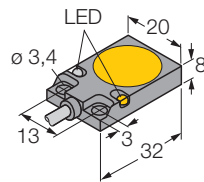


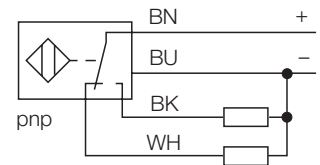
## Inductive sensor

### Bi5-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>                                            | Bi5-Q08-VP6X2                       |
| Ident-No.                                              | 16001                               |
| <b>Rated operating distance <math>S_n</math></b>       | 5 mm                                |
| Mounting mode                                          | flush                               |
| Hysteresis (switching distance)                        | 3... 15 %                           |
| Min. repeat accuracy                                   | $\leq 2 \%$                         |
| Temperature drift                                      | $\leq \pm 10 \%$                    |
| Operating temperature                                  | -25 ... + 70 °C                     |
| <b>Rated operational voltage (DC) <math>U_B</math></b> | 10... 30 VDC                        |
| Max. ripple                                            | $\leq 10 \% U_{pp}$                 |
| Rated operational current (DC) $I_e$                   | $\leq 200 \text{ mA}$               |
| No-load current $I_0$                                  | $\leq 15 \text{ mA}$                |
| Max. OFF-state current                                 | $\leq 0,1 \text{ mA}$               |
| Max. switching frequency                               | $\leq 1 \text{ kHz}$                |
| Rated insulation voltage                               | $\leq 0,5 \text{ kV}$               |
| Output function                                        | 4-wire, complementary, PNP          |
| Short-circuit protection                               | yes, cyclic                         |
| Max. voltage drop at $I_e$                             | $\leq 1,8 \text{ V}$                |
| 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                                                  | $\varnothing 5,2$ , 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

### Bi5-Q08-VP6X2

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**Mounting instructions**

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

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**Width of active face B**20 mm

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