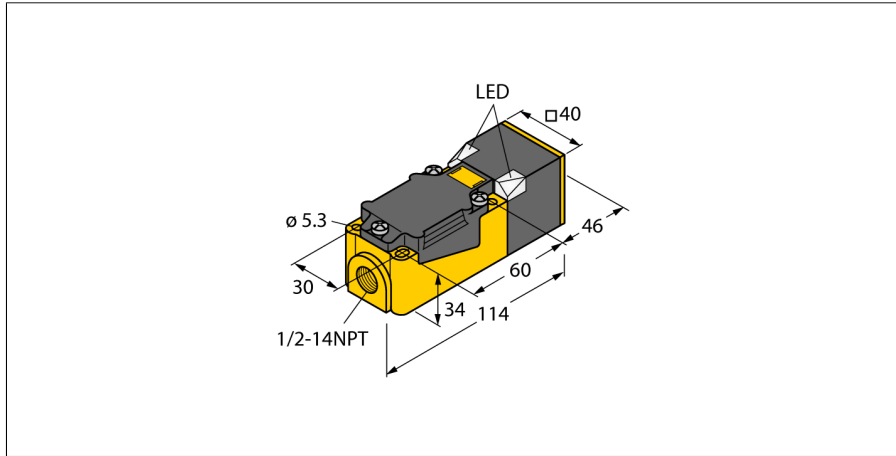


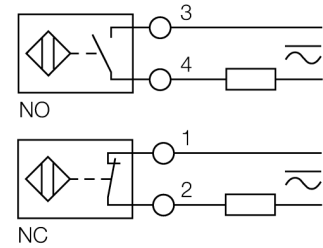
Inductive sensor
With increased switching distance
NI40U-CP40-FDZ30X2/S10



- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- Factor 1 for all metals
- Increased switching distance
- Protection class IP68
- Large coverage
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NC/NO programmable
- Terminal chamber

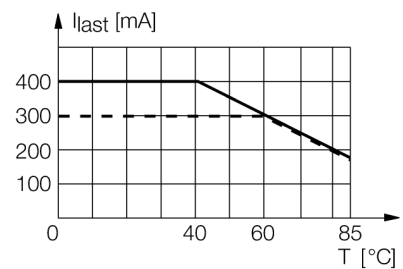
| | |
|--|---|
| Type designation | NI40U-CP40-FDZ30X2/S10 |
| Ident-No. | 4280801 |
| Special version | S10 = Mounting base with 1/2-14NPT thread |
| Rated switching distance S_n | 40 mm |
| Mounting conditions | Non-flush |
| Secured operating distance | $\leq (0,81 \times S_n)$ mm |
| Repeat accuracy | $\leq 2\%$ of full scale |
| Temperature drift | $\leq \pm 10\%$ |
| Hysteresis | $\leq \pm 20\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$ |
| Ambient temperature | -30...+85 °C |
| Operating voltage | 20...250VAC |
| Operating voltage | 10...300 VDC |
| AC rated operational current | ≤ 400 mA |
| DC rated operational current | ≤ 300 mA |
| Frequency | $\geq 50... \leq 60$ Hz |
| Residual current | ≤ 1.7 mA |
| Isolation test voltage | ≤ 1.5 kV |
| Surge current | ≤ 3 A (≤ 20 ms max. 5 Hz) |
| Short-circuit protection | yes/ Latching |
| Voltage drop at I_n | ≤ 6 V |
| Wire breakage/Reverse polarity protection | yes/ Complete |
| Output function | 2-wire, Connection programmable |
| Smallest operating current I_m | ≥ 3 mA |
| Protection class | IP67 |
| Switching frequency | 0.01 kHz |
| Design | Rectangular, CP40 |
| Dimensions | 114 x 40 x 40 mm |
| Housing material | Plastic, PBT-GF30-V0, Black |
| Active area material | Plastic, PA6-GF30-X, yellow |
| Electrical connection | Terminal chamber |
| Clamping ability | ≤ 2.5 mm ² |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| Protection class | IP67 |
| MTTF | 874 years acc. to SN 29500 (Ed. 99) 40 °C |
| Packaging unit | 1 |
| Power-on indication | 2 x LEDs, Green |
| Switching state | 2 x LEDs, Yellow |

Wiring Diagram



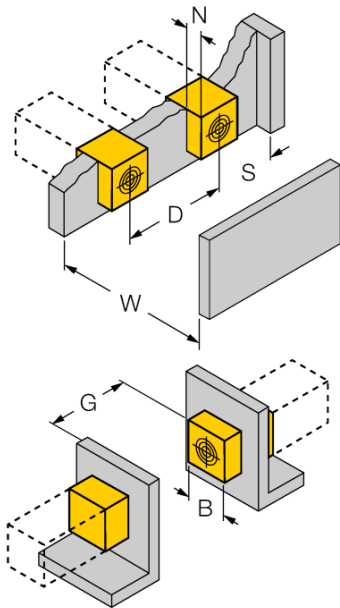
Functional principle

Inductive sensors detect metal objects contactless and wear-free. *uprox*® Factor 1 sensors have significant advantages due to their patented ferrite-coreless multicoil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.



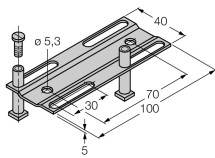
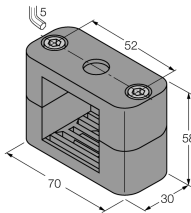
Inductive sensor
With increased switching distance
NI40U-CP40-FDZ30X2/S10

| | |
|---------------------|---------|
| Distance D | 6 x B |
| Distance W | 3 x Sn |
| Distance S | 1.5 x B |
| Distance G | 6 x Sn |
| Distance N | 1 x B |
| <hr/> | |
| Width active area B | 40 mm |



Inductive sensor
With increased switching distance
NI40U-CP40-FDZ30X2/S10

Accessories

| Type code | Ident-No. | Description | |
|--------------------------|-----------|---|---|
| Adjusting bar JS 025/037 | 69429 | Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301 |  |
| BSS-CP40 | 6901318 | Mounting bracket for rectangular devices; material: Polypropylene |  |