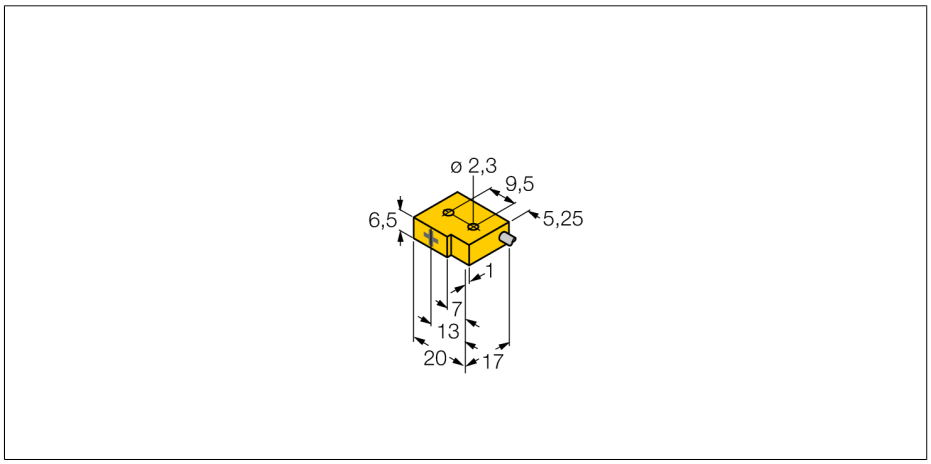
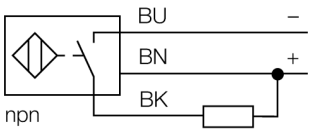
Inductive sensor
BI1-Q6,5-AN6



- **Rectangular, height 6.5 mm**
- **Active face, lateral**
- **Plastic, PP GR-20**
- **DC 3-wire, 10…30 VDC**
- **NO contact, NPN output**
- **Cable connection**

Wiring diagram



Type code	BI1-Q6,5-AN6
Ident no.	4613420
Rated operating distance Sn	1 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	3…15 %
Ambient temperature	-25…+70 °C
Operating voltage	10…30VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 150 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I_e	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Switching frequency	2 kHz
Design	rectangular, Q6.5
Dimensions	20x 17x 6.5 mm
Housing material	Plastic, PP
Connection	cable
Cable quality	2 mm, grey, Lif9Y-11Y, PUR, 2 m
Cable cross section	3 x 0.08 mm²
Litz wire	40x0.05mm²
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

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.

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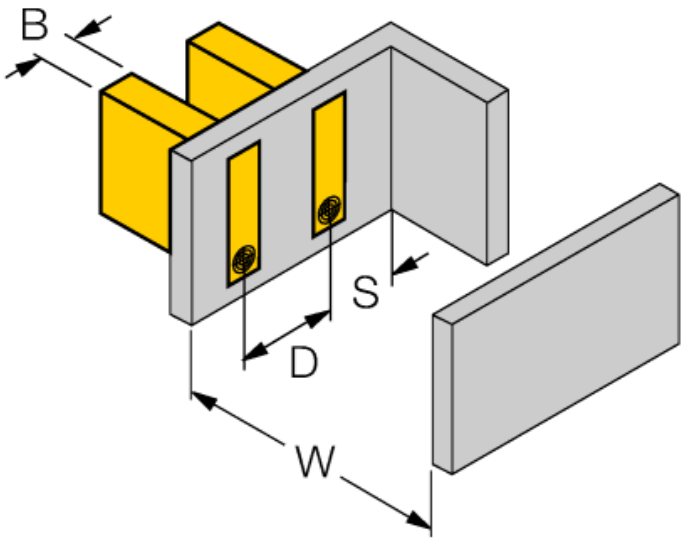
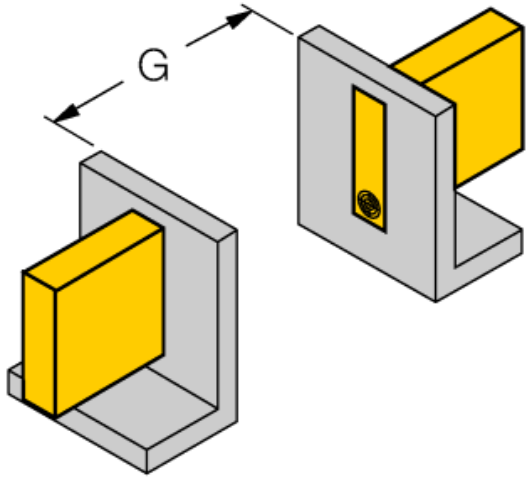
Distance D	2 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn
Width of the active face B	6.5 mm





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