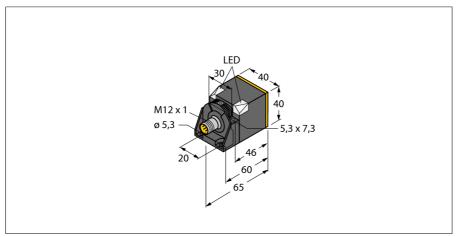


Inductive sensor

Increased switching distance and extended temperature range NI35U-CK40-VP6X2-H1141/S97





| Type code | NI35U-CK40-VP6X2-H1141/S97 1625814 | |
|-----------------------------|---------------------------------------|--|
| Ident no. | | |
| Rated switching distance Sn | 35 mm | |
| Mounting conditions | non-flush, partially embeddable | |
| Assured switching distance | ≤ (0,81 x Sn) mm | |
| Repeatability | ≤ 2 % of full scale | |
| Temperature drift | ≤ ± 10 % | |
| | ≤ ± 20 %, ≤ -25 °C | |
| Hysteresis | 315 % | |
| Ambient temperature | -40+85 °C | |
| | | |

| Operating voltage | 1030VDC |
|---|--------------------------------|
| Residual ripple | ≤ 10 % U _{ss} |
| DC rated operational current | ≤ 200 mA |
| No-load current I ₀ | ≤ 15 mA |
| Residual current | ≤ 0.1 mA |
| Rated insulation voltage | ≤ 0.5 kV |
| Short-circuit protection | yes/ cyclic |
| Voltage drop at I _e | ≤ 1.8 V |
| Wire breakage / Reverse polarity protection | yes/ complete |
| Output function | 4-wire, changover contact, PNP |
| Protective insulation | |
| Switching frequency | 0.25 kHz |

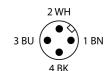
| Construction | rectangular, CK40 |
|----------------------|---|
| Dimensions | 65 x 40 x 40 mm |
| | variable orientation of active face in 5 directions |
| Housing material | plastic, PBT, black |
| Connection | male, M12 x 1 |
| Vibration resistance | 55 Hz (1 mm) |
| Shock resistance | 30 g (11 ms) |
| IP Rating | IP68 |

| Power-on indication | 2 LEDs green |
|----------------------|-----------------------|
| Switching state | LED yellow |
| Included in delivery | Fixing clamp BS4-CK40 |

- Rectangular, height 40 mm
- Variable orientation of active face in 5 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
- Resistant to magnetic fields
- Temperatures up to -40 °C
- High switching frequency
- Auto-compensation protects against pre-attenuation
- DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- M12 x 1 male connector

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.

MTTF

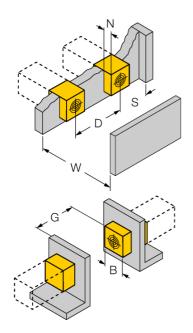
874 years acc. to SN 29500 (Ed. 99) 40 °C

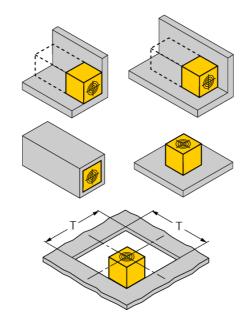


Inductive sensor Increased switching distance and extended temperature range NI35U-CK40-VP6X2-H1141/S97



| Distance D | 120 mm |
|----------------------------|--------|
| Distance W | 105 mm |
| Distance T | 140 mm |
| Distance S | 60 mm |
| Distance G | 210 mm |
| Distance N | 30 mm |
| Width of the active face B | 40 mm |





Flush mounting

1-side mounting: Sr = 28 mm

2-side mounting: Sr = 24 mm

3-side mounting: Sr = 19 mm

Backside mounting with full switching distance.

Recessed mounting with reduced switching distance.

The values stated relate to a 1 mm thick steel plate.



Inductive sensor Increased switching distance and extended temperature range NI35U-CK40-VP6X2-H1141/S97



Accessories

| Type code | ldent no. | Description | Design |
|-----------|-----------|---|--------|
| BSS-CP40 | 6901318 | Mounting bracket for rectangular devices; material: Polypropylene | 70 30 |