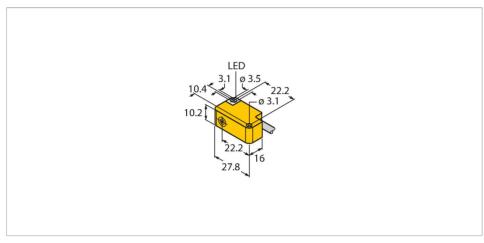


# NI5U-Q10S-AP6X Inductive Sensor



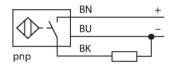
### Technical data

| Туре                                      | NI5U-Q10S-AP6X                |
|---|-------------------------------|
| ldent. no.                                | 1609364                       |
| Rated switching distance                  | 5 mm                          |
| Mounting conditions                       | Non-flush, flush mountable    |
| Secured operating distance                | ≤ (0.81 × Sn) mm              |
| Repeat accuracy                           | ≤ 2 % of full scale           |
| Temperature drift                         | ≤ ± 10 %                      |
|   | ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C |
| Hysteresis                                | 315 %                         |
| Ambient temperature                       | -30+85 °C                     |
| Operating voltage                         | 1030 VDC                      |
| Residual ripple                           | ≤ 10 % U <sub>ss</sub>        |
| DC rated operational current              | ≤ 150 mA                      |
| No-load current                           | ≤ 15 mA                       |
| Residual current                          | ≤ 0.1 mA                      |
| Isolation test voltage                    | ≤ 0.5 kV                      |
| Short-circuit protection                  | yes / Cyclic                  |
| Voltage drop at I.                        | ≤ 1.8 V                       |
| Wire breakage/Reverse polarity protection | yes / Complete                |
| Output function                           | 3-wire, NO contact, PNP       |
| Switching frequency                       | 1 kHz                         |
| Design                                    | Rectangular, Q10S             |
| Dimensions                                | 27.8 x 16 x 10.2 mm           |
| Housing material                          | Plastic, PP-GF20              |

### **Features**

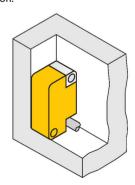
- Rectangular, height 10.2 mm
- Active face, lateral
- Cable outlet to all sides
- Plastic, PP-GF20
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Resistant to magnetic fields
- Auto-compensation protects against predamping
- Flush mounted installation on up to 4 sides
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

### Wiring diagram



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*°+ 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  | PP-GF20   |
|-----------------------|---|
| Electrical connection | Cable   |
| Cable quality         | Ø 3 mm, Gray, Lif9Y-11Y, PUR, 2 m                                   |
|                       | Suited for E-ChainSystems® acc. to manufacturers declaration H1063M |
| Core cross-section    | 3 x 0.14 mm²  |
| 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

# 

| Distance D          | 3 x B   |
|---------------------|---------|
| Distance W          | 3 x Sn  |
| Distance S          | 1.5 x B |
| Distance G          | 6 x Sn  |
| Width active area B | 10.2 mm |

Flush mounting on 4 sides

1-side mounting: Sn = 3 mm

2-side mounting: Sn = 3 mm

3-side mounting: Sn = 2.6 mm

4-side mounting: Sn = 2.3 mm

In many cases, sensors have to be mounted side by side to fulfill monitoring tasks. In order to avoid mutual interferences, Turck offers the Q10S-ZP shield (ident no. 6900520).



## Accessories

