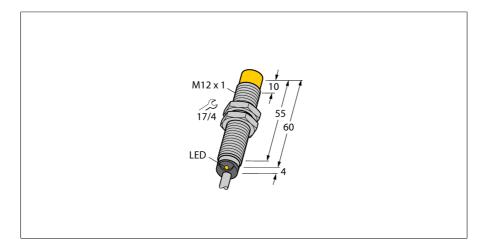


## Inductive Sensor With Extended Switching Distance NI10U-M12E-VP44X



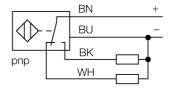
Type	NI10U-M12E-VP44X
ID	1634870
Remark to product	Product discontinued.  Please use the alternative product 100000621 with an operating voltage of 1030 VDC.

General data		
Rated switching distance Sn	10 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	315 %	

Electrical data		
Operating voltage U <sub>B</sub>	1055 VDC	
Ripple U <sub>ss</sub>	≤ 10 % U <sub>Bmax</sub>	
DC rated operating current I <sub>e</sub>	≤ 200 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 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		
	1 kHz	

- M12 × 1 threaded barrel
- Long version
- 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.



Mechanical data		
Design	Threaded barrel, M12 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	10 Nm	
Electrical connection	Cable	
Cable quality	Ø 5.2 mm, Gray, LifYY, PVC, 2 m	
Core cross-section	4 x 0.34 mm²	
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
BST-12B	6947212	Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6	20 28 40 18 18
QM-12	6945101	Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M16 × 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.	0 12 19.5 34
MW-12	6945003	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	9.5 12.7 13.9 38.1 18.7,9 14.3 34.8
BSS-12	6901321	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	0 12 20 20 20 20 30 30