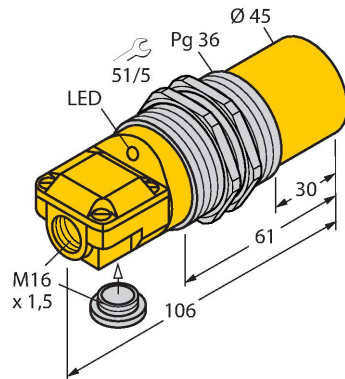


NI40-G47SR-VN4X2

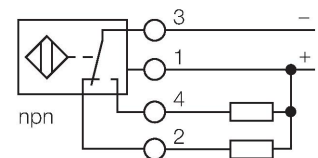
Inductive Sensor



Features

- 2 cable entries (axial, radial)
- Threaded barrel, Pg36
- Chrome-plated brass
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- Terminal chamber

Wiring diagram



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

Type	NI40-G47SR-VN4X2
ID	15750
General data	
Rated switching distance	40 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	4-wire, Complementary contact, NPN
Switching frequency	0.1 kHz
Mechanical data	
Design	Threaded barrel, G47
Dimensions	106 mm
Housing material	Metal, CuZn, Chrome-plated

Technical data

Active area material	Plastic, PA12-GF30
Max. tightening torque of housing nut	90 Nm
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm²
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	LED, Yellow
Included in delivery	cable gland, blanking plug

Mounting instructions

Mounting instructions/Description

The image contains three technical diagrams illustrating the mounting of a cable gland.

1. The top diagram is a side view showing a cable gland (yellow) being inserted into a hole in a mounting plate (grey). A dimension line labeled 'T' indicates the distance from the inner edge of the hole to the center of the gland.

2. The middle diagram is a side view showing the gland (yellow) being tightened onto a cable (grey). A dimension line labeled 'G' indicates the distance from the cable to the mounting plate.

3. The bottom diagram is a perspective view showing the gland (yellow) mounted on a plate (grey). Several dimension lines are shown: 'N' for the distance from the top edge of the plate to the top of the gland, 'S' for the distance from the bottom edge of the plate to the bottom of the gland, 'D' for the distance from the front edge of the plate to the front of the gland, and 'W' for the width of the plate.

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

Accessories

MW47

69452

Mounting bracket; material: Steel
plate, galvanized

