



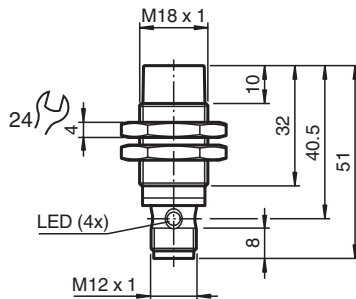
Inductive sensor NAN12-18GM35-U-V1

- Inductive analog sensor
- Output 0 V ... 10 V
- Measuring range 0 ... 12 mm
- Non-flush mountable
- Flexible use with versatile mounting opportunities

Inductive distance sensor with analog voltage output



Dimensions



Technical Data

General specifications

Output type	Analog voltage output	
Installation	non-flush	
Output polarity	DC	
Actuating element	mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 36 mm x 36 mm x 1 mm	
Measuring range	0 ... 12 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	

Functional safety related parameters

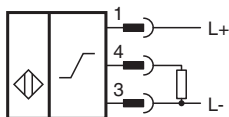
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Technical Data

Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %
Analog output	
Output type	0 ... 10 V
Slope of output characteristic	0.8 V / mm
Load resistor	≥ 500 Ω
Settling time	≤ 100 ms
Conformity	
PWIS conformity	VDMA 24364-A1/B2/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	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	45 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 Assignment



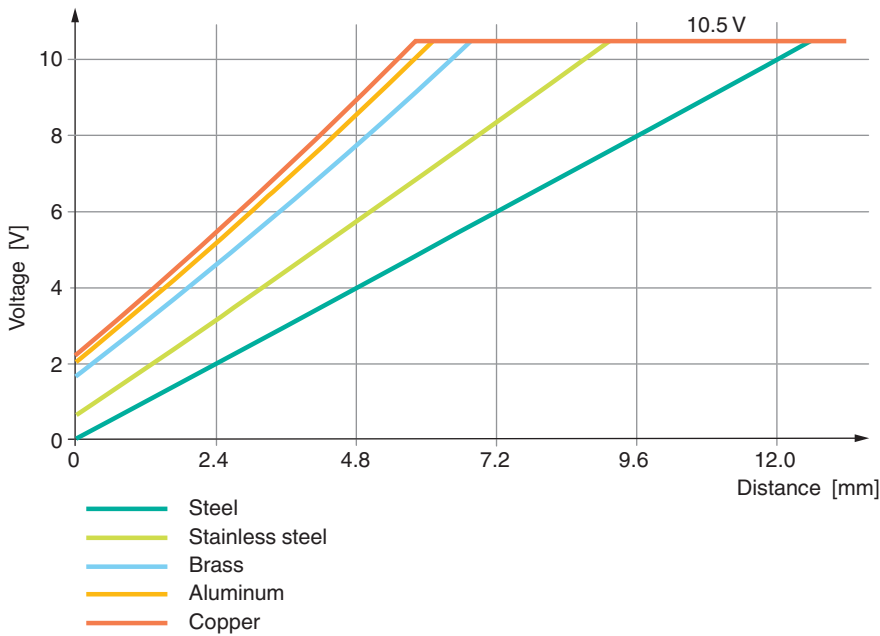
Connection Assignment



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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