

Inductive sensor

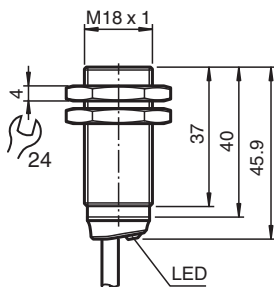
NAB8-18GM40-I

- Inductive analog sensor
- Output 4 mA ... 20 mA
- Measuring range 0 ... 8 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) 24 mm x 24 mm x 1 mm	
Measuring range	0 ... 8 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	LED, yellow permanently on: damping element within measuring range slowly flashing (2 Hz): damping element outside measuring range fast flashing (10 Hz): fault state	

Functional safety related parameters

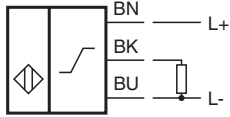
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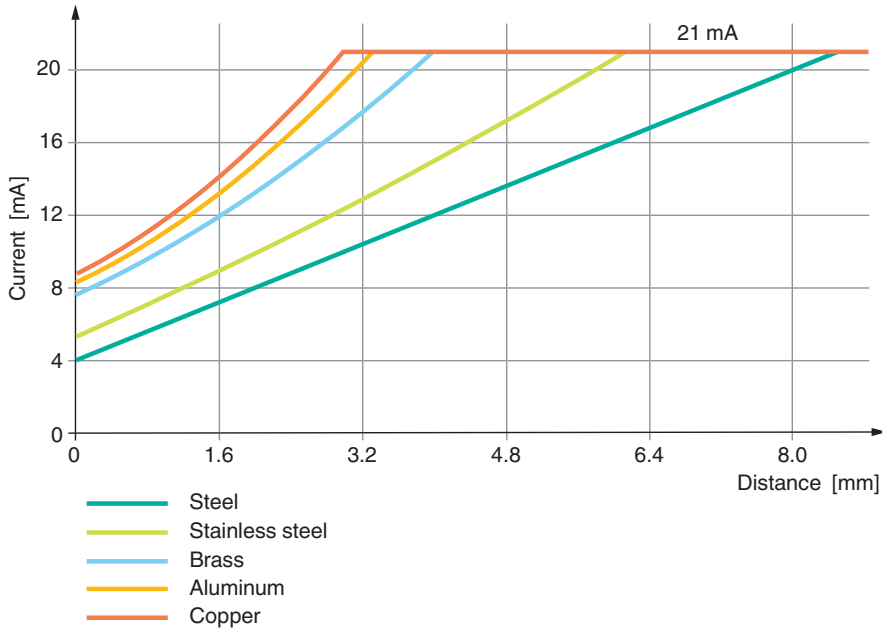
Technical Data

Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Analog output		
Output type		4 ... 20 mA
Slope of output characteristic		2 mA / mm
Load resistor		≤ 500 Ω
Settling time		≤ 100 ms
Conformity		
PWIS conformity		VDMA 24364-C1/T100°C-W
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		cable
Housing material		brass , white bronze coated
Sensing face		PBT , green
Degree of protection		IP65/IP67/IP68
Cable		
Wire end ferrules		yes
Cable diameter		4.3 mm ± 0.15 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		black
Number of cores		3
Core cross section		0.34 mm ²
Length	L	2 m
Mass		104 g
Dimensions		
Length		46 mm
Diameter		18 mm
Mounting		with nuts, M18
Tightening torque		≤ 30 Nm
General information		
Scope of delivery		2 self locking nuts in scope of delivery

Connection



Characteristic Curve



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