

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM16US0391X
3. **Equipment:** Tank Level System (TLS) PVDF Ultraflex Sensor
(Type Reference and Name)
4. **Name of Listing Company:** AMETEK Drexelbrook
5. **Address of Listing Company:** 205 Keith Road
Horsham, PA 19044 USA
6. The examination and test results are recorded in confidential report number:
3060268 dated 10th March 2017
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:
FM Class 3600:2011, FM Class 3610:2010, FM Class 3611:2004, FM Class 3615:2006,
FM Class 3616:2011, FM Class 3810:2005, ANSI/ISA 60079-0:2013, ANSI/UL 60079-1:2015, ANSI/ISA 60079-11:2014, ANSI/ISA 60079-26:2011, ANSI/NEMA 250:1991, ANSI/IEC 60529:2004
8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
10. **Equipment Ratings:**
Explosionproof and Intrinsically Safe for Class I, Division 1, Groups C, D in accordance with Control Drawing 420-0004-492-01-CD; Nonincendive for use in Class I, Division 2, Groups A, B, C, D; Dust-Ignitionproof and Intrinsically Safe for Class II, III, Division 1, Groups E, F, G; Indoor and Outdoor (Type 4, 4X, IP66) Hazardous (Classified) Locations.

Certificate issued by:

J.E. Marquedant
Manager, Electrical Systems

10 March 2017

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

SCHEDULE



US Certificate Of Conformity No: FM16US0391X

Intrinsically Safe / Flameproof for Class I, Zone 0/1 AEx ia/db IIB T4 Ga/Gb Hazardous (Classified) Location, with an indoor / outdoor Type 4, 4X and an Ingress protection of IP66.

11. The marking of the equipment shall include:

Class I, Division 1, Groups C, D; T4 Ta = -40°C to +70°C;
Class II, Division 2, Groups A, B, C, D T4 Ta = -40°C to +70°C;
Class II, III, Division 1, Groups E, F, G; T4 Ta = -40°C to +70°C;
Class I Zone 0/1 AEx ia/db IIB T4 Ga/Gb Ta = -40°C to +70°C;
Type 4, 4X / IP66;

12. **Description of Equipment:**

General - The Total Tank Level System (TLS) is a magnetostrictive liquid and interface level sensor with temperature inputs. The system includes an explosion-proof housing containing a wiring terminal strip and an intrinsically safe probe. Modbus communications are used to receive information from the level, interface and temperature sensors. A variety of floats and mounting accessories are available to fit different applications.

Construction - The Total Tank Level System (TLS) consists of a single compartment electronics housing with thread-cover, A cylindrical seal assembly that separates and a probe. The enclosure is provided with two (2) ¾ inch NPT openings.

Ratings - The Total Tank Level System (TLS) operate at 10-30 Vdc (6W). The transmitters are rated for use in an ambient temperature range of -40°C to +70°C. The transmitter probes are rated for use in a process temperature range of -40°C to +70°C.

M1aXVb. Tank Level System (TLS) PVDF Ultraflex Sensor

a = 1

b = 17 characters expanded numbering that does not affect safety

13. **Specific Conditions of Use:**

1. Contact Manufacturer for Flamepath Information.
2. The equipment contains non-metallic enclosure parts, to prevent the risk of electrostatic sparking the non-metallic surface should only be cleaned with a damp cloth.
3. The O-ring material shall not be subject to environmental conditions which might adversely affect the partition wall.
4. Conduit Seal at Enclosure Entrance

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

SCHEDULE



US Certificate Of Conformity No: FM16US0391X

15. **Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
10 th March 2017	Original Issue.

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmaprovals.com www.fmaprovals.com