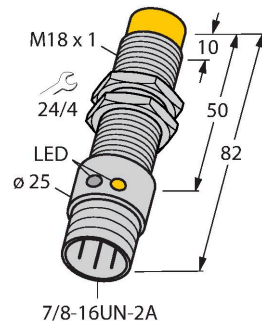


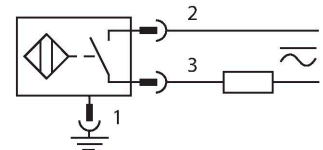
NI8-GT18-ADZ30X2-B1331/S34/S1589 Inductive Sensor – Resistant to Magnetic Fields



Features

- Threaded barrel, M18 x 1
- Brass, PTFE-coated
- AC 2-wire, 20...250 VDC
- DC 2-wire, 10...300 VDC
- NO contact
- 7/8" male connector

Wiring diagram

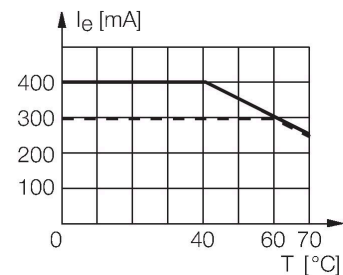


Technical data

Type	NI8-GT18-ADZ30X2-B1331/S34/S1589
ID no.	4208890
Special version	S34, S1589 corresponds to: Resistant to magnetic fields WeldGuard™ coating
Rated switching distance	8 mm
Mounting conditions	Non-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	≤ 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	≤ 400 mA
DC rated operational current	≤ 300 mA
Frequency	$\geq 50... \leq 60$ 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_e	≤ 6 V
Wire breakage/Reverse polarity protection	yes / Complete

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

Output function	2-wire, NO contact, 2-wire
Smallest operating current	$\geq 3 \text{ mA}$
Switching frequency	0.02 kHz
Design	Threaded barrel, M18 × 1
Dimensions	82 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, 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
Power-on indication	LED, Green
Switching state	LED, Red

Mounting instructions

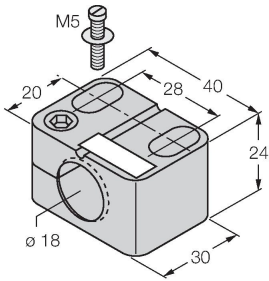
Mounting instructions/Description	
	Distance D
	3 x B
	Distance W
	3 x Sn
	Distance T
	3 x B
	Distance S
	1.5 x B
	Distance G
	6 x Sn
	Distance N
	2 x Sn
	Diameter active area B
	Ø 18 mm

N18-GT18-ADZ30X2-B1331/S34/S1589 05/05/2021 16-11 | technical changes reserved

Accessories

BST-18B

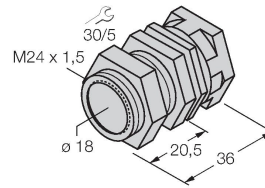
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Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

QMT-18

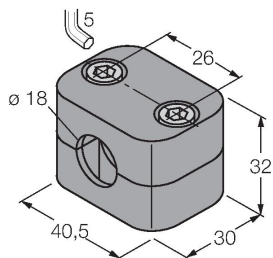
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Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BSS-18

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