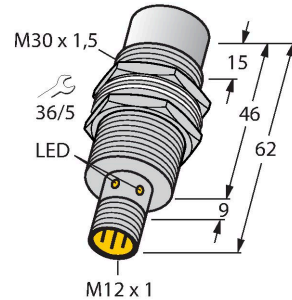


# NI30U-MT30-AP6X2-H1141/S1589 Inductive Sensor – With WeldGuard™ Coating



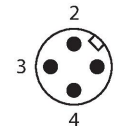
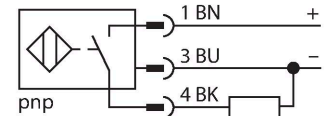
## Features

- Threaded barrel, M18 x 1
- Brass, PTFE
- Front cap with special coating, very resistant to thermal and mechanical load
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Integrated protection against predamping
- Little metal-free spaces
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

## Technical data

Type	NI30U-MT30-AP6X2-H1141/S1589
ID	16466351
Special version	S1589 Corresponds to: With weldguard coating
<b>General data</b>	
Rated switching distance	30 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Hysteresis	3...15 %
<b>Electrical data</b>	
Operating voltage $U_B$	10...30 VDC
Ripple $U_{ss}$	$\leq 10 \%$ $U_{Bmax}$
DC rated operating current $I_o$	$\leq 200$ mA
No-load current	$\leq 25$ mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
DC field stability	300 mT
AC field stability	300 mT <sub>ss</sub>
Insulation class	□

## Wiring diagram



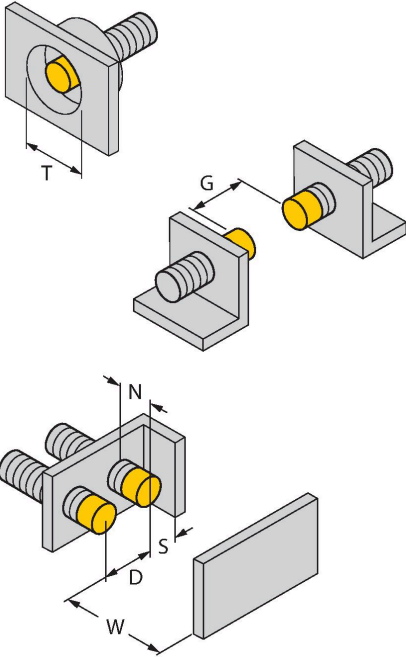
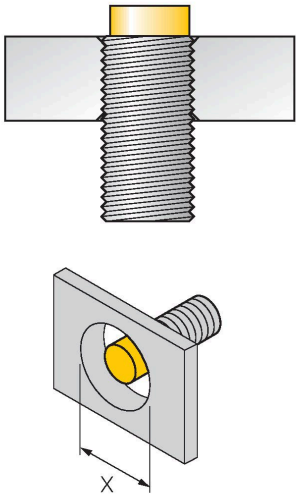
## Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

## Technical data

Switching frequency	1 kHz
<b>Mechanical data</b>	
Design	Threaded barrel, M30 x 1.5
Dimensions	62 mm
Housing material	Metal, CuZn, PTFE-coated
Active area material	Plastic, LCP + WeldGuard™, PTFE-coated
Max. tightening torque of housing nut	75 Nm
Electrical connection	Connector, M12 x 1
<b>Environmental conditions</b>	
Ambient temperature	-30...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	LED, Yellow

## Mounting instructions

Mounting instructions/Description														
														
	<table> <tr> <td>Distance D</td><td>3 x B</td></tr> <tr> <td>Distance W</td><td>3 x Sn</td></tr> <tr> <td>Distance T</td><td>3 x B</td></tr> <tr> <td>Distance S</td><td>1.5 x B</td></tr> <tr> <td>Distance G</td><td>6 x Sn</td></tr> <tr> <td>Distance N</td><td>2 x Sn</td></tr> <tr> <td>Diameter active area B</td><td>Ø 30 mm</td></tr> </table> <p>All non-flush mountable uprox®+ threaded barrel sensors can be screwed to the upper edge of the barrel. In this mounting position, the sensor operates safely with a 20 % reduced switching distance.</p> <p>When installed in an aperture plate, a distance of X = 140 mm must be observed.</p>	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
Distance D	3 x B													
Distance W	3 x Sn													
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Distance G	6 x Sn													
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Diameter active area B	Ø 30 mm													

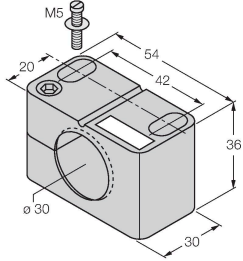
NI30U-MT30-AP6X2-H114 1/S1589j 02/21/2025 13-51 | technical changes reserved

## Accessories

BST-30B

6947216

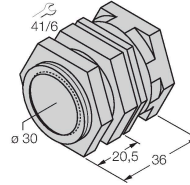
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



QMT-30

6945105

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



BSS-30

6901319

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

