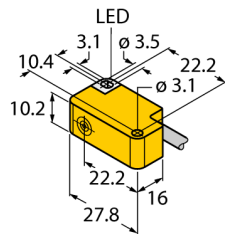
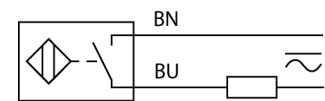


# Inductive sensor BI2-Q10S-AZ31X



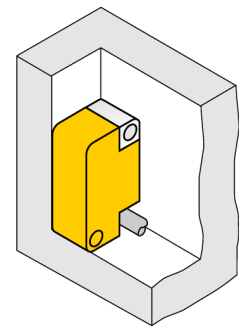
- Rectangular, height 10.2 mm
- Active face, lateral
- Cable outlet to all sides
- Plastic, PP-GF20
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NO contact
- Cable connection

### Wiring Diagram



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



<b>Type designation</b>	BI2-Q10S-AZ31X
Ident-No.	1309100
<b>Rated switching distance Sn</b>	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	20...250VAC
Operating voltage	10...300 VDC
AC rated operational current	≤ 100 mA
DC rated operational current	≤ 100 mA
Frequency	≥ 50...≤ 60 Hz
Residual current	≤ 1.7 mA
Isolation test voltage	≤ 1.5 kV
Surge current	≤ 1 A (≤ 10 ms max. 5 Hz)
Voltage drop at I <sub>n</sub>	≤ 6 V
Output function	2-wire, NO contact
Smallest operating current I <sub>m</sub>	≥ 3 mA
Switching frequency	0.02 kHz
<b>Design</b>	Rectangular, Q10S
Dimensions	27.8 x 16 x 10.2 mm
Housing material	Plastic, PP-GF20
Electrical connection	Cables
Cable quality	3mm, Gray, Lif9Y-11Y, PUR, 2
Cable cross section	2 x 0.14 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Packaging unit	1
<b>Switching state</b>	LED, Yellow

# Inductive sensor BI2-Q10S-AZ31X

**TURCK**  
*works*

Industrial  
Automation

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Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn

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Width active area B	10.2 mm
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