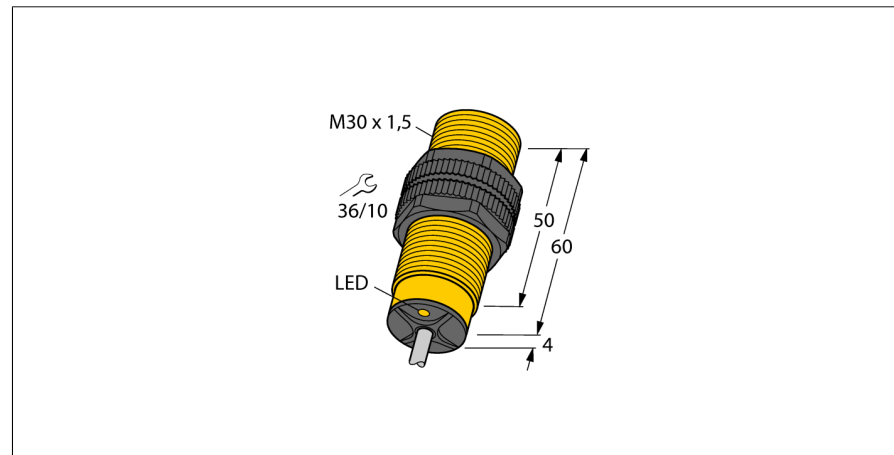
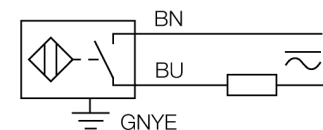


Inductive sensor
With extended temperature range
NI15-S30-AZ3X/S100



- Threaded barrel, M30 x 1.5
- Plastic, PA12-GF30
- Temperatures up to +100 °C
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- Cable connection

Wiring Diagram

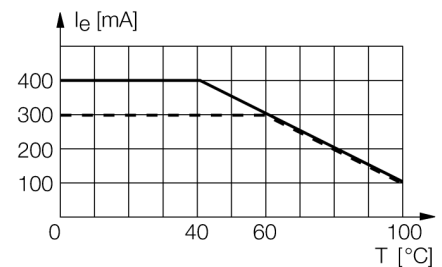


Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Special versions are available for ambient temperatures between -60°C and +250°C.

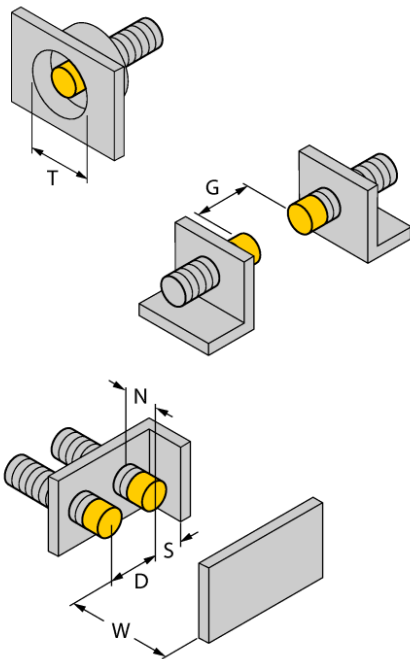
Derating Curve



| | |
|---|---|
| Type designation | NI15-S30-AZ3X/S100 |
| Ident no. | 13758 |
| Rated switching distance S_n | 15 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | ≤ (0,81 x 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 | ≤ ± 10 % |
| | ≤ ± 20 %, ≥ +70 °C |
| Hysteresis | 3...15 % |
| Ambient temperature | -25...+100 °C |
| Operating voltage | 20...250VAC |
| Operating voltage | 10...300 VDC |
| AC rated operational current | ≤ 400 mA |
| DC rated operational current | ≤ 300 mA |
| Rated operational current | See derating curve |
| Frequency | ≥ 50...≤ 60 Hz |
| Residual current | ≤ 1.7 mA |
| Isolation test voltage | ≤ 1.5 kV |
| Surge current | ≤ 8 A (≤ 10 ms max. 5 Hz) |
| Voltage drop at I _e | ≤ 6 V |
| Output function | 2-wire, NO contact |
| Smallest operating current I _o | ≥ 3 mA |
| Switching frequency | 0.02 kHz |
| Design | Threaded barrel, M30 × 1.5 |
| Dimensions | 64 mm |
| Housing material | Plastic, PA12-GF30 |
| Active area material | Plastic, PA12-GF30 |
| End cap | Plastic, EPTR |
| Max. tightening torque housing nut | 5 Nm |
| Electrical connection | Cable |
| Cable quality | 5.2 mm, LifYY-T105, PVC, 2m |
| Cable cross section | 2 x 0.5 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 |
| Switching state | LED red |

Inductive sensor
With extended temperature range
NI15-S30-AZ3X/S100

| | |
|-------------------------------|----------------|
| Distance D | 3 x B |
| Distance W | 3 x Sn |
| Distance T | 3 x B |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Distance N | 2 x Sn |
| Diameter active area B | Ø 30 mm |



Inductive sensor
With extended temperature range
NI15-S30-AZ3X/S100

Accessories

| Type code | Ident no. | Description | |
|-----------|-----------|--|--|
| QM-30 | 6945103 | Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M36 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets. | |
| BST-30B | 6947216 | Fixing clamp for threaded barrel devices, with dead-stop; material: PA6 | |
| MW-30 | 6945005 | Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304) | |
| BSS-30 | 6901319 | Mounting bracket for smooth and threaded barrel devices; material: Polypropylene | |