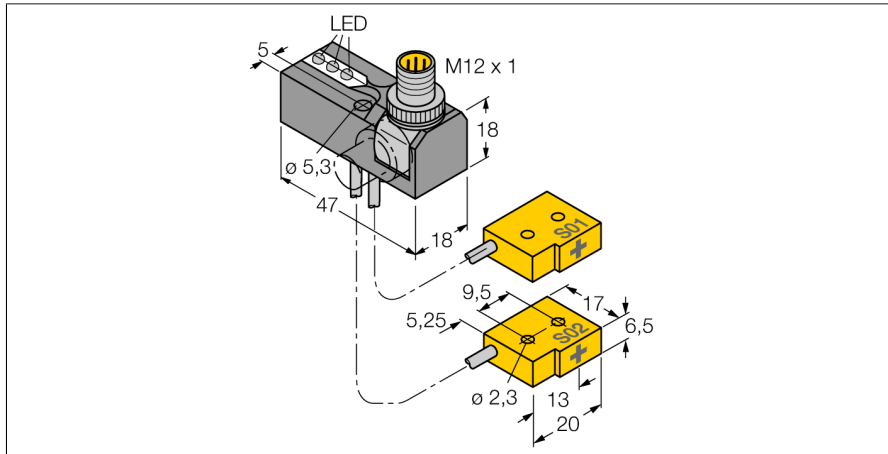
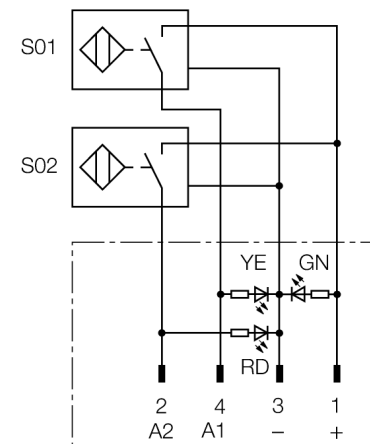


# Inductive Sensor Monitoring Kit for Power Clamps NI2-Q6,5-0,04/0,1- BDS-2AP6X3-H1141/S34



- 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.

|      |                                        |
|------|----------------------------------------|
| Type | NI2-Q6.5-0.04/0.1-BDS-2AP6X3-H1141/S34 |
| ID   | 1650116                                |

|                 |                                                     |
|-----------------|-----------------------------------------------------|
| Special version | S34 corresponds to:<br>Resistant to magnetic fields |
|-----------------|-----------------------------------------------------|

|                                |                                                       |
|--------------------------------|-------------------------------------------------------|
| General data                   |                                                       |
| Rated switching distance $S_n$ | 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 %                                              |

|                                  |                         |
|----------------------------------|-------------------------|
| Electrical data                  |                         |
| Operating voltage                | 10...30 VDC             |
| Residual ripple                  | $\leq 10\% U_{in}$      |
| DC rated operational current     | $\leq 150$ mA           |
| Residual current                 | $\leq 0.1$ mA           |
| Isolation test voltage           | $\leq 0.5$ kV           |
| Short-circuit protection         | yes/ Cyclic             |
| Voltage drop at $I_n$            | $\leq 1.8$ V            |
| Output function                  | 4-wire, NO contact, PNP |
| Smallest operating current $I_m$ | $\geq 1$ mA             |
| Switching frequency              | 0.03 kHz                |

|                       |                                            |
|-----------------------|--------------------------------------------|
| Mechanical data       |                                            |
| Design                | Monitoring Kit for Spanners, Q6,5          |
| Dimensions            | 47 x 18 x 18 mm                            |
| Housing material      | Metal, Trogamid                            |
| Active area material  | Plastic, PP GR-20                          |
| Electrical connection | Connector, M12 x 1                         |
| Cable quality         | Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.04 m, 0.1m |
| Core cross-section    | 3 x 0.08 mm <sup>2</sup>                   |
| Litz wire             | 40x0.05mm                                  |

|                          |                                            |
|--------------------------|--------------------------------------------|
| 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      |                                            |
| Switching state          | LED, Green                                 |
| Switching state          | 2 × LEDs, Yellow/red                       |
| Included in delivery     | Screw M5 x 25 DIN 912                      |