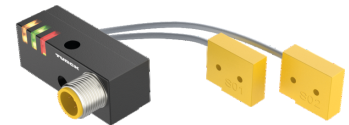
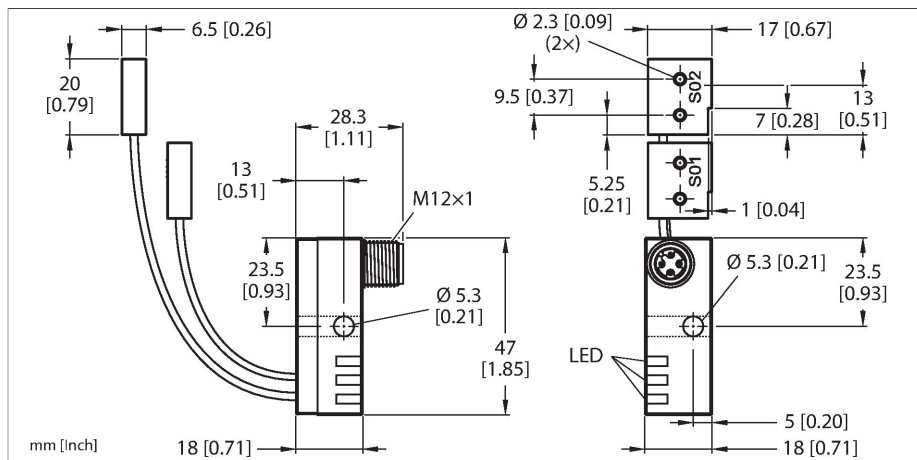


NI2-Q6.5-AP6-0.15-FS4.4X3/S304  
Inductive Sensor – Monitoring Kit for Power Clamps



## Technical data

|                 |                                                                                                                                                                                                                        |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type            | Ni2-Q6.5-AP6-0.15-FS4.4X3/S304                                                                                                                                                                                         |
| ID              | 1650074                                                                                                                                                                                                                |
| Special version | S304 Corresponds to: 2 × Ni../Bi../-AP(N)6/S34. Function for DeviceNet. 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-AP6-0.1-FSF4.4X3/S304 |

## General data

|                            |                                                          |
|----------------------------|----------------------------------------------------------|
| 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;<br>Ms = 0.45 |
| Repeat accuracy            | $\leq 2$ % of full scale                                 |
| Temperature drift          | $\leq \pm 10$ %                                          |
| Hysteresis                 | 3...15 %                                                 |

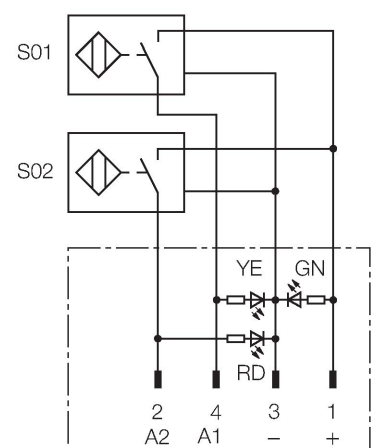
## Electrical data

|                                        |                         |
|----------------------------------------|-------------------------|
| Operating voltage $U_B$                | 10...30 VDC             |
| Ripple $U_{ss}$                        | $\leq 10 \% U_{Bmax}$   |
| DC rated operating current $I_e$       | $\leq 150 \text{ mA}$   |
| No-load current                        | $\leq 20 \text{ mA}$    |
| Residual current                       | $\leq 0.1 \text{ mA}$   |
| Isolation test voltage                 | 0.5 kV                  |
| Short-circuit protection               | yes/Cyclic              |
| Voltage drop at $I_e$                  | $\leq 1.8 \text{ V}$    |
| Wire break/reverse polarity protection | Complete                |
| Output function                        | 4-wire, NO contact, PNP |
| Smallest operating current             | $\geq 1 \text{ mA}$     |

## Features

- Q6,5 power block with two connected sensors and LEDs
- Relocatable block 0°...90°, with cross drilling for flexible cable routing
- Plastic, PBT-GF20-V0
- 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

|                          |                                            |
|--------------------------|--------------------------------------------|
| Switching frequency      | 0.03 kHz                                   |
| Mechanical data          |                                            |
| Design                   | Monitoring Kit for Spanners, Q6,5          |
| Dimensions               | 47 x 18 x 18 mm                            |
| Housing material         | Plastic, PBT-GF20-V0                       |
| Active area material     | Plastic, PP GR-15                          |
| Electrical connection    | Connector, M12 × 1                         |
| Cable quality            | Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.15 m       |
| Core cross-section       | 3 x 0.08 mm <sup>2</sup>                   |
| 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                       |
| Included in delivery     | Screw M5 x 25 DIN 912                      |

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.

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 |

