

DATA SHEET

vibro-meter®

PA151 probe mounting adaptor



KEY FEATURES AND BENEFITS

- From the vibro-meter® product line
- For the external mounting of TQxxx proximity sensors
- Ex certified for use in hazardous areas (potentially explosive atmospheres)
- Removable housing, with a U-shaped retainer, that allows easier probe (sensor) installation and gap adjustment
- Sealed die-cast polyester housing
- Stainless steel rod available in lengths from 50 to 800 mm, with mounting position adjustable to ± 10 mm
- Range of adaptor threads and lengths
- Choice of cable fittings (stuffing glands)



Certified for use in potentially explosive atmospheres only with Ex certified products from Meggitt's vibro-meter® product line



Information contained in this document may be subject to export control regulations of the European Union, USA or other countries. Each recipient of this document is responsible for ensuring that transfer or use of any information contained in this document complies with all relevant export control regulations. ECN N/A.

APPLICATIONS

- For use with TQxxx proximity measurement chains/systems
- Allows easier probe (sensor) installation and gap adjustment
- Ex applications

DESCRIPTION

The PA151 probe mounting adaptor is designed for use with TQxxx proximity measurement chains/systems, from Meggitt's vibro-meter® product line.

The PA151 probe mounting adaptor facilitates the external mounting of a reverse-mount proximity sensor such as the TQ912, without the need for machine disassembly. The removable housing and U-shaped retainer make it easier to adjust the gap or replace the sensor, even while the machine is running.

DESCRIPTION *(continued)*

Designed for harsh industrial environments and certified for use in hazardous areas (potentially explosive atmospheres), the adjustable stainless-steel rod and polyester housing assembly protects the proximity sensor and the sensor to extension cable connection.

The PA151 probe mounting adaptor, together with a matching extension cable, optional

protection (flexible stainless-steel hose) and cable feedthroughs makes installation easier and helps ensure the proper functioning of a proximity measurement chain/system.

For specific applications, contact your local Meggitt representative.

SPECIFICATIONS

Rod (ordering option codes B and C)

Material	: Stainless steel 1.4301
Length	: See Ordering information on page 5
Probe (sensor) mounting thread	: See Ordering information on page 5

Adaptor assembly (ordering option codes D and E)

Material	: Stainless steel 1.4305
Adaptor length and mounting thread	: See Ordering information on page 5
O-ring seal	: Viton [®] (FPM), Ø13 × 1.5 mm

Cable fittings (ordering option code F)

Material	Nickel-plated brass, Viton [®] (FPM) seal
Cable fittings (stuffing glands)	See Ordering information on page 5

Housing

Material	: Polyester reinforced with glass fibre
Cover	: Sealed with a neoprene gasket
Colour	: Black (RAL 9011)

Environmental

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

SPECIFICATIONS

Potentially explosive atmospheres

Ex approved for use in hazardous areas


Housing


Type of protection Ex e: increased safety		
Europe	EC type examination certificate	II 2 G/D (Zones 1, 2 / 21, 22) Ex e II / Ex t III
International	IECEx certificate of conformity	II 2 G/D (Zones 1, 2 / 21, 22) Ex e II / Ex t III
Russian Federation	EAЭC RU certificate of conformity*	EAЭC RU C-CH.AΔ07.B.03022/21 Ex e IIC Gb U

Surface resistivity for Ex version : $<10^9 \Omega$ (DIN 53482)

Cable fittings (stuffing glands)

