

# Inductive sensor

## NAB4-12GM35-I-V1

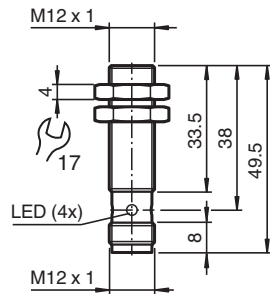


- Inductive analog sensor
- Output 4 mA ... 20 mA
- Measuring range 0 ... 4 mm
- Flush mounting
- Flexible use with versatile mounting opportunities

Inductive distance sensor with analog current output



### Dimensions



### Technical Data

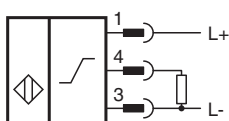
General specifications		
Output type		Analog current output
Installation		flush
Output polarity		DC
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 12 mm x 12 mm x 1 mm
Measuring range		0 ... 4 mm
Output type		3-wire
Nominal ratings		
Operating voltage	$U_B$	15 ... 30 V
Reverse polarity protection		reverse polarity protected
Short-circuit protection		current limited
Linearity error		$\pm 3$ % of full-scale value
Temperature drift		$\pm 10$ % of full-scale value
Repeat accuracy		$\pm 1$ % of full-scale value
Recovery time		$\leq 50$ ms
No-load supply current	$I_0$	12 mA

Release date: 2025-06-06 Date of issue: 2025-06-06 Filename: 70145056-0007\_eng.pdf

## Technical Data

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
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		952 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Analog output</b>		
Output type		4 ... 20 mA
Slope of output characteristic		4 mA / mm
Load resistor		≤ 500 Ω
Settling time		≤ 100 ms
<b>Conformity</b>		
PWIS conformity		VDMA 24364-A1/B2/C1/T100°C-W
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2 EN IEC 60947-5-7
<b>Approvals and certificates</b>		
Protection class		II
Rated insulation voltage	U <sub>i</sub>	30 V
Rated impulse withstand voltage	U <sub>imp</sub>	500 V
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated ≤36 V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug
Housing material		brass , white bronze coated
Sensing face		PBT , green
Degree of protection		IP65 / IP67
Connector		
Threading		M12 x 1
Number of pins		3
Mass		24 g
Dimensions		
Length		49.5 mm
Diameter		12 mm
Mounting		with nuts, M12
Tightening torque		≤ 10 Nm
<b>General information</b>		
Scope of delivery		2 self locking nuts in scope of delivery

## Connection Assignment



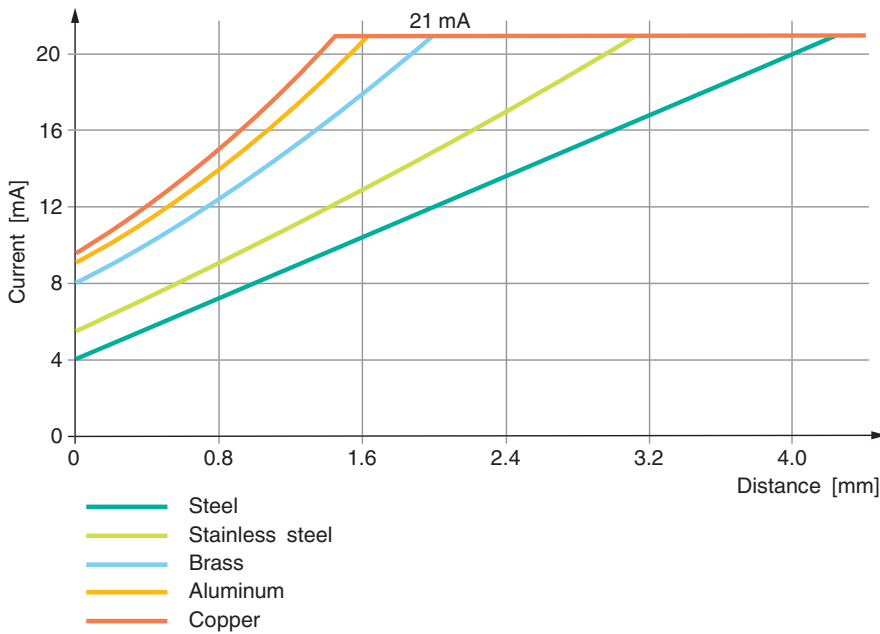
## Connection Assignment



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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