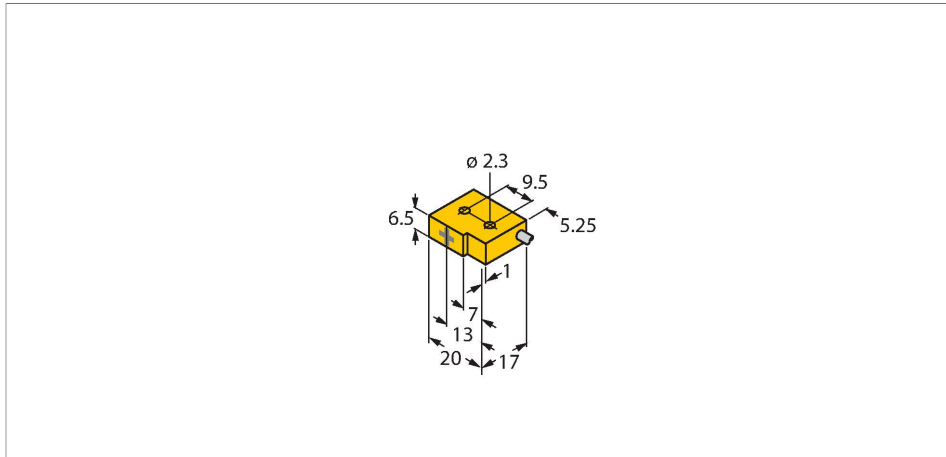


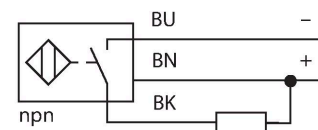
# NI2-Q6.5-AN6 Inductive Sensor



## Features

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

## Wiring diagram



## Technical data

Type	NI2-Q6.5-AN6
Ident. no.	4613520
Rated switching distance	2 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.7; stainless steel = 0.75; Ms = 0.45
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 150$ mA
No-load current	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_e$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, NPN
Switching frequency	2 kHz
Design	Rectangular, Q6,5
Dimensions	20.2 x 17.2 x 6.5 mm

## Functional principle

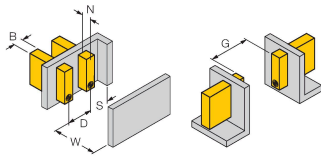
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

## Technical data

Housing material	Plastic, PP GR-20
Active area material	PP GR-20
Electrical connection	Cable
Cable quality	Ø 2 mm, Gray, Lif9Y-11Y, PUR, 2 m
Core cross-section	3 x 0.08 mm <sup>2</sup>
Litz wire	40 x0.05 mm
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

## Mounting instructions

### Mounting instructions/Description



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
Width active area B	6.5 mm