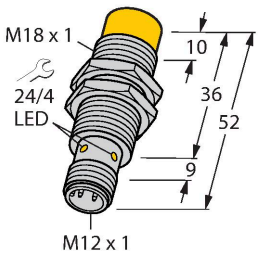
NI15U-EM18-AP6X-H1141
Inductive Sensor – With Extended Switching Distance



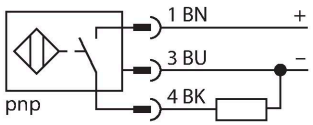
Technical data

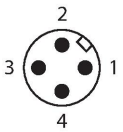
Type	NI15U-EM18-AP6X-H1141
ID	1635332
General data	
Rated switching distance	15 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3…15 %
Electrical data	
Operating voltage	10…30 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current	25 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 breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
DC field stability	300 mT
AC field stability	300 mT_{ss}
Insulation class	⧈

Features

- Threaded barrel, M18 x 1
- Stainless steel, 1.4301
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Integrated protection against predamping
- Little metal-free spaces
- DC 3-wire, 10…30 VDC
- NO contact, PNP output
- M12 x 1 male connector

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.

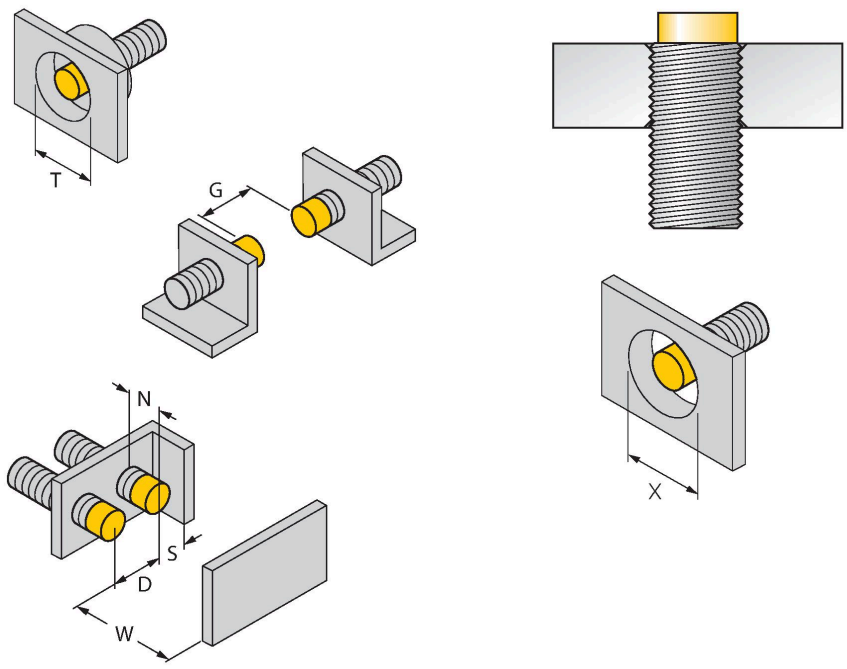
NI15U-EM18-AP6X-H1141| 11/07/2023 13-14 | technical changes reserved

Technical data

Switching frequency	1 kHz
Mechanical data	
Design	Threaded barrel, M18 x 1
Dimensions	52 mm
Housing material	Stainless steel, 1.4301 (AISI 304)
Active area material	Plastic, LCP
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	72 mm
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

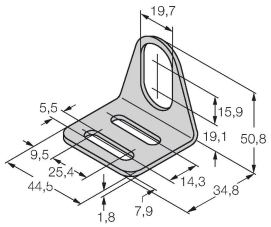
All non-flush mountable uprox®+ threaded barrel sensors can be screwed to the upper edge of the barrel. In this mounting position, the sensor operates safely with a 20 % reduced switching distance.

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

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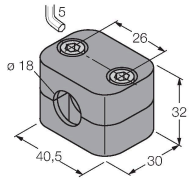
Accessories

MW-18	6945004



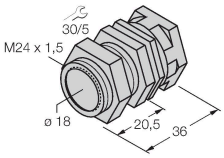
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-18	6901320



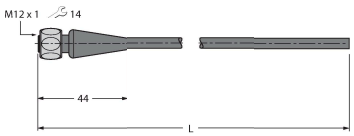
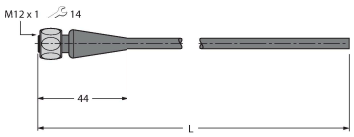
Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

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.

Wiring accessories

Dimension drawing	Type	ID	
	RKH4-2/TFE	6935482	Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, gray; temperature range: -25…+80 °C
	RKH4-2/TFG	6934384	Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: TPE, gray; temperature range: -40…+105 °C

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RKC8T-2/TXL 6936233 FS 4.4-0.5/14.5/NPT NI10U-M12-AP6X BI10-M30-AP6X-H1141 IM31-22EX-I C4-A40FX/024VDC IM33-11EX-HI/24VDC NI100U-K90SR-VP4X2-H1141 NI10U-M12E-AP6X-H1141 RKM 30-2M BI 5-M18-Y1X-H1141 NI 4U-Q8SE-AP6X NI 8U-M12-AN6X-H1141 MFKS 3-1 RK 4T-4/S618 BI30U-CP40-AP6X2 BIM-IKM-AP6X2-H1141/S34 W/KLI-3 C9-A41BX/024VADC NI30U-M30-AN6X-H1141 BI10U-Q14-AP6X2-V1131 BIM-IKT-AP6X BIM-UNT-AP6X-0.3-PSG3M NI10-G18-AZ3X-B1431 50MM NI12U-S18-AP6X TX1-Q20L60 BC5-Q08-AP6X2-V1131 BI4-M12-AN6X-H1141 Bi 8U-M18-AP6X Bi5-G18-Y1X