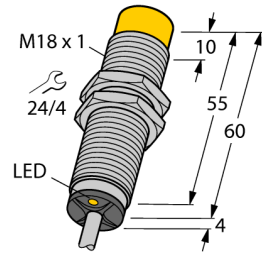
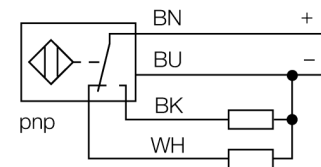


# Inductive Sensor With Extended Switching Distance NI15U-M18M-VP44X



- Threaded barrel, M18 x 1
- 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 4-wire, 10...55 VDC
- Changeover contact, PNP output
- Cable connection

### Wiring Diagram



### 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.

Type	NI15U-M18M-VP44X
ID	1634878

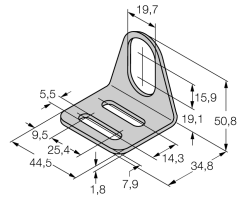
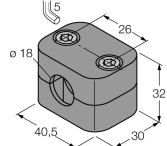
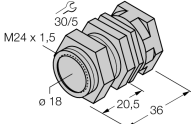
Remark to product	Product discontinued. Please use the alternative product 100000628 with an operating voltage of 10...30 VDC.
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General data	
Rated switching distance $S_n$	15 mm
Mounting conditions	Non-flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
	$\leq \pm 15\%$ , $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$
Hysteresis	3...15 %

Electrical data	
Operating voltage $U_s$	10...55 VDC
Ripple $U_{rs}$	$\leq 10\%$ $U_{Bmax}$
DC rated operating current $I_s$	$\leq 200$ mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at $I_s$	$\leq 1.8$ V
Wire break/reverse polarity protection	yes/Complete
Output function	4-wire, Complementary contact, PNP
DC field stability	300 mT
AC field stability	300 mT <sub>SS</sub>
Insulation class	□
Switching frequency	1 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	Ø 5.2 mm, Gray, LifYY, PVC, 2 m
Core cross-section	4 x 0.34 mm <sup>2</sup>
Environmental conditions	
Ambient temperature	-30...+85 °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)	 <p>Technical drawing of a mounting bracket for threaded barrel sensors. The drawing shows a perspective view of a U-shaped bracket with a central slot. Dimensions are provided in millimeters: 19.7 (width of the top flange), 15.9 (height of the top flange), 50.8 (total height), 19.1 (width of the central slot), 14.3 (width of the bottom flange), 34.8 (width of the bottom flange), 7.9 (height of the bottom flange), 1.8 (thickness of the bottom flange), 44.5 (total width), 25.4 (width of the central slot), 9.5 (width of the top flange), and 5.5 (width of the top flange).</p>
BSS-18	6901320	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	 <p>Technical drawing of a mounting clamp for smooth and threaded barrel sensors. The drawing shows a perspective view of a rectangular clamp with a central slot. Dimensions are provided in millimeters: 26 (width of the top flange), 32 (height of the top flange), 40.5 (total width), 30 (width of the bottom flange), and 18 (diameter of the central slot). A small dimension of 5 is also indicated.</p>
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.	 <p>Technical drawing of a quick-mount bracket with a dead-stop. The drawing shows a perspective view of a cylindrical bracket with a male thread. Dimensions are provided in millimeters: 30.5 (width of the top flange), 20.5 (width of the bottom flange), 36 (total width), 18 (diameter of the central slot), and M24 x 1.5 (thread specification).</p>