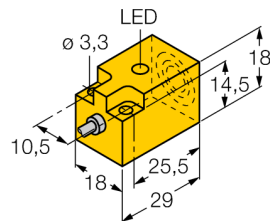


# Inductive sensor NI5-Q18-AP6X

**TURCK**

Industrial  
Automation



- Rectangular, height 18 mm
- Active face in front
- Plastic, PBT-GF30-V0
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

### Wiring diagram



### Functional principle

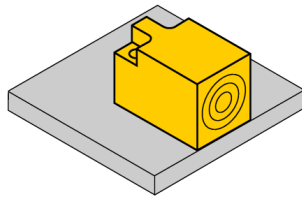
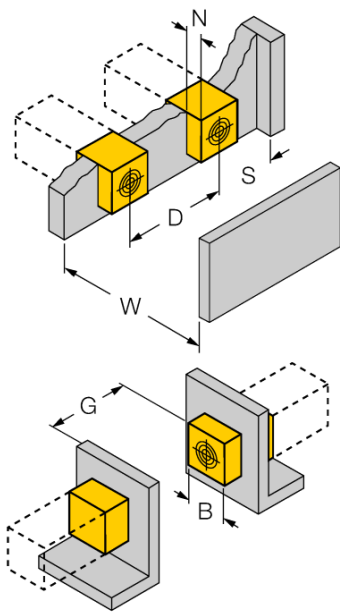
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

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

<b>Type code</b>	NI5-Q18-AP6X
Ident no.	4614606
<b>Rated operating distance Sn</b>	5 mm
Mounting condition	non-flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 2\%$ of full scale
Temperature drift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	$\leq 10\%$ $U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current $I_0$	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Rated insulation voltage	$\leq 0.5$ kV
Short-circuit protection	yes/ cyclic
Voltage drop at $I_L$	$\leq 1.8$ V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.5 kHz
<b>Design</b>	rectangular, Q18
Dimensions	29 x 18 x 18 mm
Housing material	plastic, PBT
Connection	cable
Cable quality	5.2 mm, LifYY, PVC, 2 m
Cable cross section	3 x 0.34 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  
NI5-Q18-AP6X**

Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
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Width of the active face B	18 mm



Backside mounting with full switching distance