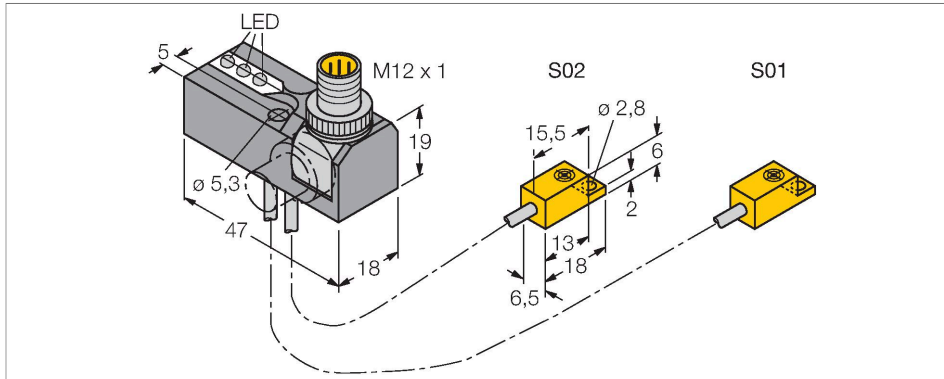


# NI2-ISI-0.1-BDS-2AP6X3-H1141/S34

## Inductive Sensor – Monitoring Kit for Power Clamps



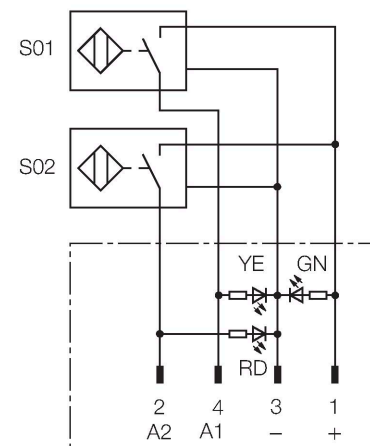
### Technical data

Type	NI2-ISI-0.1-BDS-2AP6X3-H1141/S34
ID	1650133
<b>General data</b>	
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 %
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10$ % $U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current	15 mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Thermal
Voltage drop at $I_o$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	Complete
Output function	4-wire, NO contact, PNP
Smallest operating current	$\geq 1$ mA
Switching frequency	0.03 kHz
<b>Mechanical data</b>	
Design	Monitoring kit for power clamps, ISI

### Features

- 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.

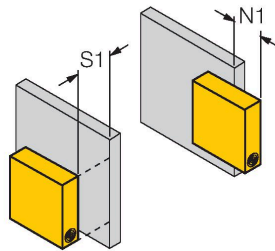
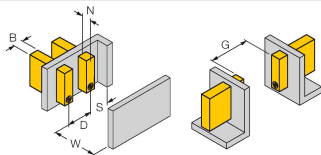
NI2-ISI-0.1-BDS-2AP6X3-H1141/S34 | 11/29/2022 06-35 | technical changes reserved

## Technical data

Dimensions	47 x 18 x 18 mm
Housing material	Metal, Trogamit
Active area material	Plastic, PA12-GF20
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

## 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 S137.