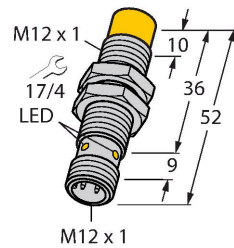


# NI10U-M12-AP6X-H1141

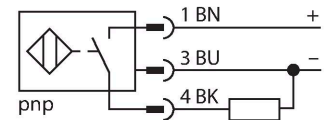
## Inductive sensor



### Features

- M12 × 1 threaded barrel
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Integrated protection against pre-attenuation
- Little metal-free spaces
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 × 1 male connector

### Wiring diagram



### Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*<sup>®</sup>+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

### Technical data

Type	NI10U-M12-AP6X-H1141
Ident. no.	1634806
Rated switching distance	10 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × S <sub>n</sub> ) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U <sub>s</sub>
DC rated operational current	≤ 200 mA
No-load current	≤ 20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Insulation class	□
Switching frequency	2 kHz
Design	Threaded barrel, M12 × 1
Dimensions	52 mm

## Technical data

Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP
Max. tightening torque housing nut	10 Nm
Electrical connection	Connector, M12 × 1
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
Switching state	LED, Yellow

## Mounting instructions

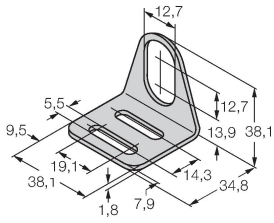
Mounting instructions/Description																	
	<table border="1"> <tr> <td>Distance D</td> <td>48 mm</td> </tr> <tr> <td>Distance W</td> <td>3 x Sn</td> </tr> <tr> <td>Distance T</td> <td>45 mm</td> </tr> <tr> <td>Distance S</td> <td>1.5 x B</td> </tr> <tr> <td>Distance G</td> <td>6 x Sn</td> </tr> <tr> <td>Distance N</td> <td>2 x Sn</td> </tr> <tr> <td>Diameter active area</td> <td>Ø 12 mm</td> </tr> <tr> <td>B</td> <td></td> </tr> </table>	Distance D	48 mm	Distance W	3 x Sn	Distance T	45 mm	Distance S	1.5 x B	Distance G	6 x Sn	Distance N	2 x Sn	Diameter active area	Ø 12 mm	B	
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	Distance N	2 x Sn															
Diameter active area	Ø 12 mm																
B																	
<p>All recessed mountable <i>uprox</i><sup>®</sup>+ threaded barrel sensors can be embedded to the upper edge of the thread. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %. When installed in an aperture plate a distance of X = 50 mm must be observed.</p>																	

## Accessories

<p><b>QM-12</b></p>	<p><b>6945101</b></p> <p>Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M16 × 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.</p>
<p><b>BST-12B</b></p>	<p><b>6947212</b></p> <p>Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6</p>

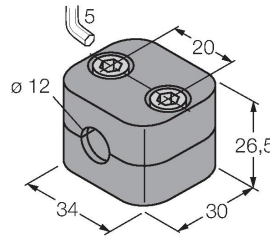
N110U-M12-AP6X-H1141 | 03/07/2020 07-55 | technical changes reserved

**MW12 6945003**



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

**BSS-12 6901321**



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

Wiring accessories

**Dimension drawing Type Ident. no.**

**RKC4T-2/TEL**

**6625010**

Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see [www.turck.com](http://www.turck.com)





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