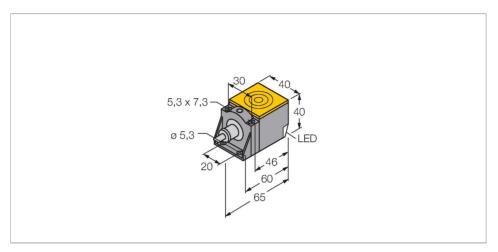


NI35U-CK40-ADZ30X2-T Inductive Sensor – With Extended Switching Distance





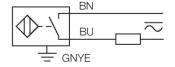
Туре	NI35U-CK40-ADZ30X2-T
ID	4280443
Remark to product	Product delivered: With active face on top
General data	
Rated switching distance	35 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	315 %
Electrical data	
Operating voltage U _B	20250 VAC
Operating voltage U _B	10300 VDC
AC rated operational current	≤ 400 mA
DC rated operating current I _e	≤ 300 mA
Frequency	≥ 50≤ 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 _e	≤ 6 V
Wire break/reverse polarity protection	yes/Complete
Output function	2-wire, NO contact, 2-wire



Features

- 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
- Only use the included plastic clip BS4-CK40
- 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 VAC
- ■DC 2-wire, 10...300 VDC
- ■NO contact
- Cable connection

Wiring diagram



Functional principle

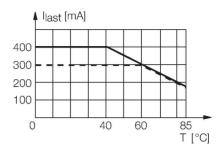
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox Factor 1 sensors have significant advantages due to their patented ferritecoreless multi-coil system. They detect all



Technical data

AC field stability Smallest operating current Insulation class Switching frequency 0.01 kHz Mechanical data Design Rectangular, CK40 Dimensions 65 x 40 x 40 mm variable orientation of active face in 5 directions Housing material Plastic, PBT-GF20-V0, Black Active area material Plastic, PA6-GF30-X, yellow Electrical connection Cable Cable quality Ø 5.2 mm, LifYY, PVC, 2 m Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 1 current 2 3 mA 3 mA 8 mA 9 ma 1 ma 1 ma 2 × LEDs, Yellow Included in delivery BS4-CK40	DC field stability	300 mT
Insulation class Switching frequency Mechanical data Design Rectangular, CK40 Dimensions 65 x 40 x 40 mm variable orientation of active face in 5 directions Housing material Plastic, PBT-GF20-V0, Black Active area material Plastic, PA6-GF30-X, yellow Electrical connection Cable Cable quality Ø 5.2 mm, LifYY, PVC, 2 m Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state	AC field stability	300 mT _{ss}
Switching frequency Mechanical data Design Rectangular, CK40 Dimensions 65 x 40 x 40 mm variable orientation of active face in 5 directions Housing material Plastic, PBT-GF20-V0, Black Active area material Plastic, PA6-GF30-X, yellow Electrical connection Cable Cable quality Ø 5.2 mm, LifYY, PVC, 2 m Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state	Smallest operating current	≥ 3 mA
Mechanical dataDesignRectangular, CK40Dimensions65 x 40 x 40 mmVariable orientation of active face in 5 directionsHousing materialPlastic, PBT-GF20-V0, BlackActive area materialPlastic, PA6-GF30-X, yellowElectrical connectionCableCable qualityØ 5.2 mm, LifYY, PVC, 2 mCore cross-section3 x 0.34 mm²Environmental conditionsEnvironmental conditionsAmbient temperature-30+85 °CVibration resistance55 Hz (1 mm)Shock resistance30 g (11 ms)Protection classIP68MTTF874 years acc. to SN 29500 (Ed. 99) 40 °CPower-on indication2 × LEDs, GreenSwitching state2 × LEDs, Yellow	Insulation class	
Design Rectangular, CK40 Dimensions 65 x 40 x 40 mm variable orientation of active face in 5 directions Housing material Plastic, PBT-GF20-V0, Black Active area material Plastic, PA6-GF30-X, yellow Electrical connection Cable Cable quality Ø 5.2 mm, LifYY, PVC, 2 m Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Switching frequency	0.01 kHz
Dimensions 65 x 40 x 40 mm variable orientation of active face in 5 directions Housing material Plastic, PBT-GF20-V0, Black Active area material Plastic, PA6-GF30-X, yellow Electrical connection Cable Cable quality Ø 5.2 mm, LifYY, PVC, 2 m Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state	Mechanical data	
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Housing material Plastic, PBT-GF20-V0, Black Active area material Plastic, PA6-GF30-X, yellow Electrical connection Cable Cable quality Ø 5.2 mm, LifYY, PVC, 2 m Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Dimensions	65 x 40 x 40 mm
Active area material Plastic, PA6-GF30-X, yellow Electrical connection Cable Cable quality Ø 5.2 mm, LifYY, PVC, 2 m Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow		
Electrical connection Cable Cable quality Ø 5.2 mm, LifYY, PVC, 2 m Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Housing material	Plastic, PBT-GF20-V0, Black
Cable quality Ø 5.2 mm, LifYY, PVC, 2 m Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Active area material	Plastic, PA6-GF30-X, yellow
Core cross-section 3 x 0.34 mm² Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Electrical connection	Cable
Environmental conditions Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Ambient temperature -30+85 °C Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Core cross-section	3 x 0.34 mm ²
Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Environmental conditions	
Shock resistance 30 g (11 ms) Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Ambient temperature	-30+85 °C
Protection class IP68 MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Vibration resistance	55 Hz (1 mm)
MTTF 874 years acc. to SN 29500 (Ed. 99) 40 °C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Shock resistance	30 g (11 ms)
°C Power-on indication 2 × LEDs, Green Switching state 2 × LEDs, Yellow	Protection class	IP68
Switching state 2 × LEDs, Yellow	MTTF	
	Power-on indication	2 × LEDs, Green
Included in delivery BS4-CK40	Switching state	2 × LEDs, Yellow
	Included in delivery	BS4-CK40

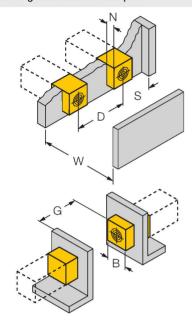
metals at the same large switching distance and are resistant to magnetic fields.





Mounting instructions

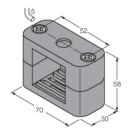
Mounting instructions/Description



Distance D	120 mm
Distance W	105 mm
Distance S	60 mm
Distance G	210 mm
Distance N	30 mm
Width active area B	40 mm

Accessories

BSS-CP40 6901318



Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene