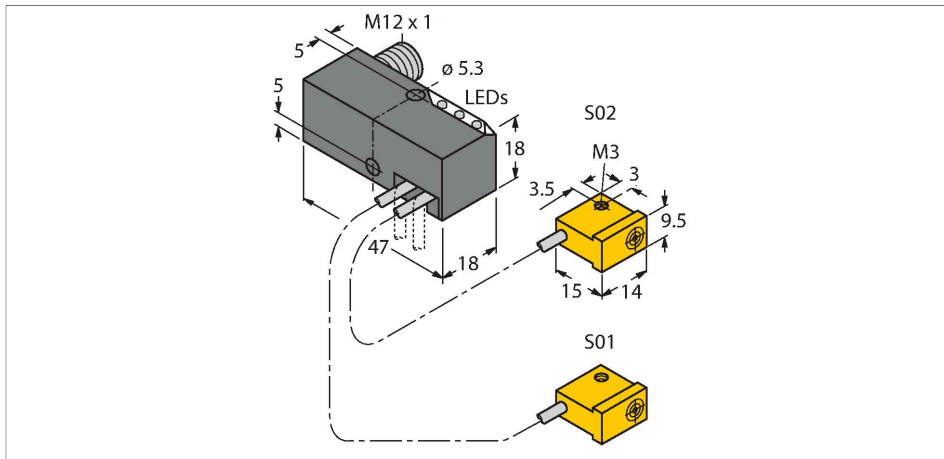


NI2-Q9.5-AP6-0.3-FS4.4X3/S304 Inductive Sensor – Monitoring Kit for Power Clamps



Technical data

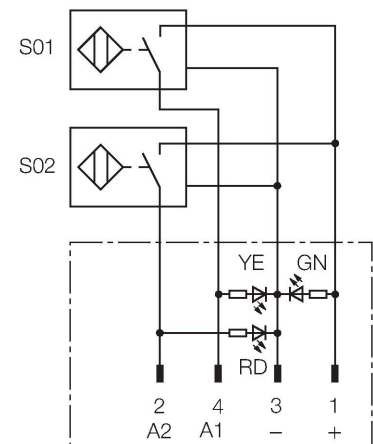
Type	NI2-Q9.5-AP6-0.3-FS4.4X3/S304
Ident. no.	1650106
Rated switching distance	2 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	$\leq 10 \%$ U_{ss}
DC rated operational current	≤ 150 mA
No-load current	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire breakage/Reverse polarity protection	Complete
Output function	4-wire, NO contact, PNP
Smallest operating current	≥ 1 mA
Switching frequency	0.03 kHz



Features

- Q9,5 power block with two connected sensors and LEDs
- Relocatable block 0°...90°, with cross drilling for flexible cable routing
- Plastic, PP GR-20
- 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

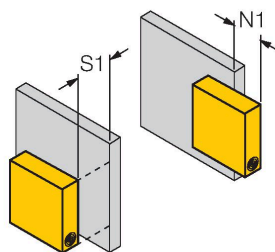
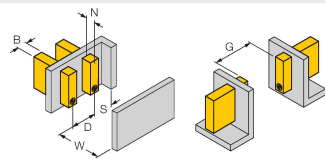
TURCK offers special monitoring kits, consisting of two miniature sensors, as a convenient solution for "Open/Closed" detection on pneumatic power clamps. This product line provides almost unlimited combination possibilities, comprising four different power blocks and over 40 different modular sensor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

Technical data

Design	Monitoring kit for power clamps, Q9,5
Dimensions	47 x 18 x 18 mm
Housing material	Metal, PBT-GF20-V0
Active area material	Plastic, PP GR-20
Electrical connection	Connector, M12 × 1
Cable quality	Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.3 m
Core cross-section	3 x 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	LED, Green
Switching state	2 × 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.