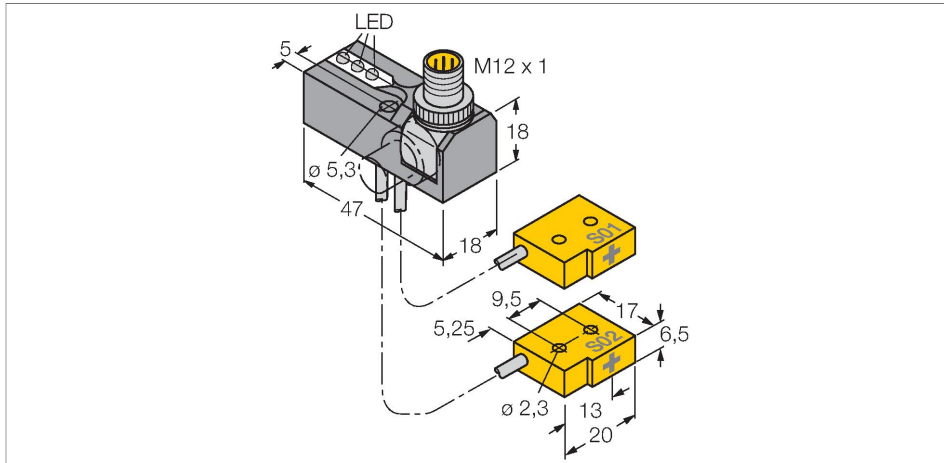


NI2-Q6.5-0.16-BDS-2AP6X3-H1141/S34

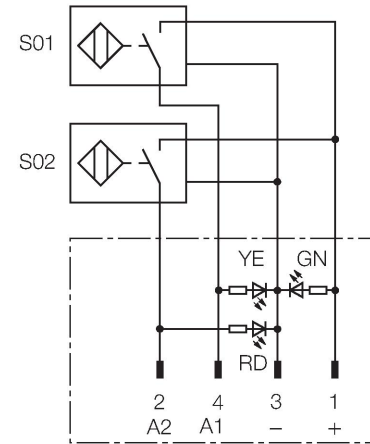
Inductive Sensor – Monitoring Kit for Power Clamps



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



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	NI2-Q6.5-0.16-BDS-2AP6X3-H1141/S34
ID	1650110
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	St37 = 1; Al = 0.7; stainless steel = 0.75; Ms = 0.45
Repeat accuracy	$\leq 2 \text{ \%}$ of full scale
Temperature drift	$\leq \pm 10 \text{ \%}$
Hysteresis	3...15 %
Electrical data	
Operating voltage U_s	10...30 VDC
Ripple U_{rs}	$\leq 10 \text{ \% } U_{Bmax}$
DC rated operating current I_s	$\leq 150 \text{ mA}$
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_s	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	Complete
Output function	4-wire, NO contact, PNP
Smallest operating current	$\geq 1 \text{ mA}$

Technical data

Switching frequency	0.03 kHz
Mechanical data	
Design	Monitoring kit for power clamps, Q6,5
Dimensions	47 x 18 x 18 mm
Housing material	Plastic, Trogamit
Active area material	Plastic, PP GR-20
Electrical connection	Connector, M12 × 1
Cable quality	Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.16 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
Included in delivery	Screw M5 x 25 DIN 912

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.	