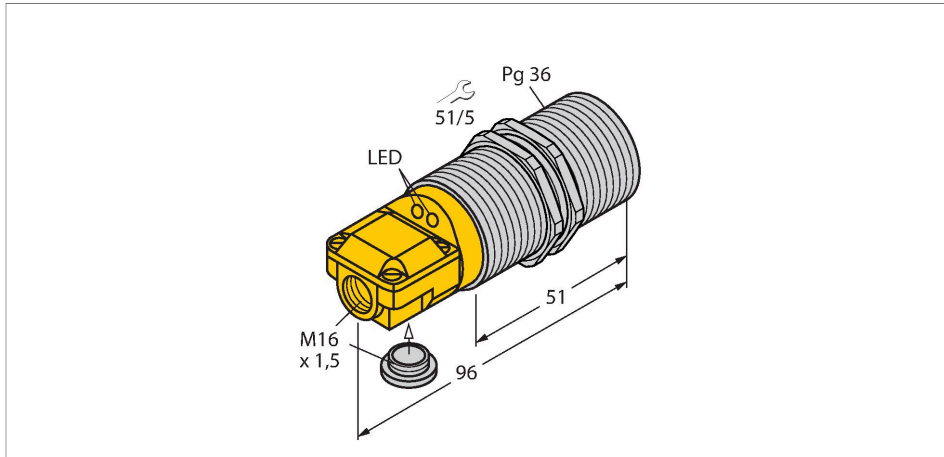


# BI25-G47SR-VP4X2

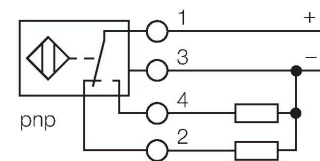
## Inductive Sensor



### Features

- 2 cable entries (axial, radial)
- Threaded barrel, Pg36
- Chrome-plated brass
- DC 4-wire, 10...65 VDC
- Changeover contact, PNP 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                                      | BI25-G47SR-VP4X2                                    |
| ID  | 15648   |
| <b>General data</b>                       |   |
| 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 %  |
| <b>Electrical data</b>                    |   |
| Operating voltage                         | 10...65 VDC   |
| Residual ripple                           | $\leq 10$ % $U_{ss}$                                |
| DC rated operational current              | $\leq 200$ mA                                       |
| No-load current                           | 15 mA   |
| Residual current                          | $\leq 0.1$ mA                                       |
| Isolation test voltage                    | $\leq 0.5$ kV                                       |
| Short-circuit protection                  | yes / Cyclic  |
| Voltage drop at $I_o$                     | $\leq 1.8$ V  |
| Wire breakage/Reverse polarity protection | yes / Complete                                      |
| Output function                           | 4-wire, Complementary contact, PNP                  |
| Switching frequency                       | 0.1 kHz   |

## Technical data

| Mechanical data                       |  |
|---------------------------------------|--|
| Design                                | Threaded barrel, G47                       |
| Dimensions                            | 96 mm                                      |
| 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 mm <sup>2</sup>                      |
| 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



|            |       |
|------------|-------|
| 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

