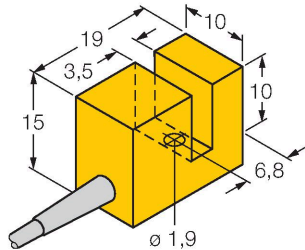


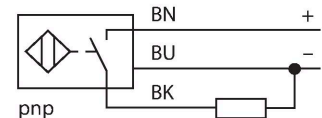
# SI3.5-K10-AP6X/S258 Inductive Sensor – Slot-type



## Features

- Slot sensor, height 10 mm
- Plastic, PBT-GF30-V0
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

## Wiring diagram



## Technical data

|                                           |                                                                                   |
|-------------------------------------------|-----------------------------------------------------------------------------------|
| Type                                      | SI3.5-K10-AP6X/S258                                                               |
| Ident. no.                                | 1650002                                                                           |
| Special version                           | S258 corresponds to:<br>Cable Lif9Y11Y Ø 3 mm - 2 m = standard<br>or as requested |
| Slot width                                | 3.5 mm                                                                            |
| Repeat accuracy                           | ≤ 2 % of full scale                                                               |
| Temperature drift                         | ≤ ± 10 %                                                                          |
| Hysteresis                                | 3...15 %                                                                          |
| Ambient temperature                       | -25...+70 °C                                                                      |
| Operating voltage                         | 10...30 VDC                                                                       |
| Residual ripple                           | ≤ 10 % U <sub>ss</sub>                                                            |
| DC rated operational current              | ≤ 200 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 <sub>o</sub>            | ≤ 1.8 V                                                                           |
| Wire breakage/Reverse polarity protection | yes / Complete                                                                    |
| Output function                           | 3-wire, NO contact, PNP                                                           |
| Switching frequency                       | 2 kHz                                                                             |
| Design                                    | Slot sensor, K10                                                                  |
| Dimensions                                | 19 x 15 x 10 mm                                                                   |
| Housing material                          | Plastic, PBT-GF30-V0                                                              |
| Active area material                      | Plastic, PBT-GF30-V0                                                              |

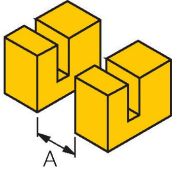
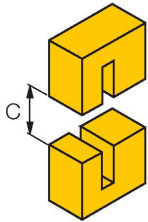
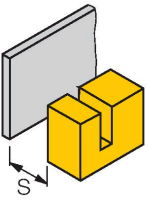
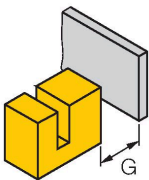
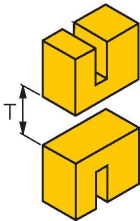
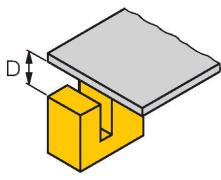
## Functional principle

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.

## Technical data

|                       |                                                                     |
|-----------------------|---------------------------------------------------------------------|
| Electrical connection | Cable                                                               |
| Cable quality         | Ø 3 mm, Black, Lif9Y-11Y, PUR, 2 m                                  |
|                       | Suited for E-ChainSystems® acc. to manufacturers declaration H1063M |
| Core cross-section    | 3 x 0.14 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                          |
| Switching state       | LED, Yellow                                                         |
| Included in delivery  | 1 x M1,8 x 10 (DIN963A)                                             |

## Mounting instructions

| Mounting instructions/Description                                                   |                  |
|-------------------------------------------------------------------------------------|------------------|
|   | Distance D 0 mm  |
|  | Distance T 5 mm  |
|  | Distance S 0 mm  |
|   | Distance G 0 mm  |
|  | Distance A 15 mm |
|  | Distance C 15 mm |