

- Threaded barrel, M12 x 1
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- High switching distance
- Integrated protection against pre-attenuation
- Little metal-free spaces
- 3-wire DC, 10...30 VDC
- NC contact, PNP output
- Male M12 x 1

Type code NI10U-M12-RP6X-H1141
Ident no. 1634848

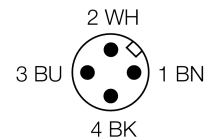
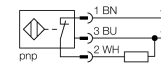
Rated operating distance Sn 10 mm
Mounting condition non-flush
Assured sensing range $\leq (0,81 \times S_n)$ mm
Repeatability $\leq 2\%$ of full scale
Temperature drift 10 %
 $\leq \pm 15\%$, $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$
Hysteresis 3...15 %
Ambient temperature -30...+85 °C

Operating voltage 10...30VDC
Residual ripple $\leq 10\%$ 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, NC contact, PNP
Protection class \square
Switching frequency 2 kHz

Design threaded barrel, M12 x 1
Dimensions 52 mm
Housing material metal, CuZn, chrome-plated
Material active area Plastic, LCP
Max. tightening torque housing nut 10 Nm
Connection male, 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

Switching state LED yellow

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. Due to the patented multi-coil system, *uprox*+ sensors have distinct advantages over conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Distance D	48 mm
Distance W	30 mm
Distance T	36 mm
Distance S	18 mm
Distance G	60 mm
Distance N	16 mm

Diameter of the active area B Ø 12 mm



All recessed mountable *uprox⁺* threaded barrel sensors can be embedded to the upper edge of the thread. Thus safe operation is guaranteed with a reduced switching distance of max. 20 %.

When installed in an aperture plate a distance of X = 50 mm must be observed.

Accessories

Type code	Ident no.	Description	Dimension drawing
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	Dimension drawing
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	