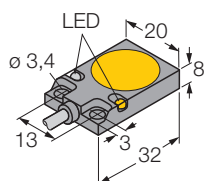


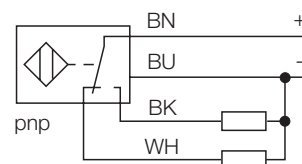
## Inductive sensor

### Bi7-Q08-VP6X2



- rectangular, height 8 mm
- top active face
- metal, GD-Zn
- 4-wire DC, 10...30 VDC
- SPDT, pnp output
- cable connection

#### Wiring diagram



#### Function principles

Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

|                                                     |                            |
|-----------------------------------------------------|----------------------------|
| <b>Type</b>                                         | Bi7-Q08-VP6X2              |
| Ident-No.                                           | 1600900                    |
| <b>Rated operating distance Sn</b>                  | 7 mm                       |
| Mounting mode                                       | flush                      |
| Hysteresis (switching distance)                     | 3... 15 %                  |
| Min. repeat accuracy                                | ≤ 2 %                      |
| Temperature drift                                   | ≤ ± 10 %                   |
| Operating temperature                               | -25 ...+ 70 °C             |
| <b>Rated operational voltage (DC) U<sub>B</sub></b> | 10... 30 VDC               |
| Max. ripple                                         | ≤ 10 % U <sub>pp</sub>     |
| Rated operational current (DC) I <sub>e</sub>       | ≤ 200 mA                   |
| No-load current I <sub>0</sub>                      | ≤ 15 mA                    |
| Max. OFF-state current                              | ≤ 0,1 mA                   |
| Max. switching frequency                            | ≤ 1 kHz                    |
| Rated insulation voltage                            | ≤ 0,5 kV                   |
| Output function                                     | 4-wire, complementary, PNP |
| Short-circuit protection                            | yes, cyclic                |
| Max. voltage drop at I <sub>e</sub>                 | ≤ 1,8 V                    |
| Wire breakage / reverse polarity protection         | yes / complete             |
| <b>Housing style</b>                                | rectangular; Q08           |
| Dimensions                                          | 32 x 20 x 8 mm             |
| Housing material                                    | metal, GD-Zn               |
| Active face                                         | plastic, PA12-GF30         |
| Wiring                                              | cable                      |
| Cable                                               | Ø 5,2, LifYY, PVC, 2 m     |
| Cable cross section                                 | 4 x 0,25 mm <sup>2</sup>   |
| Vibration resistance                                | 55 Hz (1 mm)               |
| Shock resistance                                    | 30 x g (11 ms)             |
| Degree of protection                                | IP67                       |
| <b>Supply voltage indication</b>                    | LED green                  |
| Switching status indication                         | LED yellow                 |

## Inductive sensor

### Bi7-Q08-VP6X2

---

**Mounting instructions**

|       |             |
|-------|-------------|
|       | minimum gap |
| Gap D | 2 x B       |
| Gap W | 3 x Sn      |
| Gap S | 1 x B       |
| Gap G | 6 x Sn      |

---

**Width of active face B**20 mm

---

