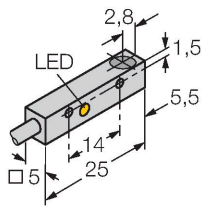
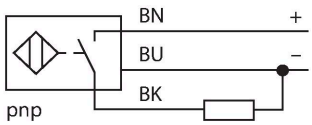
BI0.8-Q5SE-AP6X
Inductive Sensor



Features

- Rectangular, height 5 mm
- Active face on top
- Metal, GD-ZnAl
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Technical data

Type	BI0.8-Q5SE-AP6X
ID	1619341
General data	
Rated switching distance	0.8 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 5 % of full scale
Temperature drift	≤ ±20 %
Hysteresis	3…15 %
Electrical data	
Operating voltage U_B	10…30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_e	≤ 100 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
Switching frequency	3 kHz

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.

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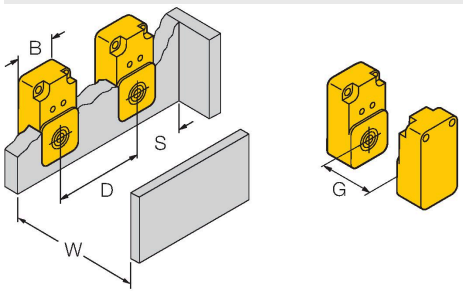
Technical data

Mechanical data	
Design	Rectangular, Q5SE
Dimensions	25 x 5 x 5 mm
Housing material	Metal, AL, Anodized
Active area material	POM
Electrical connection	Cable
Cable quality	Ø 3 mm, LifYY-11Y, PUR, 2 m
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, Red
Included in delivery	2x screws DIN 84A 4.8 1,6x10 mm

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	5 mm

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