

**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>	1.5 m
<b>Connection</b>	M12x1-Male, 3-pin, A-coded
<b>Connection type</b>	Cable with connector, 1.50 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 min.</b>	2000 Ohm
<b>No-load current Io max. at Ue</b>	10 mA
<b>Operating voltage Ub</b>	15...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 U</b>	3.30 V/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, voltage 0...10 V
<b>Output characteristic</b>	falling on approach
<b>Output voltage at SI max.</b>	10 V
<b>Output voltage at SI min.</b>	0 V
<b>Output voltage at Se</b>	5 V

Inductive Sensors  
**BAW M12MF2-UAC40F-BP01,5-GS04**  
**Order Code: BAW0016**



**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.	±90 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.

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

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

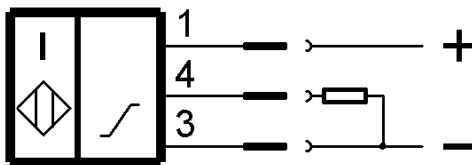
For more information about MTTF and B10d see MTTF / B10d Certificate

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

