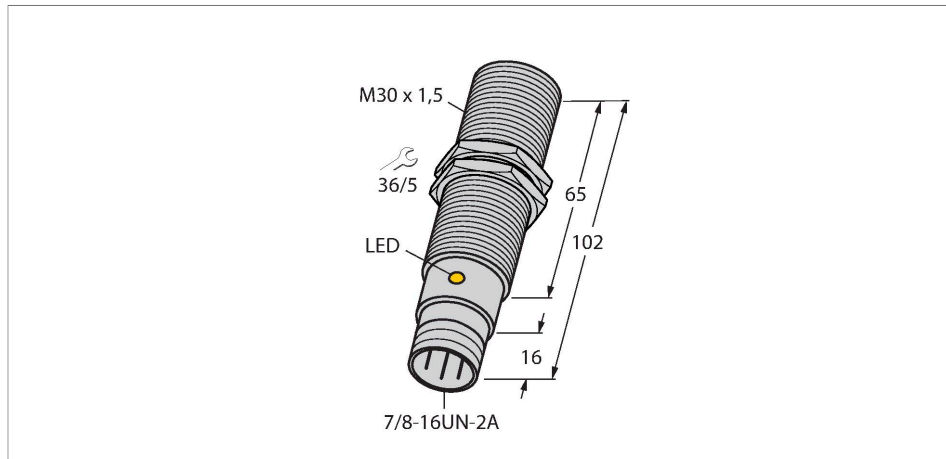


# BI10-EG30-AZ3X-B1131/S120

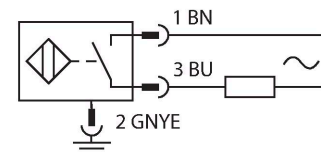
## Inductive Sensor – With Increased Temperature Range



### Features

- Threaded barrel, M30 x 1.5
- Stainless steel, 1.4571
- S120 = Temperatures up to +120 °C
- AC 2-wire, 20...250 VAC
- NO contact
- 7/8" connector

### Wiring diagram

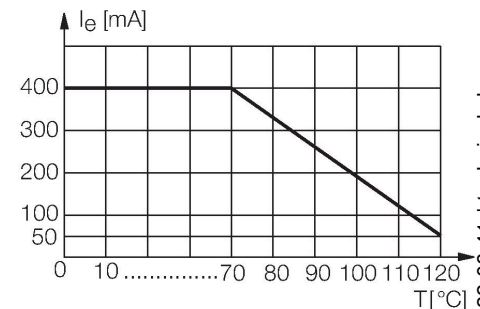


### Technical data

Type	BI10-EG30-AZ3X-B1131/S120
ID	4372202
Special version	S120 corresponds to: Maximum ambient temperature = 120 °C
<b>General data</b>	
Rated switching distance	10 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	$\leq \pm 10\%$ $\leq \pm 20\%$ , $\geq +70\text{ °C}$
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage	20...250 VAC
AC rated operational current	$\leq 400$ mA
Frequency	$\geq 50\text{...}\leq 60$ Hz
Residual current	$\leq 1.7$ mA
Isolation test voltage	$\leq 1.5$ kV
Surge current	$\leq 8$ A ( $\leq 10$ ms max. 5 Hz)
Voltage drop at $I_e$	$\leq 6$ V
Output function	2-wire, NO contact, 2-wire
Smallest operating current	$\geq 3$ mA
Switching frequency	0.02 kHz

### Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit. Special versions are available for ambient temperatures between -60°C and +250°C.

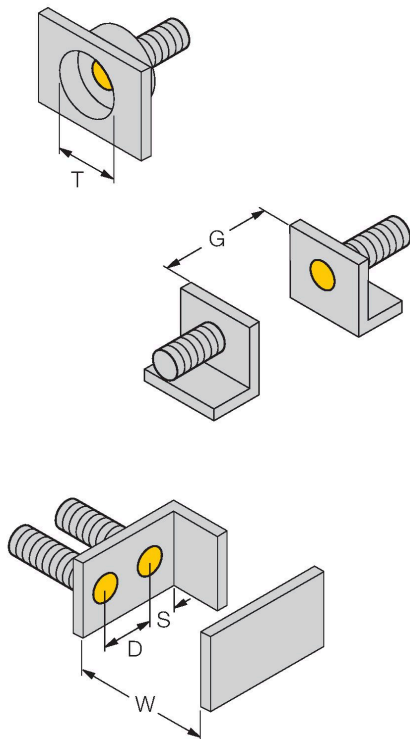


## Technical data

Mechanical data	
Design	Threaded barrel, M30 × 1.5
Dimensions	102 mm
Housing material	Stainless steel, 1.4571 (AISI 316Ti)
Active area material	Plastic, PTFE
Max. tightening torque of housing nut	75 Nm
Electrical connection	Connector, 7/8"
Environmental conditions	
Ambient temperature	-25...+120 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Switching state	LED, Red

## Mounting instructions

### Mounting instructions/Description

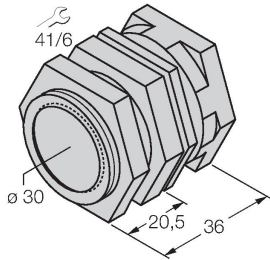


Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 30 mm

## Accessories

QM-30

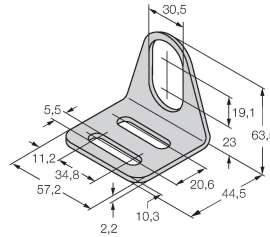
6945103



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.

MW-30

6945005



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