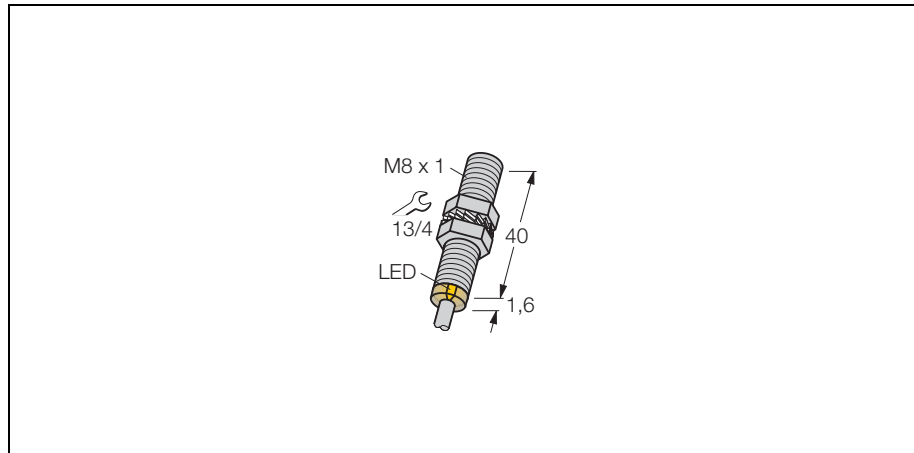
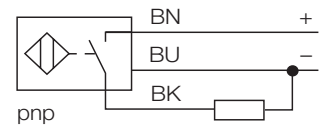


inductive sensor with extended switching distance Bi2-EG08-AP6X



- threaded barrel, M8 x 1
- stainless steel, 1.4404
- large detection range
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- cable connection

Wiring diagram



Functional principle

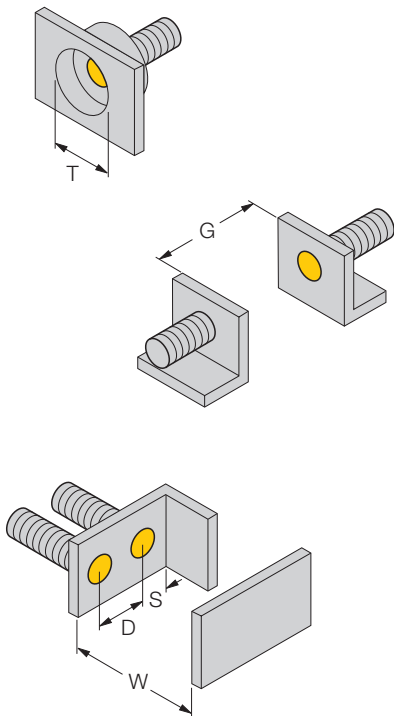
Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

| | |
|---|---|
| Type | Bi2-EG08-AP6X |
| Ident-No. | 4602040 |
| Rated operating distance Sn | 2 mm |
| Mounting condition | flush |
| Assured switching distance | ≤ (0,81 x Sn) mm |
| Correction factors | St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3 |
| Repeatability | ≤ 2 % |
| Temperature drift | ≤ ± 10 % |
| Hysteresis | 3... 15 % |
| Ambient temperature | -25...+ 70 °C |
| Operating voltage | 10... 30 VDC |
| 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 dip at I _e | ≤ 1.8 V |
| Wire breakage / Reverse polarity protection | yes / complete |
| Output function | 3-wire, normally open, pnp |
| Switching frequency | ≤ 3 kHz |
| Housing | threaded barrel, M8 x 1 |
| Dimensions | 41.6 mm |
| Housing material | metal, A4 1.4404 (AISI 316L) |
| Material active area | plastic, PA12-GF20 |
| End cap | plastic, PP |
| Tightening torque of housing nut | 10 Nm |
| Connection | cable |
| Cable quality | Ø 4, LifYY-11Y, PUR, 2 m |
| Cable cross section: | 3 x 0.25 mm ² |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30g (11 ms) |
| Degree of protection | IP67 |
| Display switch state | LED yellow |

**inductive sensor
with extended switching distance
Bi2-EG08-AP6X**

| Mounting instructions | minimum distances |
|-----------------------|-------------------|
| 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 |

| | |
|--------------------------------------|--------|
| Diameter of the active area B | Ø 8 mm |
|--------------------------------------|--------|


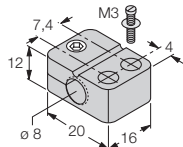
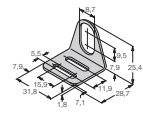



**inductive sensor
with extended switching distance
Bi2-EG08-AP6X**

TURCK

Industrial
Automation

Accessories

| Type code | Ident-No. | Short text | Dimension drawing |
|-----------|-----------|--|---|
| QM-08 | 6945100 | quick-mount fixing clamp with dead-stop; material: chrome-plated brass male thread M12 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick mounting brackets. |  |
| BST-08B | 6947210 | fixing clamp with dead-stop; material: PA6 |  |
| MW-08 | 6945008 | mounting bracket; material: stainless steel A2 1.4301 (AISI 304) |  |
| BSS-08 | 6901322 | fixing clamp; material: polypropylene |  |