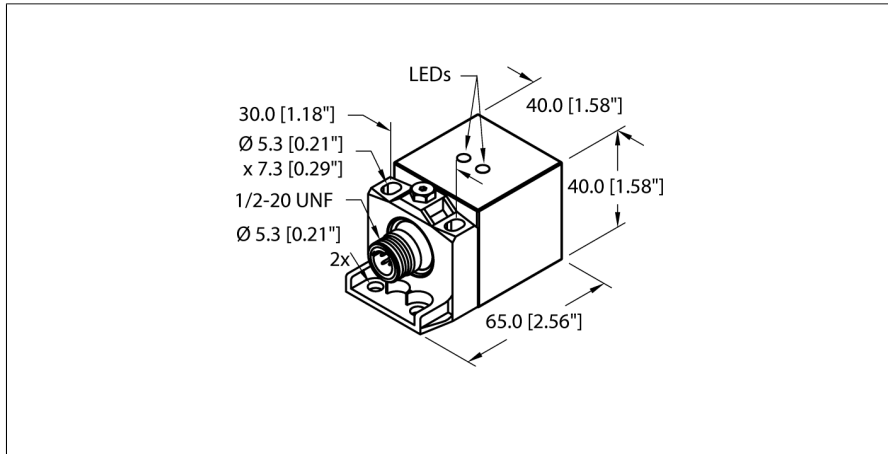
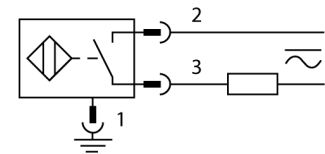


Inductive Sensor Resistant to Magnetic Fields BI20-CA40-ADZ30X2-B3131/S34 W/BS2.1



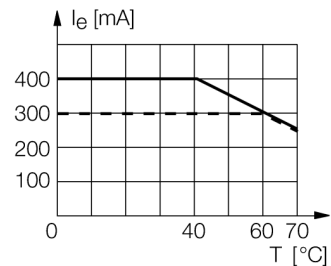
- Rectangular, height 40 mm
- Variable orientation of active face in 5 directions
- Sensor housing GD-ALSI 12
- Plastic, PA6-GF30
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- 1/2" male connector

Wiring Diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



Type	BI20-CA40-ADZ30X2-B3131/S34 W/BS2.1
ID	4283590

Special version	S34 corresponds to: Weld-field immune proximity sensors
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General data	
Rated switching distance S _n	20 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × S _n) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
Hysteresis	3...15 %

Electrical data	
Operating voltage	20...250VAC
Operating voltage	10...300 VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	≥ 50...≤ 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, NO contact, 2-wire
Smallest operating current I _e	≥ 3 mA
Insulation class	□
Switching frequency	0.02 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	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	
Power-on indication	LED, Green
Switching state	LED, Yellow
Included in delivery	BS2.1-CK40

Accessories

Type code	Ident-No.		Dimension drawing
BSS-CP40	6901318	Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene	