# **CERTIFICATE OF CONFORMITY**



1. HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS

2. **Certificate No:**  FM16US0174

3. **Equipment:** 

4.

**TTE Series Temperature Transmitters** 

(Type Reference and Name)

Name of Listing Company:

**Dwyer Insturments Inc.** 

5. Address of Listing Company:

102 Indiana Hwy 212 Michigan City, IN 02062 USA

6. The examination and test results are recorded in confidential report number:

3029894 dated July 5th, 2007

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 3615:2006, FM Class 3810:2005. ANSI/NEMA 250:2003, ANSI/IEC 60529:2004

- 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:

Explosion proof for Class I, Division 1, Groups B, C and D; Dust-ignition proof for Class II / III, Division 1, Groups E, F and G; indoors and outdoors (Type 4X, IP66).

Certificate issued by:

J.4. Marquedant

Manager, Electrical Systems

9. Marquestro

5 July 2016

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

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# **SCHEDULE**



Member of the FM Global Group

US Certificate Of Conformity No: FM16US0174

#### 11. The marking of the equipment shall include:

Class I Division 1, Groups B, C, D; T6 Ta = 70°C Class II/III, Division 1, Groups E, F, G; T6 Ta = 70°C Type 4X, IP66

## 12. Description of Equipment:

**General** - The Series TTE Temperature Transmitter uses an FM Approved Instrument Housing with a stainless steel probe threaded into the base of the housing. The housing is manufactured by Dwyer Instruments, Model EPI, rated as explosionproof for Class I, Division I, Groups B, C and D; and dust-ignitionproof for Class II, Division I, Groups E, F and G hazardous (classified) locations; indoor/outdoor (Type 4X) as described in FM Approval report 3027189.

**Construction** - The probe is a stainless steel tube up to 18 inches long, with a 0.250 inch diameter and 0.2 inch wall thickness welded to a threded adapter. The probe adapter provies a  $\frac{1}{2}$  –14 NPT thread which threads into the enclosure base  $\frac{3}{4}$  –14 NPT entry via a  $\frac{3}{4}$  to  $\frac{1}{2}$  NPT threaded adapter. The probe adapter also provides a  $\frac{1}{2}$  –14 NPT process connection. The probe is available in 2–18 inch lengths and is filled with MGO (Magnesium Dioxide) and sealed with 3M DP270 epoxy.

**Ratings** - The transmitter provides a 4-20 mA output proportional to the temperature being monitored. The transmitter is available with an LCD temperature display and windowed cover or with no LCD and a blank cover. The ambient temperature rating is -18°C to +70°C. The voltage range is 10 to 35 VDC. The process pressure rating is 2000 psi.

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### TTE-1a-b-cd. Temperature Transmitter for Thermowell.

a = Probe length 02 to 18

b = LCD or blank.

c = M2 conduit connection or blank.

d = C5 or blank.

## TTE-1a-W-b-c-d. Temperature Transmitter for Thermowell.

a = Probe length 02 to 18

b = LCD or blank.

c = M2 conduit connection or blank.

d = C5 or blank.

#### 13. Specific Conditions of Use:

None

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

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

## 15. Schedule Drawings

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US Certificate Of Conformity No: FM16US0174

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
5 <sup>th</sup> July 2007	Original issue.
5 <sup>th</sup> July 2016	Supplement 3: Report Reference: RR205611, dated 5th July 2016 Description of the Change: Editorial changes to the listing.

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