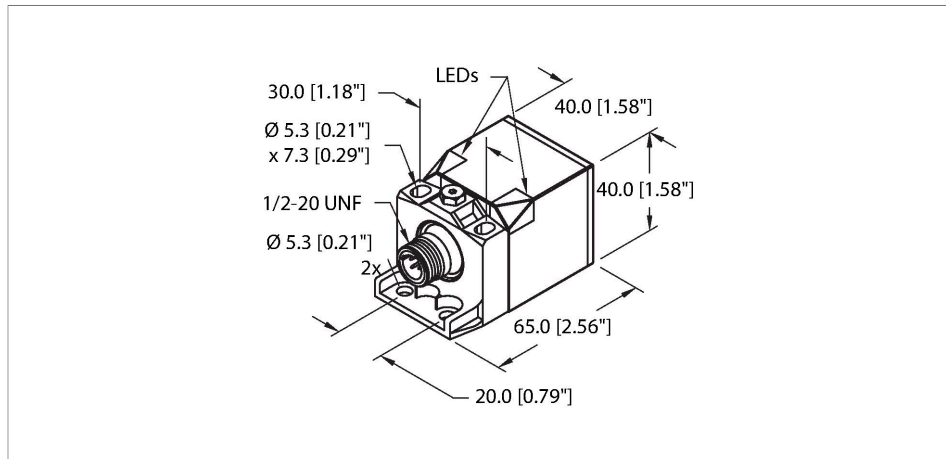


BI15U-CK40-RDZ30X2-B3131 W/BS 2.1

Inductive Sensor



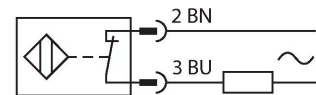
Features

- 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
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NC contact
- 1/2" male connector

Technical data

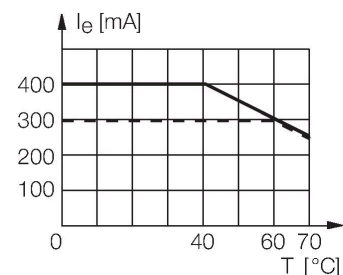
Type	BI15U-CK40-RDZ30X2-B3131 W/BS 2.1
ID	4280191
General data	
Rated switching distance	15 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
	$\leq \pm 15\%$, $\leq -25\text{ }^\circ\text{C}$ v $\geq +70\text{ }^\circ\text{C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage	20...250 VAC
Operating voltage	10...300 VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	$\geq 50... \leq 60$ 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 breakage/Reverse polarity protection	yes / Complete
Output function	2-wire, NC contact, 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, 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, PA12-GF30, yellow
Electrical connection	Connector, 1/2"
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
Included in delivery	BS2.1-CK40

Mounting instructions

Mounting instructions/Description		
	Distance D	2 × B
	Distance W	3 x Sn
	Distance S	1 × B
	Distance G	6 x Sn
	Width active area B	40 mm

Accessories

BSS-CP40**6901318**

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

