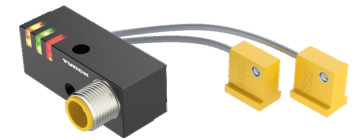
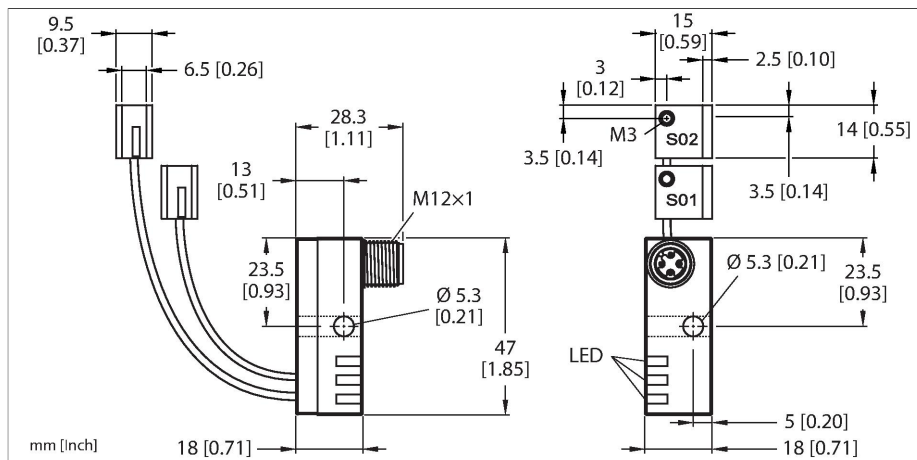


NI2-Q9.5-AP6-0.15-FS4.4X3/S304

Inductive Sensor – Monitoring Kit for Power Clamps



Technical data

Type	NI2-Q9.5-AP6-0.15-FS4.4X3/S304
ID	1650065
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

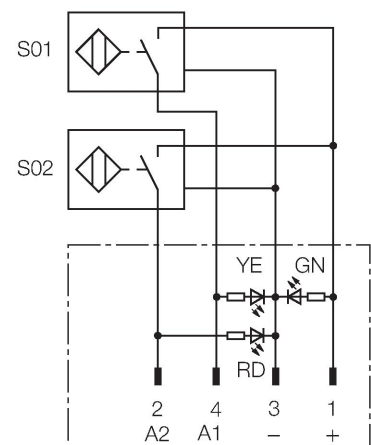
General data	
Rated switching distance	2 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %

Electrical data	
Operating voltage	10...30 VDC
Residual ripple	≤ 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_a	≤ 1.8 V
Wire breakage/Reverse polarity protection	Complete
Output function	4-wire, NO contact, PNP

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

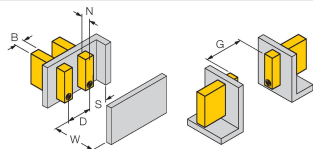
TURCK offers special monitoring kits, consisting of two miniature sensors, as a convenient solution for "Open/Closed" detection on pneumatic power clamps. This product line provides almost unlimited combination possibilities, comprising four different power blocks and over 40 different modular sensor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

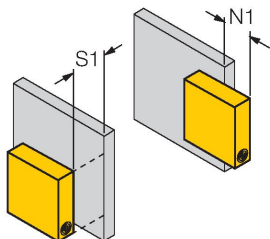
Technical data

Smallest operating current	≥ 1 mA
Switching frequency	0.03 kHz
Mechanical data	
Design	Monitoring Kit for Spanners, Q9,5
Dimensions	47 x 18 x 18 mm
Housing material	Metal, PBT-GF20-V0
Active area material	Plastic, PP GR-15
Electrical connection	Connector, M12 × 1
Cable quality	Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.15 m
Core cross-section	3 x 0.08 mm ²
Litz wire	40 x 0.05 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

Mounting instructions

Mounting instructions/Description





Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance N	$2 \times S_n$
Width active area B	6.5 mm

Please note, non-flush mounting of this sensor is obligatory.

The following conditions allow semi-flush mounting:

$N1 = 0 \text{ mm}$ and $S1 = 1 \text{ mm}$ or

$N1 = 1 \text{ mm}$ and $S1 = 0 \text{ mm}$

These values apply for mounting in aluminium

$N1 = 0 \text{ mm}$ and $S1 = 5 \text{ mm}$ or

$N1 = 5 \text{ mm}$ and $S1 = 0 \text{ mm}$

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

