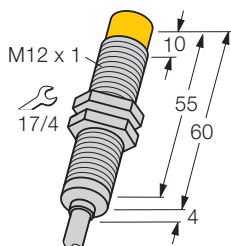
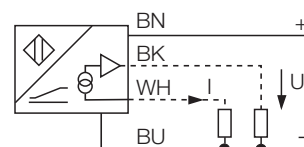


Inductive sensor with analogue output Ni5-M12-LiU



- threaded barrel, M12 x 1
- chrome-plated brass
- analogue output (current and voltage)
- 4-wire, 15...30 VDC
- cable connection

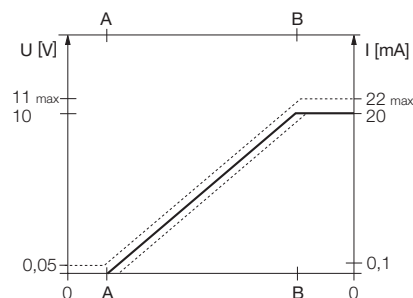
Wiring diagram



Function principles

Simple control tasks can be accomplished with inductive TURCK sensors with analogue output. They provide a current, voltage or frequency signal that is proportional to the target's distance. With TURCK's analogue sensors, this output signal is linear to the distance of the target over the entire sensing range.

Measuring range



Type	Ni5-M12-LiU
Ident-No.	1535536
Measuring range [A...B]	0,5... 4 mm
Mounting mode	non-flush
Min. repeat accuracy	$\leq 1\%$ of measuring range A - B
	$\leq 0,5\%$, after a heating period of 0,5 h
Reproducibility	$\leq 35\ \mu\text{m}$
	$\leq 17,5\ \mu\text{m}$, after a heating period of 0,5 h
Linearity tolerance	$\leq 3\%$ of final value
Max. relative temperature drift	$\leq \pm 0,06\ \%/^{\circ}\text{C}$
Operating temperature	-10 ... + 70 °C
Rated operational voltage (DC) U_B	15... 30 VDC
Max. ripple	$\leq 10\%$ U_{pp}
No-load current I_0	$\leq 8\ \text{mA}$
Rated insulation voltage	$\leq 0,5\ \text{kV}$
Output function	4-wire, analogue output
Short-circuit protection	yes
Wire breakage / reverse polarity protection	yes / complete
Voltage output	0... 10 V
Current output	0... 20 mA
Voltage output load resistance	$\geq 4,7\ \text{k}\Omega$
Current output load resistance	$\leq 0,4\ \text{k}\Omega$
Reading rate frequency	100 Hz
Recovery time on output	$\leq 12\ \text{ms}$
Housing style	threaded barrel; M12 x 1
Dimensions	64 mm
Housing material	metal, CuZn, chrome-plated
Active face	plastic, PA12-GF30
Max. fixing torque of coupling nut	10 Nm
Wiring	cable
Cable	$\varnothing 5,2$, LiYY, PVC, 2 m
Cable cross section	4 x 0,34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67

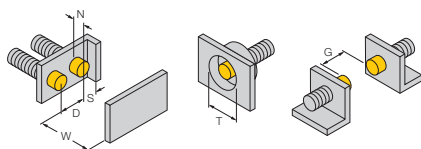
Inductive sensor with analogue output Ni5-M12-LiU

Mounting instructions

	minimum gap
Gap D	36 mm
Gap W	12 mm
Gap T	3 x B
Gap S	18 mm
Gap G	24 mm
Gap N	8 mm

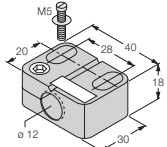
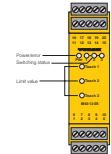
Diameter of active face B

Ø 12 mm



Inductive sensor with analogue output Ni5-M12-LiU

Accessories

Typ	Ident-No.	Description	Dimension drawing
QM-12	6945101	quick-mount fixing clamp with dead-stop; material: chrome-plated brass external thread M16 x 1	  
BST-12B	6947212	fixing clamp with dead-stop; material: PA6	
IM43-13-SR	7540041	limit value monitor; single channel; input 0/4...20 mA or 0/2...10 V; supply of 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one normally open contact each; removeable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further limit value monitors are described in our "Interface Technology" catalogue.	