

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

Connection	M12x1-Male, 3-pin, A-coded
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 min.	2000 Ohm
No-load current Io max. at Ue	10 mA
Operating voltage Ub	15...30 VDC
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	15 %
Slope U	1.25 V/mm

Environmental conditions

Ambient temperature	-10...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms See remarks
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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Material

Housing material	Brass, nickel plated
Material sensing surface	PBT

Mechanical data

Dimension	Ø 30 x 44.5 mm
Installation	for flush mounting
Size	M30x1.5
Tightening torque	70 Nm

Output/Interface

Analog output	Analog, voltage 0...10 V
Output characteristic	falling on approach
Output voltage at SI max.	10 V
Output voltage at SI min.	0 V
Output voltage at Se	5 V

Inductive Sensors
BAW M30ME-UAC10B-S04G
Order Code: BAW002W



Range/Distance

Linearity range SI	2...10 mm
Measuring range	2...10 mm

Non-linearity max.	±240 µm
Repeat accuracy per BWN	±10 µm
Temperature drift max. from end value	±5.0 %

Remarks

When used in Balluff clamping holders, Ua may be reduced by max. 10%

With connector, e.g. BKS-S 20-... total length = switch length +18 mm.

Shock: Half-sinus, 30 gn, 11 ms, number: 3x12, continuous shock, half-sinus, 100 gn, 2 ms, number: 3x8000.

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 by the formula: $T = (sl_{max} + sl_{min}) / 20 = \pm xx \text{ mm}$.

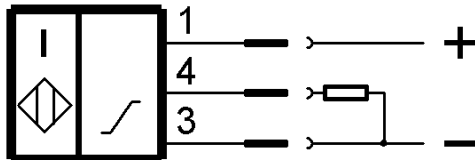
For more information about MTTF and B10d see MTTF / B10d Certificate

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

