

Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2 IEC 60947-5-7

Display/Operation

Function indicator	Adjustment indicator
Power indicator	no

Electrical connection

Cable diameter D	4.60 mm
Cable length L	3 m
Conductor cross-section	0.34 mm ²
Connection type	Cable, 3.00 m, PUR
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Limit frequency -3 dB	500 Hz
Load resistance RL max.	500 Ohm
No-load current I _o max. at U _e	10 mA
Operating voltage U _b	10...30 VDC
Protection class	II
Rated insulation voltage U _i	250 V AC
Rated operating voltage U _e DC	24 V
Ripple max. (% of U _e)	15 %
Slope I	13.30 mA/mm

Environmental conditions

Ambient temperature	-10...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g _n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C)	640 a
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Interface

Analog output	Analog, current 0...20 mA
Output characteristic	falling on approach
Output current at SI max.	20 mA
Output current at SI min.	0 mA
Output current at Se	10 mA

Inductive Sensors
BAW M12MG2-IAC20B-BP03
Order Code: BAW001C



Material

Housing material	Brass, nickel plated
Material jacket	PUR
Material sensing surface	PBT

Range/Distance

Linearity range SI	0.5...2 mm
Measuring range	0.5...2 mm
Non-linearity max.	±45 µm
Repeat accuracy per BWN	±5 µm
Temperature drift max. from end value	±5.0 %

Mechanical data

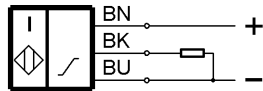
Dimension	Ø 12 x 65 mm
Installation	for flush mounting
Size	M12x1
Tightening torque	15 Nm

Remarks

Values referenced to axial approach of St 37 target. For other materials correction factors are applied.
 Load resistance RL max. applies for Ub min. 16V.
 For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Wiring Diagrams



Technical Drawings

