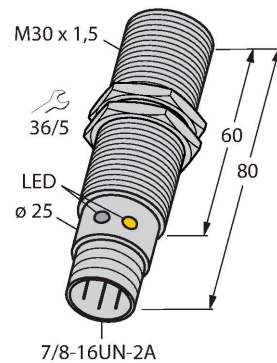


# BI15-G30-RDZ30X2-B1131

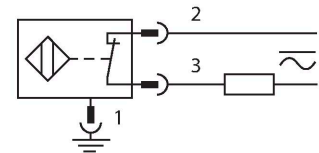
## Inductive Sensor – With Increased Switching Distance



### Features

- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- Large sensing range
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NC contact
- 7/8" male connector

### Wiring diagram

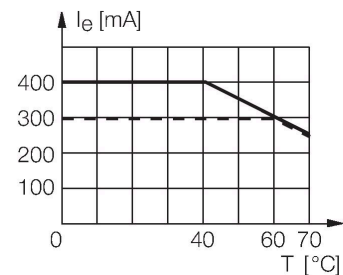


### Technical data

Type	BI15-G30-RDZ30X2-B1131
ID no.	4207289
Rated switching distance	15 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n) \text{ mm}$
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...250 VAC
Operating voltage	10...300 VDC
AC rated operational current	$\leq 400 \text{ mA}$
DC rated operational current	$\leq 300 \text{ mA}$
Frequency	$\geq 50 \dots \leq 60 \text{ Hz}$
Residual current	$\leq 1.7 \text{ mA}$
Isolation test voltage	$\leq 1.5 \text{ kV}$
Surge current	$\leq 3 \text{ A}$ ( $\leq 20 \text{ ms max. 5 Hz}$ )
Short-circuit protection	yes / Latching
Voltage drop at $I_o$	$\leq 6 \text{ V}$
Wire breakage/Reverse polarity protection	yes / Complete
Output function	2-wire, NC contact, 2-wire
Smallest operating current	$\geq 3 \text{ mA}$

### Functional principle

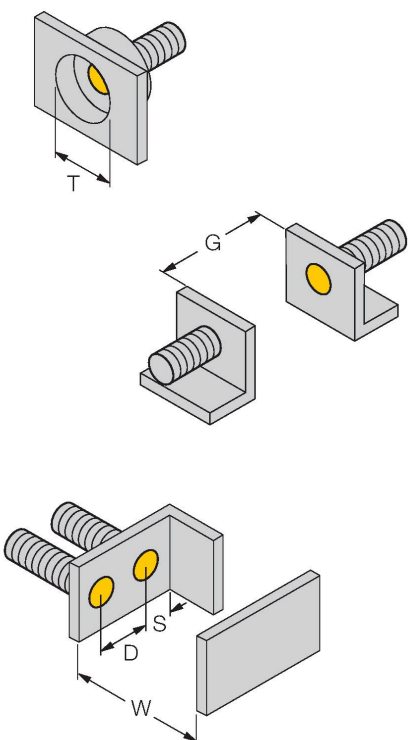
Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



## Technical data

Switching frequency	0.02 kHz
<b>Design</b>	Threaded barrel, M30 × 1.5
Dimensions	80 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
Max. tightening torque of housing nut	75 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
<b>Power-on indication</b>	LED, Green
Switching state	LED, Red

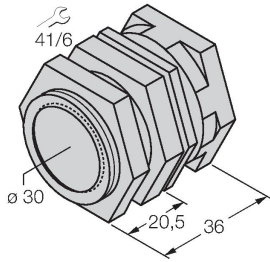
## Mounting instructions

Mounting instructions/Description	
	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 30 mm

## Accessories

QM-30

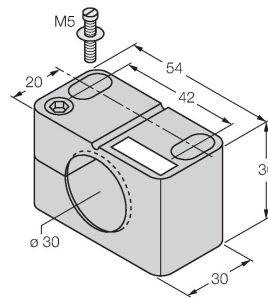
6945103



Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BST-30B

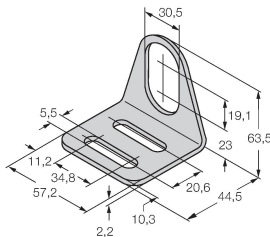
6947216



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW-30

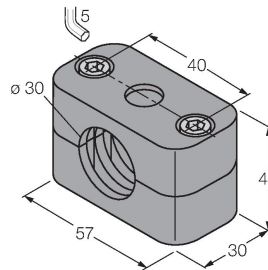
6945005



Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-30

6901319



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene