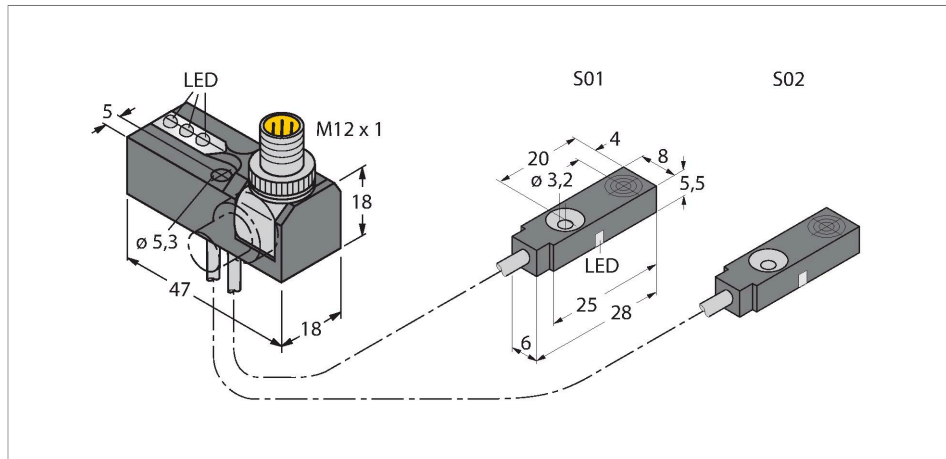


BI2-Q5.5-0.05-BDS-2AP6X3-H1141/S34

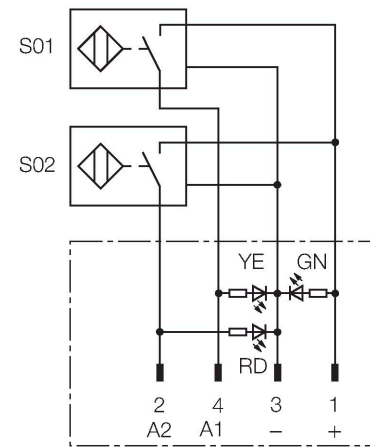
Inductive Sensor – Monitoring Kit for Power Clamps



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



Technical data

Type	BI2-Q5.5-0.05-BDS-2AP6X3-H1141/S34
ID	1613008
Special version	S34 corresponds to: Weld-field immune proximity sensors
General data	
Rated switching distance	2 mm
Mounting conditions	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_o	≤ 1.8 V
Wire breakage/Reverse polarity protection	Complete
Output function	4-wire, NO contact, PNP
Smallest operating current	≥ 1 mA

Functional principle

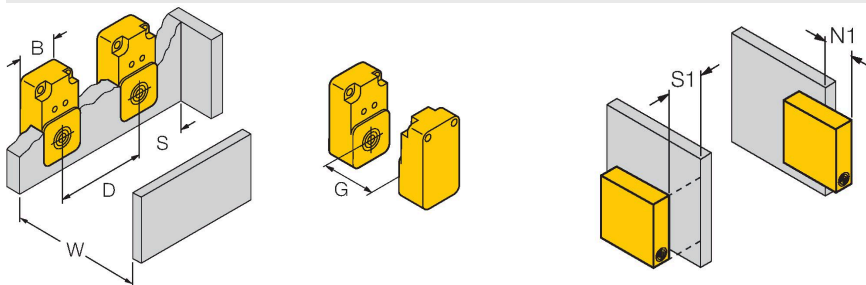
TURCK offers special monitoring kits, consisting of two miniature sensors, as a convenient solution for "Open/Closed" detection on pneumatic power clamps. This product line provides almost unlimited combination possibilities, comprising four different power blocks and over 40 different modular sensor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

Technical data

Switching frequency	0.03 kHz
Mechanical data	
Design	Monitoring kit for power clamps, Q5,5
Dimensions	47 x 18 x 18 mm
Housing material	Metal, Trogamit
Active area material	Plastic, PP-GF20
Electrical connection	Connector, M12 x 1
Cable quality	Ø 3 mm, Gray, LIF2X11XFHF, TPU, 0.05 m
	Flame retardant acc. to VDE 0472, part 804B
Core cross-section	3 x 0.14 mm ²
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 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 St37.