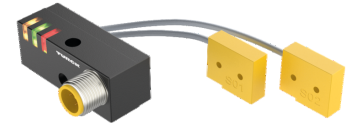
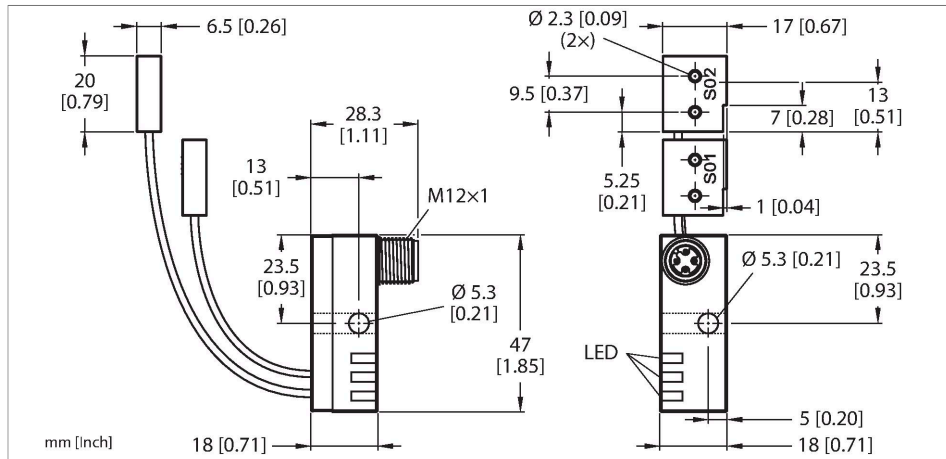


# NI2-Q6.5-AN6-0.1-FS4.4X3/S304

## Inductive Sensor – Monitoring Kit for Power Clamps



### Technical data

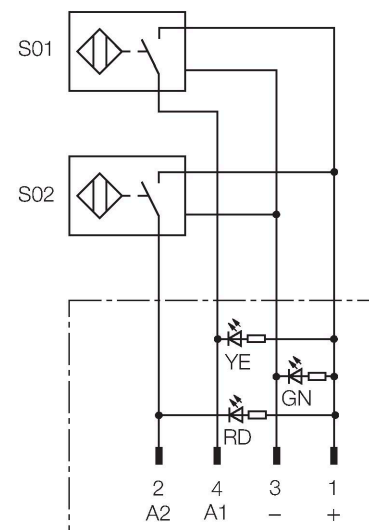
Type	NI2-Q6.5-AN6-0.1-FS4.4X3/S304
ID	1650079
Special version	S304 corresponds to: 2 x Ni../Bi../-AP(N)6/S34. Function for DeviceNet. Defined length at connector FS4.4/FS4.4K or FSF5.5/FSF5.5K (with PE connection) or FS4.4X3. Example for order : Ni2-Q6.5-AP6-0.1-FSF4.4X3/S304

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; 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	$\leq 10\% U_{ss}$
DC rated operational current	$\leq 150$ mA
No-load current	20 mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_a$	$\leq 1.8$ V

### 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, NPN output
- DC 4-wire, 10...30 VDC

### Wiring diagram



### Functional principle

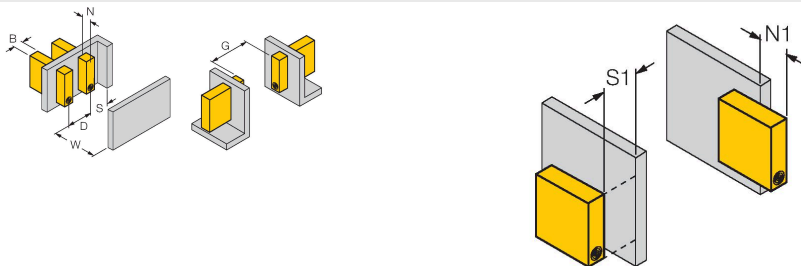
## Technical data

Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, NO contact, NPN
Switching frequency	0.03 kHz
<b>Mechanical data</b>	
Design	Monitoring kit for power clamps, Q6,5
Dimensions	47 x 18 x 18 mm
Housing material	Metal, PBT-GF20-V0
Active area material	Plastic, PP GR-15
Electrical connection	Connector, M12 x 1
Cable quality	Ø 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
<b>Environmental conditions</b>	
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 x LEDs, Yellow/Red
Included in delivery	Screw M5 x 25 DIN 912

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.

## 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.