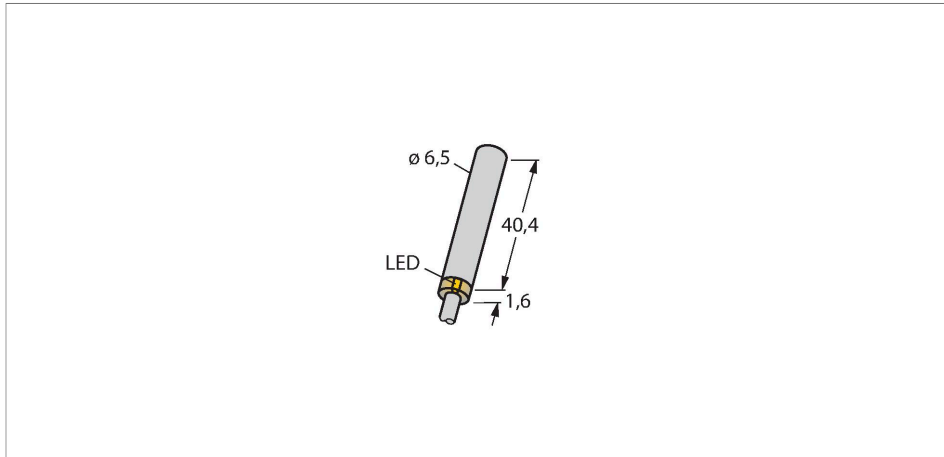


# BI2U-EH6.5-AN6X

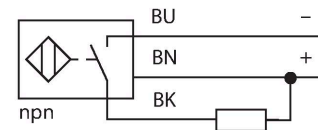
## Inductive Sensor – With Extended Switching Distance



### Features

- Smooth barrel, Ø 6.5 mm
- 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
- Cable connection

### Wiring diagram



### Functional principle

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

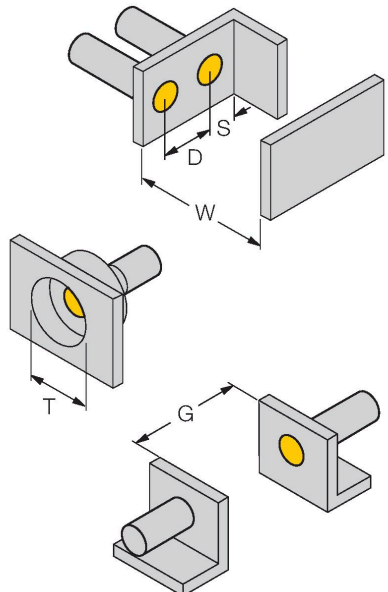
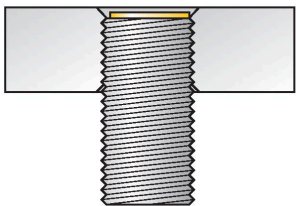
### Technical data

Type	BI2U-EH6.5-AN6X
ID	4281170
<b>General data</b>	
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	$\leq \pm 10\%$
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 150$ mA
No-load current	15 mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, NPN
DC field stability	200 mT
AC field stability	200 mT <sub>SS</sub>
Insulation class	□
Switching frequency	2 kHz

## Technical data

Mechanical data	
Design	Smooth barrel, 6,5 mm
Dimensions	41.6 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12-GF20
End cap	Plastic, PP
Electrical connection	Cable
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 2 m
Core cross-section	3 x 0.25 mm <sup>2</sup>
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														
		<table border="1"> <tbody> <tr> <td>Distance D</td> <td>13 mm</td> </tr> <tr> <td>Distance W</td> <td>6 mm</td> </tr> <tr> <td>Distance T</td> <td>20 mm</td> </tr> <tr> <td>Distance S</td> <td>10 mm</td> </tr> <tr> <td>Distance G</td> <td>12 mm</td> </tr> <tr> <td>Diameter active area B</td> <td>Ø 6.5 mm</td> </tr> </tbody> </table>	Distance D	13 mm	Distance W	6 mm	Distance T	20 mm	Distance S	10 mm	Distance G	12 mm	Diameter active area B	Ø 6.5 mm
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Distance W	6 mm													
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Distance S	10 mm													
Distance G	12 mm													
Diameter active area B	Ø 6.5 mm													
<p>All flush mountable uprox+ threaded barrel types are also recessed mountable. Safe operation is ensured if the sensor is screwed in 0.5 mm.</p>														