DATA SHEET

vibro-meter®

IP172 interconnection protection mounting kit

CE

KEY FEATURES AND BENEFITS

- From the vibro-meter® product line
- Suitable for all TQxxx proximity measurement chains/systems (TQ9xx and TQ4xx)
- Fits coaxial cables from Ø2.6 to Ø3.6 mm using miniature coaxial connectors
- Made from fluorosilicone rubber:
  Resistant to harsh chemicals, fuels and solvents
  Resistant to high and low temperatures
- Good mechanical properties
- Electrically insulating

APPLICATIONS

- Protection of the connection between a TQxxx proximity probe's integral cable and a EAxxx extension cable
- Low-cost alternative to the JB118 junction box for use in less extreme environments

DESCRIPTION

To ensure proper functioning of TQxxx-based proximity measurement chains/systems and minimise installation costs, it is recommended to use dedicated and reliable mounting accessories.

IP172 interconnection protection is used to provide a basic level of mechanical and electrical protection to the connection between a TQxxx (TQ9xx or TQ4xx) proximity sensor's integral cable and a EAxxx (EA90x or EA40x) extension cable.

A IP172 interconnection protector is a protective fluorosilicone rubber boot that consists of two parts (male and female). The parts of the interconnection protector are assembled behind the miniature coaxial connectors on the cables to be joined. After the electrical connection is made using the connectors, the two parts of the interconnection protector are push-fit assembled to surround and protect the connection.

Meggitt SA, Route de Moncor 4, Case postale, 1701 Fribourg, Switzerland

Tel: +41 26 407 11 11
Fax: +41 26 407 13 01
energy@ch.meggitt.com
www.meggittsensing.com/energy
www.meggitt.com

DESCRIPTION *(continued)*

The IP172 interconnection protection mounting kit is a plastic carrying case that contains all of the components required to assemble IP172 interconnection protectors on the miniature coaxial connectors used in TQxxx proximity measurement chains/systems:

- IP172 interconnection protectors
- IP172 tool
- Silicone grease
- Instructions.

The tool comes in two parts: one for mating with the male miniature coaxial connector on a TQxxx proximity sensor's integral cable, the other for mating with the female miniature coaxial connector on a EAxxx extension cable. When attached to a cable, the tool allows the appropriate IP172 interconnection protector (male or female) to be assembled on the cable. The silicone grease is used as a lubricant, to protect the interconnection protector from damage as it moves over the tool and miniature coaxial connector, and onto the cable.

IP172 interconnection protection is available as an ordering option for new TQxxx and EAxxx assemblies, but can also be easily and quickly retrofitted to existing TQxxx-based proximity measurement chain/system installations using the equipment provided in the IP172 interconnection protection mounting kit.

Note: IP172 interconnection protectors are used on the connection between TQxxx and EAxxx cables using miniature coaxial connectors. They are compatible with the newer self-locking miniature coaxial connectors and the older AMP-type connectors.

For specific applications, contact your local Meggitt representative.

IP172 INTERCONNECTION PROTECTION MOUNTING KIT

IP172 INTERCONNECTION PROTECTORS

10 ×
IP172
interconnection protectors

8 ×
sachets of
silicone grease

SPECIFICATIONS

Interconnection protectors

Material	: Fluorosilicone 60 Sh A. Fluorosilicone is noted for its good mechanical properties and resistance to harsh organic solvents and petroleum based fluids. It also exhibits stability at high and low temperatures. Note: Poor physical characteristics (high friction, limited strength and poor abrasion resistance) make it suitable for static applications only.
Seal	: IP172 interconnection protection uses a cylindrical push-fit assembly, where the raised ring of the male interconnection protector fits into the annular groove of the female interconnection protector. Assembly force is required in an axial direction and results in the temporary deformation of the female interconnection protector, with both parts returning to an unstressed state in the assembled position. The friction of the fluorosilicone and the geometry of the annular ring/groove provide a retaining (release) force that must be overcome in order to separate the interconnection protector.
Reuse	: IP172 interconnection protectors can be reused (joined and separated) multiple times
Dimensions	: See **Mechanical drawings on page 4**
Colour	: Black

Environmental

Temperature range	: −40 to 200°C (−40 to 392°F)
Protection rating (according to IEC 60529)	: IP54
Chemical resistance	: Extremely resistant to chemicals, fuels and solvents. Also resistant to fungus and UV/ozone.

