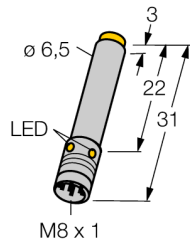


Inductive sensor NI3-EH6,5K-AP6X-V1131

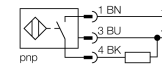
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- Smooth barrel, Ø 6.5 mm
- Stainless steel, 1.4404
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M8 x 1 connector

Wiring diagram



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.

Type code	NI3-EH6,5K-AP6X-V1131
Ident no.	4610220
Rated operating distance Sn	3 mm
Mounting condition	non-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 ₀	≤ 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	31 mm
Housing material	Metal, V4A (1.4404)
Material active face	Plastic, PA
Connection	male, M8 x 1
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	● yellow

Inductive sensor
NI3-EH6,5K-AP6X-V1131

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Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance N	$2 \times S_n$

Diameter of the active area B	$\varnothing 6.5 \text{ mm}$
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