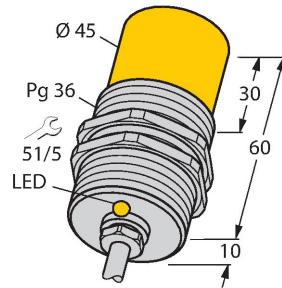


NI25-G47-AP4X

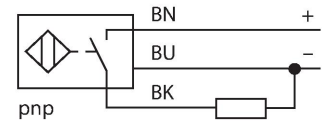
Inductive Sensor



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_{rs}	≤ 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

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

Mechanical data	
Design	Threaded barrel, G47
Dimensions	70 mm
Housing material	Metal, CuZn, Chrome-plated
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

Technical drawing showing three views of a mounting bracket. The top view shows a side profile with dimension T. The middle view shows a top-down perspective with dimension G. The bottom view shows a front perspective with dimensions N, S, D, and W.

Technical drawing showing a front perspective view of the mounting bracket with dimensions N, S, D, and W.

Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	40 mm
Diameter active area B	Ø 47 mm

NI25-G47-AP4X| 02/21/2025 13-11 | technical changes reserved

Accessories

MW47

69452

Mounting bracket; material: Steel
plate, galvanized

