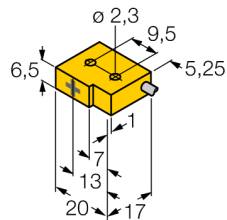


# Inductive sensor

## NI2-Q6,5-AN6

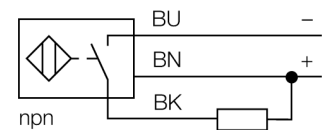
**TURCK**

Industrial  
Automation



- Rectangular, height 6.5 mm
- Active face, lateral
- Plastic, PP GR-20
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

### 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.

<b>Type code</b>	NI2-Q6,5-AN6
Ident no.	4613520
<b>Rated operating distance Sn</b>	2 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
Temperaturdrift	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	$\leq 150$ 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 $I_0$	$\leq 1.8$ V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Switching frequency	2 kHz
<b>Design</b>	rectangular, Q6.5
Dimensions	20x 17x 6.5 mm
Housing material	Plastic, PP
Connection	cable
Cable quality	2 mm, grey, Lif9Y-11Y, PUR, 2 m
Cable cross section	3 x 0.08 mm <sup>2</sup>
Litz wire	40x0.05mm <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

**Inductive sensor  
NI2-Q6,5-AN6**

Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
<hr/>	
Width of the active face B	6.5 mm

