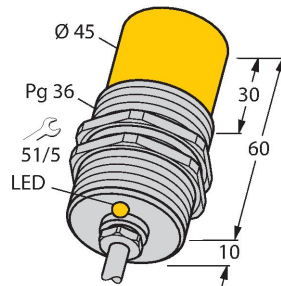


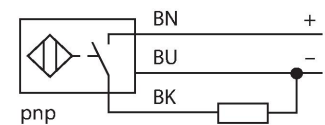
NI25-G47-AP4X Inductive Sensor



Features

- Threaded barrel, PG36
- Chrome-plated brass
- DC 3-wire, 10...65 VDC
- NO contact, PNP output
- Cable connection

Wiring diagram



Technical data

Type	NI25-G47-AP4X
ID	15646
General data	
Rated switching distance	25 mm
Mounting conditions	Non-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 U_B	10...65 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_o	≤ 200 mA
No-load current	≤ 15 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 break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.1 kHz
Mechanical data	
Design	Threaded barrel, G47
Dimensions	70 mm
Housing material	Metal, CuZn, Chrome-plated

Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

Technical data

Active area material	Plastic, PA12-GF30
End cap	Plastic, PA66-GF25
Max. tightening torque of housing nut	90 Nm
Electrical connection	Cable
Cable quality	Ø 6.3 mm, LiÖlflex, Ölflex®, 2 m
Core cross-section	3 x 0.5 mm ²
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
Switching state	LED

Mounting instructions

Mounting instructions/Description

The image contains three technical diagrams illustrating the mounting of a sensor. The top diagram shows a side view of a sensor mounted on a plate, with dimension T indicating the distance from the sensor face to the mounting surface. The middle diagram shows a top view of two sensors mounted on a plate, with dimension G indicating the distance between the sensor faces. The bottom diagram shows a front view of a sensor mounted on a plate, with dimensions N, S, D, W, and B indicating various mounting parameters.

Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance N	40 mm
Diameter active area B	$\varnothing 47 \text{ mm}$

Accessories

MW47

69452

Mounting bracket; material: Steel
plate, galvanized

