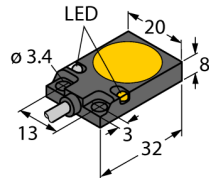
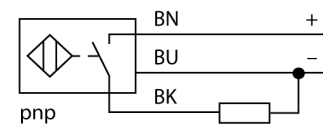


**Inductive sensor  
With Extended Switching Distance  
BI5U-Q08-AP6X2**



- Rectangular, height 8 mm
- Active face on top
- Metall, zinc die casting
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

**Wiring Diagram**



**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. *uprox®* Factor 1 sensors have significant advantages due to their patented ferrite-coreless multicoil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

|                                           |                                                                      |
|-------------------------------------------|----------------------------------------------------------------------|
| <b>Type designation</b>                   | BI5U-Q08-AP6X2                                                       |
| Ident-No.                                 | 1608901                                                              |
| <b>Rated switching distance Sn</b>        | 5 mm                                                                 |
| Mounting conditions                       | Flush                                                                |
| Secured operating distance                | $\leq (0,81 \times S_n)$ mm                                          |
| Repeat accuracy                           | $\leq 2 \%$ of full scale                                            |
| Temperature drift                         | $\leq \pm 10 \%$                                                     |
| Hysteresis                                | $\leq \pm 15 \%, \leq -25^\circ\text{C} \vee \geq +70^\circ\text{C}$ |
| Ambient temperature                       | $3...15^\circ\text{C}$<br>$-30...+85^\circ\text{C}$                  |
| <b>Operating voltage</b>                  | 10...30 VDC                                                          |
| Residual ripple                           | $\leq 10 \%$ $U_{ss}$                                                |
| DC rated operational current              | $\leq 200$ mA                                                        |
| No-load current $I_o$                     | $\leq 15$ 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                           | 3-wire, NO contact, PNP                                              |
| Protection class                          | IP67                                                                 |
| Switching frequency                       | 0.25 kHz                                                             |
| <b>Design</b>                             | Rectangular, Q08                                                     |
| Dimensions                                | 32 x 20 x 8 mm                                                       |
| Housing material                          | Metal, GD-Zn, Black-finished                                         |
| Active area material                      | Plastic, PPA, yellow                                                 |
| Electrical connection                     | Cable                                                                |
| Cable quality                             | 4mm, LifY-11Y, PUR, 2                                                |
| Cable cross section                       | 3 x 0.25 mm <sup>2</sup>                                             |
| Vibration resistance                      | 55 Hz (1 mm)                                                         |
| Shock resistance                          | 30 g (11 ms)                                                         |
| Protection class                          | IP67                                                                 |
| MTTF                                      | 874 years acc. to SN 29500 (Ed. 99) 40 °C                            |
| Packaging unit                            | 1                                                                    |
| <b>Power-on indication</b>                | LED, Green                                                           |
| Switching state                           | LED, Yellow                                                          |

**Inductive sensor**  
**With Extended Switching Distance**  
**BI5U-Q08-AP6X2**

|            |       |
|------------|-------|
| Distance D | 40 mm |
| Distance W | 15 mm |
| Distance G | 30 mm |

|                     |       |
|---------------------|-------|
| Width active area B | 17 mm |
|---------------------|-------|

