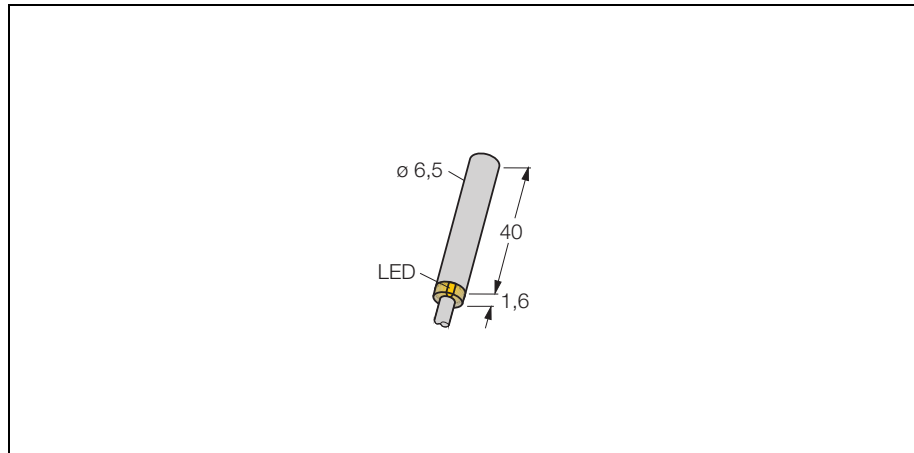
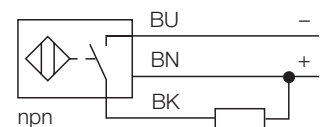


**Inductive sensor
with extended switching distance
Bi2-EH6,5-AN6X**



- smooth barrel, 6.5 mm diameter
- stainless steel, 1.4404
- large detection range
- 3-wire DC, 10...30 VDC
- normally open npn 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-EH6,5-AN6X |
| Ident-No. | 4612300 |
| Rated operating distance Sn | 2 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 | 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 _e | 1.8V |
| Wire breakage / Reverse polarity protection | yes / complete |
| Output function | 3-wire, normally open, npn |
| Switching frequency | 3 kHz |
| Housing | smooth barrel, 6.5 mm |
| Dimensions | 41.6 mm |
| Housing material | metal, AISI 316L |
| Material active face | plastic, plastic, PA12-GF20 |
| End cap | plastic, PP |
| Connection | cable |
| Cable quality | Ø 4, LiYY-11Y, PUR, 2 m |
| Cable cross section: | 3 x 0.25mm 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-EH6,5-AN6X**

| 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 6.5 mm |
|--------------------------------------|----------|

