

## DATA SHEET

# vibro-meter®

## JB118 junction box



### KEY FEATURES AND BENEFITS

- From the vibro-meter® product line
- Die-cast polyester enclosure
- Fully insulated and corrosion resistant
- Protected against mechanical damage, water and dust: IP65 protection rating
- Ex certified for use in hazardous areas (potentially explosive atmospheres)



Certified for use in hazardous areas only with Ex certified products from Meggitt's vibro-meter® product line

### APPLICATIONS

- For use in TQxxx proximity measurement chains, and similar systems
- Protects sensor / measurement chain connections
- Suitable for Ex applications



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### DESCRIPTION

The JB118 junction box is designed for the connection of a sensor cable and an extension and/or signal transmission cable, for example, in TQxxx-based proximity measurement chains from Meggitt's vibro-meter® product line.

It is recommended to use a permanently installed junction box to make and protect the connection between a sensor and any extension cabling, which typically goes to a remote signal conditioner and/or monitoring system.

The cables are fed into the junction box via cable fittings (stuffing glands). The cable ends are then screwed to terminal blocks in order to easily create a permanent connection.

The JB118 is a polyester junction box and is approved for use in hazardous areas / potentially explosive atmospheres (Ex) as well as in standard applications (non-explosive atmospheres). It also offers protection against the possible splashing of oil, water and corrosive mediums encountered in severe industrial environments (including offshore or petrochemical applications).

For specific applications, contact your local Meggitt representative.

## SPECIFICATIONS

### General

Material	: Die-cast polyester, reinforced with glass fibre
Cover	: Sealed by neoprene gasket
Colour	: Black (RAL 9011) with blue plate (Ex approved)
Mounting	: M4 × 16 mm Allen-head screws
Dimensions	: See <b>Mechanical drawing on page 3</b>

### Input/output cable fittings (stuffing glands)

Material	: Nickel-plated brass
Seal	: Viton®

### Environmental

Temperature range	: -40 to 100°C (-40 to 212°F)
Protection rating (according to IEC 60529 / DIN 40050)	: IP65
Impact resistance	: 4 mJ/mm <sup>2</sup> (DIN 53453)
Surface resistivity	: < 10 <sup>9</sup> Ω (DIN 53482)
Chemical resistance	: Good resistance to sea water, acids, alkaline solutions, solvents, gasoline and oils
Flammability	: Self extinguishing, UL94V-0

### Potentially explosive atmospheres

Ex approved for use in hazardous areas

### Industrial housing


Type of protection Ex e: increased safety, Ex t: protection by enclosure		
Europe	EC type examination certificate	II 2 G / D (Zones 1, 2 / 21, 22) Ex eb IIC Gb / Ex tb IIIC Db
International	IECEx certificate of conformity	Ex eb IIC Gb / Ex tb IIIC Db

Surface resistivity for Ex version : < 10<sup>9</sup> W (DIN 53482)

### Cable fittings (stuffing glands)

Type of protection Ex e: increased safety, Ex t: protection by enclosure		
Europe	EC type examination certificate	II 2 G / D (Zones 1, 2 / 21, 22) Ex e II / Ex † III
International	IECEx certificate of conformity	Ex e II / Ex † III

 **For specific parameters of the mode of protection concerned and special conditions for safe use, refer to the Ex certificates that are available from Meggitt SA.**

