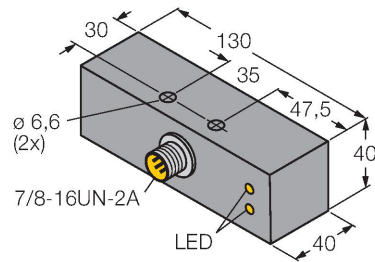


BI20-CA40130-ADZ30X2-B1131

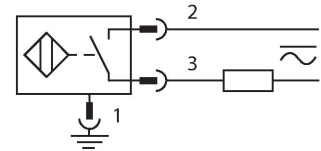
Inductive Sensor



Features

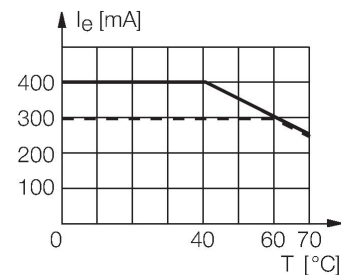
- Rectangular, height 40 mm
- Sensor housing GD-ALSI 12
- Plastic, Duroplast
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NO contact
- 7/8" male connector

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.



Technical data

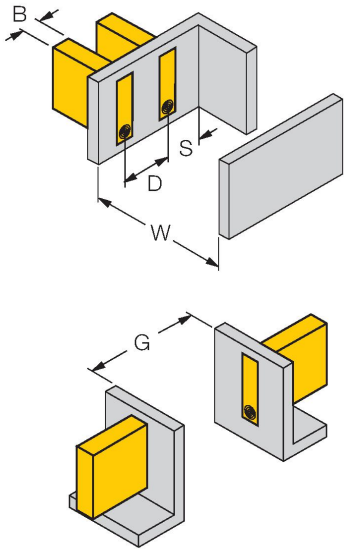
Type	BI20-CA40130-ADZ30X2-B1131
Ident. no.	4283503
Rated switching distance	20 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	3...15 %
Ambient temperature	0...+70 °C
Operating voltage	20...250 VAC
Operating voltage	10...300 VDC
AC rated operational current	$\leq 400 \text{ mA}$
DC rated operational current	$\leq 300 \text{ mA}$
Frequency	$\geq 50 \dots \leq 60 \text{ Hz}$
Residual current	$\leq 1.7 \text{ mA}$
Isolation test voltage	$\leq 1.5 \text{ kV}$
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 breakage/Reverse polarity protection	yes / Complete
Output function	2-wire, NO contact
Smallest operating current	$\geq 3 \text{ mA}$

Technical data

Switching frequency	0.02 kHz
Design	Rectangular, CA40130
Dimensions	130 x 40 x 40 mm
Housing material	Metal, GD-AISI 12
Active area material	Duroplast
Electrical connection	Connector, 7/8"
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	LED, Green
Switching state	LED, Red

Mounting instructions

Mounting instructions/Description



Distance D	3 x B
Distance W	3 x Sn
Distance S	1.5 x B
Distance G	6 x Sn
Width active area B	130 mm

BI20-CA40130-ADZ30X2-B1131| 12/03/2020 04-47 | technical changes reserved