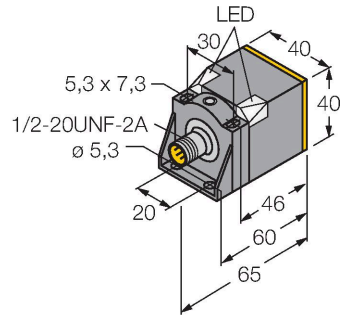


# NI35U-CK40-ADZ30X2-B3131 w/BS4 Inductive Sensor – With Extended Switching Distance



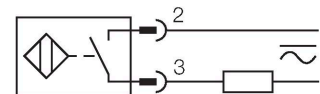
## Technical data

Type	NI35U-CK40-ADZ30X2-B3131 w/BS4
ID	4280431
General data	
Rated switching distance	35 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 20 \%, \leq -25 \text{ }^{\circ}\text{C} \vee \geq +70 \text{ }^{\circ}\text{C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage $U_b$	20...250 VAC
Operating voltage $U_b$	10...300 VDC
AC rated operational current	$\leq 400 \text{ mA}$
DC rated operating current $I_o$	$\leq 300 \text{ mA}$
Frequency	$\geq 50 \dots \leq 60 \text{ Hz}$
Residual current	$\leq 1.7 \text{ mA}$
Isolation test voltage	1.5 kV
Surge current	$\leq 3 \text{ A} (\leq 20 \text{ ms max. } 5 \text{ Hz})$
Short-circuit protection	yes/Latching
Voltage drop at $I_o$	$\leq 6 \text{ V}$
Wire break/reverse polarity protection	yes/Complete
Output function	2-wire, NO contact, 2-wire
DC field stability	300 mT

## Features

- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Plastic, PBT-GF30-V0
- 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
- 1/2" male connector

## Wiring diagram



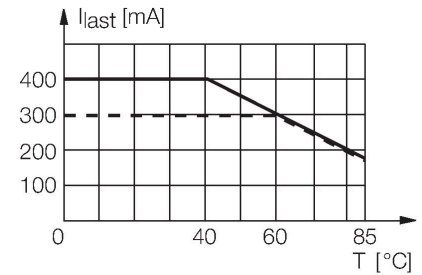
## Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. approx Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

NI35U-CK40-ADZ30X2-B3131 w/BS4 | 02/21/2025 13-45 | technical changes reserved

## Technical data

AC field stability	300 mT <sub>ss</sub>
Smallest operating current	≥ 3 mA
Insulation class	□
Switching frequency	0.01 kHz
<b>Mechanical data</b>	
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
Connector housing	metal, CuZn, nickel-plated
Electrical connection	Connector, 1/2"
<b>Environmental conditions</b>	
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
Included in delivery	BS4-CK40

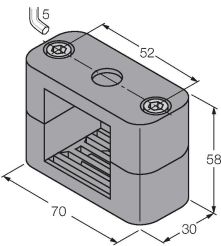


Mounting instructions

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