

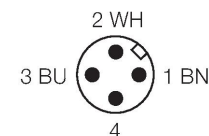
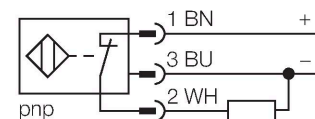
# NI30U-M30-RP6X-H1141

## Inductive Sensor

### Features

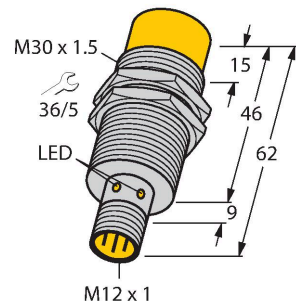
- M30 × 1.5 threaded tube
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Integrated protection against predamping
- Little metal-free spaces
- DC 3-wire, 10...30 VDC
- NC contact, PNP output
- M12 × 1 male connector

### 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

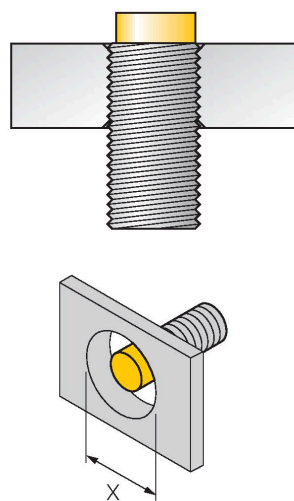
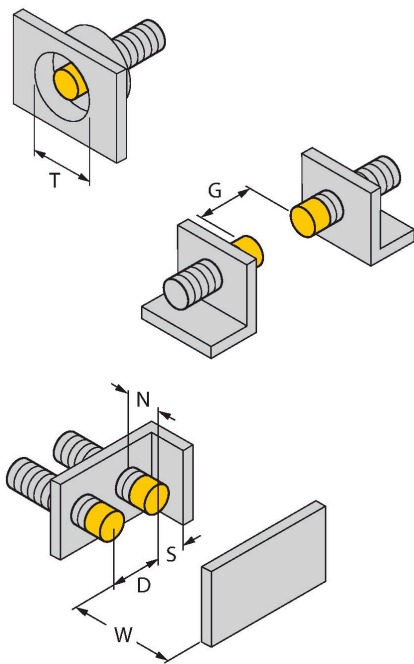
Type	NI30U-M30-RP6X-H1141
Ident. no.	1646636
Rated switching distance	30 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × S <sub>n</sub> ) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °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, NC contact, PNP
Insulation class	□
Switching frequency	1 kHz
Design	Threaded barrel, M30 × 1.5
Dimensions	62 mm

## Technical data

Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP
Max. tightening torque housing nut	75 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



Distance D	135 mm
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	Ø 30 mm
B	

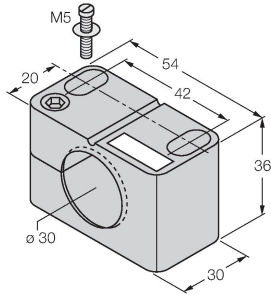
All non-flush mountable *uprox*<sup>®</sup>+ threaded barrel sensors can be screwed to the upper edge of the barrel. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.

When installed in an aperture plate a distance of X = 140 mm must be observed.

## Accessories

**BST-30B**

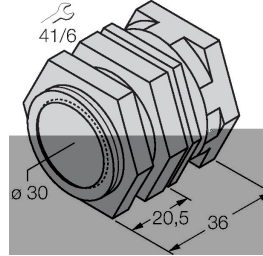
6947216



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

**QM-30**

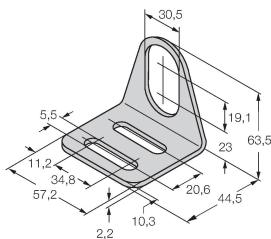
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Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

**MW30**

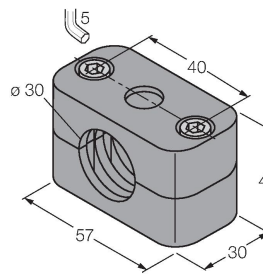
6945005



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

**BSS-30**

6901319



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

## Wiring accessories

Dimension drawing

Type

Ident. no.

RKC4.4T-2/TEL

6625013

Connection cable, female M12, straight, 4-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)

