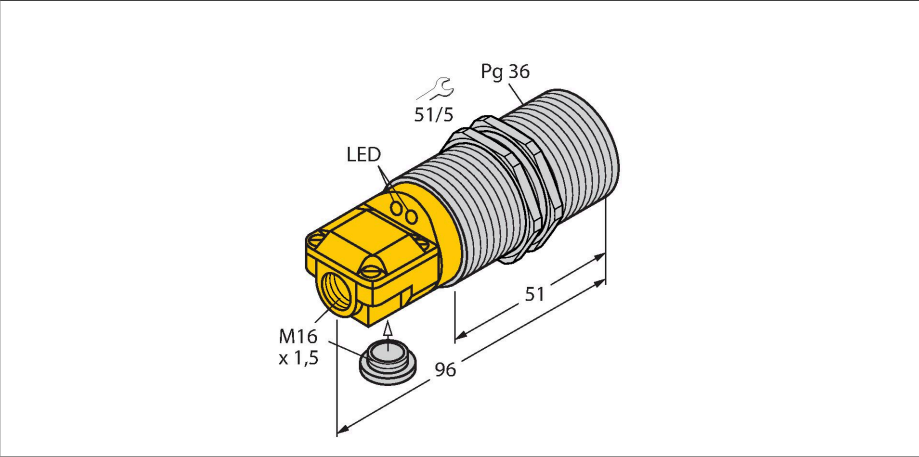


BI25-G47SR-VN4X2

Inductive Sensor



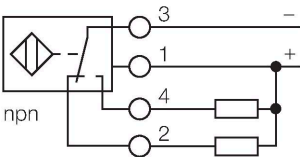
Technical data

Type	BI25-G47SR-VN4X2
ID	15748
General data	
Rated switching distance	25 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±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	96 mm
Housing material	Metal, CuZn, Chrome-plated

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

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 drawings of a cable gland assembly. The top drawing is a side view showing a square flange with a central hole and a threaded rod passing through it. Dimension T is indicated as the distance from the center of the hole to the edge of the flange. The middle drawing is a top view showing two L-shaped brackets with threaded rods. Dimension G is indicated as the distance between the centers of the two rods. The bottom drawing is a perspective view showing a rectangular plate with two holes and a threaded rod passing through one of them. Dimension D is the distance between the centers of the two holes, S is the distance from the center of the hole to the edge of the plate, and W is the width of the 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

