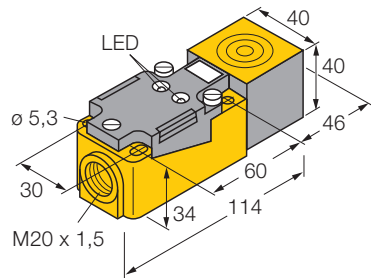


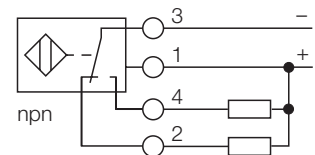
## Inductive sensor

### Ni35-CP40-VN4X2



- rectangular, height 40 mm
- plastic, PBT-GF30-V0
- 4-wire DC, 10...65 VDC
- SPDT, npn output
- terminal chamber

#### Wiring diagram



#### Function principles

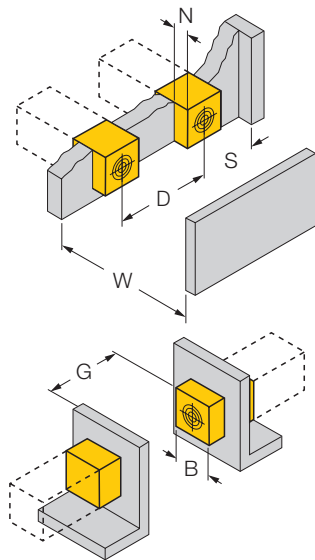
Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

|                                                     |                            |
|-----------------------------------------------------|----------------------------|
| <b>Type</b>                                         | Ni35-CP40-VN4X2            |
| Ident-No.                                           | 15794                      |
| <b>Rated operating distance Sn</b>                  | 35 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 (DC) U<sub>B</sub></b> | 10... 65 VDC               |
| Max. ripple                                         | ≤ 10 % U <sub>pp</sub>     |
| Rated operational current (DC) I <sub>e</sub>       | ≤ 200 mA                   |
| No-load current I <sub>0</sub>                      | ≤ 15 mA                    |
| Max. OFF-state current                              | ≤ 0,1 mA                   |
| Max. switching frequency                            | ≤ 0,15 kHz                 |
| Rated insulation voltage                            | ≤ 0,5 kV                   |
| Output function                                     | 4-wire, complementary, NPN |
| Short-circuit protection                            | yes, cyclic                |
| Max. voltage drop at I <sub>e</sub>                 | ≤ 1,8 V                    |
| Wire breakage / reverse polarity protection         | yes / complete             |
| <b>Housing style</b>                                | rectangular; CP40          |
| Dimensions                                          | 114 x 40 x 40 mm           |
| Housing material                                    | plastic, PBT-GF30-V0       |
| Active face                                         | plastic, PBT-GF30-V0       |
| Wiring                                              | terminal chamber           |
| Clamping ability                                    | ≤ 2,5 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

### Ni35-CP40-VN4X2

| Mounting instructions         | minimum gap    |
|-------------------------------|----------------|
| Gap D                         | $4,5 \times B$ |
| Gap W                         | $3 \times S_n$ |
| Gap S                         | $1,5 \times B$ |
| Gap G                         | $6 \times S_n$ |
| Gap N                         | $1 \times B$   |
| <b>Width of active face B</b> | 40 mm          |



## Inductive sensor

### Ni35-CP40-VN4X2

#### Accessories

| Typ        | Ident-No. | Description                                                                                                                        | Dimension drawing |
|------------|-----------|------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| SG40       | 69500     | protective housing; housing material: PA (per UL94/V-2); cover: PBT-GF30; for harsh environments; protection degree IP68, 5 m w.g. |                   |
| JS 025/037 | 69429     | mounting rail; material: VA 1.4301                                                                                                 |                   |