis	315 %
Electrical data	
Operating voltage	1030 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 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 <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
DC field stability	200 mT
AC field stability	200 mT <sub>ss</sub>
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.

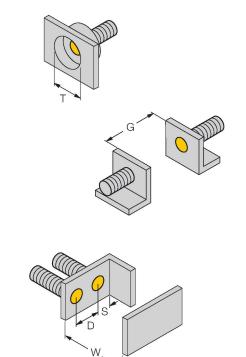
# BI3U-EMT08-AP6X-H1341/S1589| 07-11-2023 21-03 | Technical modifications reserved

## 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

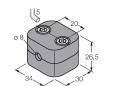
## Mounting instructions/Description



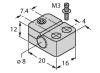
Distance D	3 × B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 8 mm

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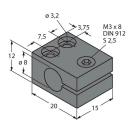
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



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	Туре	ID
	RKC4T-2/TXI 1001	6630249



Connection cable, M12 female connector, straight, 3-pin, cable length: 2 m, protective jacket material: aramid fibers, yellow; temperature peak: 200 °C