



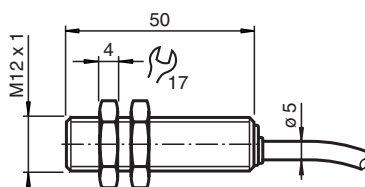
Inductive analog sensor

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	15 ... 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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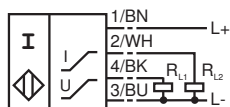
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Technical Data

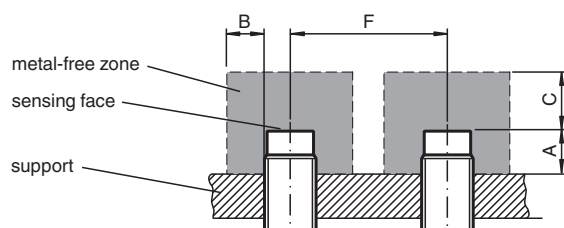
Repeat accuracy	R	± 0.32 mm
Repeat accuracy		0 ... 1 µm
No-load supply current	I ₀	≤ 10 mA
Functional safety related parameters		
MTTF _d		551 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Analog output		
Output type		0 ... 5 V / 1 ... 5 mA
Load resistor		Current output A2: 0.4 Ω (U _B =15V) 1 Ω (U _B =30V)
Load current		Voltage output A1: ≤ 15 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 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 ≤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

Connection

IU

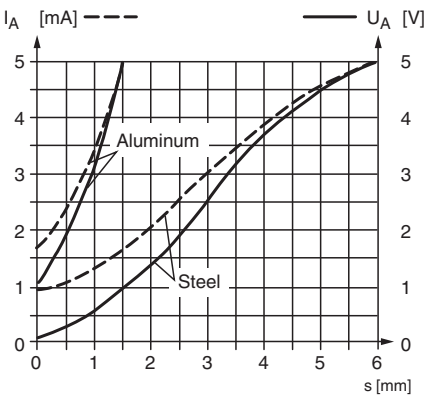


Installation



Characteristic Curve

Output characteristics



Accessories

	BF 12	Mounting flange, 12 mm
	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable