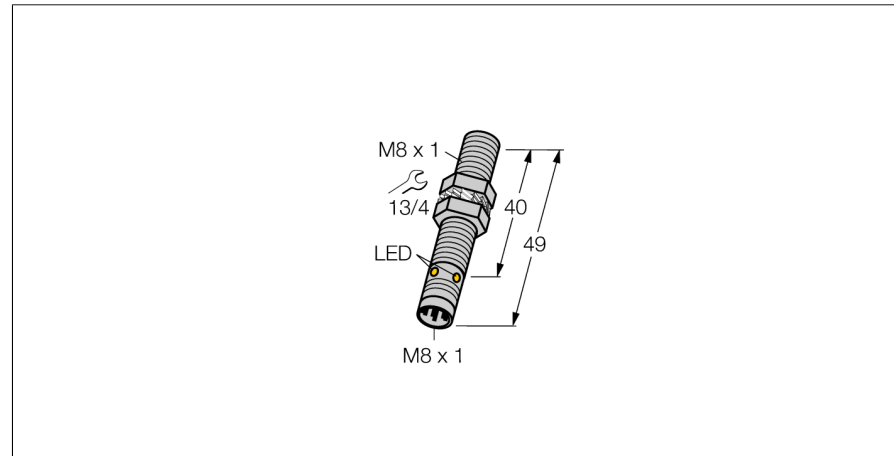
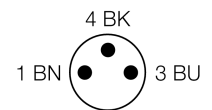
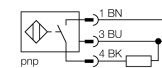


**Inductive sensor
with extended switching distance
BI2-EG08-AP6X-V1131**



- Threaded barrel, M8 x 1
- Stainless steel, 1.4427 SO
- Large detection range
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Male M8 x 1

Wiring diagram



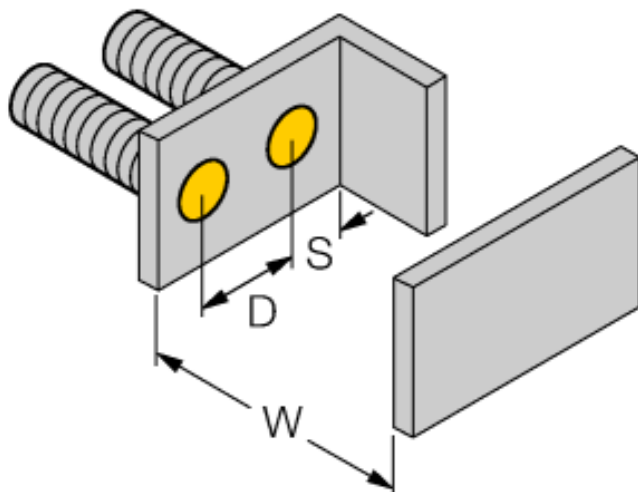
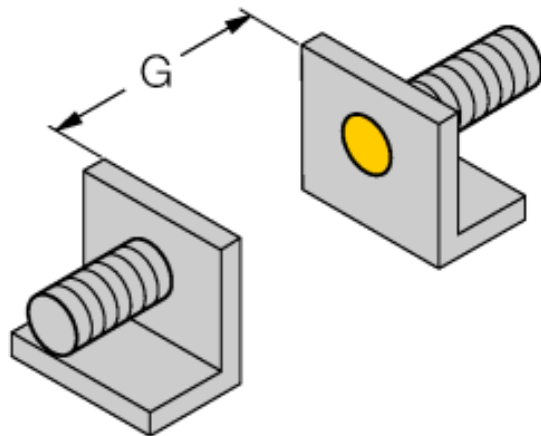
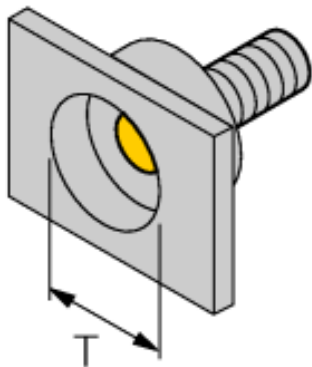
| | |
|---|---|
| Type code | BI2-EG08-AP6X-V1131 |
| Ident no. | 4602050 |
| Rated operating distance Sn | 2 mm |
| Mounting condition | flush |
| Assured sensing range | ≤ (0,81 x Sn) mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeatability | ≤ 2 % of full scale |
| Temperature drift | 10 % |
| Hysteresis | 3...15 % |
| Ambient temperature | -25...+70 °C |
| Operating voltage | 10...30VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| DC rated operational current | ≤ 150 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 drop at I ₀ | ≤ 1.8 V |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 3-wire, NO contact, PNP |
| Switching frequency | 3 kHz |
| Design | threaded barrel, M8 x 1 |
| Dimensions | 49 mm |
| Housing material | stainless steel, 1.4427 SO |
| Material active area | Plastic, PA |
| Max. tightening torque housing nut | 10 Nm |
| Connection | male, M8 x 1 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 2283 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state | LED yellow |

Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.

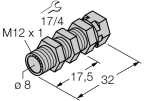
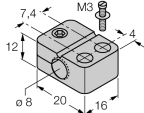
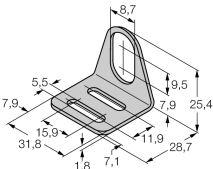
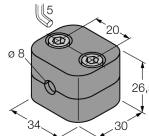
**Inductive sensor
with extended switching distance
BI2-EG08-AP6X-V1131**

| | |
|-------------------------------|---------|
| Distance D | 2 x B |
| Distance W | 3 x Sn |
| Distance T | 3 x B |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| <hr/> | |
| Diameter of the active area B | Ø 8 mm |

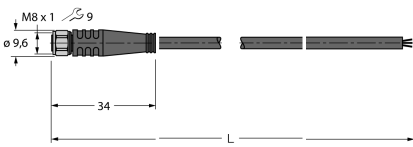


**Inductive sensor
with extended switching distance
BI2-EG08-AP6X-V1131**

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-----------|-----------|--|---|
| QM-08 | 6945100 | Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets. |  |
| BST-08B | 6947210 | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6 |  |
| MW-08 | 6945008 | Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304) |  |
| BSS-08 | 6901322 | Mounting bracket for smooth and threaded barrel devices; material: Polypropylene |  |

Wiring accessories

| Type code | Ident no. | Description | Dimension drawing |
|-------------|-----------|---|---|
| PKG3M-2/TEL | 6625385 | Connection cable, female M8, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com |  |