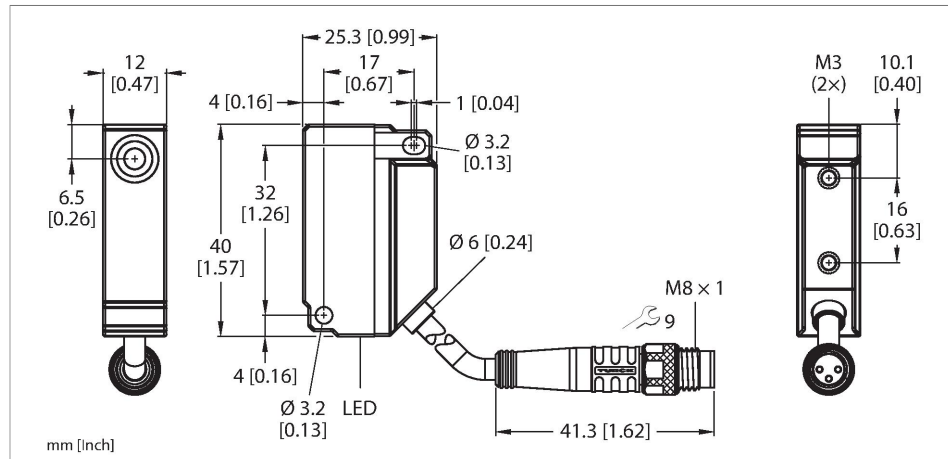


BI5U-Q12-AP6X2-0.5-PSG3M

Inductive Sensor – With Extended Switching Distance



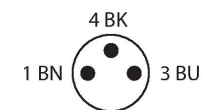
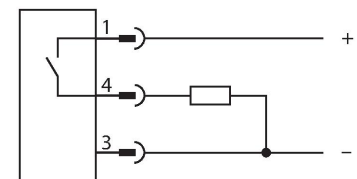
Technical data

Type	BI5U-Q12-AP6X2-0.5-PSG3M
ID	16355220
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
Hysteresis	3...15 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \%$ 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
Mechanical data	
Design	Rectangular, Q12

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
- Pigtail with male end M8 x 1

Wiring diagram



Functional principle

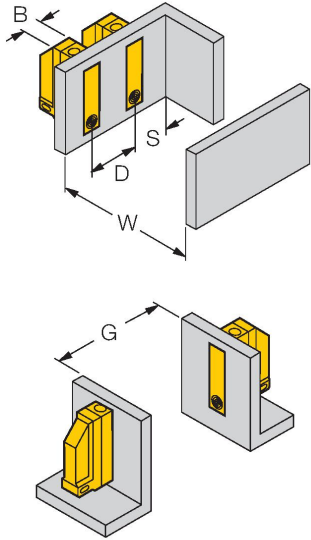
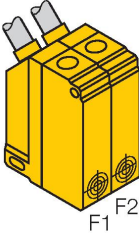
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching

Technical data

Dimensions	40 x 26 x 12 mm
Housing material	Plastic, PA12-GF30
Active area material	PA12-GF30
Electrical connection	Cable with connector, M8 × 1
Cable quality	Ø 4 mm, LifYY-11Y, PUR, 0.5 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

distances, maximum flexibility and operational reliability as well as efficient standardization.

Mounting instructions

Mounting instructions/Description										
										
	<table><tr><td>Distance D</td><td>48 mm</td></tr><tr><td>Distance W</td><td>25 mm</td></tr><tr><td>Distance S</td><td>12 mm</td></tr><tr><td>Distance G</td><td>50 mm</td></tr><tr><td>Width active area B</td><td>12 mm</td></tr></table>	Distance D	48 mm	Distance W	25 mm	Distance S	12 mm	Distance G	50 mm	Width active area B
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.										

Bi5U-Q12-AP6X2-0.5-PSG3M| 02/21/2025 13-53 | technical changes reserved