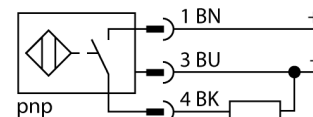


- Threaded barrel, M12x1
- Chrome-plated brass
- Factor 1 for all metals
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Wiring Diagram

Functional principle

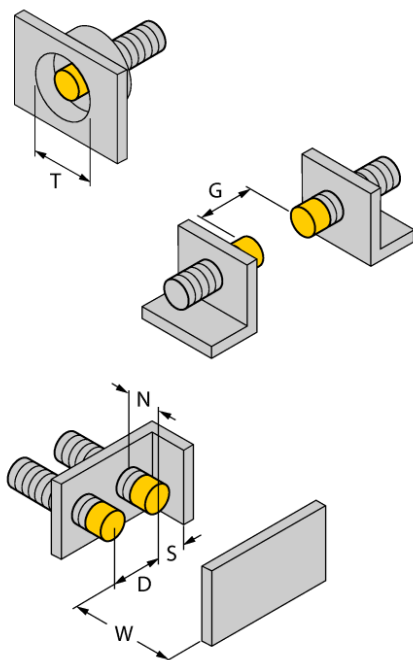
Inductive sensors detect metal objects contactless and wear-free. *uprox®* Factor 1 sensors have significant advantages due to their patented ferrite-coreless multicoil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

Type designation	NI8U-M12-AP6X-H1141
Ident-No.	1644140
Ident-No (TUSA)	M1644140
Rated switching distance Sn	8 mm
Mounting conditions	non-flush
Assured switching distance	$\leq (0,81 \times S_n) \text{ mm}$
Repeatability	$\leq 2 \% \text{ of full scale}$
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 15 \%, \leq -25^\circ\text{C} \vee \geq +70^\circ\text{C}$
Hysteresis	3...15 %
Ambient temperature	-30...+85 °C
Operating voltage	10... 30VDC
Residual ripple	$\leq 10 \% U_{in}$
DC rated operational current	$\leq 200 \text{ mA}$
No-load current I_0	$\leq 20 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Rated insulation voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes/ cyclic
Voltage drop at I_0	$\leq 1.8 \text{ V}$
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
Protective insulation	□
Switching frequency	2 kHz
Construction	Threaded barrel, M12 x 1
Dimensions	52 mm
Housing material	Metal, CuZn, chrome-plated
Active area material	Plastic, LCP
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	IP67
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED yellow

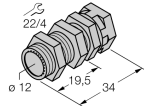
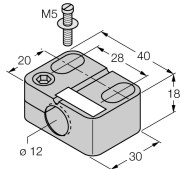
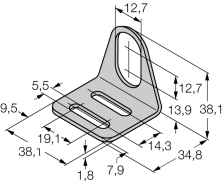
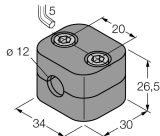
**Inductive sensor
NI8U-M12-AP6X-H1141**

Distance D	48 mm
Distance W	3 x Sn
Distance T	45 mm
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn

Diameter of the active area B	Ø 12 mm
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Accessories

Type code	Ident-No.	Description	
QM-12	6945101	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M16 x 1. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
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	
RKC4T-2/TEL	6625010	Connection cable, female M12, straight, 3-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com	