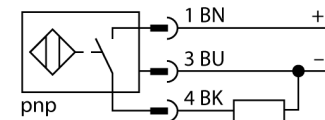


- Threaded barrel, M12 x 1
- Stainless steel, 1.4301
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- Auto-compensation protects against pre-attenuation
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

<b>Type designation</b>	NI8U-EM12-AP6X-H1141
Ident no.	1644340
<b>Rated switching distance Sn</b>	8 mm
Mounting conditions	non-flush, partially embeddable
Assured switching distance	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
Hysteresis	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Ambient temperature	3...15 % -30...+85 °C
<b>Operating voltage</b>	10... 30VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 20 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protective insulation	☐
Switching frequency	2 kHz
<b>Construction</b>	Threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	Stainless steel, V2A (1.4301)
Active area material	Plastic, PBT
Max. tightening torque housing nut	10 Nm
Electrical connection	Flange connector, M12 x 1
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
<b>Switching state</b>	LED yellow

**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.

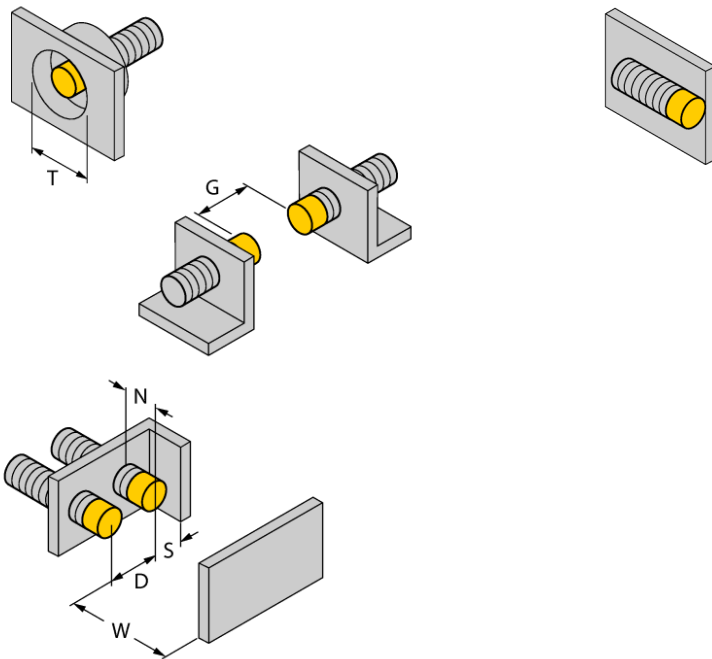
**Inductive sensor**  
**NI8U-EM12-AP6X-H1141**

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Distance D	3 x B
Distance W	3 x Sn
Distance T	45 mm
Distance S	0.5 x B
Distance G	6 x Sn
Distance N	2 x Sn

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**Diameter of the active area B**                       $\varnothing$  12 mm



1-side flush mounting possible:  
1-side flush mounting: Sr = 6 mm

**Accessories**

Type code	Ident no.	Description	
BST-12B	6947212	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
MW-12	6945003	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-12	6901321	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	

**Wiring accessories**

Type code	Ident no.	Description	
RKH4-2/TFE	6935482	Connection cable, M12 connector, female, straight, 3-pin, cable length: 2 m, sheath material: PVC, grey; temperature range: -25...+80 °C (in resting state), 0...+80 °C (in motion); other cable lengths and types available, see <a href="http://www.turck.com">www.turck.com</a>	
RKH4-2/TFG	6934384	Connection cable, M12 connector, female, straight, 3-pin, cable length: 2 m, sheath material: TPE, grey; temperature range: -40...+105 °C (in resting state), -25...+105 °C (in motion); other cable lengths and types available, see <a href="http://www.turck.com">www.turck.com</a>	