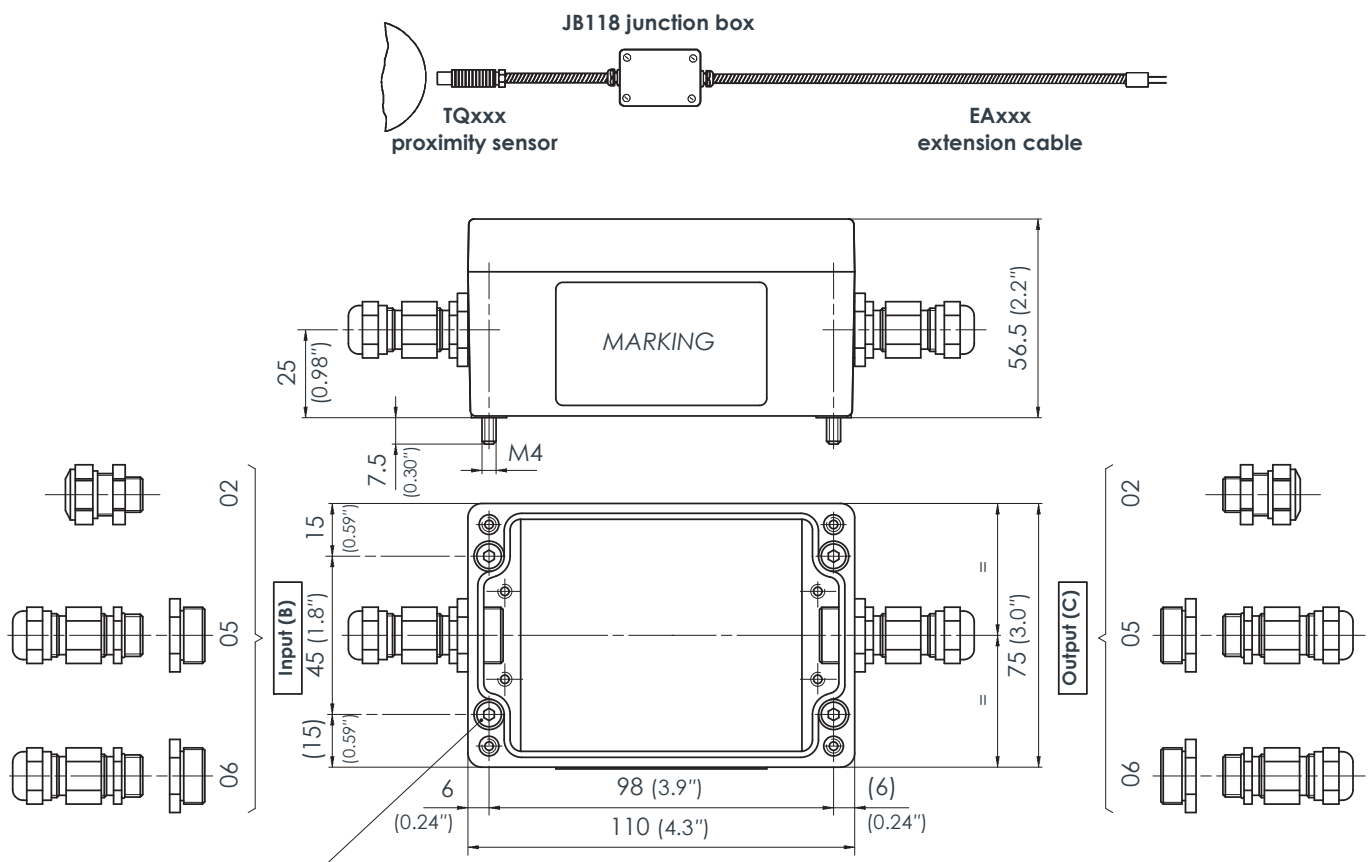
 **For the most recent information on the Ex certifications that are applicable to this product, refer to the Ex product register (PL-1511) document that is available from Meggitt SA.**

## SPECIFICATIONS *(continued)*

### Approvals

Conformity	: European Union (EU) declaration of conformity (CE marking)
Environmental management	: RoHS compliant (2011/65/EU)
Hazardous areas	: Ex approved versions (see <b>Potentially explosive atmospheres on page 2</b> )

## MECHANICAL DRAWING



Note: All dimensions in mm (in) unless otherwise stated.

## ORDERING INFORMATION

Ordering number (PNR):

823 - 118 - 000 - 012



Input cable fitting (B)	
M12 × 1.5 cable fitting / stuffing gland for Ø2.5 - Ø3.6 mm cable	02
Combination M12 × 1.5 cable fitting / stuffing gland for Ø2 - Ø4 mm cable with Ø6 - Ø8 mm flexible protection hose	05
Combination M12 × 1.5 cable fitting / stuffing gland for Ø0.7 - Ø2.7 mm cable with Ø5 - Ø7 mm flexible protection hose	06

Note: B102 allows a Ø7.2 mm connector to be fed through.

Output cable fitting (C)	
M12 × 1.5 cable fitting / stuffing gland for Ø2.5 - Ø3.6 mm cable	02
Combination M12 × 1.5 cable fitting / stuffing gland for Ø2 - Ø4 mm cable with Ø6 - Ø8 mm flexible protection hose	05
Combination M12 × 1.5 cable fitting / stuffing gland for Ø0.7 - Ø2.7 mm cable with Ø5 - Ø7 mm flexible protection hose	06

Note: C102 allows a Ø7.2 mm connector to be fed through.

## RELATED PRODUCTS

IP172	IP172 interconnection protection mounting kit	: Refer to corresponding data sheet
JB105	Junction box	: Refer to corresponding data sheet
JB116	Junction box	: Refer to corresponding data sheet

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