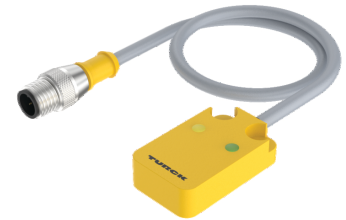
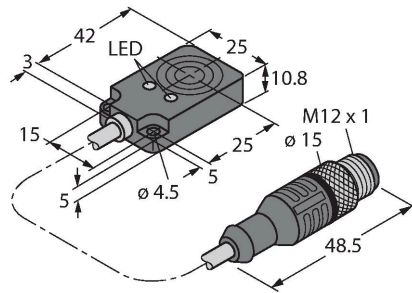


BI8U-Q10-AP6X2-0.2-RS4T  
Inductive Sensor



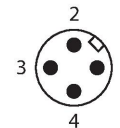
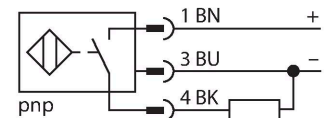
## Technical data

Type	BI8U-Q10-AP6X2-0.2-RS4T
ID	1662091
General data	
Rated switching distance	8 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Electrical data	
Operating voltage U <sub>B</sub>	10...30 VDC
Ripple U <sub>ss</sub>	≤ 10 % U <sub>Bmax</sub>
DC rated operating current I <sub>e</sub>	≤ 200 mA
No-load current	≤ 15 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 break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
DC field stability	300 mT
AC field stability	300 mT <sub>ss</sub>
Switching frequency	0.25 kHz

## Features

- Rectangular, height 10.8 mm
- Active face on top
- Plastic, PBT-GF30-V0
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end M12 x 1

## Wiring diagram



### Functional principle

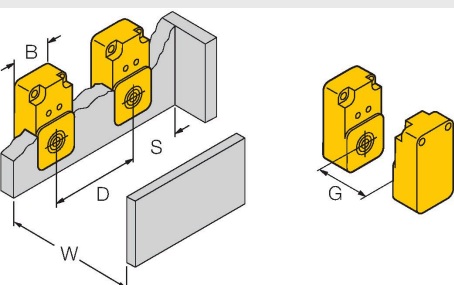
Inductive sensors are designed for wear-free and contactless detection of metal objects. Iprox Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Technical data

Mechanical data	
Design	Rectangular, Q10
Dimensions	42 x 25 x 10.8 mm
Housing material	Plastic, PBT-GF30-V0
Active area material	PBT-GF30-V0
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Cable with connector, M12 × 1
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 0.2 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	IP67
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

# Mounting instructions/Description



The image contains two technical diagrams illustrating the mounting of the BI8U-Q10-AP6X2-0.2-RS4T sensor. The main diagram shows two yellow sensor units mounted on a grey rail. Dimension lines indicate the following measurements: B (width of the sensor), D (distance between the centers of the two sensors), S (distance from the end of the rail to the center of the first sensor), W (total width of the rail assembly), and G (distance from the end of the rail to the center of the second sensor). A secondary diagram shows a single yellow sensor unit with dimension G indicating the distance from the end of the rail to its center.

Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Width active area B	25 mm

BI8U-Q10-AP6X2-0.2-RS4T| 02/21/2025 14-01 | technical changes reserved