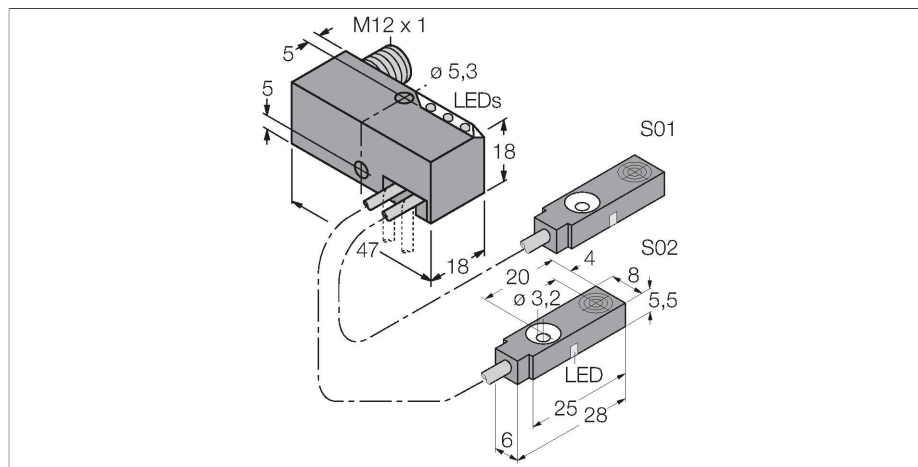


BI2-Q5.5-0.27-BS-2AP6X3-H1141/S34

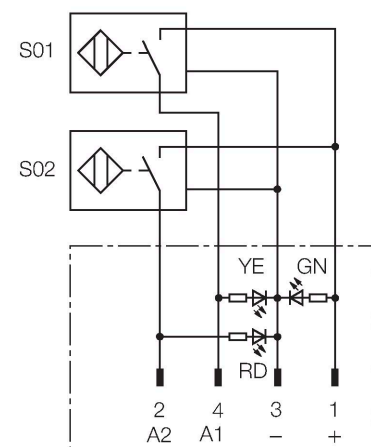
Inductive Sensor – Monitoring Kit for Power Clamps



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	$\leq (0.81 \times S_n) \text{ mm}$
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 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	$\leq 10 \% U_{Bmax}$
DC rated operating current I_o	$\leq 150 \text{ mA}$
No-load current	$\leq 20 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
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
Mechanical data	
Design	Monitoring Kit for Spanners, Q5,5

Technical data

Dimensions	47 x 18 x 18 mm
Housing material	Plastic, PBT-GF20-V0
Active area material	Plastic, PP-GF20
Electrical connection	Connector, M12 × 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 x0.05 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	$3 \times B$
Distance W	$3 \times S_n$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance N	$2 \times S_n$
Width active area	6.5 mm
B	

Please note, non-flush mounting of this sensor is obligatory.

The following conditions allow semi-flush mounting:

$N1 = 0 \text{ mm}$ and $S1 = 1 \text{ mm}$ or

$N1 = 1 \text{ mm}$ and $S1 = 0 \text{ mm}$

These values apply for mounting in aluminium

$N1 = 0 \text{ mm}$ and $S1 = 5 \text{ mm}$ or

$N1 = 5 \text{ mm}$ and $S1 = 0 \text{ mm}$

These values apply for mounting in St37.

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

