

Basic features

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

Display/Operation

Power indicator	no
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Electrical connection

Cable diameter D	4.60 mm
Cable length L	1 m
Conductor cross-section	0.25 mm ²
Connection type	Cable, 1.00 m, PUR
Number of conductors	4
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Limit frequency -3 dB	1000 Hz
Load resistance RL min.	2000 Ohm
Load resistance RT min.	5000 Ohm
No-load current Io max. at Ue	10 mA
Operating voltage Ub	15...30 VDC
Rated insulation voltage Ui	75 V DC
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	15 %
Slope U	2.50 V/mm
Temperature output	-9 mV/°C

Environmental conditions

Ambient temperature	0...60 °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, voltage 0...10 V Analog, temperature
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 M12ME-UAD50B-BP01
Order Code: BAW0011



Material

Housing material	Brass, nickel-plated
Material jacket	PUR
Material sensing surface	PA 12

Mechanical data

Dimension	Ø 12 x 30 mm
Installation	quasi-flush
Mounting length	26.0 mm
Size	M12x1
Tightening torque	10 Nm

Range/Distance

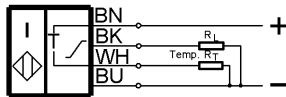
Linearity range SI	1...5 mm
Measuring range	1...5 mm
Non-linearity max.	±160 µm
Repeat accuracy per BWN	±10 µm
Temperature drift max. from end value	±5.0 %

Remarks

Values referenced to axial approach of St 37 target. For other materials correction factors are applied.
The specified parameters apply to the temperature range of 0...+60 °C. Function is also guaranteed in the ranges -10...0 °C and +60...+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.

Wiring Diagrams



Technical Drawings

