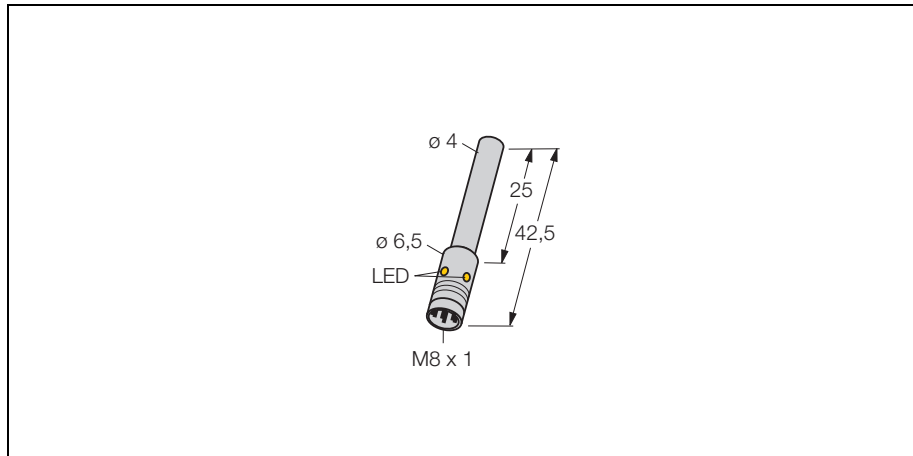
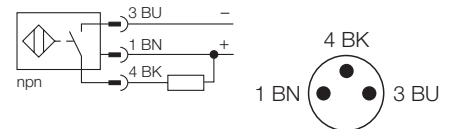


Inductive sensor
Bi1-EH04-AN6X-V1331



- smooth barrel, 4 mm diameter
- stainless steel 1.4301
- 3-wire DC, 10...30 VDC
- normally open npn output
- connector, M8 x 1

Wiring diagram



| | |
|---|---|
| Type | Bi1-EH04-AN6X-V1331 |
| Ident-No. | 4608540 |
| Rated operating distance Sn | 1 mm |
| Mounting condition | flush |
| Assured sensing range | ≤ (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... 30VDC |
| Residual ripple | ≤ 10 % U _{SS} |
| DC rated operational current | ≤ 100 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 _e | ≤ 1.8V |
| Wire breakage / Reverse polarity protection | yes / complete |
| Output function | 3-wire, normally open, npn |
| Switching frequency | ≤ 3 kHz |
| Housing | smooth barrel, 4 mm |
| Dimensions | 42.5 mm |
| Housing material | metal, AISI 316L |
| Material active face | plastic, plastic, PA12-GF20 |
| Connection | connectors, M8 x 1 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30g (11 ms) |
| Degree of protection | IP67 |
| Display switch state | LED yellow |

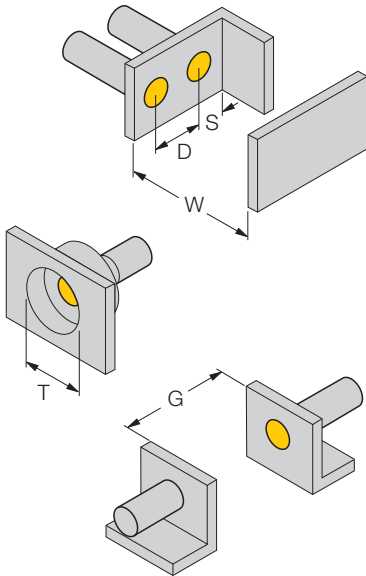
Functional principle

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. Concerning inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Inductive sensor
Bi1-EH04-AN6X-V1331

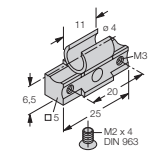
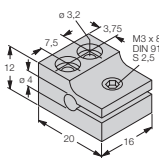
| Mounting instructions | minimum distances |
|------------------------------|-------------------|
| Distance D | 2 x B |
| Distance W | 3 x Sn |
| Distance T | 3 x B |
| Distance S | 1,5 x B |
| Distance G | 6 x Sn |

Diameter of the active area B \varnothing 4 mm



**Inductive sensor
Bi1-EH04-AN6X-V1331**

Accessories

| Type code | Ident-No. | Short text | Dimension drawing |
|-----------|-----------|--|---|
| BS540 | 69475 | fixing clamp; material mounting block: anodized aluminium; clamp sleeve: steel |  <p>Technical drawing of the BS540 fixing clamp. It shows a perspective view of a U-shaped clamp with a mounting block. Dimensions include a height of 11, a width of 20, and a depth of 6.5. A hole with diameter $\varnothing 4$ is shown. A screw with diameter $\varnothing 3.2$ is used for mounting. The drawing also shows a detail of the mounting block with a hole of diameter $\varnothing 5$ and a depth of 25. A screw with diameter $\varnothing 3.2$ and length 4 is specified as M2 x 4 DIN 963.</p> |
| MBS40 | 69477 | fixing clamp; material mounting block: anodized aluminium |  <p>Technical drawing of the MBS40 mounting block. It shows a perspective view of a rectangular block. Dimensions include a height of 12, a width of 20, and a depth of 16. A hole with diameter $\varnothing 3.2$ is shown. A screw with diameter $\varnothing 3.2$ and length 8 is specified as M3 x 8 DIN 912 S 2.5.</p> |