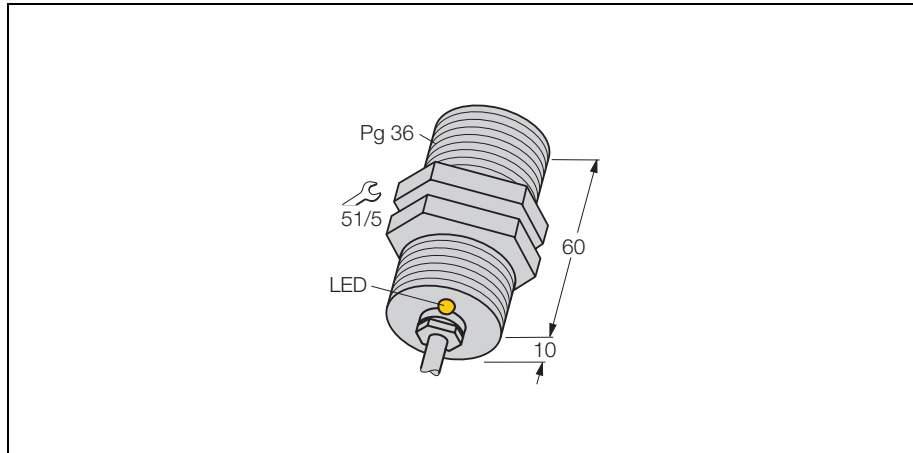


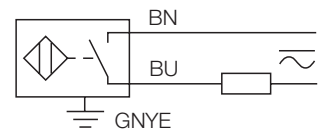
Inductive sensor

Bi20-G47-AZ3X



- threaded barrel, PG36
- chrome-plated brass
- 2-wire AC, 20...250 VAC
- 2-wire DC, 10...300 VDC
- normally open
- cable connection

Wiring diagram



Function principles

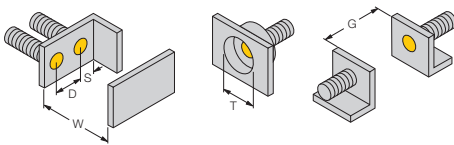
Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Type	Bi20-G47-AZ3X
Ident-No.	13088
Rated operating distance S_n	20 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Operating temperature	-25 ...+ 70 °C
Rated operational voltage (AC) U_B	20... 250 VAC
Rated operational voltage (DC) U_B	10... 300 VDC
Rated operational current (AC) I_e	≤ 400 mA
Rated operational current (DC) I_e	≤ 300 mA
Line frequency	50... 60 Hz
Max. OFF-state current	$\leq 1,7$ mA
Max. switching frequency	$\leq 0,02$ kHz
Rated insulation voltage	$\leq 1,5$ kV
Surge Current	≤ 8 A (≤ 10 ms max. 5 Hz)
Output function	2-wire, normally open
Max. voltage drop at I_e	≤ 6 V
Min. operational current I_m	≥ 3 mA
Housing style	threaded barrel; PG36
Dimensions	70 mm
Housing material	metal, CuZn, chrome-plated
Active face	plastic, PA12-GF30
Max. fixing torque of coupling nut	90 Nm
Wiring	cable
Cable	$\varnothing 5,2$, LifYY, PVC, 2 m
Cable cross section	$3 \times 0,75 \text{ mm}^2$
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Switching status indication	LED red

Inductive sensor

Bi20-G47-AZ3X

Mounting instructions	minimum gap
Gap D	2 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	1,5 x B
Gap G	6 x Sn
Diameter of active face B	Ø 47 mm



Inductive sensor

Bi20-G47-AZ3X

Accessories

Typ	Ident-No.	Description	Dimension drawing
MW47	69452	mounting bracket; material: zinc-plated steel plate	