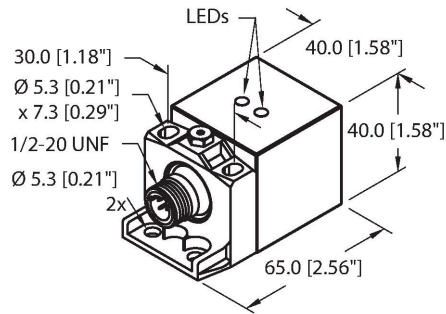


# BI20U-CA40-ADZ30X2-B3131 W/BS2.1 Inductive Sensor



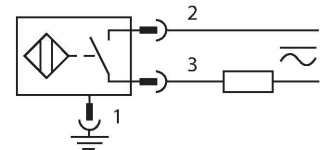
## Features

- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Sensor housing GD-ALSI 12
- Active face PA6-GF30
- Factor 1 for all metals
- Resistant to magnetic fields
- High switching frequency
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- 1/2" male connector

## Technical data

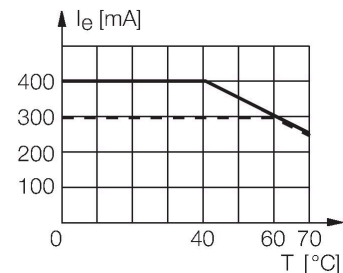
Type	BI20U-CA40-ADZ30X2-B3131 W/BS2.1
ID	4283292
General data	
Rated switching distance	20 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Hysteresis	3...15 %
Electrical data	
Operating voltage $U_b$	20...250 VAC
Operating voltage $U_b$	10...300 VDC
AC rated operational current	$\leq 400$ mA
DC rated operating current $I_o$	$\leq 300$ mA
Frequency	$\geq 50 \dots \leq 60$ Hz
Residual current	$\leq 1.7$ mA
Isolation test voltage	1.5 kV
Surge current	$\leq 3$ A ( $\leq 20$ ms max. 5 Hz)
Short-circuit protection	yes/Latching
Voltage drop at $I_o$	$\leq 6$ V
Wire break/reverse polarity protection	yes/Complete
Output function	2-wire, NO contact, 2-wire
DC field stability	300 mT
AC field stability	300 mT <sub>ss</sub>
Smallest operating current	$\geq 3$ mA

## 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 ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

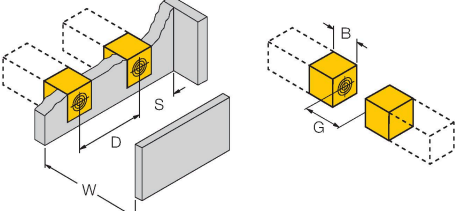


Technical data

Insulation class	□
Switching frequency	0.01 kHz
Mechanical data	
Design	Rectangular, CA40
Dimensions	65 x 40 x 40 mm
	variable orientation of active face in 5 directions
Housing material	Metal, GD-AISI 12
Active area material	Plastic, PA6-GF30, black
Electrical connection	Connector, 1/2"
Environmental conditions	
Ambient temperature	0...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	LED, Yellow
Included in delivery	BS2.1-CK40

Mounting instructions

Mounting instructions/Description



Distance D	2 × B
Distance W	3 × Sn
Distance S	1 × B
Distance G	6 × Sn
Width active area B	40 mm

BI20U-CA40-ADZ30X2-B3131 W/BS2.1| 02/21/2025 13-59 | technical changes reserved

## Accessories

BSS-CP40

6901318

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

