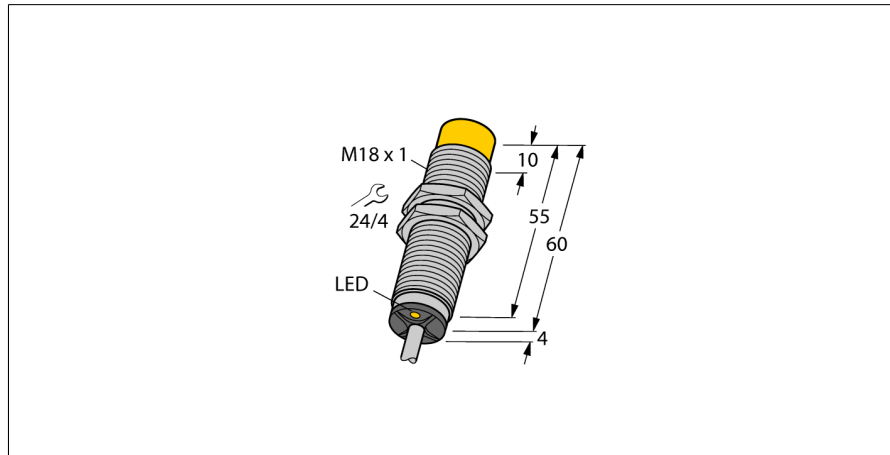


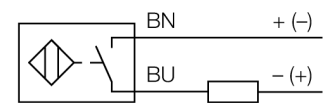
# Inductive Sensor

## Ni10U-M18M-AD4X



- Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 2-wire, 10...65 VDC
- NO contact
- Cable connection

### Wiring Diagram



Type	NI10U-M18M-AD4X
ID	4405070

General data	
Rated switching distance $S_n$	10 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
	$\leq \pm 15\%$ , $\leq -25^\circ\text{C}$ v $\geq +70^\circ\text{C}$
Hysteresis	3...20 %

Electrical data	
Operating voltage	10...65 VDC
Residual ripple	$\leq 10\% U_{is}$
DC rated operational current	$\leq 100$ mA
Residual current	$\leq 0.8$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes/ Cyclic
Voltage drop at $I_o$	$\leq 5$ V
Output function	2-wire, NO contact, 2-wire
DC field stability	300 mT
AC field stability	300 mT <sub>ss</sub>
Smallest operating current $I_m$	$\geq 3$ mA
Switching frequency	0.01 kHz

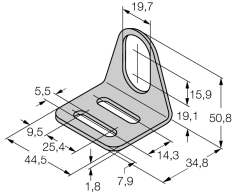
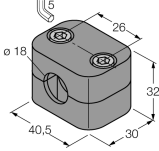
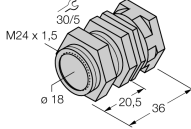
Mechanical data	
Design	Threaded barrel, M18 x 1
Dimensions	64 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP
End cap	Plastic, EPTR
Max. tightening torque of housing nut	25 Nm
Electrical connection	Cable
Cable quality	$\varnothing 5.2$ mm, LifYY, PVC, 2 m
Core cross-section	2 x 0.34 mm <sup>2</sup>

### 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.

Environmental conditions	
Ambient temperature	-25...+70 °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
Switching state	
	LED, Yellow

## Accessories

Type code	Ident no.		Dimension drawing
MW-18	6945004	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	
QM-18	6945102	Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.	
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.	