

Model Number

IA6-12GM50-IU-V1

Features

- **Inductive analog**
- **0...6 mm quasi flush**
- **Analog output 0 V ... 10 V/4 mA ... 20 mA**

Accessories

BF 12
Mounting flange, 12 mm

V1-W
Female connector, M12, 4-pin, field attachable

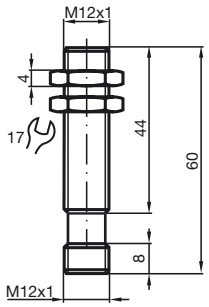
V1-G-2M-PUR
Female cordset, M12, 4-pin, PUR cable

V1-W-2M-PUR
Female cordset, M12, 4-pin, PUR cable

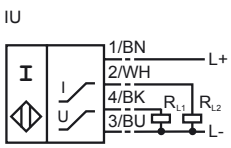
Technical Data

General specifications		
Output type		Analog current output or analog voltage output
Installation		quasi flush
Output polarity		DC
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
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 µm
No-load supply current	I_0	≤ 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: ≥ 500 Ω current output: ≤ 500 Ω
Recovery time		1 ... 10 ms , typ. 5 ms
Adjustment tolerance zero point		≤ ± 10 % of full-scale value
Temperature drift		± 5 % (0 ... 70 °C) ± 10 % (-25 ... 0 °C)
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
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 ≤36 V

Dimensions

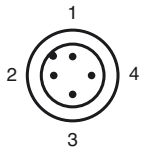


Electrical Connection



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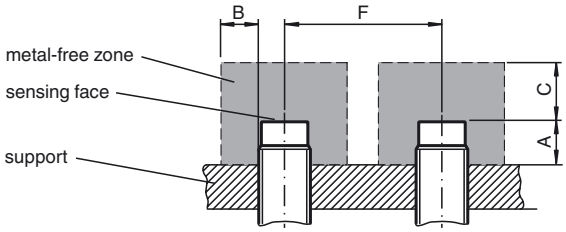
Pinout



Wire colors in accordance with EN 60947-5-2

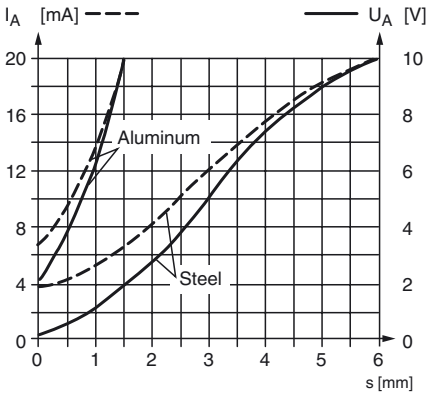
1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Installation Conditions



Characteristic Curves

Output characteristics



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Refer to “General Notes Relating to Pepperl+Fuchs Product Information”.
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