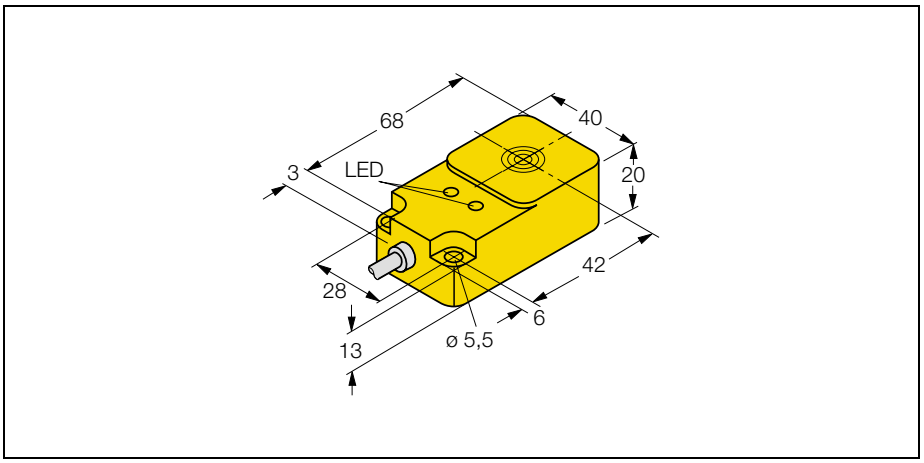
# Inductive sensor uprox®

## Bi15U-Q20-AP6X2

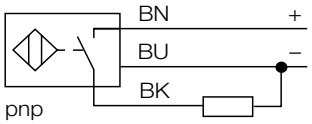



- **Rectangular, height 20mm**
- **Active face on top**
- **Plastic, PBT12-GF30-V0**
- **Factor 1 for all metals**
- **Magnetic field immune**
- **Increased temperature range**
- **High switching frequency**

| | |
|---|---|
| **Type** | Bi15U-Q20-AP6X2 |
| Ident-No. | 1608800 |
| **Rated operating distance Sn** | 15,0 mm |
| Mounting mode | flush |
| Hysteresis H | 3...15 % |
| Max. relative temperature drift | ≤ 15 % v.E |
| Min. repeat accuracy | ≤ 2 % v.E |
| Operation temperature | -30...85 °C |
| **Rated operational voltage (DC) $U_e$** | 10...30 VDC |
| Max. ripple | ≤ 10 % $U_{ss}$ |
| Rated operational current (DC) $I_e$ | 200 mA |
| No-load current $I_0$ | ≤ 15,0 mA |
| Max. OFF-state current | ≤ 0,1 mA |
| Max. switching frequency | ≤ 0,25 kHz |
| Rated insulation voltage | 0,5 kV |
| Output function | normally open, PNP |
| Short-circuit protection | yes, cyclic |
| Max. voltage drop at $I_e$ | ≤ 1,8 V |
| Wire brakage and reverse polarity protection | yes, complete |
| Degree of protection / protection class | IP 67; 2 |
| **Housing style** | rectangular; Q20 |
| Dimensions | 68,0 x 40,0 x 20,0 mm |
| Housing material | plastic; PBT-GF30-V0 |
| Active face | plastic; PBT-GF30-V0 |
| Wiring | cable |
| Cable | Ø 5,2LifYY; PVC; 2,0 m |
| Cross section | 3 x 0,34 mm$^2$ |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 x g (11 ms) |
| **Supply voltage indication** | LED; grün |
| Switching status indication | LED; yellow |

3-wire DC, 10-30VDC
Normally open, PNP-output
Cable

### Wiring diagram




### Function principles

Inductive sensors serve for wear-free and non contact detection of metal objects. Uprox Factor 1-sensors have considerable advantages because of their patented ferrite-less 3-coil system. They detect all metals with the same operating distance, are magnetic field immune and have high operating distances.

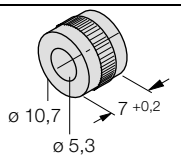
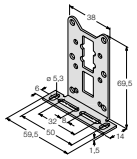


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# Inductive sensor uprox®

## Bi15U-Q20-AP6X2

### Mounting accessories

| Typ | Ident-No. | Text | Dimension drawing |
|---|---|---|---|
| MH-Q20 | 6950010 | For mounting with active face downwards |   |
| MW-Q14/Q20 | 6945006 | Mounting bracket; material V2A 1.4301 |   |



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