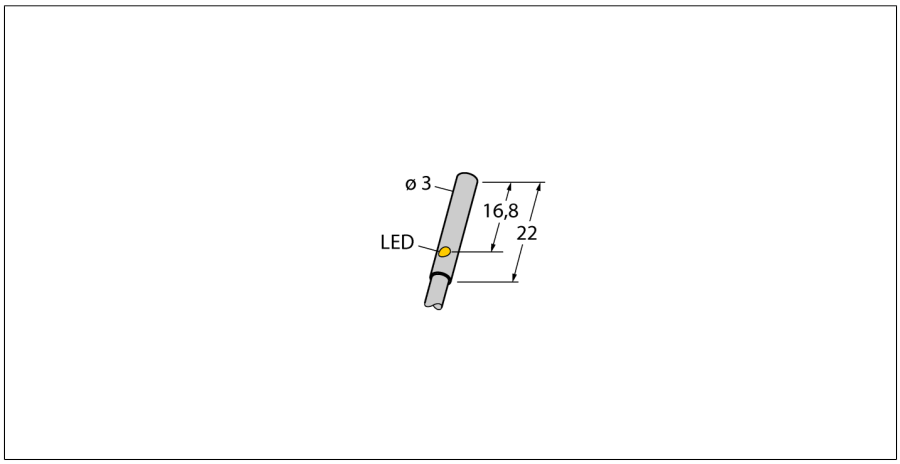
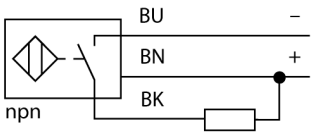
Inductive sensor
Bi1-EH03-AN6X



- **Smooth barrel, Ø 3 mm**
- **Stainless steel 1.4301**
- **3-wire DC, 10…30 VDC**
- **NO contact, NPN output**
- **Cable connection**

Wiring diagram



Type code	Bi1-EH03-AN6X
Ident-No.	1619326
Rated operating distance Sn	1 mm
Mounting condition	flush
Assured switching distance	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.5; Cu=0.45; stainless steel = 0.8; Ms = 0.6
Repeatability	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3…15 %
Ambient temperature	-25…+70 °C
Operating voltage	10…30VDC
Residual ripple	≤ 20 % U_{ss}
DC rated operational current	≤ 100 mA
No-load current I_0	≤ 10 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I_e	≤ 2 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Switching frequency	3 kHz
Construction	smooth barrel, 3 mm
Dimensions	22 mm
Housing material	metal, V2A (1.4301)
Material active area	plastic, Polyester
Connection	cable
Cable quality	2.6 mm, LifY-11Y, PUR, 2m
Cable cross section	3 x 0.055 mm²
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

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.

We offer special versions for temperatures of -60 °C up to +250 °C.

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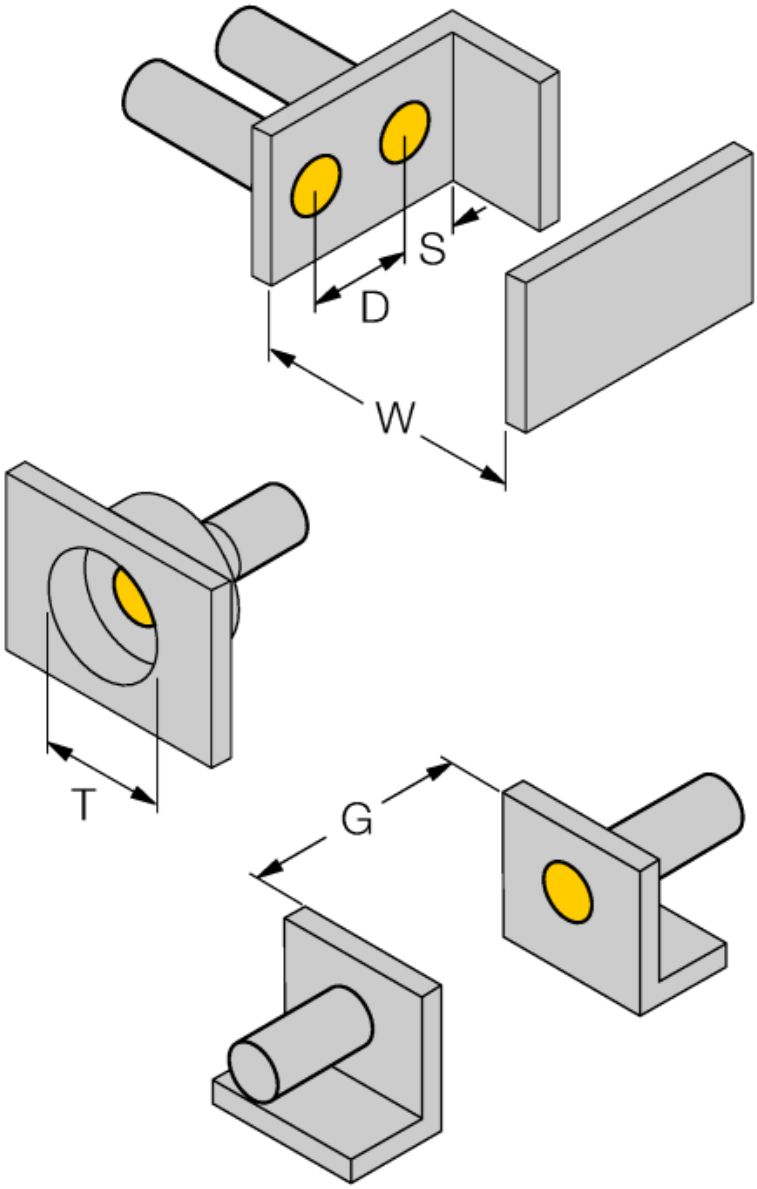
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	9 x Sn

Diameter of the active area B	Ø 3 mm



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