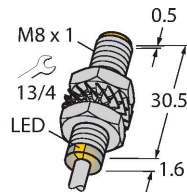


BI2-M08-AN6X

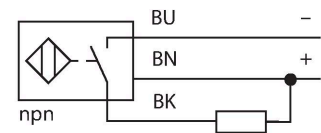
Inductive Sensor – With Increased Switching Distance



Features

- Threaded barrel, M8 x 1
- Nickel-plated brass
- Large sensing range
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Cable connection

Wiring diagram



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.

Technical data

| | |
|--|---|
| Type | BI2-M08-AN6X |
| ID | 4602926 |
| General data | |
| Rated switching distance | 2 mm |
| Mounting conditions | Flush |
| Secured operating distance | $\leq (0.81 \times S_n)$ mm |
| Correction factors | St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4 |
| Repeat accuracy | ≤ 2 % of full scale |
| Temperature drift | $\leq \pm 10$ % |
| Hysteresis | 3...15 % |
| Electrical data | |
| Operating voltage U_B | 10...30 VDC |
| Ripple U_{rs} | ≤ 10 % U_{Bmax} |
| DC rated operating current I_o | ≤ 150 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_o | ≤ 1.8 V |
| Wire break/reverse polarity protection | yes/Complete |
| Output function | 3-wire, NO contact, NPN |
| Switching frequency | 2.8 kHz |

Technical data

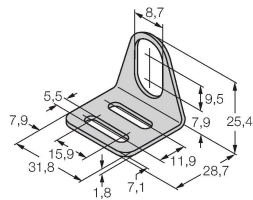
| Mechanical data | |
|---------------------------------------|---|
| Design | Threaded barrel, M8 x 1 |
| Dimensions | 32.1 mm |
| Housing material | Metal, CuZn, Nickel Plated |
| Active area material | Plastic, PP-GF20 |
| End cap | Plastic, PP-GF20 |
| Max. tightening torque of housing nut | 7 Nm |
| Electrical connection | Cable |
| Cable quality | Ø 3 mm, Gray, Lif9Y-11Y, PUR, 2 m |
| | Suited for E-ChainSystems® acc. to manufacturers declaration H1063M |
| Core cross-section | 3 x 0.14 mm ² |
| Environmental conditions | |
| Ambient temperature | -25...+70 °C |
| 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 |

Mounting instructions

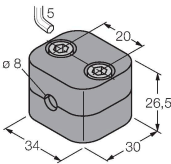
| Mounting instructions/Description | |
|--|------------------------|
|  | Distance D |
| | 2 x B |
| | Distance W |
| | 3 x Sn |
| | Distance T |
| | 3 x B |
| | Distance S |
| | 1.5 x B |
| | Distance G |
| | 6 x Sn |
| | Diameter active area B |
| | Ø 8 mm |

Accessories

| | |
|--|---------|
| MW08 | 6945008 |
| Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304) | |



| | |
|--|---------|
| BSS-08 | 6901322 |
| Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene | |



| | |
|--|-------|
| MBS80 | 69479 |
| Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum | |

