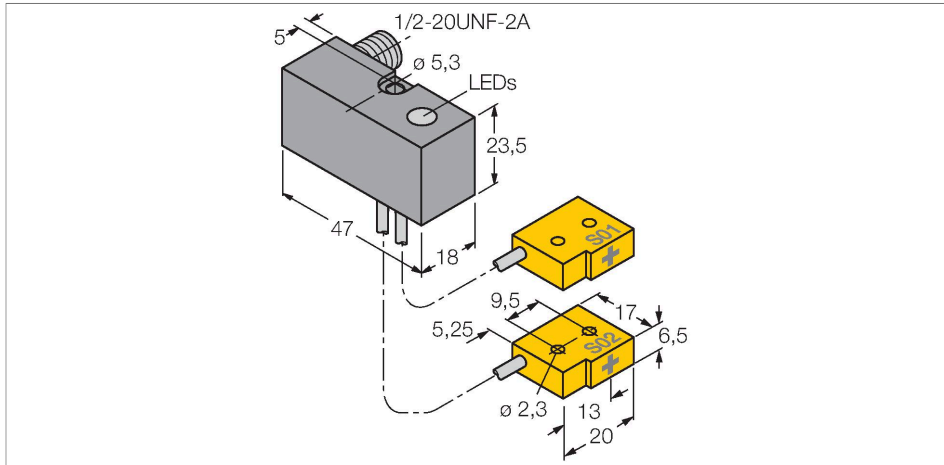


NI2-Q6.5-ADZ32-0.16-FSB5.4X4/S304

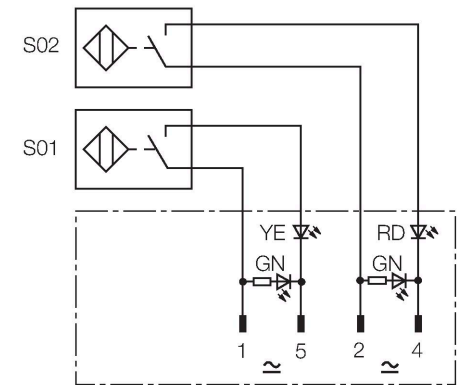
Inductive Sensor – Monitoring Kit for Power Clamps



Features

- Rectangular, height 23.5 mm
- Plastic, PBT-GF20-V0
- Resistant to magnetic fields (weld-resistant), for DC and AC fields up to 100 mT
- AC 4-wire, 20...250 VDC
- DC 4-wire, 10...300 VDC
- 2 x NO contact
- 1/2" male connector

Wiring diagram



Technical data

| | |
|------------------------------|---|
| Type | NI2-Q6.5-ADZ32-0.16-FSB5.4X4/S304 |
| Ident. no. | 4200203 |
| Special version | S304 corresponds to: 2x Ni./Bi.-...-AP(N)6/S34. function for Device Net. Defined length at connector FS4.4/FS4.4K or FSF5.5/FSF5.5K (with PE-connection) or FS4.4X3. Example for order : Ni2-Q6.5-AP6-0.10-FSF4.4X3/S304 |
| Rated switching distance | 2 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Correction factors | St37 = 1; Al = 0.7; stainless steel = 0.75; Ms = 0.45 |
| Repeat accuracy | $\leq 2\%$ of full scale |
| Temperature drift | $\leq \pm 10\%$ |
| Hysteresis | 3...15 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 20...250 VAC |
| Operating voltage | 10...300 VDC |
| AC rated operational current | ≤ 100 mA |
| DC rated operational current | ≤ 100 mA |
| Frequency | $\geq 50... \leq 60$ Hz |
| Residual current | ≤ 1.7 mA |
| Isolation test voltage | ≤ 1.5 kV |
| Surge current | ≤ 1 A (≤ 10 ms max. 5 Hz) |
| Short-circuit protection | yes / Latching |

Functional principle

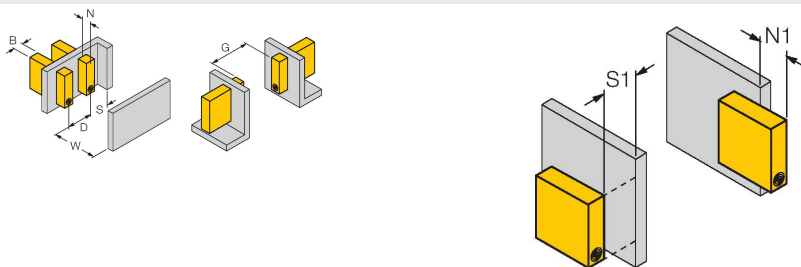
TURCK offers special monitoring kits, consisting of two miniature sensors, as a convenient solution for "Open/Closed" detection on pneumatic power clamps. This product line provides almost unlimited combination possibilities, comprising four different power blocks and over 40 different modular sensor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

Technical data

| | |
|---|--|
| Voltage drop at I_e | ≤ 6 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 4-wire, 2 x NO contact |
| Smallest operating current | ≥ 3 mA |
| Switching frequency | 0.02 kHz |
| Design | Monitoring kit for power clamps, Q6,5 |
| Dimensions | 47 x 18 x 23.5 mm |
| Housing material | Metal, PBT-GF20-V0 |
| Active area material | Plastic, PP GR-20 |
| Electrical connection | Connector, 1/2" |
| Cable quality | $\varnothing 2$ mm, Gray, Lif9Y-11Y, PUR, 0.16 m |
| Core cross-section | 3×0.08 mm ² |
| Litz wire | 40 x 0.05 mm |
| 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 | 2 x LEDs, Green |
| Switching state | 2 x LEDs, Yellow/Red |

Mounting instructions

Mounting instructions/Description



| | |
|---------------------|---------|
| Distance D | 3 x B |
| Distance W | 3 x Sn |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Distance N | 2 x Sn |
| Width active area B | 6.5 mm |

Please note, non-flush mounting of this sensor is obligatory.

The following conditions allow semi-flush mounting:

N1 = 0 mm and S1 = 1 mm or

N1 = 1 mm and S1 = 0 mm

These values apply for mounting in aluminium

N1 = 0 mm and S1 = 5 mm or

N1 = 5 mm and S1 = 0 mm

These values apply for mounting in St37.