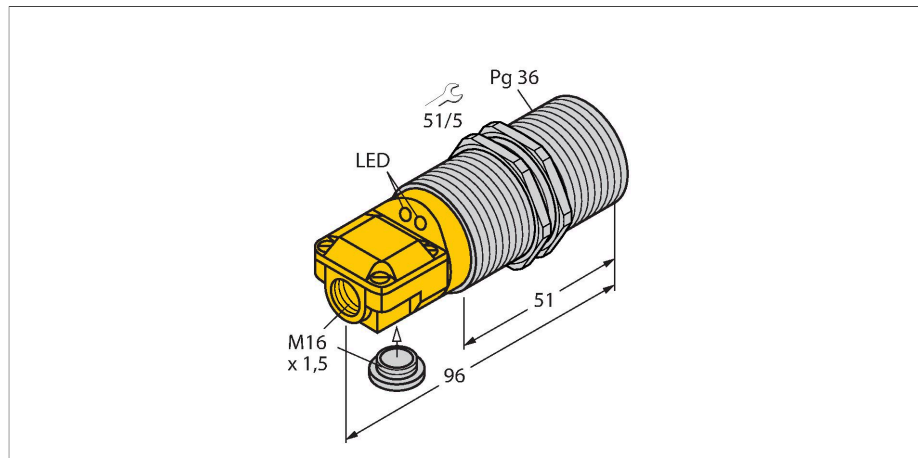


BI25-G47SR-FZ3X2

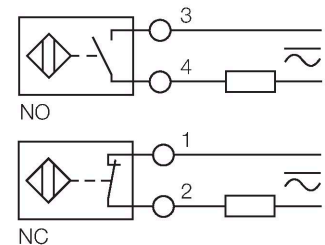
Inductive Sensor



Features

- 2 cable entries (axial, radial)
- Threaded barrel, Pg36
- Chrome-plated brass
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NC/NO programmable
- Terminal chamber

Wiring diagram

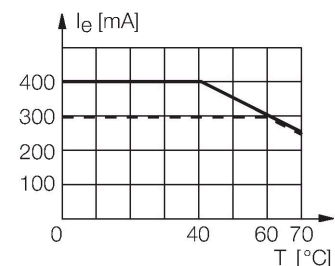


Technical data

Type	BI25-G47SR-FZ3X2
ID	13427
General data	
Rated switching distance	25 mm
Mounting conditions	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	20...250 VAC
Operating voltage U_B	10...300 VDC
AC rated operational current	≤ 400 mA
DC rated operating current I_o	≤ 300 mA
Frequency	$\geq 50... \leq 60$ Hz
Residual current	≤ 1.7 mA
Isolation test voltage	1.5 kV
Surge current	≤ 8 A (≤ 10 ms max. 5 Hz)
Voltage drop at I_o	≤ 6 V
Output function	2-wire, Connection programmable, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz
Mechanical data	
Design	Threaded barrel, G47
Dimensions	96 mm

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

Housing material	Metal, CuZn, Chrome-plated
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, Red
Included in delivery	cable gland, blanking plug

Mounting instructions

Mounting instructions/Description

The image contains three technical diagrams illustrating the mounting of a device. The top diagram shows a side view of a single unit with a dimension line labeled 'T' indicating the thickness of the mounting plate. The middle diagram shows two units with a dimension line labeled 'G' indicating the distance between the centers of the mounting holes. The bottom diagram shows a top view of two units with dimension lines labeled 'D' (distance between mounting holes), 'S' (distance from the edge to the mounting hole), and 'W' (width of the mounting plate).

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 47 mm

Accessories

MW47

69452

Mounting bracket; material: Steel
plate, galvanized

