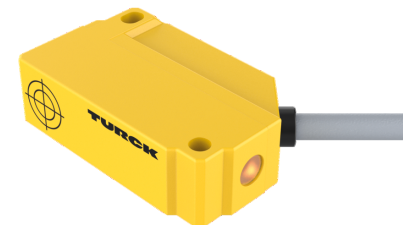
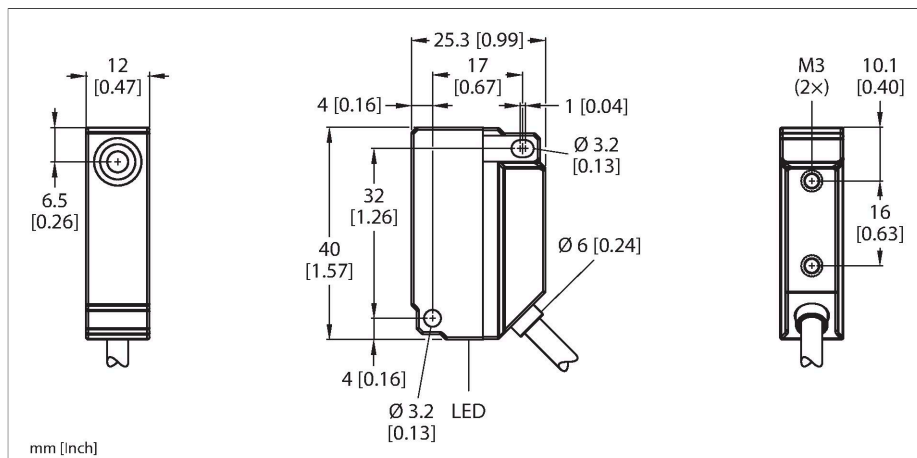


BI5U-Q12-AP6X2

Inductive Sensor – With Extended Switching Distance



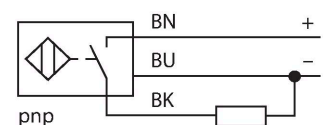
Technical data

Type	BI5U-Q12-AP6X2
ID	1635522
General data	
Rated switching distance	5 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 %
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	≤ 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_o	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
DC field stability	300 mT
AC field stability	300 mT _{ss}
Switching frequency	1 kHz
Mechanical data	
Design	Rectangular, Q12
Dimensions	40 x 26 x 12 mm

Features

- Rectangular, height 12mm
- Active face, lateral
- Plastic, PA12-GF30
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- Mountable on metal
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Functional principle

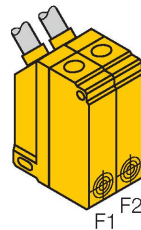
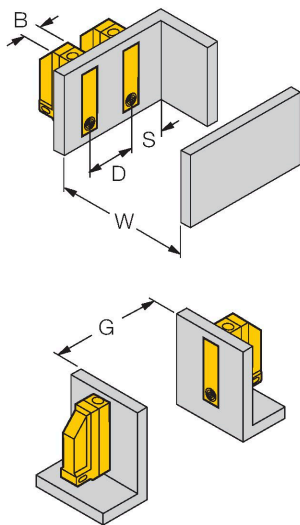
Inductive sensors are designed for wear-free and contactless detection of metal objects. prox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Housing material	Plastic, PA12-GF30
Active area material	PA12-GF30
Electrical connection	Cable
Cable quality	Ø 4 mm, LiYY-11Y, PUR, 2 m
Core cross-section	3 x 0.25 mm ²
Environmental conditions	
Ambient temperature	-25...+70 °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
Power-on indication	LED, Green
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description



Distance D	48 mm
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Distance W	25 mm
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Distance S	12 mm
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Distance G	50 mm
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Width active area B	12 mm
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The sensors can be mounted directly side by side if a sensor with offset oscillation frequency Bi5U-Q12.../F2 is used.