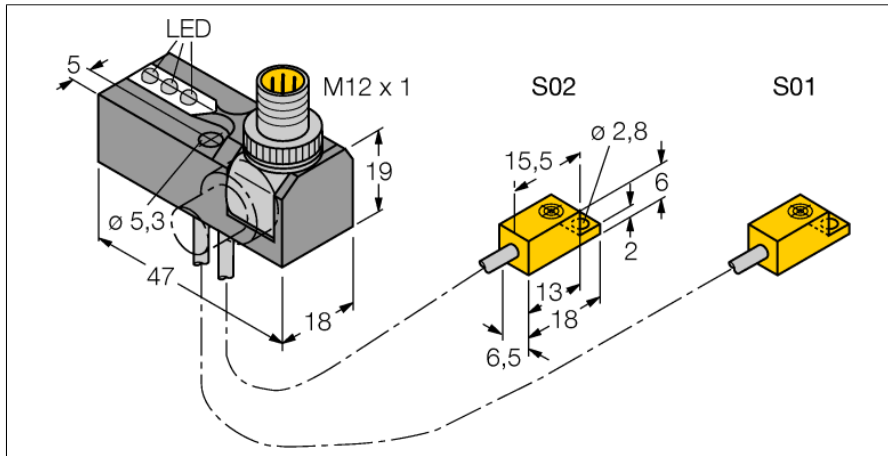
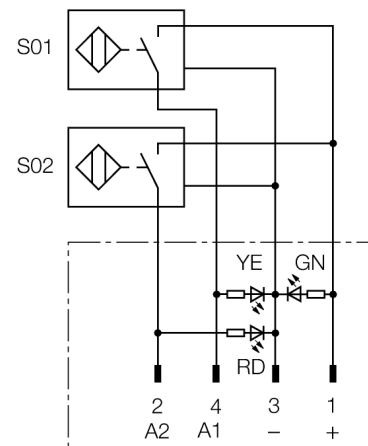


Inductive sensor
Monitoring Kit for Power Clamps
NI2-ISI-0.055-BDS-2AP6X3-H1141/S34



- 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

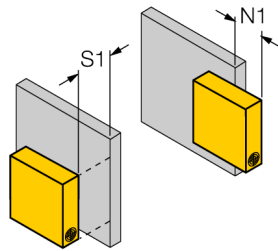
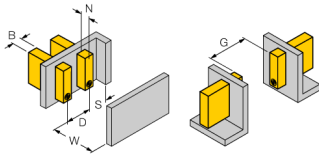
TURCK offers special monitoring kits, consisting of two miniature sensors, as a convenient solution for "Open/Closed" detection on pneumatic power clamps. This product line provides almost unlimited combination possibilities, comprising four different power blocks and over 40 different modular sensor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

Type designation	NI2-ISI-0.055-BDS-2AP6X3-H1141/S34
Ident no.	1650130
Special version	S34 = The sensors are resistant to magnetic fields.
Rated switching distance S_n	2 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0,81 x 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	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U _s
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Thermal
Voltage drop at I ₀	≤ 1.8 V
Output function	4-wire, NO contact, PNP
Smallest operating current I ₀	≥ 1 mA
Switching frequency	0.03 kHz
Design	Monitoring Kit for Spanners, ISI
Dimensions	47 x 18 x 18 mm
Housing material	Metal, Trogamid
Active area material	Plastic, PA12-GF20
Electrical connection	Connectors, M12 x 1
Cable quality	2 mm, Gray, Lif9Y-11Y, PUR, 0.055
Cable cross section	3 x 0.08 mm ²
Litz wire	40x0.05mm
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
Packaging unit	1
Power-on indication	LED, Green
Switching state	2 x LEDs, Yellow/Red

Inductive sensor
Monitoring Kit for Power Clamps
NI2-ISI-0.055-BDS-2AP6X3-H1141/S34

Mounting instructions/Description	minimum distances
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.