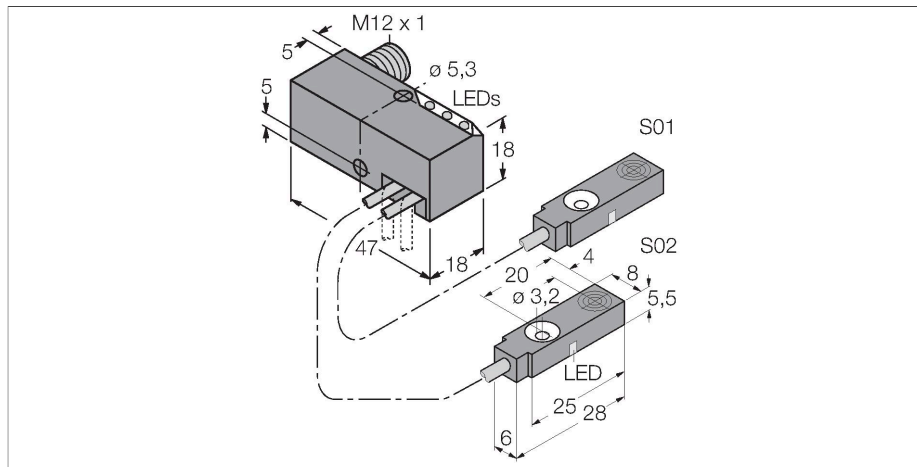


BI2-Q5.5-0.27-BS-2AP6X3-H1141/S34

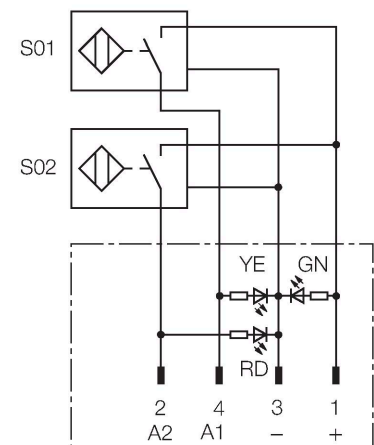
Inductive Sensor – Monitoring Kit for Power Clamps



Features

- Power block with two connected sensors and LEDs
- Relocatable block 0°...90°, with cross drilling for flexible cable routing
- Plastic, PBT-GF20-V0
- 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	BI2-Q5.5-0.27-BS-2AP6X3-H1141/S34
ID	1613006
Special version	S34 corresponds to: Resistant to magnetic fields
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
Switching frequency	0.03 kHz

Technical data

Mechanical data	
Design	Monitoring Kit for Spanners, Q5,5
Dimensions	47 x 18 x 18 mm
Housing material	Metal, PBT-GF20-V0
Active area material	Plastic, PP-GF20
Electrical connection	Connector, M12 x 1
Cable quality	Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.27 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 x LEDs, Yellow/red

Mounting instructions

Mounting instructions/Description															
	<table border="1"> <tbody> <tr> <td>Distance D</td> <td>3 x B</td> </tr> <tr> <td>Distance W</td> <td>3 x Sn</td> </tr> <tr> <td>Distance S</td> <td>1.5 x B</td> </tr> <tr> <td>Distance G</td> <td>6 x Sn</td> </tr> <tr> <td>Distance N</td> <td>2 x Sn</td> </tr> <tr> <td>Width active area</td> <td>6.5 mm</td> </tr> <tr> <td>B</td> <td></td> </tr> </tbody> </table> <p>Please note, non-flush mounting of this sensor is obligatory.</p> <p>The following conditions allow semi-flush mounting:</p> <p>N1 = 0 mm and S1 = 1 mm or N1 = 1 mm and S1 = 0 mm These values apply for mounting in aluminium</p> <p>N1 = 0 mm and S1 = 5 mm or N1 = 5 mm and S1 = 0 mm These values apply for mounting in St37.</p>	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	6.5 mm	B	
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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

