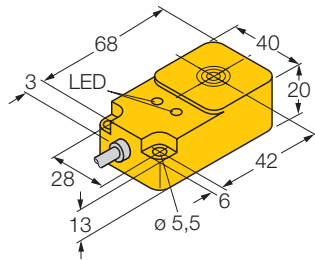


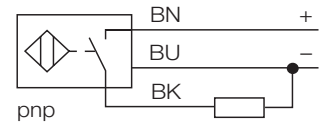
## Inductive sensor

### Ni25-Q20-AP6X2



- rectangular, height 20mm
- top active face
- plastic, PBT-GF30-V0
- 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>                                            | Ni25-Q20-AP6X2                     |
| Ident-No.                                              | 1602700                            |
| <b>Rated operating distance <math>S_n</math></b>       | 25 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) $I_e$                   | $\leq 200 \text{ mA}$              |
| No-load current $I_0$                                  | $\leq 15 \text{ mA}$               |
| Max. OFF-state current                                 | $\leq 0,1 \text{ mA}$              |
| Max. switching frequency                               | $\leq 0,25 \text{ kHz}$            |
| 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; Q20                   |
| Dimensions                                             | 68 x 40 x 20 mm                    |
| Housing material                                       | plastic, PBT-GF30-V0               |
| Active face                                            | plastic, PBT-GF30-V0               |
| Wiring                                                 | cable                              |
| Cable                                                  | $\varnothing 5,2$ , LiYY, PVC, 2 m |
| Cable cross section                                    | 3 x 0,34 mm <sup>2</sup>           |
| Vibration resistance                                   | 55 Hz (1 mm)                       |
| Shock resistance                                       | 30 x g (11 ms)                     |
| Degree of protection                                   | IP67                               |
| <b>Supply voltage indication</b>                       | LED green                          |
| Switching status indication                            | LED yellow                         |

## Inductive sensor

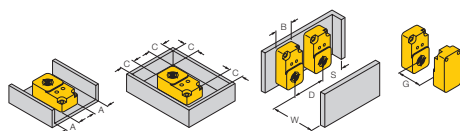
### Ni25-Q20-AP6X2

#### Mounting instructions

|       | minimum gap |
|-------|-------------|
| Gap D | 3 x B       |
| Gap W | 3 x Sn      |
| Gap S | 1,5 x B     |
| Gap G | 6 x Sn      |
| Gap N | 2 x Sn      |
| Gap A | 1 x Sn      |
| Gap C | 2 x Sn      |

#### Width of active face B

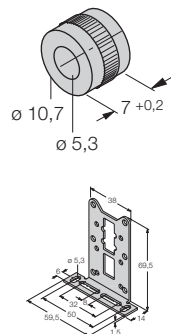
40 mm



## Inductive sensor

### Ni25-Q20-AP6X2

#### Accessories

| Typ        | Ident-No. | Description                             | Dimension drawing                                                                   |
|------------|-----------|-----------------------------------------|-------------------------------------------------------------------------------------|
| MH-Q20     | 6950010   | for mounting with active face downwards |  |
| MW-Q14/Q20 | 6945006   | mounting bracket; material VA 1.4301    |                                                                                     |