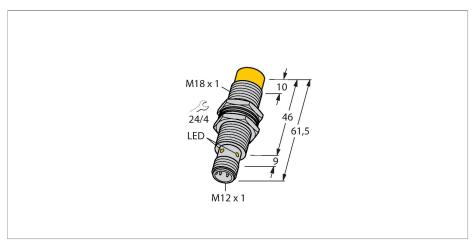


NI12U-M18M-VN4X-H1141 **Inductive Sensor**



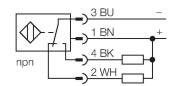
Technical data

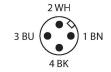
Туре	NI12U-M18M-VN4X-H1141
ID	1581552
General data	
Rated switching distance	12 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	315 %
Electrical data	
Operating voltage U _в	1065 VDC
Ripple U _{ss}	≤ 10 % U _{Bmax}
DC rated operating current I _e	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I _e	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	4-wire, Complementary contact, NPN
DC field stability	300 mT
AC field stability	300 mT _{ss}
Insulation class	
Switching frequency	1 kHz
Mechanical data	
Design	Threaded barrel, M18 x 1

Features

- ■Threaded barrel, M18 x 1
- Chrome-plated brass
- Factor 1 for all metals
- ■Protection class IP68
- Resistant to magnetic fields
- ■Extended temperature range ■ High switching frequency
- ■DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- ■M12 x 1 male connector

Wiring diagram





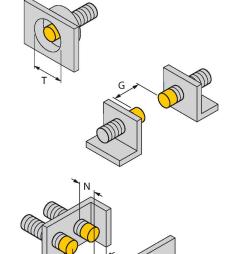
Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox Factor 1 sensors have significant advantages due to their patented ferritecoreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Dimensions	61.5 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PBT
Max. tightening torque of housing nut	25 Nm
Electrical connection	Connector, M12 × 1
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

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 18 mm

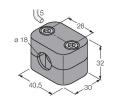
6945004

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.

Accessories

Dimension drawing Type ID

RKC4.4T-2/TEL 6625013



Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval