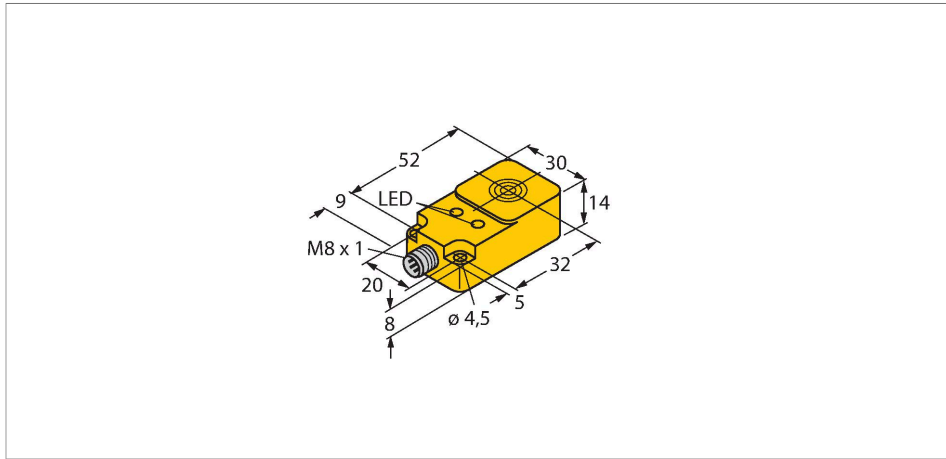


BI10U-Q14-AP6X2-V1131

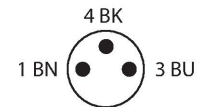
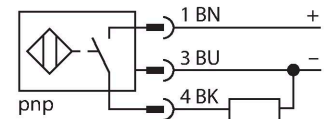
Inductive Sensor – With Increased Switching Distance



Features

- Rectangular, height 14 mm
- Active face on top
- Plastic, PBT-GF30-V0
- 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
- M8 x 1 male connector

Wiring diagram



Technical data

| | |
|---|---|
| Type | BI10U-Q14-AP6X2-V1131 |
| Ident. no. | 1608500 |
| Rated switching distance | 10 mm |
| Mounting conditions | Flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Repeat accuracy | $\leq 2\%$ of full scale |
| Temperature drift | $\leq \pm 10\%$ |
| | $\leq \pm 15\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Hysteresis | 3...15 % |
| Ambient temperature | -30...+85 °C |
| Operating voltage | 10...30 VDC |
| Residual ripple | $\leq 10\% U_s$ |
| DC rated operational current | ≤ 200 mA |
| No-load current | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Isolation test voltage | ≤ 0.5 kV |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I_e | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |
| Output function | 3-wire, NO contact, PNP |
| Switching frequency | 0.25 kHz |
| Design | Rectangular, Q14 |
| Dimensions | 52 x 30 x 14 mm |
| Housing material | Plastic, PBT-GF30-V0 |

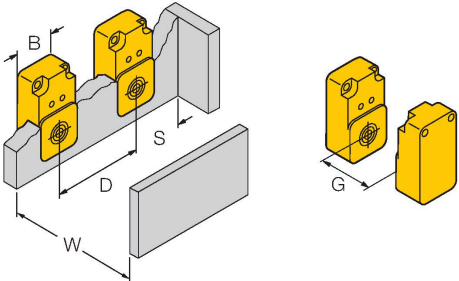
Functional principle

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.

Technical data

| | |
|-----------------------|---|
| Active area material | PBT-GF30-V0 |
| Electrical connection | Connector, M8 x 1 |
| 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 |
| Power-on indication | LED, Green |
| Switching state | LED, Yellow |

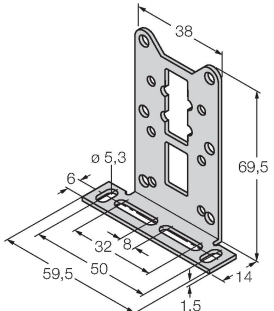
Mounting instructions

| Mounting instructions/Description | | |
|--|---------------------|---------|
|  | Distance D | 1.5 x B |
| | Distance W | 3 x Sn |
| | Distance S | 1 x B |
| | Distance G | 6 x Sn |
| | Width active area B | 30 mm |


Accessories

| | |
|------------|---------|
| MW-Q14/Q20 | 6945006 |
|------------|---------|

Mounting bracket for rectangular Q14 or Q20; material VA 1.4301



Wiring accessories

| Dimension drawing | Type | Ident. no. | |
|---|-------------|------------|---|
|  | PKG3M-2/TEL | 6625058 | Connection cable, female M8, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |