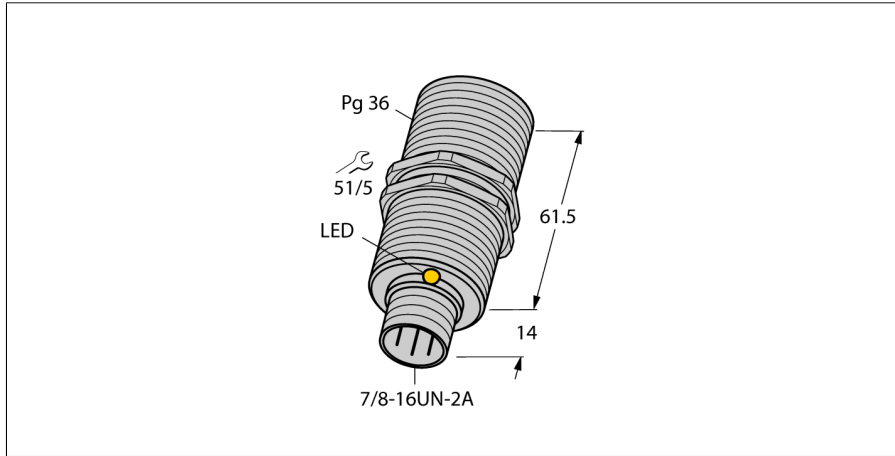


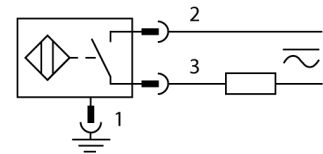
Inductive sensor

BI20-G47-ADZ30X2-B2131



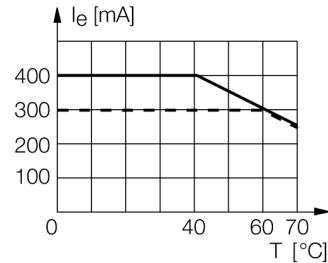
- PG36 threaded barrel
- Chrome-plated brass
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NO contact
- 7/8" male connector

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.



Type designation	BI20-G47-ADZ30X2-B2131
Ident-No.	4283510
Rated switching distance Sn	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	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	20...250VAC
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, NO contact
Smallest operating current I _m	≥ 3 mA
Switching frequency	0.03 kHz
Design	Threaded barrel, G47
Dimensions	75.5 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
Connector housing	metal
Max. tightening torque housing nut	90 Nm
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
Switching state	LED, Red

Inductive sensor BI20-G47-ADZ30X2-B2131

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter active area B	Ø 47 mm
------------------------	---------



Inductive sensor
BI20-G47-ADZ30X2-B2131



Accessories

Type code	Ident-No.	Description	
MW-47	69452	Mounting bracket; material: Steel plate, zinc-plated	