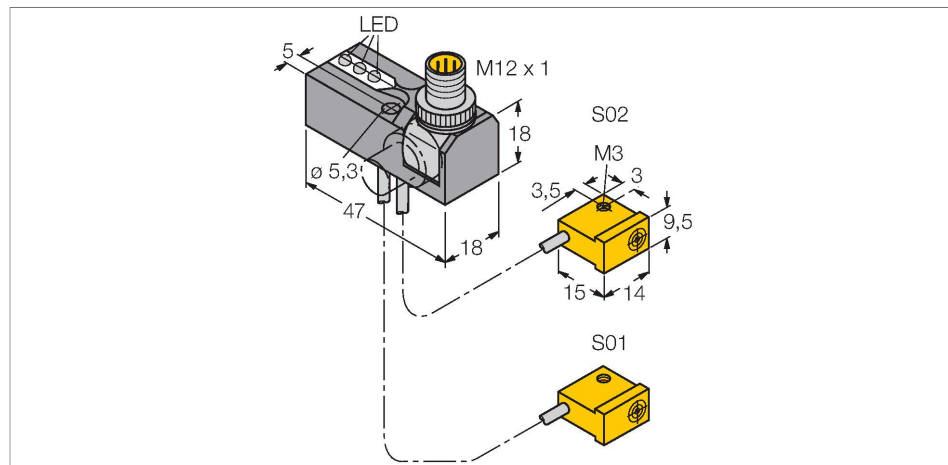


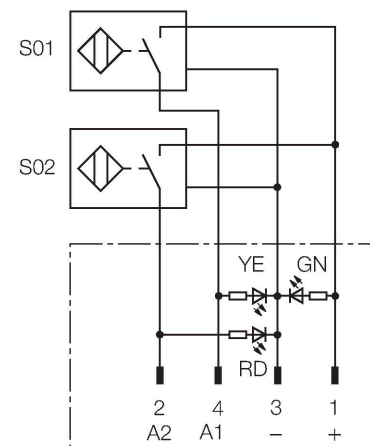
NI2-Q9.5-0.1-BDS-2AP6X3-H1141/S34 Inductive Sensor – Monitoring Kit for Power Clamps



Features

- Rectangular, height 18 mm
- Plastic, Trogamid
- Relocatable connector
- 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

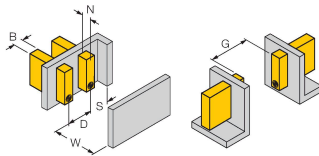
Type	NI2-Q9.5-0.1-BDS-2AP6X3-H1141/S34
ID	1650099
Special version	S34 Corresponds to: Weld-field immune proximity sensors
General data	
Rated switching distance	2 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2 \text{ \% of full scale}$
Temperature drift	$\leq \pm 10 \text{ \%}$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_s	10...30 VDC
Ripple U_{rs}	$\leq 10 \text{ \% } U_{Bmax}$
DC rated operating current I_s	$\leq 150 \text{ mA}$
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_s	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	Complete
Output function	4-wire, NO contact, PNP
Smallest operating current	$\geq 1 \text{ mA}$

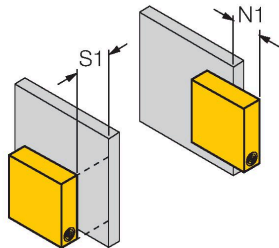
Technical data

Switching frequency	0.03 kHz
Mechanical data	
Design	Monitoring kit for power clamps, Q9,5
Dimensions	47 x 18 x 18 mm
Housing material	Plastic, Trogamit
Active area material	Plastic, PP GR-20
Electrical connection	Connector, M12 × 1
Cable quality	Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.1 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

The diagram consists of two parts. The left part shows a yellow sensor being mounted onto a grey plate. Dimension lines indicate: 'B' for the width of the sensor, 'N' for the distance from the top of the sensor to the top of the plate, 'S' for the distance from the bottom of the sensor to the bottom of the plate, 'D' for the distance from the front face of the sensor to the front face of the plate, and 'W' for the width of the plate. The right part shows the sensor mounted on a U-shaped bracket, with dimension 'G' indicating the distance from the front face of the sensor to the front face of the bracket.

The diagram shows two views of a sensor mounted on a grey plate. The left view shows the sensor flush with the plate, with dimension 'S1' indicating the distance from the top of the sensor to the top of the plate. The right view shows the sensor protruding from the plate, with dimension 'N1' indicating the distance from the top of the sensor to the top of the plate.

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.

Wiring 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