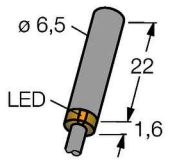
BI2-EH6.5K-AP6X 5M
Inductive sensor – With increased switching distance



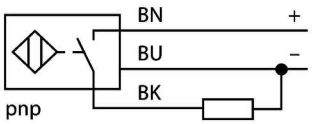
Technical data

Type	BI2-EH6.5K-AP6X 5M
ID number	4612205
Rated switching distance	2 mm
Mounting conditions	Flush
Secured operating distance	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3…15 %
Ambient temperature	-25…+70 °C
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	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	3 kHz
Design	Smooth barrel, 6.5 mm
Dimensions	23.6 mm
Housing material	Metal, V2A (1.4427 SO)
Active area material	Plastic, PA12-GF30
End cap	Plastic, PP
Electrical connection	Cable

Features

- Smooth barrel, Ø 6.5 mm
- Stainless steel, 1.4427 SO
- Large sensing range
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram

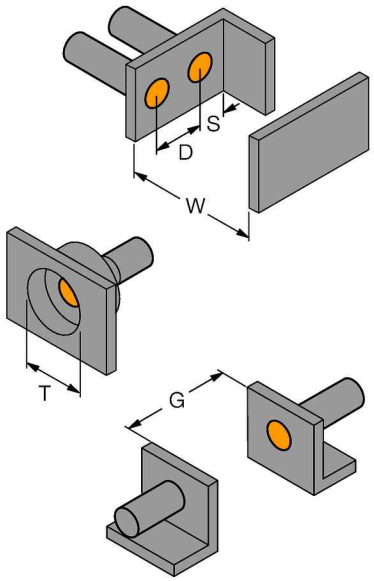


Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Technical data

Cable quality	Ø 4 mm, LifYY-11Y, PUR, 5 m
Cable cross section	3 x 0.25 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 yellow

Mounting instructions/Description



Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 6.5 mm