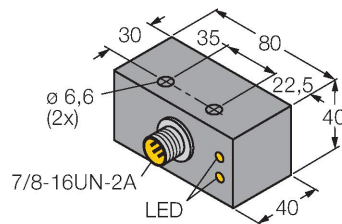


BI20-CA4080-ADZ30X2-B1131

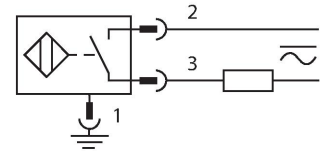
Inductive Sensor



Features

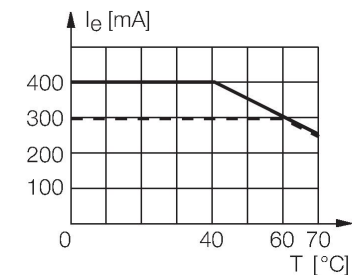
- Rectangular, height 40 mm
- Sensor housing GD-ALSI 12
- Plastic, Duroplast
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- 7/8" male connector

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.



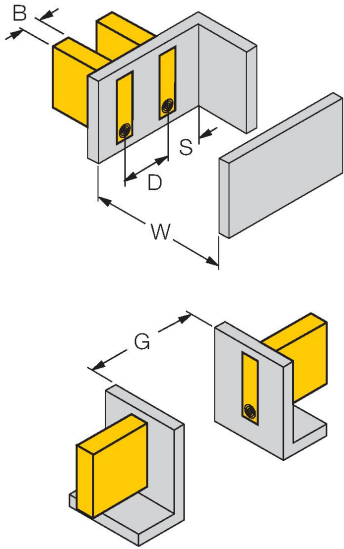
Technical data

Type	BI20-CA4080-ADZ30X2-B1131
ID	4283400
General data	
Rated switching distance	20 mm
Mounting conditions	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	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
Hysteresis	3...15 %
Electrical data	
Operating voltage U _b	20...250 VAC
Operating voltage U _b	10...300 VDC
AC rated operational current	≤ 400 mA
DC rated operating current I _b	≤ 300 mA
Frequency	$\geq 50 \dots \leq 60$ 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 _b	≤ 6 V
Wire break/reverse polarity protection	yes/Complete
Output function	2-wire, NO contact, 2-wire

Technical data

Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz
Mechanical data	
Design	Rectangular, CA4080
Dimensions	80 x 40 x 40 mm
Housing material	Metal, GD-AISI 12
Active area material	Duroplast
Electrical connection	Connector, 7/8"
Environmental conditions	
Ambient temperature	0...+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	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	80 mm

BI20-CA4080-ADZ30X2-B1131| 02/21/2025 13-46 | technical changes reserved