



Model Number

IA6-12GM50-IU-V1

Features

- Inductive analog
- 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
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
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)

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

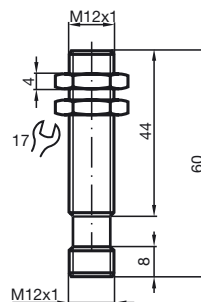
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007 EN 60947-5-7:2003 IEC 60947-5-7:2003

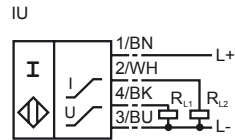
Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq$ 36 V

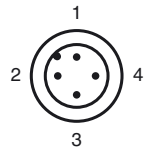
Dimensions



Electrical Connection



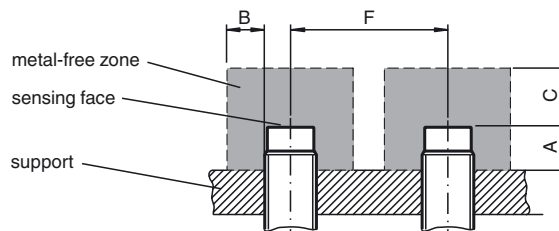
Pinout



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

