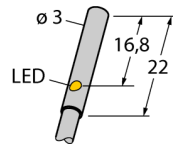


Inductive sensor BI1-EH03-AP6X

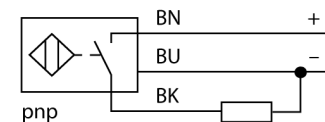
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- Smooth barrel, Ø 3 mm
- Stainless steel, 1.4301
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

Wiring Diagram



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.

Type designation	BI1-EH03-AP6X
Ident-No.	1619325
Ident-No (TUSA)	M1619325
Rated switching distance Sn	1 mm
Mounting conditions	Flush
Secured operating distance	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.5; Cu=0.45; stainless steel = 0.8; Ms = 0.6
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 20 % U _{ss}
DC rated operational current	≤ 100 mA
No-load current I ₀	≤ 10 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 2 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO contact, PNP
Switching frequency	3 kHz
Design	Smooth barrel, 3 mm
Dimensions	22 mm
Housing material	Metal, V2A (1.4301)
Active area material	Plastic, Polyester
Electrical connection	Cable
Cable quality	2.6mm, LifY-11Y, PUR, 2
Cable cross section	3 x 0.055 mm ²
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

Inductive sensor BI1-EH03-AP6X

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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 active area B	Ø 3 mm
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