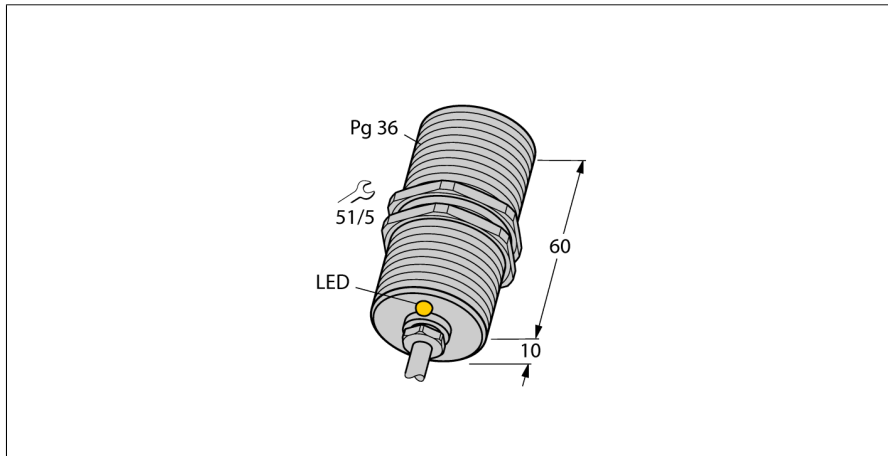


Inductive sensor BI20-G47-RZ3X

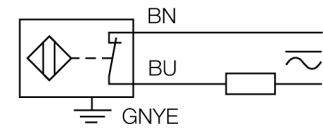
TURCK
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- Threaded barrel, PG36
- Chrome-plated brass
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NC contact
- Cable connection

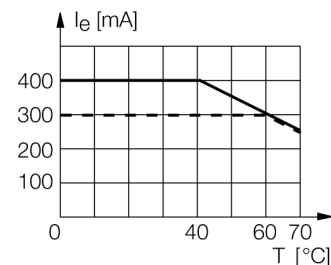
Wiring diagram



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.

We offer special versions for temperatures of -60 °C up to +250 °C.



Type code	BI20-G47-RZ3X
Ident-No.	13187
Ident-No (TUSA)	M1318700
Rated operating distance Sn	20 mm
Mounting condition	flush
Assured switching distance	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	20...250 VAC
Operating voltage	10...300VDC
AC rated operational current	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	≥ 50...≤ 60 Hz
Residual current	≤ 1.7 mA
Rated insulation voltage	≤ 1.5 kV
Surge current	≤ 8 A (≤ 10 ms max. 5 Hz)
Voltage drop at I _e	≤ 6 V
Output function	2-wire, NC contact
Smallest operating current I _m	≥ 3 mA
Switching frequency	0.02 kHz
Construction	threaded barrel, G47
Dimensions	70 mm
Housing material	metal, CuZn, chrome-plated
Material active area	plastic, PA
End cap	Plastic, PA66-GF25
Max. tightening torque housing nut	90 Nm
Connection	cable
Cable quality	5.2 mm, LifYY, PVC, 2m
Cable cross section	3 x 0.75 mm ²
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

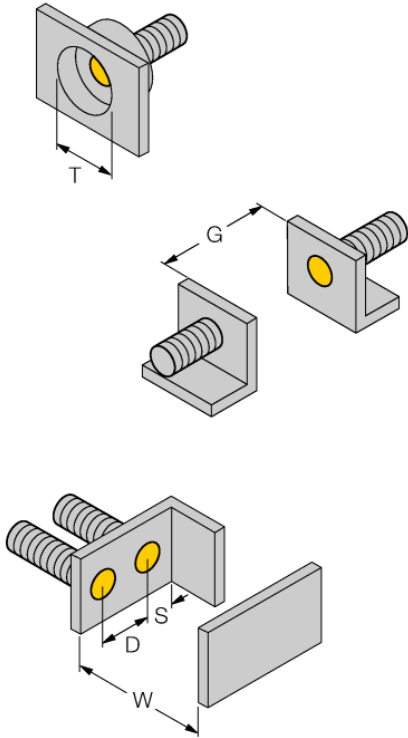
Inductive sensor BI20-G47-RZ3X

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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 of the active area B \varnothing 47 mm



Inductive sensor BI20-G47-RZ3X



Accessories

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