

Inductive analog sensor

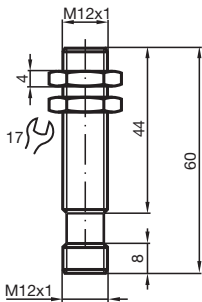
IA6-12GM50-IU-V1



- Inductive analog
- Analog output 0 V ... 10 V/4 mA ... 20 mA



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
Measurement range	0 ... 6 mm
Output type	4-wire

Nominal ratings

Installation conditions	
A	2 mm
B	6 mm
C	18 mm
F	30 mm

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

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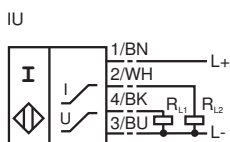
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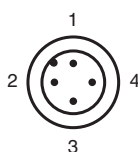
Technical Data

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
Repeat accuracy		0 ... 10 μ m
No-load supply current	I_0	\leq 10 mA
Functional safety related parameters		
MTTF _d		464 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Analog output		
Output type		0 ... 10 V / 4 ... 20 mA
Load resistor		voltage output: \geq 500 Ω current output: \leq 500 Ω
Recovery time		1 ... 10 ms , typ. 5 ms
Adjustment tolerance zero point		$\leq \pm$ 10 % of full-scale value
Temperature drift		\pm 5 % (0 ... 70 °C) \pm 10 % (-25 ... 0 °C)
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		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated \leq 36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		chromium plated brass
Sensing face		PBT
Degree of protection		IP67

Connection



Connection Assignment

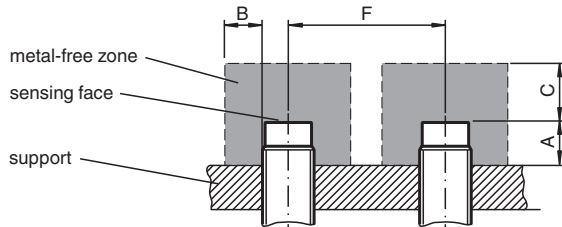


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Wire colors in accordance with EN 60947-5-2

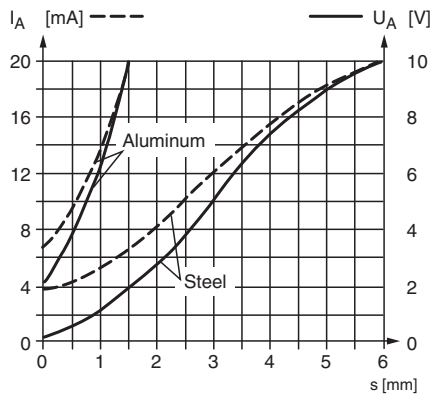
- 1 | BN (brown)
- 2 | WH (white)
- 3 | BU (blue)
- 4 | BK (black)

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

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