

# Inductive sensor NI15-S30-AD4X

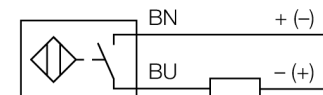
**TURCK**

Industrial  
Automation



- Threaded barrel, M30 x 1.5
- Plastic, PA12-GF30
- 2-wire DC, 10...65 VDC
- NO contact
- 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.

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

|   |   |
|---|---|
| <b>Type code</b>                          | NI15-S30-AD4X                                       |
| Ident no.                                 | 44592   |
| <b>Rated operating distance Sn</b>        | 15 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                                | 1...15 %  |
| Ambient temperature                       | -25...+70 °C  |
| <b>Operating voltage</b>                  | 10...65VDC  |
| Residual ripple                           | ≤ 10 % U <sub>ss</sub>                              |
| DC rated operational current              | ≤ 100 mA  |
| Residual current                          | ≤ 0.6 mA  |
| Rated insulation voltage                  | ≤ 0.5 kV  |
| Short-circuit protection                  | yes/ cyclic   |
| Voltage drop at I <sub>n</sub>            | ≤ 5 V   |
| Smallest operating current I <sub>m</sub> | ≤ 3 mA  |
| Switching frequency                       | 0.2 kHz   |
| <b>Design</b>                             | threaded barrel, M30 x 1.5                          |
| Dimensions                                | 64 mm   |
| Housing material                          | plastic, PA   |
| Material active area                      | Plastic, PA   |
| End cap                                   | Plastic, EPTR                                       |
| Max. tightening torque housing nut        | 5 Nm  |
| Connection                                | cable   |
| Cable quality                             | 5.2 mm, LifYY, PVC, 2 m                             |
| Cable cross section                       | 2 x 0.34 mm <sup>2</sup>                            |
| 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          |
| <b>Switching state</b>                    | LED yellow  |

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|                               |         |
|-------------------------------|---------|
| 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  |
| <hr/>                         |         |
| Diameter of the active area B | Ø 30 mm |



**Accessories**

| Type code | Ident no. | Description  | Dimension drawing |
|-----------|-----------|--|-------------------|
| 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   |                   |