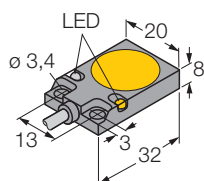
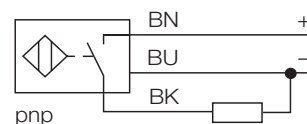


## Inductive sensor magnetic-field immune Bi5-Q08-AP6X2/S34



- rectangular, height 8 mm
- top active face
- metal, GD-Zn
- magnetic-field immunity (welding resistance) to AC and DC fields
- 3-wire DC, 10...30 VDC
- normally open 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. Magnetic field sensors incorporate a special ferrite core which make them immune to magnetic AC and DC fields. They may thus be used in welding applications.

|                                                        |                                    |
|--------------------------------------------------------|------------------------------------|
| <b>Type</b>                                            | Bi5-Q08-AP6X2/S34                  |
| Ident-No.                                              | 16008                              |
| <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                                        | 3-wire, normally open, 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                                                  | $\varnothing 5,2$ , LiYY, PVC, 2 m |
| Cable cross section                                    | 3 x 0,34 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 magnetic-field immune BI5-Q08-AP6X2/S34

| Mounting instructions         | minimum gap    |
|-------------------------------|----------------|
| Gap D                         | $2 \times B$   |
| Gap W                         | $3 \times S_n$ |
| Gap S                         | $1 \times B$   |
| Gap G                         | $6 \times S_n$ |
| <b>Width of active face B</b> | 20 mm          |

