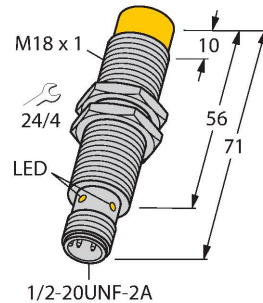


# NI8-GT18-ADZ30X2-B3331/S34

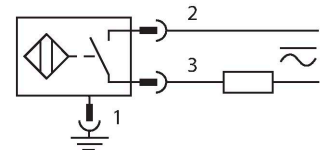
## Inductive Sensor – Resistant to Magnetic Fields



### Features

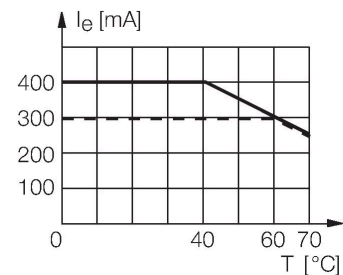
- Threaded barrel, M18 x 1
- Brass, PTFE-coated
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- 1/2" male connector

### Wiring diagram



### 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. Magnetic field sensors incorporate a special ferrite core making them immune to magnetic AC and DC fields. Hence, they can be applied in welding systems.



### Technical data

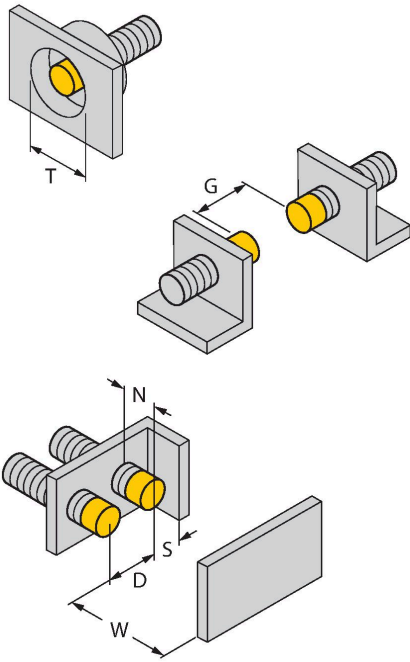
Type	NI8-GT18-ADZ30X2-B3331/S34
ID	4209101
Special version	S34 Corresponds to: Weld-field immune proximity sensors
<b>General data</b>	
Rated switching distance	8 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × S <sub>n</sub> ) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage U <sub>B</sub>	20...250 VAC
Operating voltage U <sub>B</sub>	10...300 VDC
AC rated operational current	≤ 400 mA
DC rated operating current I <sub>e</sub>	≤ 300 mA
Frequency	≥ 50...≤ 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 <sub>e</sub>	≤ 6 V
Wire break/reverse polarity protection	yes/Complete

## Technical data

Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.02 kHz
<b>Mechanical data</b>	
Design	Threaded barrel, M18 x 1
Dimensions	70 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, PA12-GF30, PTFE-coated
Max. tightening torque of housing nut	25 Nm
Electrical connection	Connector, 1/2"
<b>Environmental conditions</b>	
Ambient temperature	-25...+70 °C
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
Power-on indication	LED, Green
Switching state	LED, Red

## Mounting instructions

### Mounting instructions/Description



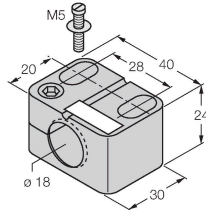
Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Diameter active area B	Ø 18 mm

## Accessories

### BST-18B

6947214

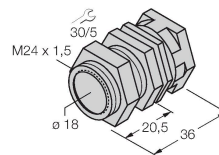
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



### QMT-18

6945104

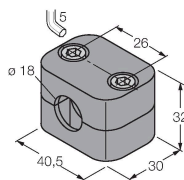
Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M24 x 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.



### BSS-18

6901320

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



### QM-18

6945102

Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 x 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

