



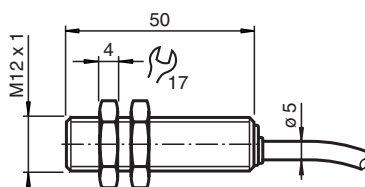
Inductive analog sensor

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

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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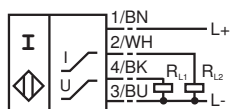
 **PEPPERL+FUCHS**

Technical Data

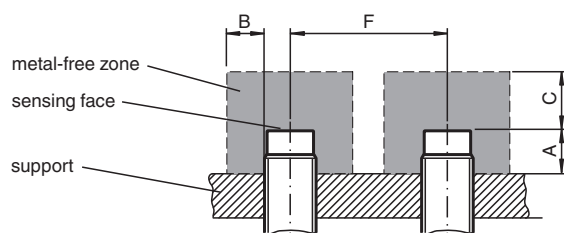
Repeat accuracy	R	$\pm 0.32 \text{ mm}$
Resolution		$0 \dots 1 \text{ }\mu\text{m}$
No-load supply current	I_0	$\leq 10 \text{ mA}$
Functional safety related parameters		
MTTF _d		551 a
Diagnostic Coverage (DC)		0 %
Analog output		
Output type		$0 \dots 5 \text{ V} / 1 \dots 5 \text{ mA}$
Load resistor		Current output A2: $1 \text{ k}\Omega$ ($U_B=10\text{V}$) / $5 \text{ k}\Omega$ ($U_B=30\text{V}$)
Load current		Voltage output A1: $\leq 10 \text{ mA}$
Recovery time		20 ms
Adjustment tolerance zero point		$\leq \pm 10 \text{ \%}$ of full-scale value
Temperature drift		$\pm 5 \text{ \%}$ ($0 \dots 70 \text{ }^\circ\text{C}$) $\pm 10 \text{ \%}$ ($-25 \dots 0 \text{ }^\circ\text{C}$)
Residual ripple		20 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007 EN 60947-5-7:2003 IEC 60947-5-7:2003
Approvals and certificates		
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		$-25 \dots 70 \text{ }^\circ\text{C}$ ($-13 \dots 158 \text{ }^\circ\text{F}$)
Mechanical specifications		
Connection type		cable PUR 2 m
Housing material		chromium plated brass
Sensing face		PBT
Degree of protection		IP67
Mass		27 g

Connection

IU

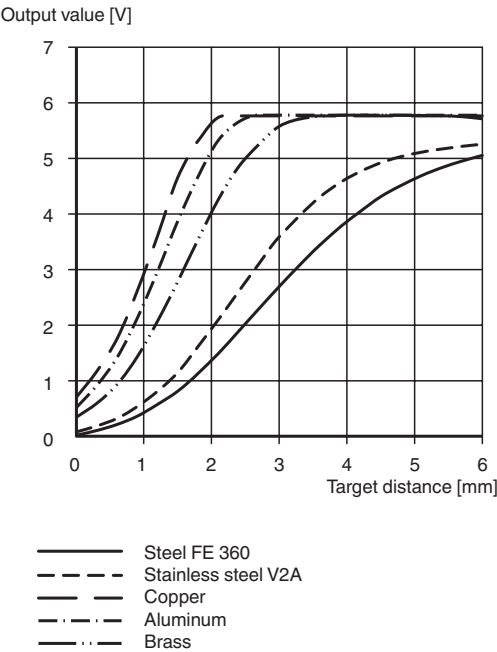


Installation



Characteristic Curve

Output characteristics



Accessories

	BF 12	Mounting flange, 12 mm
	V1-G-2M-PUR	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	V1-W-2M-PUR	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey