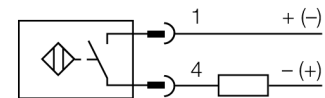


- Threaded barrel, M12 x 1
- Long version
- Chrome-plated brass
- Factor 1 for all metals
- Resistant to magnetic fields
- 2-wire DC, 10...65 VDC
- NO contact
- Male M12 x 1

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 compared to conventional sensors. They excel in largest switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Type code	NI5U-M12E-AD4X-H1144
Ident no.	4405063
Rated operating distance S_n	5 mm
Mounting condition	non-flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Repeatability	$\leq 2\%$ of full scale
Temperature drift	10 %
Hysteresis	3...20 %
Ambient temperature	-25...+70 °C
Operating voltage	10...65VDC
Residual ripple	$\leq 10\%$ U_{s}
DC rated operational current	≤ 100 mA
Residual current	≤ 0.8 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I_n	≤ 5 V
Smallest operating current I_m	≤ 3 mA
Switching frequency	0.01 kHz
Design	threaded barrel, M12 x 1
Dimensions	62 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

Distance D	36 mm
Distance W	15 mm
Distance T	36 mm
Distance S	18 mm
Distance G	30 mm
Distance N	10 mm

Diameter of the active area B \varnothing 12 mm



All non-flush mountable uprox®+ threaded barrel sensors can be screwed to the upper edge of the barrel. 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.

Isolating switching amplifiers can be applied because uprox®+ 2-wire DC sensors work with 8 VDC low operating voltage (limited load current 50 mA).

If the sensors are operated with the Turck remote I/O fieldbus system BL20, wire-break and short-circuit events are immediately detected. For this purpose connected the sensor to the BL20-4DI-NAMUR slice.

Accessories

Type code	Ident no.	Description	Dimension drawing
BL20-4DI-NAMUR	6827212	4 digital inputs acc. to EN 60947-5-6. For NAMUR sensors, de-energized contacts or uprox®+ 2-wire DC sensors.	
BST-12B	6947212	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
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.	
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	