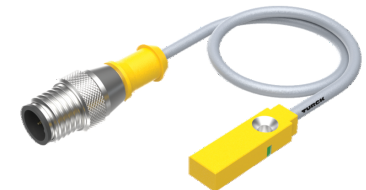
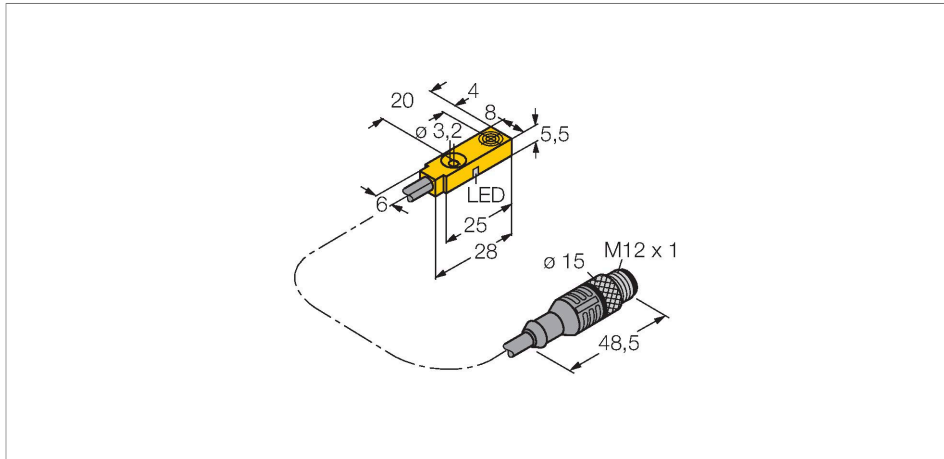


BI2-Q5.5-AP6X-0.3-RS4T/S34

Inductive Sensor – Resistant to Magnetic Fields



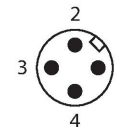
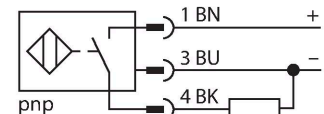
Technical data

Type	BI2-Q5.5-AP6X-0.3-RS4T/S34
ID	16130802
Special version	S34 corresponds to: Weld-field immune proximity sensors
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	≤ 2 % of full scale
Hysteresis	3...15 %
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 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_a	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz

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

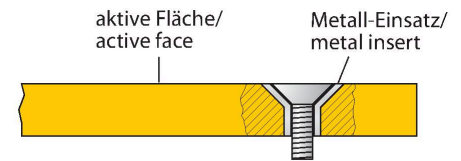


Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit. Magnetic field sensors incorporate a special ferrite core making them immune to magnetic AC and DC fields. Hence, they can be applied in welding systems.

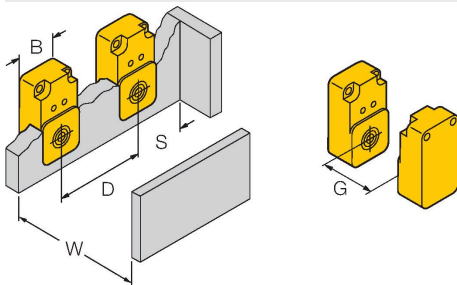
Technical data

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 × 1
Cable quality	Ø 3 mm, Gray, LIF2X11XFHF, TPU, 0.3 m
	Flame retardant acc. to VDE 0472, part 804B
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



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

