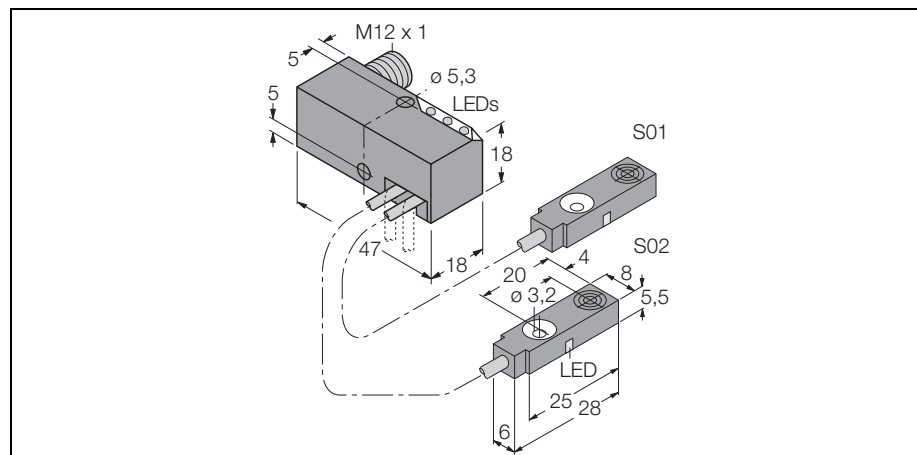


**inductive sensor**  
**power clamp monitor**  
**Bi2-Q5,5-0,27-BS-2AP6X3-H1141/S34**

**TURCK**

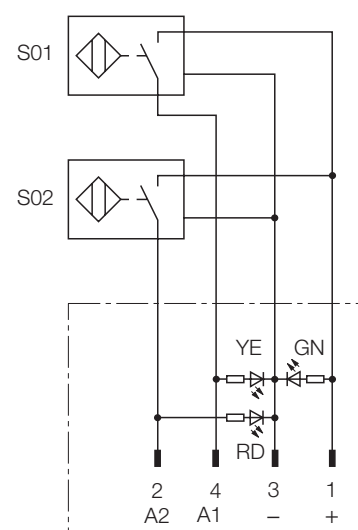
Industrial  
Automation



<b>Type</b>	Bi2-Q5,5-0,27-BS-2AP6X3-H1141/S34
Ident-No.	1613006
<b>Rated operating distance Sn</b>	2 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n) \text{ mm}$
Correction factors	$St37 = 1, V2A \sim 0.7, Ms \sim 0.4, Al \sim 0.3$
Repeatability	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3... 15 %
Ambient temperature	-25... + 70 °C
<b>Operating voltage</b>	10... 30VDC
Residual ripple	$\leq 10 \% U_{ss}$
DC rated operational current	$\leq 150 \text{ mA}$
No-load current $I_0$	$\leq 20 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Rated insulation voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes / cyclic
Voltage drop at $I_e$	$\leq 1.8 \text{ V}$
Wire breakage / Reverse polarity protection	yes / complete
Output function	4-wire, normally open, pnp
Switching frequency	$\leq 0.03 \text{ kHz}$
<b>Housing</b>	monitoring kit for clamping technology, Q5.5
Dimensions	47 x 18 x 18 mm
Housing material	plastic, PBT-GF20-V0
Material active face	plastic, PP-GF20
Connection	connectors, M12 x 1
Cable quality	Ø 2, grey, Lif9Y-11Y, PUR, 0.27 m
Cable cross section:	3 x 0.08mm <sup>2</sup>
Litz wire	40 x 0.05mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
<b>Operating voltage display</b>	LED green
Display switch state	2 x LED yellow / red

- power block with two connected sensors and LED's
- adaptable block position, 0°...90°, with cross drilling for flexible cable orientation
- Plastic, PBT-GF20-V0
- magnetic field immunity (welding resistance) to DC and AC fields
- 2 x normally open, pnp output
- 4-wire DC, 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 forty different modular sensor types.

**inductive sensor  
power clamp monitor  
Bi2-Q5,5-0,27-BS-2AP6X3-H1141/S34**

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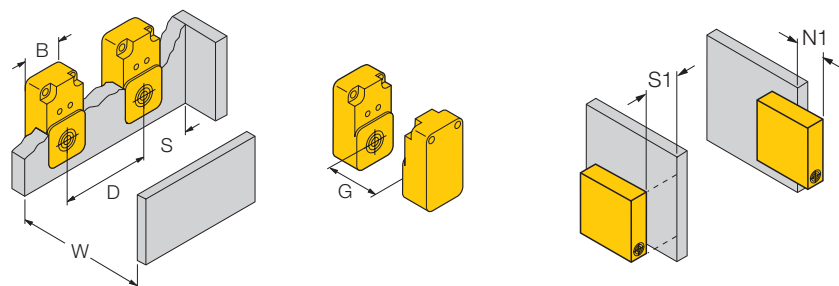
Industrial  
Automation

**Mounting instructions**

	minimum distances
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 of the active face B**

6.5 mm



**Care has to be taken that this sensor is non-flush mounted.**

Partial flush mounting is also possible under the following conditions:

Distance N1 = 0 mm and simultaneous distance S1 = 1 mm or

Distance N1 = 1 mm and simultaneous distance S1 = 0 mm

The values are valid for mounting in aluminium.

Distance N1 = 0 mm and simultaneous distance S1 = 5 mm or

Distance N1 = 5 mm and simultaneous distance S1 = 0 mm

The values are valid for mounting in St37.