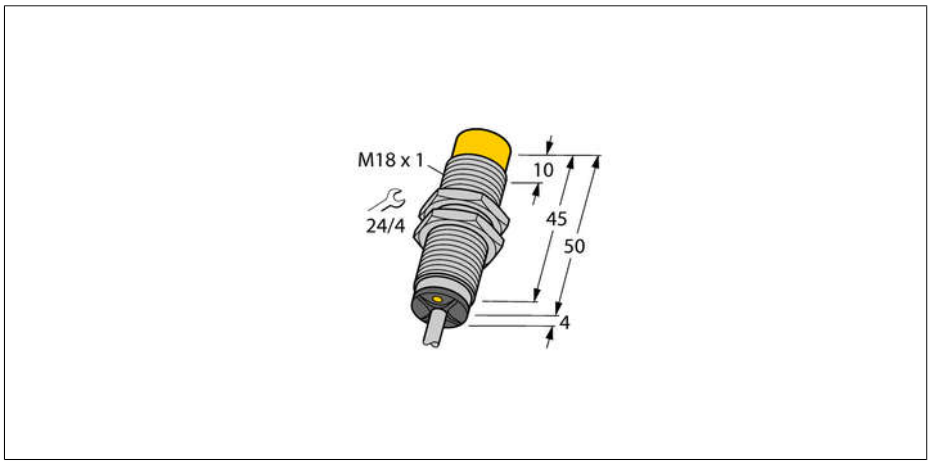
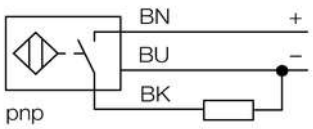
Inductive sensor
NI15U-M18-AP6X



- **Threaded barrel, M18 x 1**
- **Chrome-plated brass**
- **Factor 1 for all metals**
- **Protection class IP68**
- **Magnetic field immune**
- **High switching distance**
- **Integrated predamping protection**
- **Limited metal-free spaces**
- **DC 3-wire, 10…30 VDC**
- **NO contact, PNP output**
- **Cable connection**

Type	NI15U-M18-AP6X
Ident-No.	1635330
Rated operating distance Sn	15 mm
Mounting condition	non-flush
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 %
Temperaturdrift	10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3…15 %
Ambient temperature	-30…+85 °C
Operating voltage	10…30VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I_e	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protection class	⧈
Switching frequency	1.5 kHz
Design	threaded barrel, M18 x 1
Dimensions	54 mm
Housing material	Metal, CuZn, chrome-plated
Material active face	Plastic, LCP-GF30
End cap	Plastic, EPTR
Max. tightening torque housing nut	25 Nm
Connection	cable
Cable quality	5.2 mm, LifYY, PVC, 2 m
Cable cross section	3 x 0.34 mm^2
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

Wiring diagram



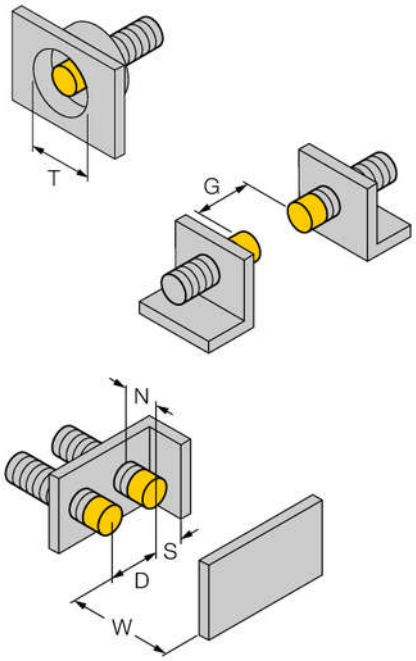
Functional principle

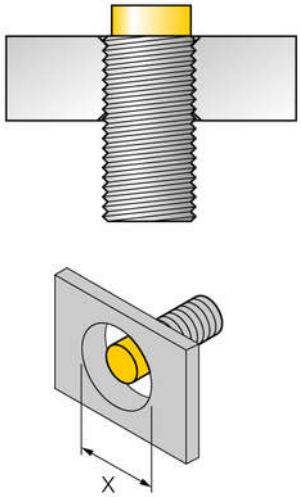
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *Uprox*®+ sensors have distinct advantages compared to conventional sensors. They excel in highest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

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Mounting instructions	minimum distances
Distance D	72 mm
Distance W	45 mm
Distance T	54 mm
Distance S	27 mm
Distance G	90 mm
Distance N	20 mm

Diameter of the active area B	Ø 18 mm



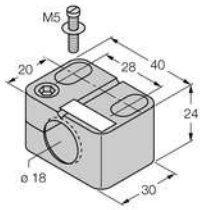
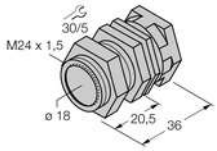
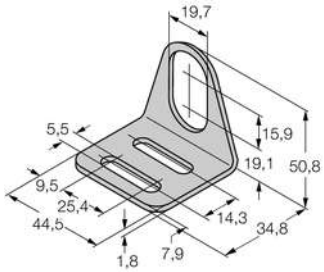
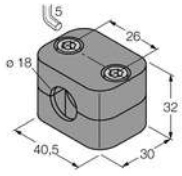


All non-flush mountable *uprox*®+ threaded barrel sensors can be screwed to the upper edge of the barrel. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.

When installed in an aperture plate a distance of X = 70 mm must be observed.

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Accessories

Type code	Ident-No.	Short text	Dimension drawing
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QM-18	6945102	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M24 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	

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