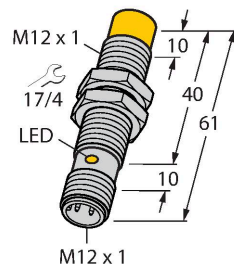


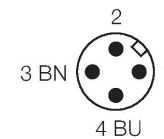
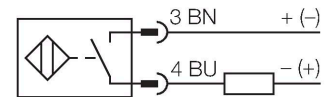
# NI8-MT12-AD4X-H1141/S1589

## Inductive Sensor – With Weldguard® coating



### Features

- Threaded barrel, M12 x 1
- Brass, PTFE-coated
- DC 2-wire, 10...65 VDC
- NO contact
- M12 x 1 male connector



### Technical data

Type	NI8-MT12-AD4X-H1141/S1589
ID	4411291
Special version	S1589 Corresponds to: With weldguard coating
<b>General data</b>	
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	$\leq 2$ % of full scale
Hysteresis	1...15 %
<b>Electrical data</b>	
Operating voltage $U_B$	10...65 VDC
Ripple $U_{rs}$	$\leq 10$ % $U_{Bmax}$
DC rated operating current $I_B$	$\leq 100$ mA
Residual current	$\leq 0.6$ mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at $I_B$	$\leq 5$ V
Wire break/reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
Smallest operating current	$\geq 3$ mA
Switching frequency	1 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.

Technical data

Mechanical data	
Design	Threaded barrel, M12 x 1
Dimensions	61 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, PA12-GF30, PTFE-coated
Max. tightening torque of housing nut	7 Nm
Electrical connection	Connector, M12 x 1
Environmental conditions	
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
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description

The image contains three technical drawings of a sensor mounting bracket. The top drawing is a side view showing the bracket's profile with a dimension line labeled 'T' indicating the distance from the mounting surface to the sensor's active area. The middle drawing is a top view showing the bracket's footprint with a dimension line labeled 'G' indicating the distance between the mounting holes. The bottom drawing is a perspective view showing the bracket's three-dimensional structure with dimension lines labeled 'N' (height), 'S' (width), 'D' (depth), and 'W' (total width).

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 12 mm

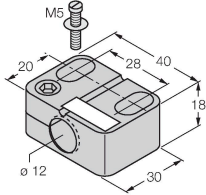
N18-MT12-AD4X-H1141/S1589 | 02/21/2025 14-13 | technical changes reserved

## Accessories

BST-12B

6947212

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



QMT-12

6945106

Quick-mount bracket with dead-stop; material: brass, PTFE-coated; Male thread M16 × 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.



BSS-12

6901321

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