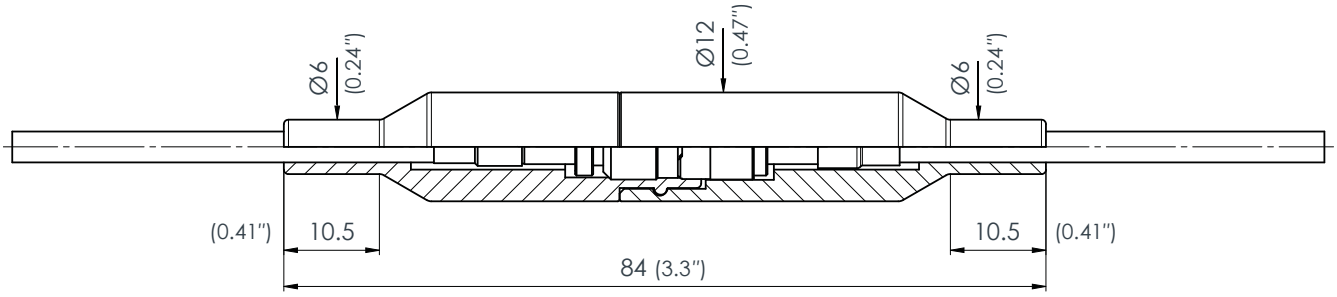
SPECIFICATIONS *(continued)*

Approvals

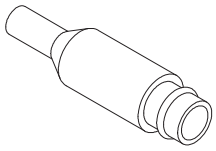
Conformity : European Union (EU) declaration of conformity (CE marking)

MECHANICAL DRAWINGS

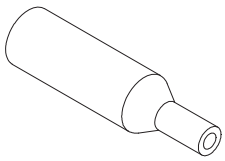
IP172 interconnection protector



For compatibility with the orientation of IP172 interconnection protection as used on TQxxx proximity sensors and EAxxx extension cable assemblies from Meggitt vibro-meter:



The male IP172 interconnection protector should be assembled on a TQxxx proximity sensor's integral cable.



The female IP172 interconnection protector should be assembled on a EAxxx extension cable.

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

ORDERING INFORMATION

To order please specify

Type	Designation	Ordering number (PNR)
IP172	Interconnection protection mounting kit	500-172-000-011

Note: The IP172 interconnection protection mounting kit consists of:
- 10 × IP172 interconnection protectors (male and female parts)
- 1 × IP172 tool (two parts)
- 8 × sachets of silicone grease (enough for installing over ten IP172 interconnection protectors)
- 1 × instruction sheet
- 1 × plastic carrying case.

IP172	Interconnection protectors	500-172-000-111

Note: The IP172 interconnection protectors consists of:
- 10 × IP172 interconnection protectors (male and female parts)
- 8 × sachets of silicone grease.

⚠ **Although silicone grease is not regarded as a health or environmental hazard, avoid contact with skin and eyes, and wash your hands after use.**

ADDITIONAL INFORMATION

Refer to the *IP172 interconnection protection mounting kit instruction sheet* for additional information.

Refer to a *Proximity measuring chains/systems manual (TQ9xx or TQ4xx)* for additional information, including more detailed installation instructions.

RELATED PRODUCTS

JB118	Junction box	: Refer to corresponding data sheet
TQ9xx, EA90x and IQS900	Proximity measurement chain	: Refer to corresponding data sheets
TQ4xx, EA40x and IQS900	Proximity measurement system	: Refer to corresponding data sheets
TQ4xx, EA40x and IQS450	Proximity measurement system	: Refer to corresponding data sheets

Meggitt (Meggitt PLC) is a leading international engineering company, headquartered in England, that designs and delivers high-performance components and subsystems for aerospace, defence and selected energy markets. Meggitt comprises four customer-aligned divisions: Airframe Systems, Engine Systems, Energy & Equipment and Services & Support.

The Energy & Equipment division includes the Energy Sensing and Controls product group that specialises in sensing and monitoring solutions for a broad range of energy infrastructure, and control valves for industrial gas turbines, primarily for the Power Generation, Oil & Gas and Services markets. Energy & Equipment is headquartered in Switzerland (Meggitt SA) and incorporates the vibro-meter® product line, which has over 65 years of sensor and systems expertise and is trusted by original equipment manufacturers (OEMs) globally.

In this publication, a dot (.) is used as the decimal separator and thousands are separated by thin spaces. Example: 12345.67890.

Sales offices

Meggitt has offices in more than 30 countries. For a complete list, please visit our website.

Local representative

Head office

Meggitt SA
Route de Moncor 4
Case postale
1701 Fribourg
Switzerland

Tel: +41 26 407 11 11
Fax: +41 26 407 13 01
energy@ch.meggitt.com
www.meggittsensing.com/energy
www.meggitt.com