



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

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	≤ 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: $\geq 500 \Omega$ current output: $\leq 500 \Omega$
Recovery time	1 ... 10 ms, typ. 5 ms
Adjustment tolerance zero point	$\leq \pm 10$ % 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 M12 x 1, 4-pin
Housing material	chromium plated brass
Sensing face	PBT
Degree of protection	IP67

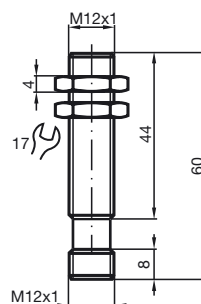
Compliance with standards and directives

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

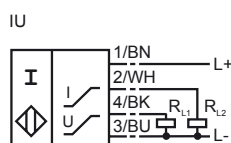
Approvals and certificates

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

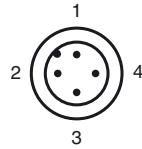
Dimensions



Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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

Characteristic Curves

Output characteristics

