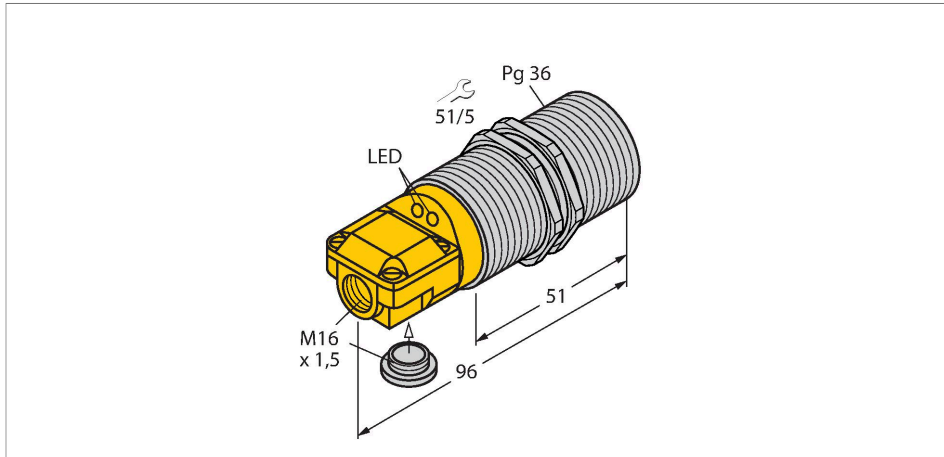


# BI25-G47SR-VN4X2

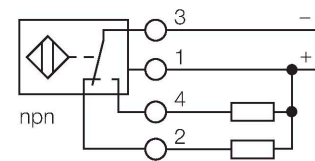
## Inductive Sensor



### 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



### Technical data

|   |   |
|---|---|
| Type                                      | BI25-G47SR-VN4X2                                    |
| Ident. no.                                | 15748   |
| 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                           | $\leq 2\%$ of full scale                            |
| Temperature drift                         | $\leq \pm 10\%$                                     |
| Hysteresis                                | 3...15 %  |
| Ambient temperature                       | -25...+70 °C  |
| Operating voltage                         | 10...65 VDC   |
| Residual ripple                           | $\leq 10\% U_s$                                     |
| DC rated operational current              | $\leq 200$ mA                                       |
| No-load current                           | $\leq 15$ mA  |
| Residual current                          | $\leq 0.1$ mA                                       |
| Isolation test voltage                    | $\leq 0.5$ kV                                       |
| Short-circuit protection                  | yes / Cyclic  |
| Voltage drop at $I_e$                     | $\leq 1.8$ V  |
| Wire breakage/Reverse polarity protection | yes / Complete                                      |
| Output function                           | 4-wire, Complementary contact, NPN                  |
| Switching frequency                       | 0.1 kHz   |
| Design                                    | Threaded barrel, G47                                |
| Dimensions                                | 96 mm   |
| Housing material                          | Metal, CuZn, Chrome-plated                          |

### Functional principle

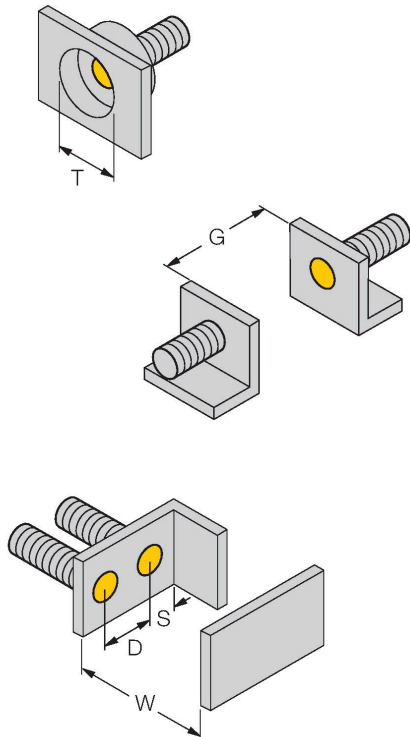
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

## Technical data

|                                    |  |
|------------------------------------|--|
| Active area material               | Plastic, PA12-GF30                         |
| Max. tightening torque housing nut | 90 Nm                                      |
| Electrical connection              | Terminal chamber                           |
| Clamping ability                   | ≤ 2.5 mm <sup>2</sup>                      |
| 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



|                      |         |
|----------------------|---------|
| 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 | Ø 47 mm |
| B                    |         |

## Accessories

MW47

69452

Mounting bracket; material: Steel  
plate, galvanized