

**Basic features**

<b>Approval/Conformity</b>	CE UKCA cULus WEEE
<b>Basic standard</b>	IEC 60947-5-2 IEC 60947-5-7

**Display/Operation**

<b>Function indicator</b>	Adjustment indicator
<b>Power indicator</b>	no

**Electrical connection**

<b>Cable diameter D</b>	4.70 mm
<b>Cable length L</b>	0.2 m
<b>Connection</b>	M12x1-Male, 3-pin, A-coded
<b>Connection type</b>	Cable with connector, 0.20 m, PUR
<b>Polarity reversal protected</b>	yes
<b>Protection against device mix-ups</b>	yes
<b>Short-circuit protection</b>	yes

**Electrical data**

<b>Limit frequency -3 dB</b>	500 Hz
<b>Load resistance RL max.</b>	500 Ohm
<b>No-load current Io max. at Ue</b>	10 mA
<b>Operating voltage Ub</b>	10...30 VDC
<b>Protection class</b>	II
<b>Rated insulation voltage Ui</b>	250 V AC
<b>Rated operating voltage Ue DC</b>	24 V
<b>Ripple max. (% of Ue)</b>	15 %
<b>Slope I</b>	5.30 mA/mm

**Environmental conditions**

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

**Functional safety**

<b>MTTF (40 °C)</b>	640 a
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**Interface**

<b>Analog output</b>	Analog, current 4...20 mA
<b>Output characteristic</b>	falling on approach
<b>Output current at SI max.</b>	20 mA
<b>Output current at SI min.</b>	4 mA
<b>Output current at Se</b>	12 mA

Inductive Sensors  
**BAW M12MF2-ICC40F-BP00,2-GS04-508**  
**Order Code: BAW0013**



**Material**

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

**Range/Distance**

Linearity range SI	1...4 mm
Measuring range	1...4 mm
Non-linearity max.	±120 µm
Repeat accuracy per BWN	±10 µm
Temperature drift max. from end value	±5.0 %

**Mechanical data**

Dimension	Ø 12 x 65 mm
Installation	non-flush
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.

The specified parameters apply to the temperature range of +10...+50 °C. Function is also guaranteed in the ranges -10...0 °C and +50...+70 °C.

Scattering (e.g. due to manufacturing tolerances) is described by the tolerance T at Se. This can be approximated using the formula:  $T = (sl_{max} + sl_{min}) / 20 = \pm xx \text{ mm}$ .

UL-MARKINGS: - For use in NFPA 79 Applications only - Adapters providing field wiring means are available from the manufacturer. Refer to manufacturers information.

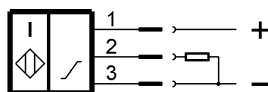
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

**Connector Drawings**



**Wiring Diagrams**



Technical Drawings

