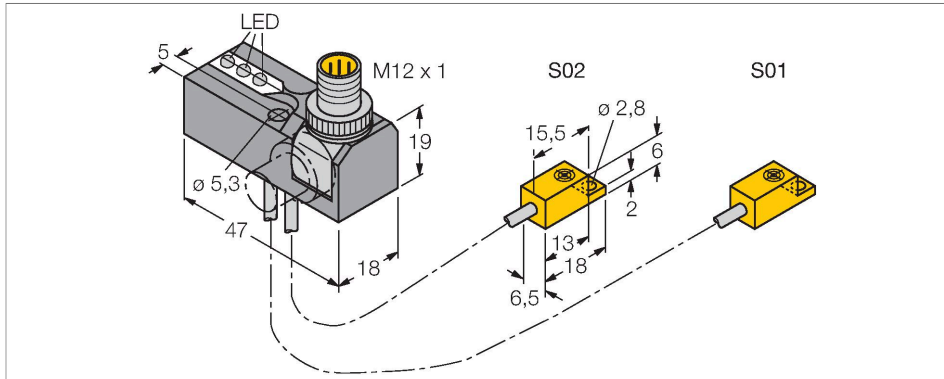


NI2-ISI-0.055-BDS-2AP6X3-H1141/S34 Inductive Sensor – Monitoring Kit for Power Clamps



Technical data

Type	NI2-ISI-0.055-BDS-2AP6X3-H1141/S34
ID	1650130
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	$S_{t37} = 1$; $A_I = 0.3$; stainless steel = 0.7; $M_s = 0.4$
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3...15 %

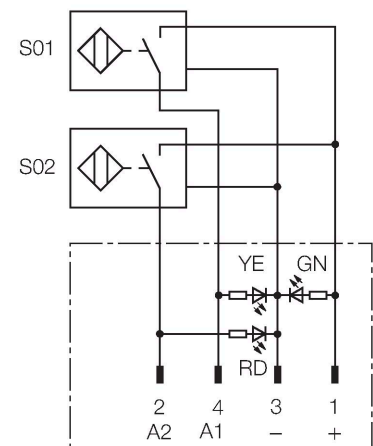
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{as}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	$\leq 200 \text{ mA}$
No-load current	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Thermal
Voltage drop at I_o	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	Complete
Output function	4-wire, NO contact, PNP
Smallest operating current	$\geq 1 \text{ mA}$
Switching frequency	0.03 kHz



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.

Technical data

Mechanical data	
Design	Monitoring kit for power clamps, ISI
Dimensions	47 x 18 x 18 mm
Housing material	Plastic, Trogamit
Active area material	Plastic, PA12-GF20
Electrical connection	Connector, M12 × 1
Cable quality	Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.055 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 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.

technical changes
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BDS-2AP6X3-H1141/S34

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