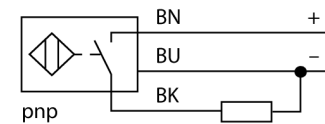




- Threaded barrel, M30 x 1.5
- Stainless steel, 1.4301
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- Auto-compensation protects against pre-attenuation
- 3-wire DC, 10...30 VDC
- NO contact, PNP output
- Cable connection

Type code	NI20U-EM30-AP6X
Ident no.	1646300
Rated operating distance Sn	20 mm
Mounting condition	non-flush, partially embeddable
Assured sensing range	≤ (0,81 x Sn) mm
Repeatability	≤ 2 % of full scale
Temperature drift	10 %
	≤ ± 20 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10...30VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protection class	☐
Switching frequency	1.5 kHz
Design	threaded barrel, M30 x 1.5
Dimensions	64 mm
Housing material	stainless steel, V2A (1.4301)
Material active area	Plastic, PBT
End cap	Plastic, EPTR
Max. tightening torque housing nut	75 Nm
Connection	cable
Cable quality	5.2 mm, LifYY, PVC, 2 m
Cable cross section	3 x 0.34 mm ²
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

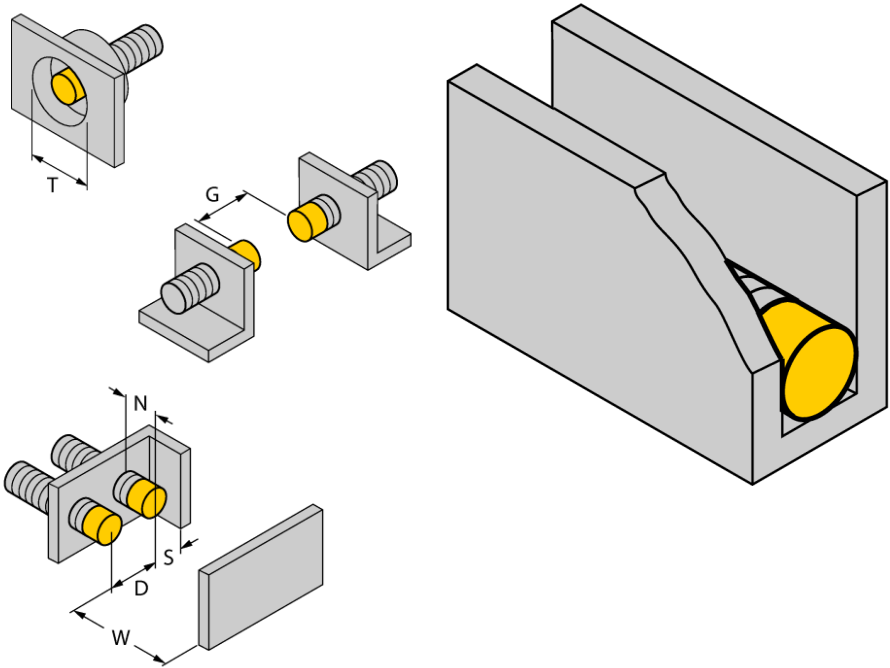
Wiring diagram



Functional principle

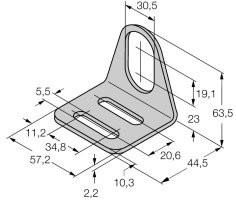
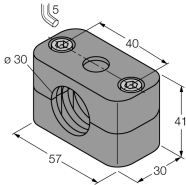
Inductive sensors detect metal objects contactless and wear-free. Due to the patented multicoil system, *uprox*®+ sensors have distinct advantages over conventional sensors. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	0.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
<hr/>	
Diameter of the active area B	Ø 30 mm



up to 3-side flush mounting possible
 1-side flush mounting: Sr = 15 mm
 2-side flush mounting: Sr = 12 mm
 3-side flush mounting: Sr = 11 mm

Accessories

Type code	Ident no.	Description	Dimension drawing
MW-30	6945005	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 <p>Technical drawing of a stainless steel mounting bracket (MW-30) for threaded barrel devices. The drawing shows a side view with the following dimensions: 5.5, 11.2, 34.8, 57.2, 2.2, 10.3, 20.6, 44.5, 30.5, 19.1, 23, and 63.5.</p>
BSS-30	6901319	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of a polypropylene mounting bracket (BSS-30) for smooth and threaded barrel devices. The drawing shows a perspective view with the following dimensions: 5, 40, 41, 30, 57, and 30.</p>