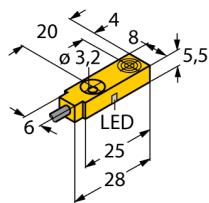


# Inductive sensor NI3,5-Q5,5-AP6X

**TURCK**

Industrial  
Automation



- Rectangular, height 5.5 mm
- Active face on top
- Plastic, PP
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

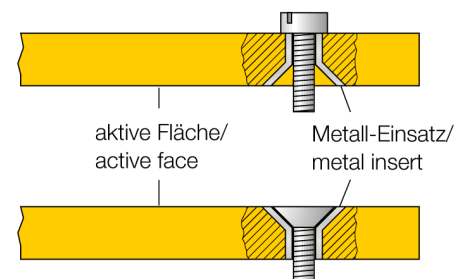
### Wiring diagram



### 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.

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



<b>Type code</b>	NI3,5-Q5,5-AP6X
Ident no.	4613601
<b>Rated operating distance Sn</b>	3.5 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
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 150 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>N</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	2 kHz
<b>Design</b>	rectangular, Q5.5
Dimensions	28 x 8 x 5.5 mm
Housing material	plastic, PP
Tightening torque fixing screw	0.5 Nm
Connection	cable
Cable quality	3 mm, grey, Lif9Y-11Y, PUR, 2 m Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Cable cross section	3 x 0.14 mm <sup>2</sup>
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
<b>Switching state</b>	LED yellow

**Inductive sensor  
NI3,5-Q5,5-AP6X**

Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Distance A	1 x Sn
Distance C	2 x Sn
<b>Width of the active face B</b>	<b>8 mm</b>

