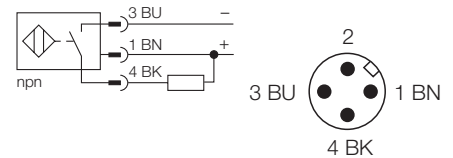


- rectangular, height 20mm
- top active face
- plastic, PBT-GF30-V0
- factor 1 for all metals
- magnetic field immune
- extended temperature range
- high switching frequency
- 3-wire DC, 10..0.30 VDC
- normally open npn output
- connector, M12 x 1

Wiring diagram



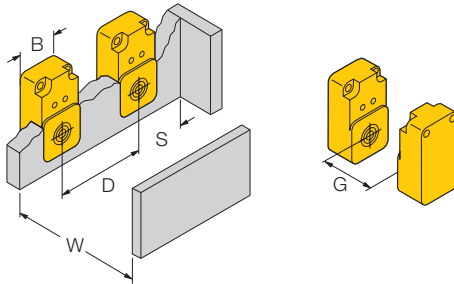
Function principle

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.

| | |
|---------------------------------------------|----------------------------|
| Type | Bi15U-Q20-AN6X2-H1141 |
| Ident-No. | 1608610 |
| Rated operating distance Sn | 15 mm |
| Mounting condition | flush |
| Assured switching distance | ≤ (0,81 x Sn) mm |
| Repetition accuracy | ≤ 2 % |
| Temperature drift | ≤ ± 10 % |
| Hysteresis | 3... 15 % |
| Ambient temperature | -30...+ 85 °C |
| Operating voltage | 10... 30 V DC |
| Residual ripple | ≤ 10 % U _{SS} |
| DC rated operational current | ≤ 200 mA |
| No-load current I ₀ | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Rated insulation voltage | ≤ 0.5 kV |
| Short-circuit protection | yes / cyclic |
| Voltage dip at I _e | ≤ 1.8 V |
| Wire breakage / reverse polarity protection | yes / complete |
| Output function | 3-wire, normally open, npn |
| Insulation class | 2 |
| Switching frequency | ≤ 0.25 kHz |
| Housing style | rectangular; Q20 |
| Dimensions | 68x 40x 20mm |
| Housing material | plastic, PBT-GF30-V0 |
| Material active area | plastic, PBT-GF30-V0 |
| Connection | connector, M12 x 1 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30g (11 ms) |
| Protection degree | IP67 |
| Operating voltage display | LED green |
| Switch state display | LED yellow |

| Mounting instructions | minimum distances |
|------------------------------|-------------------|
| Distance D | 1,5 x B |
| Distance W | 3 x Sn |
| Distance S | 1 x B |
| Distance G | 6 x Sn |

| | |
|-----------------------------------|-------|
| Width of the active area B | 40 mm |
|-----------------------------------|-------|



Accessories

| Type code | Ident-No. | Short text | Dimension drawing |
|------------|-----------|-----------------------------------------|-------------------|
| MH-Q20 | 6950010 | for mounting with active face downwards | |
| MW-Q14/Q20 | 6945006 | mounting bracket; material VA 1.4301 | |