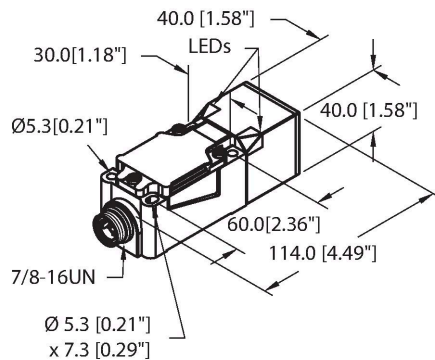


NI40U-CP40-FDZ30X2-B1131

Inductive Sensor – With Extended Switching Distance



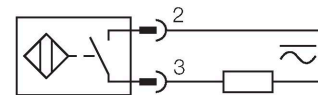
Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-VO
- High-luminance corner LEDs
- Optimum view of operating 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 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- 7/8\" connector

Technical data

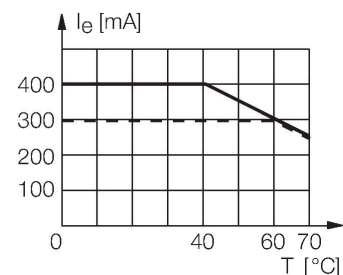
Type	NI40U-CP40-FDZ30X2-B1131
ID	4280890
General data	
Rated switching distance	40 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
	$\leq \pm 20\%$, $\leq -25\text{ }^{\circ}\text{C}$ v $\geq +70\text{ }^{\circ}\text{C}$
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_e	$\leq 300\text{ mA}$
Frequency	$\geq 50\text{...}\leq 60\text{ Hz}$
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_e	$\leq 6\text{ V}$
Wire break/reverse polarity protection	yes/Complete
Output function	2-wire, Connection programmable, 2-wire
DC field stability	300 mT
AC field stability	300 mT _{SS}

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.

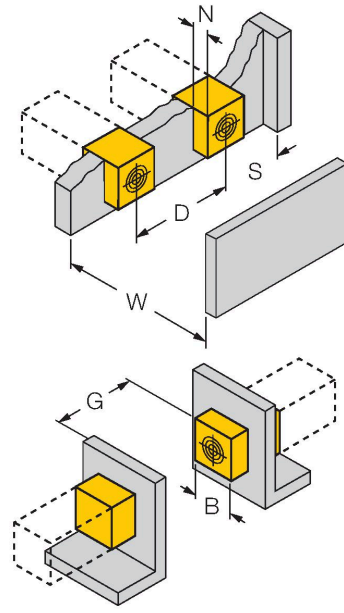


Technical data

Smallest operating current	≥ 3 mA
Insulation class	□
Switching frequency	0.01 kHz
Mechanical data	
Design	Rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PBT-GF30-V0, yellow
Connector housing	metal
Electrical connection	Connector, 7/8"
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

Mounting instructions

Mounting instructions/Description



Distance D	240 mm
Distance W	120 mm
Distance S	60 mm
Distance G	240 mm
Distance N	30 mm
Width active area B	40 mm

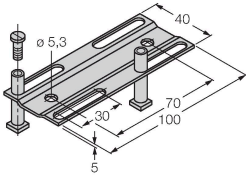
NI40U-CP40-FDZ30X2-B1131| 02/21/2025 13:59 | technical changes reserved

Accessories

JS025/037

69429

Adjusting bar for rectangular housings
CK/CP40; material: VA 1.4301



BSS-CP40

6901318

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

