



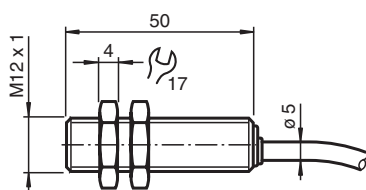
Inductive analog sensor

IA6-12GM50-IU-Y70109008

- Inductive analog
- Analog output 1 mA ... 5 mA/ 0 V ... 5 V
- 0...6 mm quasi flush



Dimensions



Technical Data

General specifications

Output type	Analog current output or analog voltage output	
Installation		quasi flush
Output polarity		DC
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 18 mm x 18 mm x 1 mm
Reduction factor r_{Al}		0.33
Reduction factor r_{Cu}		0.28
Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.43
Measurement range		0 ... 6 mm
Output type		4-wire

Nominal ratings

Installation conditions		
A		2 mm
B		12 mm
C		18 mm
F		14 mm
Operating voltage	U_B	10 ... 30 V , residual ripple 20 % U_B
Limit frequency (3dB)		1000 Hz
Reverse polarity protection		yes
Short-circuit protection		yes
Repeat accuracy	R	± 0.32 mm
Resolution		0 ... 1 μ m
No-load supply current	I_0	≤ 10 mA

Functional safety related parameters

MTTF _d	551 a
Diagnostic Coverage (DC)	0 %

Analog output

Output type	0 ... 5 V / 1 ... 5 mA
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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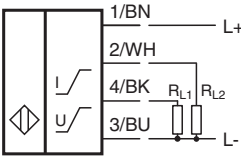
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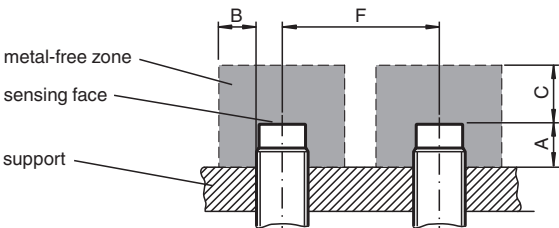
Technical Data

Load resistor	Current output A2: 1 kΩ (U _B =10V) / 5 kΩ (U _B =30V)	
Load current		Voltage output A1: ≤ 10 mA
Recovery time		20 ms
Adjustment tolerance zero point		≤ ± 10 % of full-scale value
Temperature drift		± 5 % (0 ... 70 °C) ± 10 % (-25 ... 0 °C)
Residual ripple		20 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		cablE PUR 2 m
Housing material		chromium plated brass
Sensing face		PBT
Degree of protection		IP67
Mass		27 g
Dimensions		
Length		50 mm
Diameter		12 mm

Connection

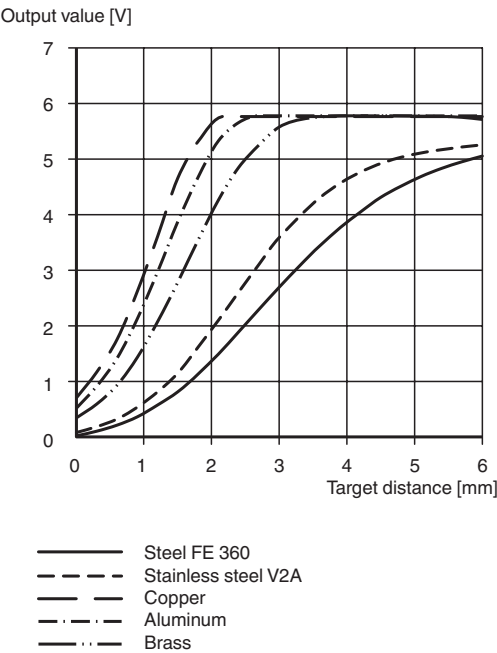


Installation



Characteristic Curve

Output characteristics



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