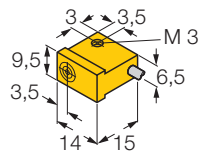


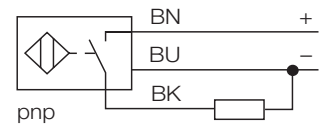
## Inductive sensor

### Ni2-Q9,5-AP6



- rectangular, height 9.5 mm
- side active face
- plastic, PA12-GF20
- 3-wire DC, 10...30 VDC
- normally open pnp output
- 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>                                            | Ni2-Q9,5-AP6                          |
| Ident-No.                                              | 1650080                               |
| <b>Rated operating distance <math>S_n</math></b>       | 2 mm                                  |
| Mounting mode                                          | non-flush                             |
| Hysteresis (switching distance)                        | 3... 15 %                             |
| Min. repeat accuracy                                   | $\leq 2 \%$                           |
| Temperature drift                                      | $\leq \pm 10 \%$                      |
| Operating temperature                                  | -25 ...+ 70 °C                        |
| <b>Rated operational voltage (DC) <math>U_B</math></b> | 10... 30 VDC                          |
| Max. ripple                                            | $\leq 10 \% U_{pp}$                   |
| Rated operational current (DC) $I_e$                   | $\leq 150 \text{ mA}$                 |
| No-load current $I_0$                                  | $\leq 15 \text{ mA}$                  |
| Max. OFF-state current                                 | $\leq 0,1 \text{ mA}$                 |
| Max. switching frequency                               | $\leq 2 \text{ kHz}$                  |
| Rated insulation voltage                               | $\leq 0,5 \text{ kV}$                 |
| Output function                                        | 3-wire, normally open, PNP            |
| Short-circuit protection                               | yes, cyclic                           |
| Max. voltage drop at $I_e$                             | $\leq 1,8 \text{ V}$                  |
| Wire breakage / reverse polarity protection            | yes / complete                        |
| <b>Housing style</b>                                   | rectangular; Q9,5                     |
| Dimensions                                             | 20 x 17 x 9,5 mm                      |
| Housing material                                       | plastic, PA12-GF20                    |
| Active face                                            | plastic, PA12-GF20                    |
| Wiring                                                 | cable                                 |
| Cable                                                  | $\varnothing 3$ , LifYY-11Y, PUR, 2 m |
| Cable cross section                                    | 3 x 0,14 mm <sup>2</sup>              |
| Vibration resistance                                   | 55 Hz (1 mm)                          |
| Shock resistance                                       | 30 x g (11 ms)                        |
| Degree of protection                                   | IP67                                  |

## Inductive sensor

### Ni2-Q9,5-AP6

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

|                        |        |
|------------------------|--------|
| Width of active face B | 9,5 mm |
|------------------------|--------|

