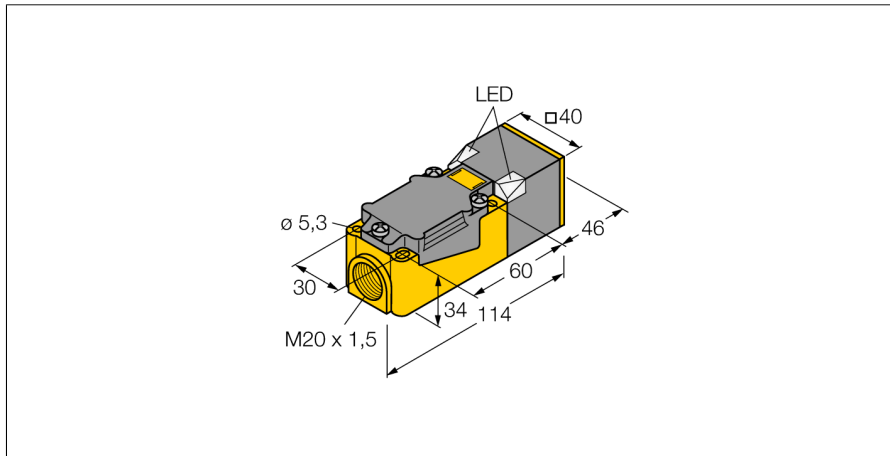
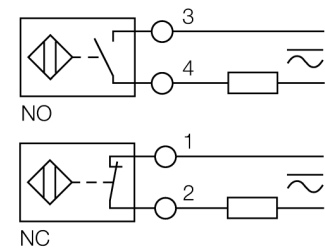


**Inductive sensor
NI35-CP40-FZ3X2**



- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- AC 2-wire, 20...250 VAC
- 2-wire DC, 10...300 VDC
- NC/NO programmable
- Terminal chamber

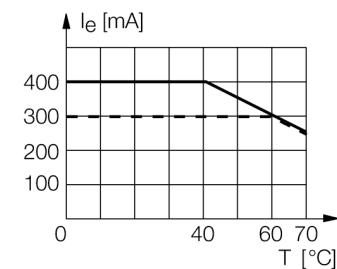
Wiring diagram



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.

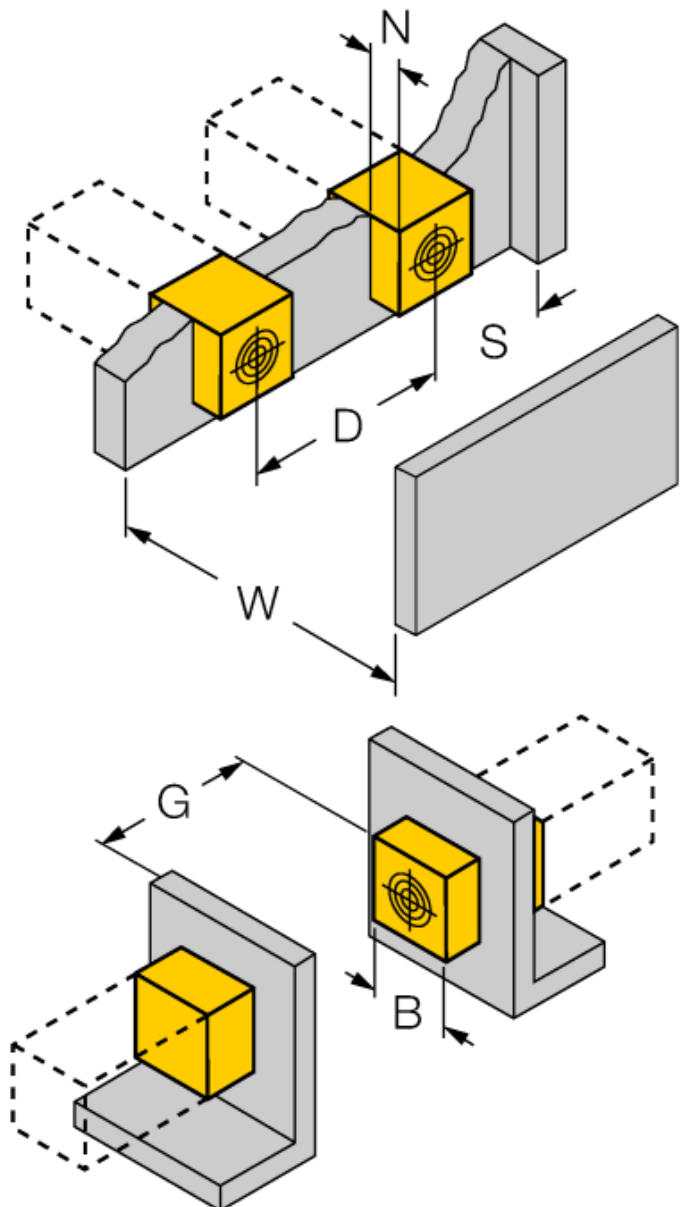
We offer special versions for temperatures of -60 °C up to +250 °C.



| | |
|---|---|
| Type code | NI35-CP40-FZ3X2 |
| Ident no. | 13403 |
| Rated operating distance Sn | 35 mm |
| Mounting condition | non-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 | 20...250 VAC |
| Operating voltage | 10...300VDC |
| AC rated operational current | ≤ 400 mA |
| DC rated operational current | ≤ 300 mA |
| Frequency | ≥ 50...≤ 60 Hz |
| Residual current | ≤ 1.7 mA |
| Rated insulation voltage | ≤ 1.5 kV |
| Surge current | ≤ 8 A (≤ 10 ms max. 5 Hz) |
| Voltage drop at I _e | ≤ 6 V |
| Output function | 2-wire, connection programmable |
| Smallest operating current I _m | ≤ 3 mA |
| Switching frequency | 0.02 kHz |
| Design | rectangular, CP40 |
| Dimensions | 114 x 40 x 40 mm |
| Housing material | plastic, PBT, black |
| Connection | terminal chamber |
| Clamping ability | ≤ 2.5 mm ² |
| 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 |
| Power-on indication | 2 x LEDs green |
| Switching state | LED red |

**Inductive sensor
NI35-CP40-FZ3X2**

| | |
|----------------------------|---------|
| Distance D | 4.5 x B |
| Distance W | 3 x Sn |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Distance N | 1 x B |
| Width of the active face B | 40 mm |



**Inductive sensor
NI35-CP40-FZ3X2**

TURCK

Industrial
Automation

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|--------------------------|-----------|---|-------------------|
| STRM M20X1,5 BLACK | 6965902 | Cable glands M20 x 1.5 | |
| Adjusting bar JS 025/037 | 69429 | Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301 | |
| BSS-CP40 | 6901318 | Mounting bracket for rectangular devices; material: Polypropylene | |