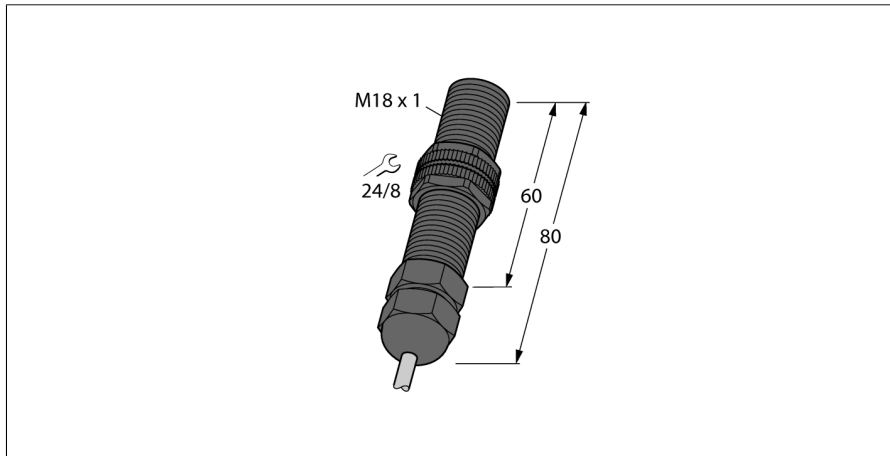


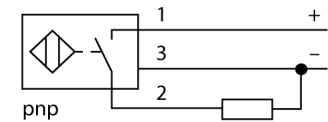
**Inductive sensor**  
**For underwater applications**  
**NI12U-P18-AP6/S139-S1261 30M**



- Threaded barrel, M18 x 1
- Plastic, POM
- For underwater and off-shore applications
- Oil and seawater resistant
- Protection class IP68, 350 m water column
- Factor 1 for all metals
- Resistant to magnetic fields
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Cable connection

**Type code** NI12U-P18-AP6/S139-S1261 30M  
**Ident-No.** 1650233

**Wiring diagram**



**Functional principle**

Inductive sensors detect metal objects contactless and wear-free. uprox Factor 1 sensors have significant advantages due to their patented ferrite-coreless multicoil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

<b>Rated operating distance Sn</b>	12 mm
Mounting condition	non-flush
Assured switching distance	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Static pressure	≤ 35 bar
Temperature drift	≤ ± 10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C

<b>Operating voltage</b>	10...30VDC
Residual ripple	≤ 10 % U <sub>s</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Switching frequency	2 kHz

<b>Construction</b>	threaded barrel, M18 x 1
Dimensions	80 mm
Housing material	plastic, POM, black
Material active area	plastic, POM, Black
End cap	Plastic, PA
Max. tightening torque housing nut	2 Nm
Connection	cable
Cable quality	5.2 mm, Ölflex rugged 210, TPE, 30m
Cable cross section	3 x 0.5 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68

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Distance D	3 x B
Distance W	3 x Sn
Distance T	65 mm
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn

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**Diameter of the active area B**                       $\varnothing$  18 mm

