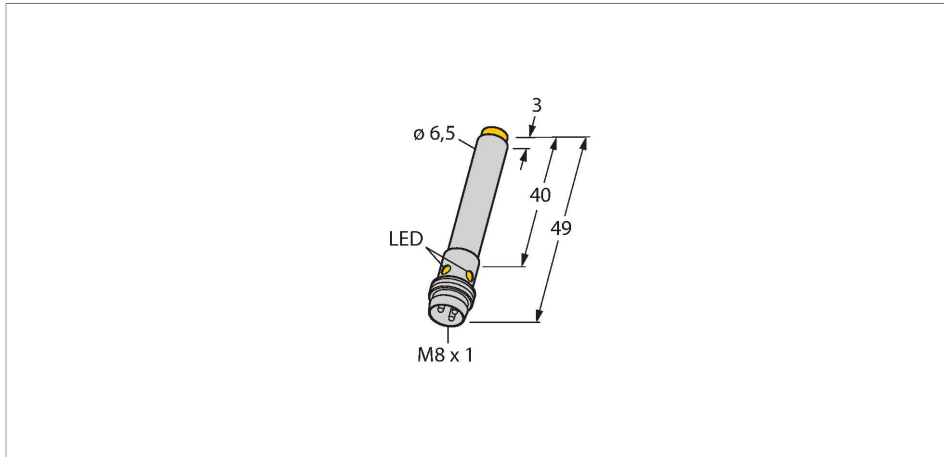


# NI6U-EH6.5-AN6X-V1131

## Inductive Sensor



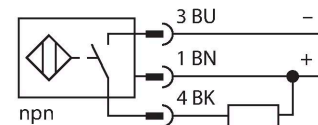
### Features

- Smooth barrel, Ø 6.5 mm
- Stainless steel, 1.4427 SO
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- High switching frequency
- Integrated protection against predamping
- Little metal-free spaces
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M8 x 1 male connector

### Technical data

Type	NI6U-EH6.5-AN6X-V1131
Ident. no.	4631530
Rated switching distance	6 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
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
Insulation class	□
Switching frequency	1 kHz
<b>Design</b>	<b>Smooth barrel, 6.5 mm</b>
Dimensions	49 mm
Housing material	Stainless steel, 1.4427 SO

### Wiring diagram



### Functional principle

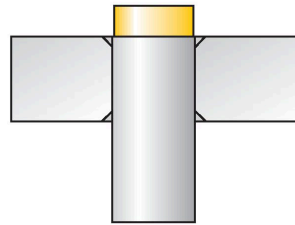
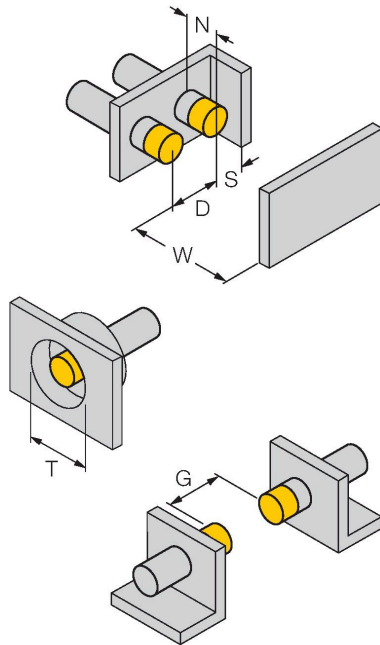
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*<sup>®</sup> sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

## Technical data

Active area material	Plastic, PA12-GF20
End cap	Plastic, PP
Electrical connection	Connector, M8 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

## Mounting instructions

### Mounting instructions/Description



Distance D	26 mm
Distance W	18 mm
Distance T	26 mm
Distance S	10 mm
Distance G	36 mm
Distance N	12 mm
Diameter active area B	Ø 6.5 mm

All non-flush mountable cylindrical *uprox*<sup>®</sup>+ sensors can be screwed to the upper edge of the barrel. Safe operation of the Ø 6.5 mm version is guaranteed with reduced switching distance of max. 30%.

## Wiring accessories

Dimension drawing	Type	Ident. no.
	PKG3M-2/TEL	6625385



Connection cable, female M8, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see [www.turck.com](http://www.turck.com)