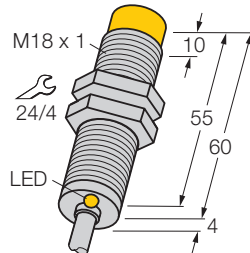


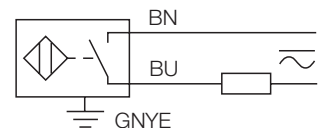
## Inductive sensor

### Ni8-M18-AZ3X



- threaded barrel, M18 x 1
- chrome-plated brass
- 2-wire AC, 20...250 VAC
- 2-wire DC, 10...300 VDC
- normally open
- cable connection

#### Wiring diagram



#### Function principles

Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this 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.

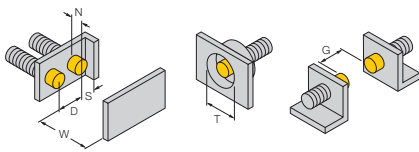
|                                                     |                            |
|-----------------------------------------------------|----------------------------|
| <b>Type</b>                                         | Ni8-M18-AZ3X               |
| Ident-No.                                           | 43105                      |
| <b>Rated operating distance Sn</b>                  | 8 mm                       |
| Mounting mode                                       | non-flush                  |
| Hysteresis (switching distance)                     | 3... 15 %                  |
| Min. repeat accuracy                                | ≤ 2 %                      |
| Temperature drift                                   | ≤ ± 10 %                   |
| Operating temperature                               | -25 ...+ 70 °C             |
| <b>Rated operational voltage (AC) U<sub>B</sub></b> | 20... 250 VAC              |
| Rated operational voltage (DC) U <sub>B</sub>       | 10... 300 VDC              |
| Rated operational current (AC) I <sub>B</sub>       | ≤ 400 mA                   |
| Rated operational current (DC) I <sub>B</sub>       | ≤ 300 mA                   |
| Line frequency                                      | 50... 60 Hz                |
| Max. OFF-state current                              | ≤ 1,7 mA                   |
| Max. switching frequency                            | ≤ 0,02 kHz                 |
| Rated insulation voltage                            | ≤ 1,5 kV                   |
| Surge Current                                       | ≤ 8 A (≤ 10 ms max. 5 Hz)  |
| Output function                                     | 2-wire, normally open      |
| Max. voltage drop at I <sub>B</sub>                 | ≤ 6 V                      |
| Min. operational current I <sub>m</sub>             | ≥ 3 mA                     |
| <b>Housing style</b>                                | threaded barrel; M18 x 1   |
| Dimensions                                          | 64 mm                      |
| Housing material                                    | metal, CuZn, chrome-plated |
| Active face                                         | plastic, PA12-GF30         |
| Max. fixing torque of coupling nut                  | 25 Nm                      |
| Wiring                                              | cable                      |
| Cable                                               | Ø 5,2, LifYY, PVC, 2 m     |
| Cable cross section                                 | 3 x 0,5 mm <sup>2</sup>    |
| Vibration resistance                                | 55 Hz (1 mm)               |
| Shock resistance                                    | 30 x g (11 ms)             |
| Degree of protection                                | IP67                       |
| <b>Switching status indication</b>                  | LED red                    |

## Inductive sensor

### Ni8-M18-AZ3X

| Mounting instructions | minimum gap |
|-----------------------|-------------|
| Gap D                 | 3 x B       |
| Gap W                 | 3 x Sn      |
| Gap T                 | 3 x B       |
| Gap S                 | 1,5 x B     |
| Gap G                 | 6 x Sn      |
| Gap N                 | 2 x Sn      |

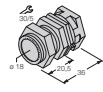
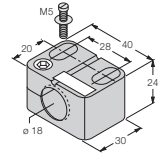
|                                  |         |
|----------------------------------|---------|
| <b>Diameter of active face B</b> | Ø 18 mm |
|----------------------------------|---------|



## Inductive sensor

### Ni8-M18-AZ3X

#### Accessories

| Typ     | Ident-No. | Description                                                                                       | Dimension drawing                                                                   |
|---------|-----------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| QM-18   | 6945102   | quick-mount fixing clamp with dead-stop; material: chrome-plated brass external thread M24 x 1,5. |  |
| BST-18B | 6947214   | fixing clamp with dead-stop; material: PA6                                                        |  |