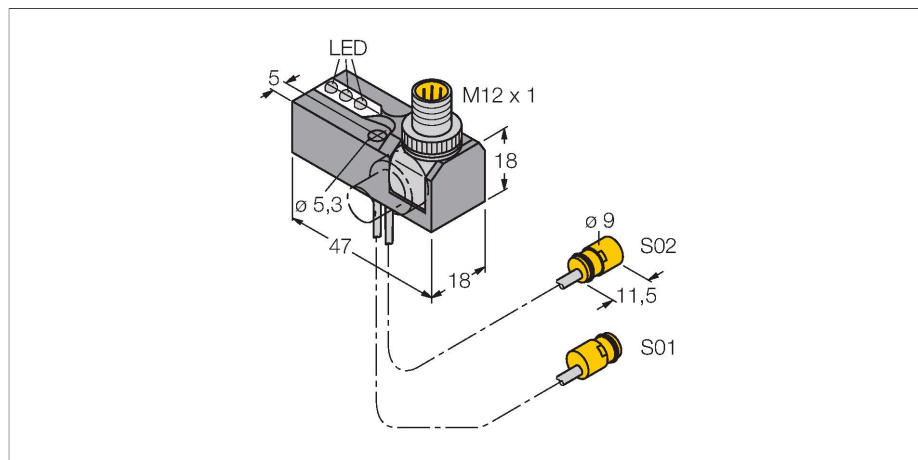


NI2-K09-0.095/0.11-BDS-2AP6X3-H1141/S34

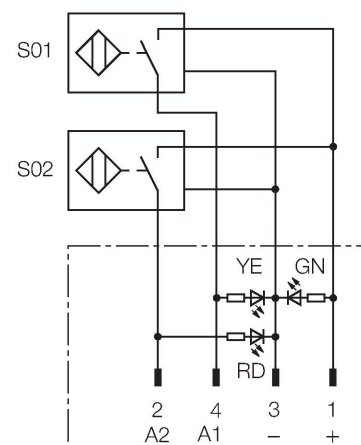
Inductive Sensor – Monitoring Kit for Power Clamps



Features

- BDS power block with two connected sensors and LEDs
- Robust rotatable connector 0°, 45° and 90°, for optimal cable routing
- Plastic, Trogamid
- Resistant to magnetic fields (weld-resistant), for DC and AC fields up to 100 mT
- 2 x NO contact, PNP output
- DC 4-wire, 10...30 VDC

Wiring diagram



Functional principle

TURCK offers special monitoring kits, consisting of two miniature sensors, as a convenient solution for "Open/Closed" detection on pneumatic power clamps. This product line provides almost unlimited combination possibilities, comprising four different power blocks and over 40 different modular sensor types.

Technical data

| | |
|--|---|
| Type | NI2-K09-0.095/0.11-BDS-2AP6X3-H1141/S34 |
| ID | 1650039 |
| Special version | S34 Corresponds to: Resistant to magnetic fields |
| General data | |
| Rated switching distance | 1.2 mm |
| | For S01 sensor, 2 mm for S02 sensor |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0.81 \times S_n) \text{ mm}$ |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | $\leq 2 \%$ of full scale |
| Temperature drift | $\leq \pm 10 \%$ |
| Hysteresis | 3...15 % |
| Electrical data | |
| Operating voltage U_B | 10...30 VDC |
| Ripple U_{ss} | $\leq 10 \% U_{Bmax}$ |
| DC rated operating current I_o | $\leq 200 \text{ mA}$ |
| No-load current | $\leq 15 \text{ mA}$ |
| Residual current | $\leq 0.1 \text{ mA}$ |
| Isolation test voltage | 0.5 kV |
| Short-circuit protection | yes/Thermal |
| Voltage drop at I_o | $\leq 1.8 \text{ V}$ |
| Wire break/reverse polarity protection | Complete |
| Output function | 4-wire, NO contact, PNP |
| Smallest operating current | $\geq 1 \text{ mA}$ |
| Switching frequency | 0.03 kHz |

Technical data

| Mechanical data | |
|--------------------------|---|
| Design | Monitoring Kit for Spanners, K09 |
| Dimensions | 47 x 18 x 18 mm |
| Housing material | Plastic, Trogamit |
| Active area material | Plastic, PP GR-20 |
| Electrical connection | Connector, M12 × 1 |
| Cable quality | Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.095 m, 0.11 m |
| Core cross-section | 3 x 0.08 mm ² |
| Litz wire | 40 x0.05 mm |
| 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 |
| Power-on indication | LED, Green |
| Switching state | 2 × LEDs, Yellow/red |

Mounting instructions

Mounting instructions/Description



The sensor should only be mounted in the correspondent retainer.

The sensor is adjusted to the mounting characteristics of the retainer. Deviant mounting may cause unpredictable performance of the sensor.

Flush mounting without leaving a gap may lead to uncontrolled switching of the sensor.

Accessories

| Dimension drawing | Type | ID | |
|-------------------|---------------|---------|---|
| | RKC4.4T-2/TEL | 6625013 | Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval |