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

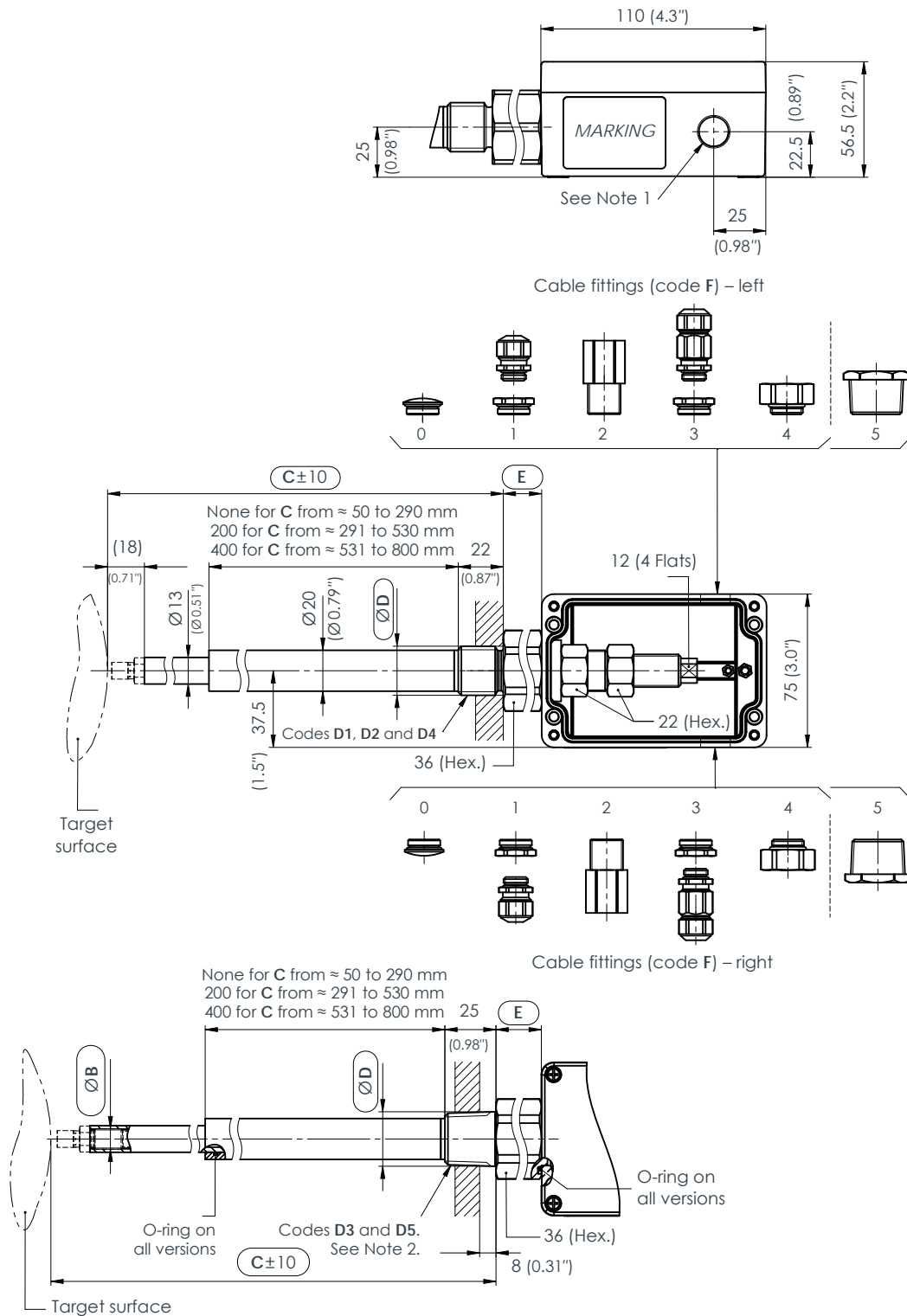
Approvals

Conformity : European Union (EU) declaration of conformity (CE marking)
Hazardous areas : Ex approved
(see **Potentially explosive atmospheres on page 3**)

Note: Refer also to the *TQ902/TQ912, EA902 and IQS900 proximity measurement chain data sheet*.

MECHANICAL DRAWINGS

PA151 probe mounting adaptor



Notes

All dimensions are in mm (in) unless otherwise stated.

