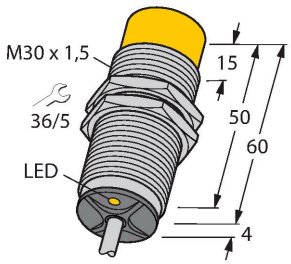
NI15U-M30-AD4X
Inductive sensor



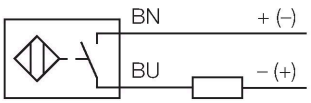
Technical data

Type	NI15U-M30-AD4X
Ident. no.	4405076
Rated switching distance	15 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3…20 %
Ambient temperature	-25…+70 °C
Operating voltage	10…65 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 100 mA
Residual current	≤ 0.8 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_e	≤ 5 V
Wire breakage/Reverse polarity protection	Complete
Output function	2-wire, NO contact, 2-wire
Smallest operating current	≥ 3 mA
Switching frequency	0.01 kHz
Design	Threaded barrel, M30 × 1.5
Dimensions	64 mm
Housing material	Metal, CuZn, Chrome-plated

Features

- M30 × 1.5 threaded tube
- Chrome-plated brass
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 2-wire, 10…65 VDC
- NO contact
- Cable connection

Wiring diagram



Functional principle

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

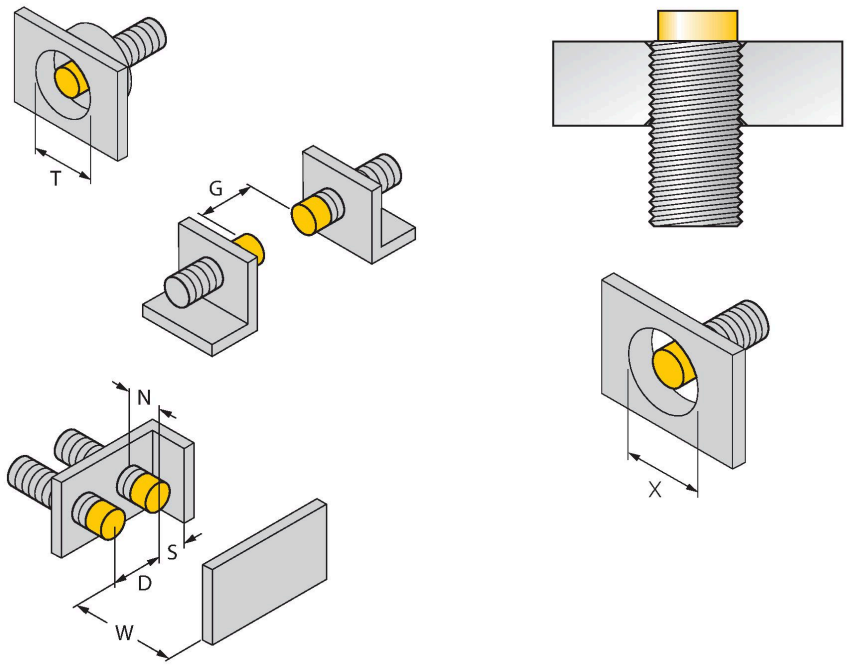
NI15U-M30-AD4X| 03/07/2020 08-26 | technical changes reserved

Technical data

Active area material	Plastic, LCP
End cap	Plastic, EPTR
Max. tightening torque housing nut	75 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	2 x 0.34 mm^2
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



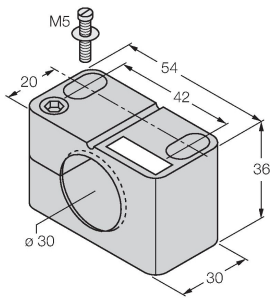
Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Diameter active area B	Ø 30 mm

All non-flush mountable uprox®+ 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 clearance of X = 140 mm must be observed.
Isolating switching amplifiers can be applied because uprox®+ 2-wire DC sensors work with a low operating voltage of 8VDC (limited load current 50 mA).
If the sensors are operated with the Turck Remote I/O fieldbus system BL20, wire-break and short-circuit are immediately detected. For this purpose connected the sensor to the BL20-4DI-NAMUR slice.

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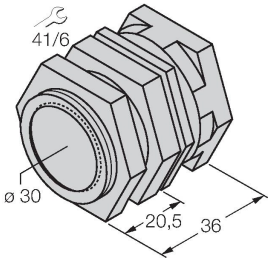
Accessories

BST-30B **6947216**



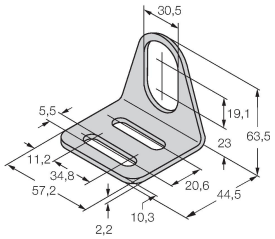
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

QM-30 **6945103**



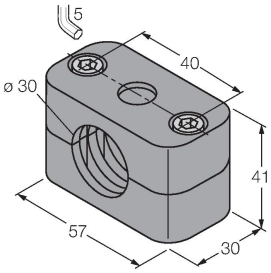
Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

MW30 **6945005**



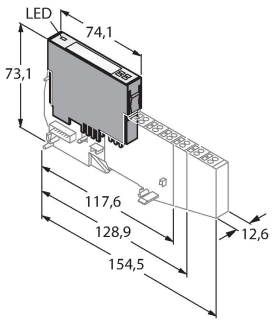
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-30 **6901319**



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

BL20-4DI-NAMUR **6827212**



4 digital inputs acc. to EN 60947-5-6 For NAMUR sensors, de-energized contacts or uprox®+ 2-wire DC sensors.

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