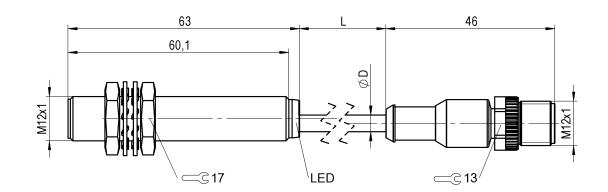
# BAW M12MN-IAC20C-BP00,2-GS04

Order Code: BAW006F















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Approval/Conformity CE

UKCA cULus 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
 0.2 m

 Connection
 M12x1-Male, 4-pin, A-coded

 Connection type
 Cable with connector, 0.20 m, PUR

 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 max. 500 Ohm No-load current lo max. at Ue 15 mA Operating voltage Ub 16...30 VDC Protection class П Rated insulation voltage Ui 250 V AC Rated operating voltage Ue DC 24 V Ripple max. (% of Ue) 15% Slope I 13.3 mA/mm

#### **Environmental conditions**

Ambient temperature -40...80 °C

Contamination scale 3

EN 60068-2-27, Shock Half-sinus, 30 g<sub>n</sub>, 11 ms

EN 60068-2-6, Vibration 55 Hz, amplitude 1 mm, 3x30 min

IP rating IP68

#### Functional safety

MTTF (40 °C) 533 a

#### 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

#### Material

Subject to change without notice: 284021

Housing materialBrass, Nickel-free coatedMaterial jacketPURMaterial sensing surfacePBT

#### Mechanical data

 Dimension
 Ø 12 x 63 mm

 Installation
 for flush mounting

 Mounting length
 60.1 mm

 Size
 M12x1

 Tightening torque
 10 Nm

#### **Inductive Sensors**

# BAW M12MN-IAC20C-BP00,2-GS04 Order Code: BAW006F



Range/Distance

Linearity range SI0.5...2 mmMeasuring range0.5...2 mm

Non-linearity max.  $\pm 53 \, \mu m$ Repeat accuracy per BWN  $\pm 7 \, \mu m$ Temperature drift max. from end value  $\pm 5.0 \, \%$ 

#### Remarks

Values referenced to axial approach of St 37 target. For other materials correction factors are applied.

At temperatures below -25°C the cable must be fixed in place.

Scattering (e.g. due to manufacturing tolerances) is described by the tolerance T at Se. This can be approximated using the formula: T = (slmax + slmin) / 20 = + xx mm

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

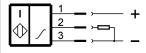
For more information about MTTF and B10d see MTTF / B10d Certificate

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**



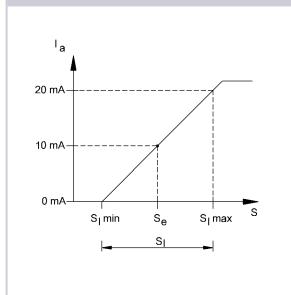
## Wiring Diagrams



# BAW M12MN-IAC20C-BP00,2-GS04 Order Code: BAW006F



**Technical Drawings** 



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