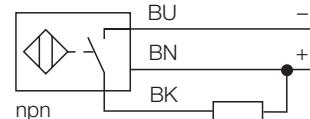


- rectangular, height 8 mm
- top active face
- metal, die-cast zinc
- factor 1 for all metals
- magnetic field immune
- extended temperature range
- high switching frequency
- 3-wire DC, 10...30 VDC
- normally open npn output
- cable connection

#### Wiring diagram



#### Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. Due to a ferrite-less 3-coil system, uprox factor 1 sensors have distinct advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

|   |                            |
|---|----------------------------|
| <b>Type</b>                                 | Bi5U-Q08-AN6X2             |
| Ident-No.                                   | 1608911                    |
| <b>Rated operating distance Sn</b>          | 5 mm                       |
| Mounting condition                          | flush                      |
| Assured sensing range                       | (0,81 x Sn) mm             |
| Repeatability                               | 2 %                        |
| Temperature drift                           | ± 10 %                     |
| Hysteresis                                  | ± 15 %, -25 °C v ≥ +70 °C  |
| Ambient temperature                         | 3...15 %<br>-30...+85 °C   |
| <b>Operating voltage</b>                    | 10...30VDC                 |
| Residual ripple                             | 10 % U <sub>ss</sub>       |
| DC rated operational current                | 200 mA                     |
| No-load current I <sub>0</sub>              | 15 mA                      |
| Residual current                            | 0.1 mA                     |
| Rated insulation voltage                    | 0.5 kV                     |
| Short-circuit protection                    | yes / cyclic               |
| Voltage drop at I <sub>e</sub>              | 1.8V                       |
| Wire breakage / Reverse polarity protection | yes / complete             |
| Output function                             | 3-wire, normally open, npn |
| Insulation class                            |                            |
| Switching frequency                         | 0.25 kHz                   |
| <b>Housing</b>                              | rectangular, Q08           |
| Dimensions                                  | 32 x 20 x 8 mm             |
| Housing material                            | metal, GD-Zn, black        |
| Material active face                        | plastic, LCP-GF30, yellow  |
| Connection                                  | cable                      |
| Cable quality                               | Ø 4, LifY-11Y, PUR, 2 m    |
| Cable cross section:                        | 3 x 0.25mm <sup>2</sup>    |
| Vibration resistance                        | 55 Hz (1 mm)               |
| Shock resistance                            | 30g (11 ms)                |
| Degree of protection                        | IP67                       |
| <b>Operating voltage display</b>            | LED green                  |
| Display switch state                        | LED yellow                 |

**Mounting instructions**

|            |                   |
|------------|-------------------|
| Distance D | minimum distances |
|            | 40 MM             |
| Distance W | 15 MM             |
| Distance G | 30 MM             |

**Width of the active face B**

20 mm

