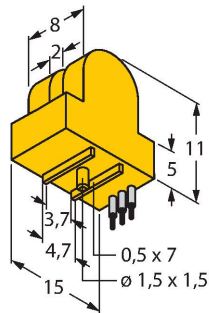


# SI2-K08-AP6

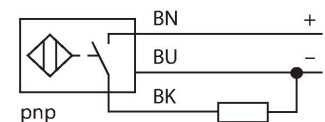
## Inductive Sensor – Slot-type



### Features

- Slot sensor, height 8 mm
- Plastic, polypropylene
- Mechanical end stop, removable, for analog pointer instruments
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Lead 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.

### Technical data

|                                        |                          |
|----------------------------------------|--------------------------|
| Type                                   | SI2-K08-AP6              |
| ID                                     | 1605500                  |
| <b>General data</b>                    |                          |
| Slot width                             | 2 mm                     |
| Repeat accuracy                        | ≤ 2 % of full scale      |
| Temperature drift                      | ≤ ±10 %                  |
| Hysteresis                             | 3...15 %                 |
| <b>Electrical data</b>                 |                          |
| Operating voltage $U_B$                | 10...30 VDC              |
| Ripple $U_{ss}$                        | ≤ 10 % $U_{Bmax}$        |
| DC rated operating current $I_o$       | ≤ 100 mA                 |
| No-load current                        | ≤ 15 mA                  |
| Residual current                       | ≤ 0.1 mA                 |
| Isolation test voltage                 | 0.075 kV                 |
| Short-circuit protection               | yes/Cyclic               |
| Voltage drop at $I_o$                  | ≤ 1.8 V                  |
| Wire break/reverse polarity protection | yes/Complete             |
| Output function                        | 3-wire, NO contact, PNP  |
| Switching frequency                    | 1 kHz                    |
| <b>Mechanical data</b>                 |                          |
| Design                                 | Slot sensor, K08         |
| Dimensions                             | 11 x 15 x 8 mm           |
| Housing material                       | Plastic, PP              |
| Active area material                   | Plastic, PP              |
| Electrical connection                  | Stranded wires           |
| Cable quality                          | LifYW, PVC, 0.32 m       |
| Core cross-section                     | 3 x 0.08 mm <sup>2</sup> |

Technical data

| Environmental conditions |                                            |
|--------------------------|--------------------------------------------|
| Ambient temperature      | -25...+70 °C                               |
| 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

The image displays six isometric diagrams of a yellow L-shaped connector being mounted on a grey rectangular plate. The diagrams illustrate different mounting orientations and the corresponding dimensions for each:

- Top-left:** Two connectors are shown side-by-side. A dimension line labeled 'A' indicates the distance between the inner vertical faces of the two connectors.
- Top-right:** A connector is mounted with its vertical face against the plate. A dimension line labeled 'G' indicates the gap between the connector's vertical face and the plate.
- Middle-left:** A connector is mounted with its horizontal face against the plate. A dimension line labeled 'C' indicates the distance from the top edge of the plate to the top edge of the connector's horizontal face.
- Middle-right:** A connector is mounted with its vertical face against the plate. A dimension line labeled 'S' indicates the distance from the bottom edge of the plate to the bottom edge of the connector's vertical face.
- Bottom-left:** Two connectors are shown stacked vertically. A dimension line labeled 'T' indicates the distance between the bottom edges of the two connectors.
- Bottom-right:** A connector is mounted with its horizontal face against the plate. A dimension line labeled 'D' indicates the distance from the top edge of the plate to the top edge of the connector's horizontal face.

|            |       |
|------------|-------|
| Distance D | 0 mm  |
| Distance T | 5 mm  |
| Distance S | 0 mm  |
| Distance G | 1 mm  |
| Distance A | 15 mm |
| Distance C | 15 mm |