

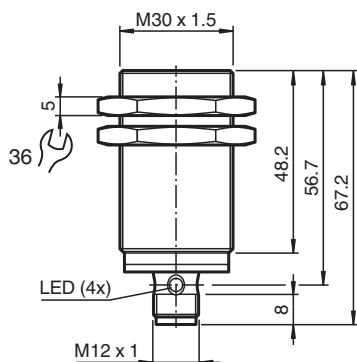
Inductive sensor NAB10-30GM50-I-V1

- Inductive analog sensor
- Output 4 mA ... 20 mA
- Measuring range 0 ... 10 mm
- Flush mounting
- Flexible use with versatile mounting opportunities

Inductive distance sensor with analog current output



Dimensions



Technical Data

General specifications

Output type	Analog current output	
Installation	flush	
Output polarity	DC	
Actuating element	mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 30 mm x 30 mm x 1 mm	
Measuring range	0 ... 10 mm	
Output type	3-wire	

Nominal ratings

Operating voltage	U_B	15 ... 30 V
Reverse polarity protection	reverse polarity protected	
Short-circuit protection	current limited	
Linearity error	± 3 % of full-scale value	
Temperature drift	± 10 % of full-scale value	
Repeat accuracy	± 1 % of full-scale value	
Recovery time	≤ 50 ms	
No-load supply current	I_0	12 mA
Status indicator	Multihole-LED, yellow permanently on: damping element within measuring range slowly flashing (2 Hz): damping element outside measuring range fast flashing (10 Hz): fault state	

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Technical Data

Functional safety related parameters

MTTF _d		929 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %

Analog output

Output type		4 ... 20 mA
Slope of output characteristic		1.6 mA / mm
Load resistor		≤ 500 Ω
Settling time		≤ 100 ms

Conformity

PWIS conformity		VDMA 24364-A1/B2/C1/T100°C-W
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Compliance with standards and directives

Standard conformity		
Standards		EN IEC 60947-5-2 EN IEC 60947-5-7

Approvals and certificates

Protection class		II
Rated insulation voltage	U _i	30 V
Rated impulse withstand voltage	U _{imp}	500 V
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated ≤36 V

Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)

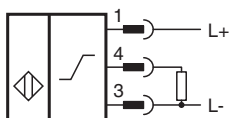
Mechanical specifications

Connection type		Connector plug
Housing material		brass , white bronze coated
Sensing face		PBT , green
Degree of protection		IP65/IP67/IP68
Connector		
Threading		M12 x 1
Number of pins		3
Mass		153 g
Dimensions		
Length		67 mm
Diameter		30 mm
Mounting		with nuts, M30
Tightening torque		≤ 30 Nm

General information

Scope of delivery		2 self locking nuts in scope of delivery
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Connection Assignment



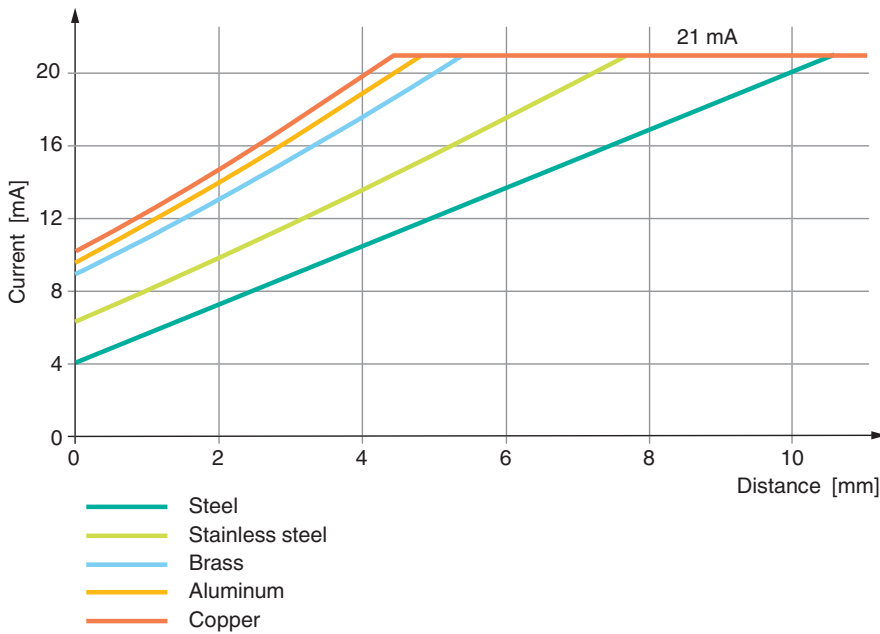
Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Characteristic Curve



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