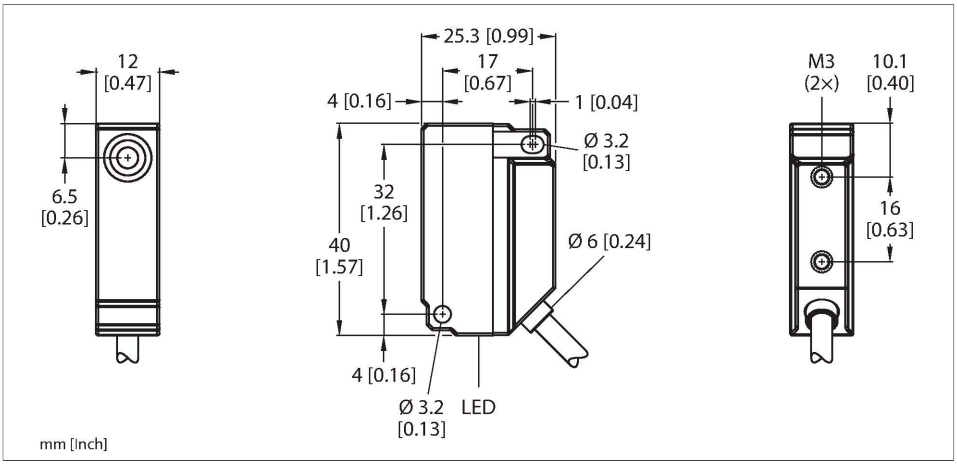
BI5U-Q12-AP6X2
Inductive Sensor – With Extended Switching Distance



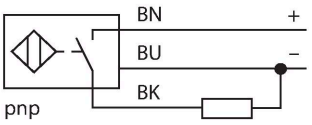
Technical data

Type	BI5U-Q12-AP6X2
ID	1635522
General data	
Rated switching distance	5 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
Hysteresis	3…15 %
Electrical data	
Operating voltage U_B	10…30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_e	≤ 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_e	≤ 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_{ss}
Switching frequency	1 kHz

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

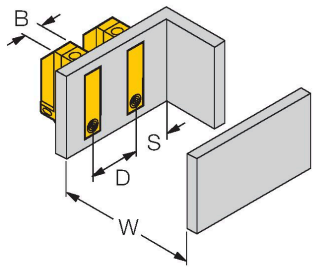
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

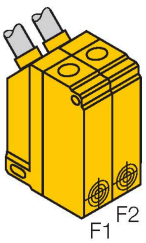
Technical data

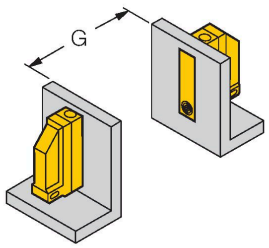
Mechanical data	
Design	Rectangular, Q12
Dimensions	40 x 26 x 12 mm
Housing material	Plastic, PA12-GF30
Active area material	PA12-GF30
Electrical connection	Cable
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 2 m
Core cross-section	3 x 0.25 mm²
Environmental conditions	
Ambient temperature	-25…+70 °C
Vibration 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
Distance W	25 mm
Distance S	12 mm
Distance G	50 mm
Width active area B	12 mm

The sensors can be mounted directly side by side if a sensor with offset oscillation frequency Bi5U-Q12…/F2 is used.