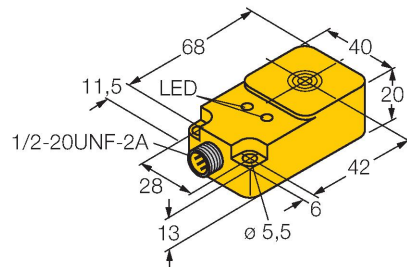


BI15-Q20-ADZ32X2-B3131

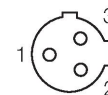
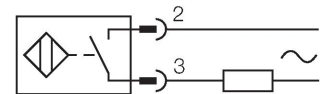
Inductive Sensor



Features

- Rectangular, height 20 mm
- Active face on top
- Plastic, PBT-GF30-V0
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- 1/2" male connector

Wiring diagram



Technical data

Type	BI15-Q20-ADZ32X2-B3131
ID	4256251
General data	
Rated switching distance	15 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	≤ 100 mA
DC rated operating current I_b	≤ 100 mA
Frequency	$\geq 50... \leq 60$ Hz
Residual current	≤ 1.7 mA
Isolation test voltage	1.5 kV
Surge current	≤ 1 A (≤ 10 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

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

Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz
Mechanical data	
Design	Rectangular, Q20
Dimensions	68 x 40 x 20 mm
Housing material	Plastic, PBT-GF30-V0
Active area material	PBT-GF30-V0
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	LED, Green
Switching state	LED, Red

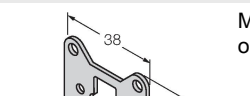
Mounting instructions

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

Accessories

MW-Q14/Q20 **6945006**

Mounting bracket for rectangular Q14 or Q20; material VA 1.4301



Technical drawing of the MW-Q14/Q20 mounting bracket. The drawing shows a 3D perspective view of the bracket, which consists of a base plate and a vertical mounting plate. The base plate has a width of 59.5 mm and a length of 50 mm. The mounting plate has a height of 69.5 mm and a width of 38 mm. The base plate has two slots for screws, each 8 mm wide and 32 mm long. The mounting plate has a central rectangular cutout and four circular holes. The material is VA 1.4301.