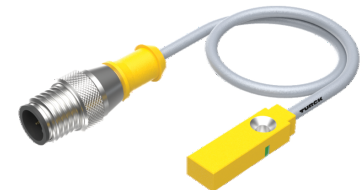
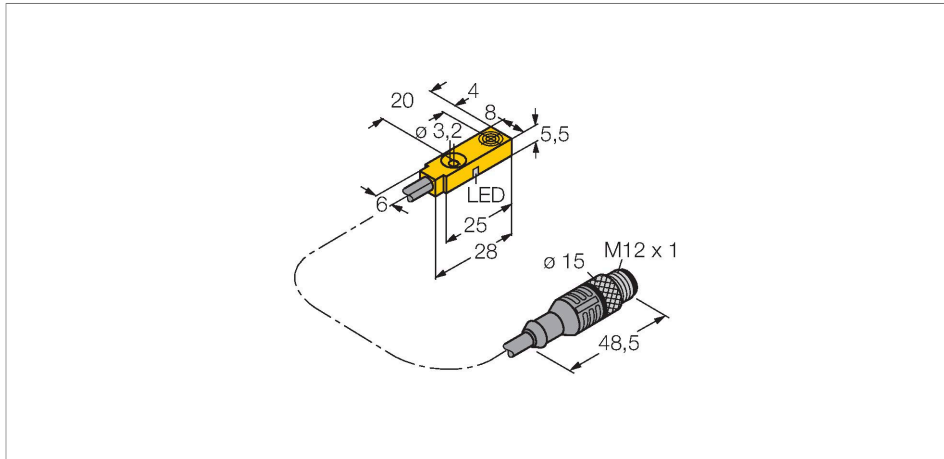


BI2-Q5.5-AP6X-0.2-RS4T/S34/S1764

Inductive Sensor – Resistant to Magnetic Fields



Technical data

Type	BI2-Q5.5-AP6X-0.2-RS4T/S34/S1764
ID	16130011
Special version	S1764 Corresponds to:Weldguard coating Viton fire-resistant jacket The jacket begins at the end of the sensor and, except for 100 mm of shrink tubing at the end of the cable, covers the entire line

General data	
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4

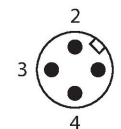
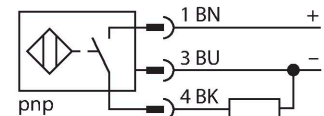
Repeat accuracy	$\leq 2\%$ of full scale
Hysteresis	3...15 %

Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10\%$ U_{Bmax}
DC rated operating current I_B	≤ 150 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_B	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP

Features

- Rectangular, height 5.5 mm
- Active face on top
- Plastic, PP
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end M12 x 1

Wiring diagram

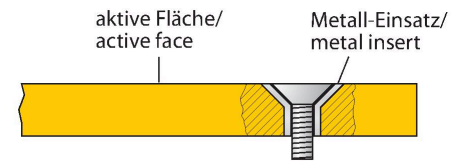


Functional principle

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.

Technical data

Switching frequency	2 kHz
Mechanical data	
Design	Rectangular, Q5,5
Dimensions	28 x 8 x 5.5 mm
Housing material	Plastic, PP-GF20
Active area material	PP-GF20
Material coupling nut	metal, CuZn, nickel-plated
Tightening torque fixing screw	0.5 Nm
Electrical connection	Cable with connector, M12 x 1
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 0.2 m
	Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Core cross-section	3 x 0.14 mm ²
Environmental conditions	
Ambient temperature	-25...+70 °C
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
Switching state	LED, Yellow



Mounting instructions

Mounting instructions/Description		
<p>The diagram shows two sensors mounted on a rail. Dimensions are indicated: B (width of active area), D (distance between sensors), S (distance from sensor to rail edge), W (total width of rail), and G (height of sensor).</p>	Distance D	2 x B
	Distance W	3 x Sn
	Distance S	1 x B
	Distance G	6 x Sn
	Width active area B	8 mm

Accessories

MW-Q4.7/Q5.5

6945013

Mounting bracket for rectangular Q4.7
or Q5.5; material VA 1.4401

