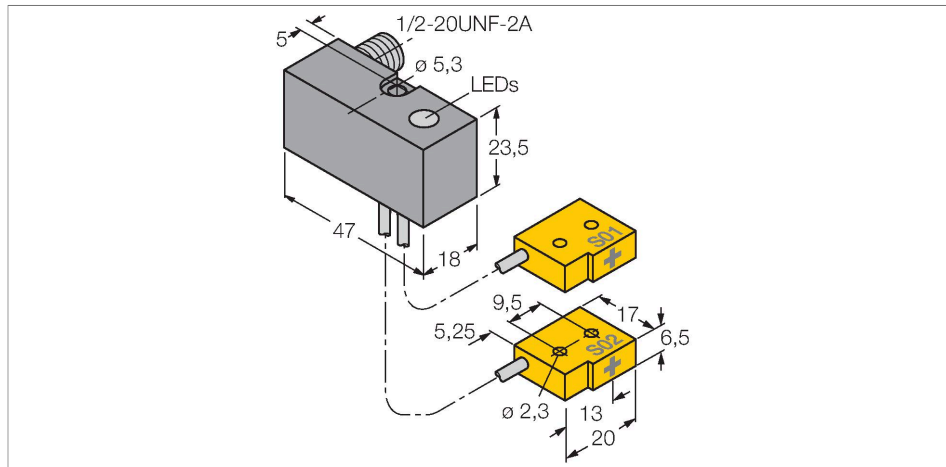


# NI2-Q6.5-ADZ32-0.1-FSB5.4X4/S304

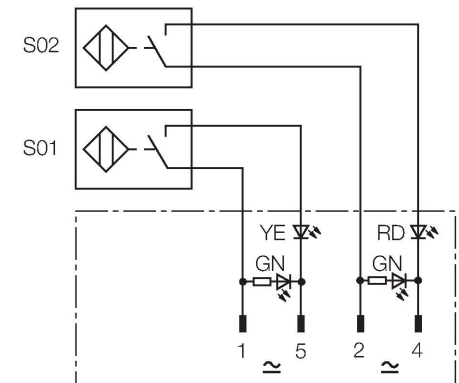
## Inductive Sensor – Monitoring Kit for Power Clamps



### 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-ADZ32-0.1-FSB5.4X4/S304  |
| Ident. no.                   | 4200204   |
| Special version              | S304 corresponds to:<br>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 | $\leq 100$ mA   |
| DC rated operational current | $\leq 100$ mA   |
| Frequency                    | $\geq 50... \leq 60$ Hz   |
| Residual current             | $\leq 1.7$ mA   |
| Isolation test voltage       | $\leq 1.5$ kV   |
| Surge current                | $\leq 1$ A ( $\leq 10$ ms max. 5 Hz)  |
| Short-circuit protection     | yes / Latching  |

### Functional principle

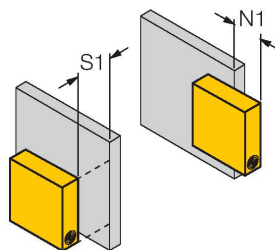
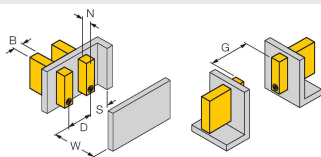
TURCK offers special monitoring kits, consisting of two miniature sensors, as a convenient solution for "Open/Closed" detection on pneumatic power clamps. This product line provides almost unlimited combination possibilities, comprising four different power blocks and over 40 different modular sensor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

## Technical data

|   |   |
|---|---|
| Voltage drop at $I_e$                     | $\leq 6$ V                                      |
| Wire breakage/Reverse polarity protection | yes / Complete                                  |
| Output function                           | 4-wire, 2 x NO contact                          |
| Smallest operating current                | $\geq 3$ mA                                     |
| Switching frequency                       | 0.02 kHz  |
| <b>Design</b>                             | <b>Monitoring kit for power clamps, Q6,5</b>    |
| 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, 0.1 m |
| Core cross-section                        | 3 x 0.08 mm <sup>2</sup>                        |
| 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      |
| <b>Power-on indication</b>                | <b>2 x LEDs, Green</b>                          |
| <b>Switching state</b>                    | <b>2 x LEDs, Yellow/Red</b>                     |

## 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.

## Wiring accessories

| Dimension drawing   | Type          | Ident. no. |  |
|---|---------------|------------|--|
|  | RKC4.4T-2/TEL | 6625013    | Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a> |