- For Cable fitting codes F0 to F4 (left and/or right), the housing has M16 x 1.5 thread (left and/or right, as appropriate).
For Cable fitting code F55 (left and right), the housing has 3/4" NPT thread (left and right, as appropriate).
- For versions with NPT threads (3/4" or 1" NPT) only, that is, Adaptor thread codes D3 and D5.
See also **Ordering information on page 5.**

ORDERING INFORMATION

To order please specify

Type : PA151
 Designation : Probe mounting adaptor
 Ordering number (PNR) : See below

Ordering number:

800 - 151 - 000 - 111



Sensor thread (B)	
M10 × 1	1
3/8" - 24UNF	2

Rod length (C)	
Each 1 mm, from 50 to 800 mm	
50 mm min.	50
800 mm max.	800

Adaptor thread (D)	
M24	1
7/8" - 14UNF	2
3/4" NPT	3
G 3/4"	4
1" NPT	5

Adaptor length (E)	
15 mm	15
105 mm	105
195 mm	195

Cable fitting (F)	Left	Right
M16 × 1.5 opening with plug	0	0
M12 × 1.5 cable fitting / stuffing gland for Ø2.5 to 3.6 mm cable	1	1
M16 × 1.5 / PG9 adaptor	2	2
Combination M12 × 1.5 cable fitting / stuffing gland for Ø2 to 4 mm cable with Ø6 to 8 mm protection hose	3	3
M16 × 1.5 / M20 × 1.5 adaptor for Ø12 mm max. cable	4	4
3/4" NPT openings with plugs	55	

Notes

F1x / Fx1 (left/right) allow a Ø7.2 mm connector to be fed through.
 F2x / Fx2 (left/right) support PG9 cabling protection.
 F4x / Fx4 (left/right) support M20 × 1.5 cabling protection.
 Cable fitting options 0, 1, 2, 3 and 4 can be specified independently for each side. For example, F02 is permitted.
 Cable fitting option 5 cannot be specified independently and must be the same for each side. That is, F55 only.

Notes

See also the notes in **Mechanical drawings on page 4.**

ACCESSORIES

KS107	Flexible conduit (protection tube)	: Refer to corresponding data sheet
SG102	Cable feedthrough	: Refer to corresponding data sheet
SG164	Cable feedthrough	: Refer to corresponding data sheet

RELATED PRODUCTS

PA150	Probe mounting adaptor with proximity measurement chain	: Refer to corresponding data sheet
PA152	Probe mounting adaptor (high temperature)	: Refer to corresponding data sheet
PA153	Probe mounting adaptor	: Refer to corresponding data sheet
TQ902/TQ912, EA902 and IQS900	Proximity measurement chain	: Refer to corresponding data sheet
TQ402/TQ412, EA402 and IQS450	Proximity measurement system	: Refer to corresponding data sheet

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.



All information in this document, such as descriptions, specifications, drawings, recommendations and other statements, is believed to be reliable and is stated in good faith as being approximately correct, but is not binding on Meggitt (Meggitt SA) unless expressly agreed in writing. Before acquiring and/or using this product, you must evaluate it and determine if it is suitable for your intended application. You should also check our website at www.meggittsensing.com/energy for any updates to data sheets, certificates, product drawings, user manuals, service bulletins and/or other instructions affecting the product.

Unless otherwise expressly agreed in writing with Meggitt SA, you assume all risks and liability associated with use of the product. Any recommendations and advice given without charge, whilst given in good faith, are not binding on Meggitt SA. Meggitt (Meggitt SA) takes no responsibility for any statements related to the product which are not contained in a current Meggitt SA publication, nor for any statements contained in extracts, summaries, translations or any other documents not authored and produced by Meggitt SA.

The certifications and warranties applicable to the products supplied by Meggitt SA are valid only for new products purchased directly from Meggitt SA or from an authorised distributor of Meggitt SA.

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

Copyright© 2022 Meggitt SA. All rights reserved. The information contained in this document is subject to change without prior notice.

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

DATA SHEET

PA151 probe mounting adaptor

6 / 6

Document reference DS 265-382

Version 9 – 28.01.2022