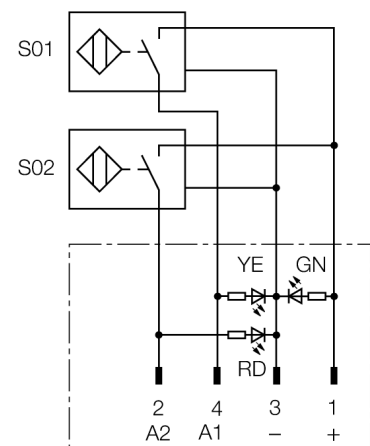


**Inductive sensor  
power clamp monitor  
NI2-Q9,5-AP6-0,3-FS4.4X3/S304**

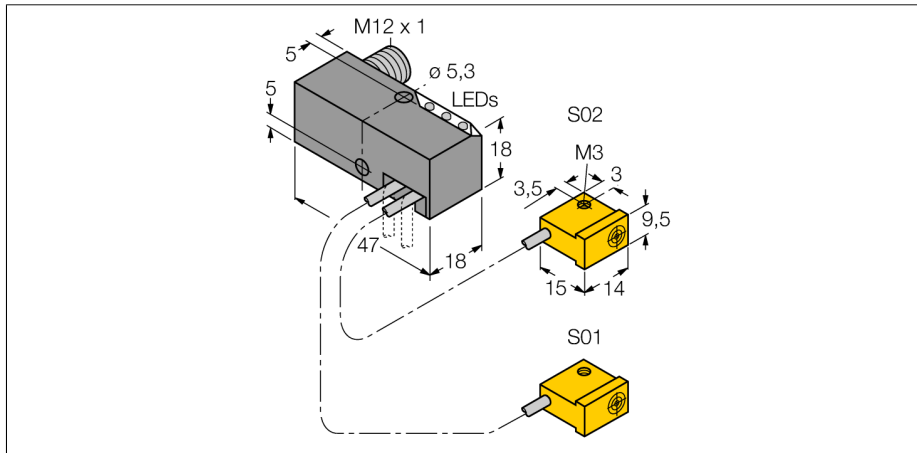
- Q9.5 power block with two connected sensors and LEDs
- Adaptable block position 0°...90°, with cross drilling for flexible cable routing
- Plastic, PP GR-20
- Magnetic field immune (weld-resistant) to DC and AC fields
- 2 x NO contacts, PNP output
- DC 4-wire, 10...30 VDC

**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 forty different modular sensor types.



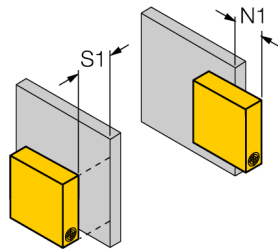
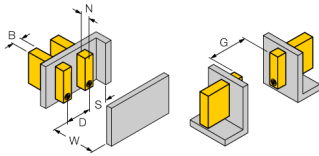
<b>Type</b>	NI2-Q9,5-AP6-0,3-FS4.4X3/S304
Ident-No.	1650106
<b>Rated operating distance Sn</b>	2 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	≤ 2 %
Temperaturdrift	10
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 150 mA
No-load current <sub>I<sub>0</sub></sub>	≤ 20 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at <sub>I<sub>0</sub></sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	4-wire, NO contact, PNP
Smallest operating current <sub>I<sub>m</sub></sub>	≤ 1 mA
Switching frequency	≤ 0.03 kHz
<b>Design</b>	monitoring kit for clamping technology, Q9.5
Dimensions	47 x 18 x 18 mm
Housing material	Plastic, PBT-GF20-V0
Material active face	Plastic, PP GR-20
Connection	connector, M12 x 1
Cable quality	2 mm, grey, Lif9Y-11Y, PUR, 0.3
Cable cross section	3 x 0.08 mm <sup>2</sup>
Litz wire	40x0.05mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283years acc. to SN 29500 (Ed. 99) 40 °C
<b>Operating voltage</b>	LED green
Switching state	2 x LEDs yellow / red

**Inductive sensor  
power clamp monitor  
NI2-Q9,5-AP6-0,3-FS4.4X3/S304**

Mounting instructions	minimum distances
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

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<b>Width of the active face B</b>	6.5 mm
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**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.