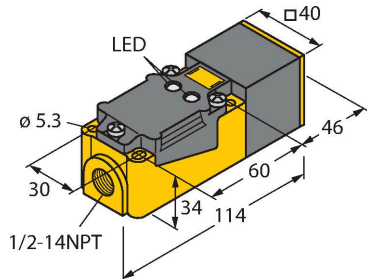


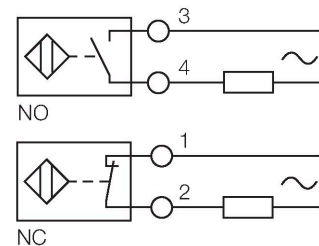
# NI20-CP40-FZ3X2/S110-S10 Inductive Sensor – With Switch-Off Delay



## Features

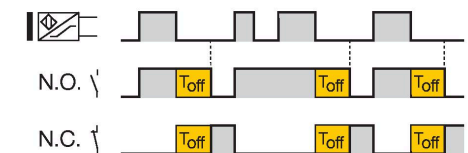
- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- Jam control and anti-collision
- Adjustable runtime
- Thread, 1/2-14 NPT
- AC 2-wire, 20...250 VAC
- Programmable connection (NC or NO)
- Terminal chamber

## Wiring diagram



## Functional principle

Inductive sensors with integrated time delay work according to the same function principle as standard inductive sensors. The output of this version is additionally equipped with an adjustable timer function. The timer function can be re-triggered, i.e. attenuating and unattenuating during the runtime activates the time delay again. The time is adjusted via a potentiometer in the sensor head.



## Technical data

Type	NI20-CP40-FZ3X2/S110-S10
ID	13746
Special version	S110-S10 Corresponds to: Mounting base with 1/2-14NPT thread Configurable switch-off delay
<b>General data</b>	
Rated switching distance	20 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2$ % of full scale
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage $U_B$	20...250 VAC
AC rated operational current	$\leq 400$ mA
Frequency	$\geq 50 \dots \leq 60$ Hz
Residual current	$\leq 1.7$ mA
Isolation test voltage	1.5 kV
Surge current	$\leq 8$ A ( $\leq 10$ ms max. 5 Hz)
Time delay	0.5...20 s
Voltage drop at $I_o$	$\leq 6$ V
Output function	2-wire, Connection programmable, 2-wire
Smallest operating current	$\geq 3$ mA
Switching frequency	0.02 kHz

Technical data

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
Electrical connection	Terminal chamber
Clamping ability	≤ 2.5 mm²
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Power-on indication	LED, Green
Switching state	LED, Red

Mounting instructions

# Mounting instructions/Description

The image contains two isometric diagrams illustrating the mounting of a sensor. The top diagram shows a sensor (yellow cube) being inserted into a slot in a panel. Dimensions are labeled: D (distance between slots), W (width of the panel), S (depth of the slot), and N (height of the sensor). The bottom diagram shows a sensor being inserted into a hole in a panel. Dimensions are labeled: G (distance from the edge to the hole) and B (width of the hole).

Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	1 x B
Width active area B	40 mm

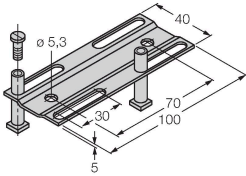
NI20-CP40-FZ3X2/S110-S10| 02/21/2025 14-31 | technical changes reserved

## 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

