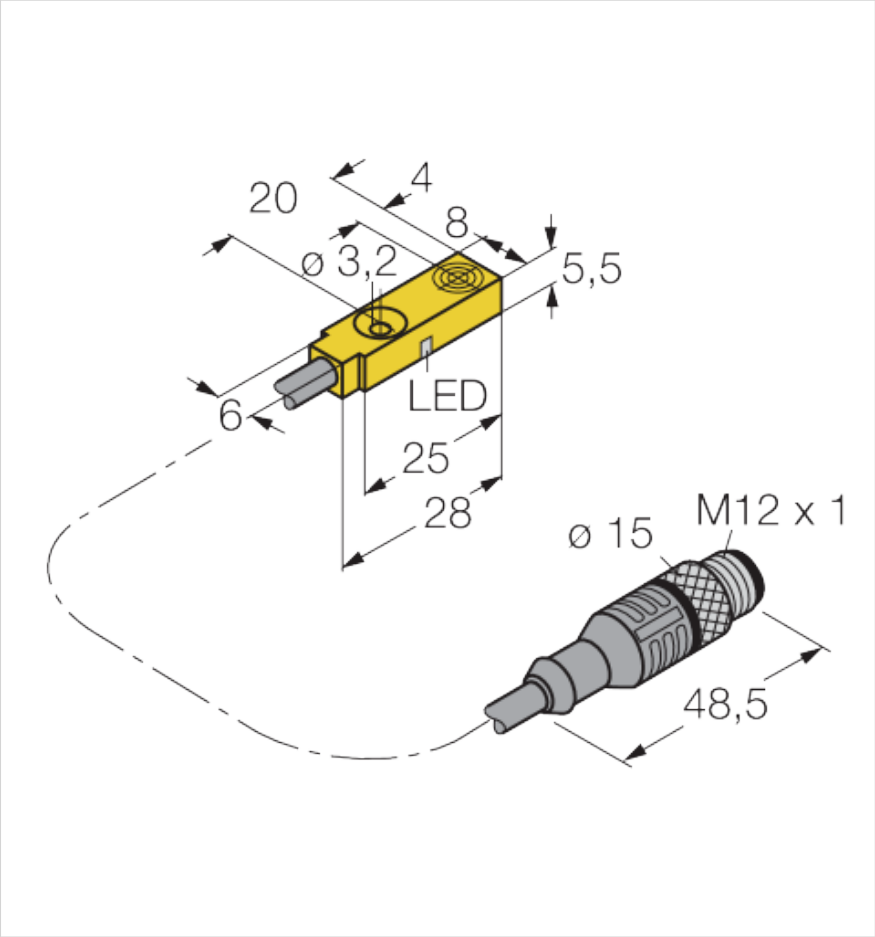
BI2-Q5.5-AP6X-0.12-RS4/S34

Inductive Sensor



Type designation	BI2-Q5.5-AP6X-0.12-RS4/S34
Ident-No.	1613083

Technical data

General data	
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Detection area/measuring range	
Rated switching distance	2 mm
Secured operating distance	≤ (0.81 × Sn) mm
Power supply	
Operating voltage U_B	10...30 VDC
Voltage drop at I_e	≤ 1,8 V

Features

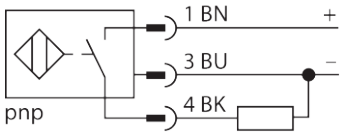
- Rectangular, height 5.5 mm
- Active face on top
- Plastic, PP
- DC 3-wire, 10…30 VDC
- NO, PNP output
- Pigtail with M12 × 1 connector

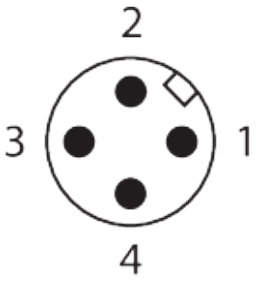
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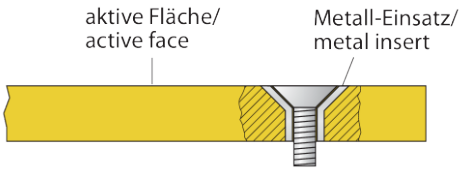
Technical data

Electrical data	
No-load current	15 mA
Output function	3-wire, NO contact, PNP
Short-circuit protection	yes/Cyclic
Wire break/reverse polarity protection	yes/Complete
DC rated operational current	≤ 150 mA
Isolation test voltage	≤ 0,5 kV
Residual current	≤ 0,1 mA
Residual ripple	≤ 10 % U_{SS}
Switching frequency	1 kHz
Accuracy/deviation	
Hysteresis	3 % v. E...15 % v. E.
Temperature drift	10 %
Repeat accuracy	≤ 2 % v. E.
Mechanical data	
Design	Rectangular, Q5,5
Construction type designation	Q5.5
Dimensions	28 mm x 8 mm x 5,5 mm
Housing material	Plastic, PP-GF20
Active area material	PP-GF20
Material coupling nut	metal, CuZn, nickel-plated
Electrical connection	Cable with connector, M12 x 1
Number of pins	4
Tightening torque fixing screw	0,5 Nm
Pressure resistant	no
Mounting conditions	Flush
Cable	
Cable length	0,12 m
	Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Cable jacket	Gray
Core cross-section	3 x 0,14 mm²
Cable type	Lif9Y-11Y
External Diameter of the Cable	Ø 3 mm
Cable Jacket Material	PUR
Ambient conditions	
Ambient temperature	-25...+70 °C

Wiring Diagram







Functional principle

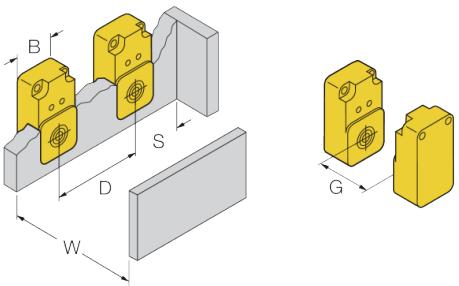
Inductive sensors are used for the contactless and wear-free detection of metallic objects. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

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Technical data

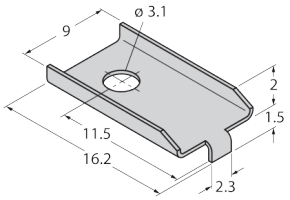
Pollution degree	3
Shock resistance	30 g (11 ms)
Vibration resistance	55 Hz (1 mm)
Protection class	IP67
Tests/approvals	
MTTF	2283 Years acc. to SN 29500 (Ed. 99) 40 °C
Displays/controls	
Switching state	LED, Yellow
Other properties	
RoHs compatibility	yes
Comments	
Special version	S34 = Resistant to magnetic fields

Assembly instructions



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

Mounting accessories

MW-Q4.7/Q5.5	6945013
	Mounting bracket for rectangular Q4.7 or Q5.5; material VA 1.4401

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