

CERTIFICATE OF CONFORMITY



- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM19US0196
- Equipment:** SPX-T 3XXX Series Smart Pressure Transmitter
(Type Reference and Name)
- Name of Listing Company:** Dynisco Inc
- Address of Listing Company:** 38 Forge Parkway
Franklin, MA 02038
USA
- The examination and test results are recorded in confidential report number:

3035512 dated June 24th, 2009
- FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2018, FM Class 3610: 2007, FM Class 3615:2018, FM Class 3810:2005,
ANSI/NEMA 250:1991, 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.
- 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.
- Equipment Ratings:**

Explosionproof with Intrinsically Safe Probe for use in Class I, Division 1, Groups A, B, C and D; Dust-Ignitionproof with Intrinsically Safe Probe for use in Class II, III, Division 1, Groups E, F and G Hazardous (classified) Locations in accordance with Control Drawing 000610; indoor / outdoor Type 4X / IP67 with an ambient temperature range of T5 Ta = -20°C to +85°C, T6 Ta = -20°C to +60°C

Certificate issued by:

J. E. Marquedant
VP, Manager, Electrical Systems

23 October 2019
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
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11. The marking of the equipment shall include:

Class I, Division 1, Groups A, B, C, D
Class II / III, Division 1, Groups E, F, G
T5 Ta = -20°C to +85°C, T6 Ta = -20°C to +60°C
Type 4X, IP67

12. **Description of Equipment:**

The SPX-T 3XXX Series Smart Pressure Transmitters are designed for use in Class I, Division 1 and Class II, III Division 1 locations. The apparatus consists of a stainless steel compartment which is 1.74 inches in diameter and the cylindrical housing is approximately 5 inches long, depending on the pressure rating and model. One end of the enclosure has a male 1/2 inch-14NPT conduit connection. The model SPX-T 3X42 has working pressure ranges from 25psig to 30,000psig, the model SPX-T 3X43 has working pressure ranges from 25psig to 30,000psig, and the model SPX-T 3X9X has working pressure ranges from 25psig to 10,000psig. The SPX-T models 3X43 and 3X9X is flange mounted, while the SPX-T 3X42 is available with a rigid snout with 1/2-20 UNF-2A threaded connection. The input/output Teflon wiring passes through the conduit connection and is sealed with Emerson & Cummings Stycast 2651 & Catalyst No. 9. The Teflon wires are pretreated with Tetra-Etch® to promote bonding of the potting material to the wires. This is an essential part of the manufacturing process. The conduit connector and the process connections are welded to the cylindrical portion of the enclosure. The transmitter housing is continuously welded stainless steel with a free internal volume of 5.9 in³. All circuitry of the SPX-T is contained within the Explosionproof SPX-T housing except the electrical output of the RTD Protection Board. This electrical output passes through a poured seal that creates an Explosionproof enclosure boundary. The electrical output of the RTD Protection Board has been designed to be intrinsically safe for installation in a Division 1 environment.

The SPX-T 3XXX Series is a 4-20 mA temperature compensated pressure transmitter for use in hazardous (classified) locations. The SPX-T Series Smart Pressure transmitter is an all welded construction that features a 1/2-20 UNF or M18 x 1.5 threads for installation in standard transducer mounting holes. The construction of the SPX-T Series Smart Pressure transmitters is based on the design of the FFX Smart Transmitter housings previously satisfactorily examined and tested under FM Approvals project ID 3025446. The SPX-T Series Transmitter's free internal volume is slightly larger the previously examined FFX Smart Transmitter housings.

3a42Ebcdefghijk. SPX-T Smart Pressure Transmitter

- a = Accuracy Code: 2 or 3.
- b = Process Diaphragm Material Code: A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W, X, or Y.
- c = Process Connection Code: 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, or 15.
- d = Engineering Units Code: B, C, K, M, or P.
- e = Pressure Range Code: 08 to 27.
- f = Rigid Snout Length Code: representing 1.19" to 36.5"
- g = Flex Length Code: representing 0" to 35.3"
- h = Hart Communications Code: A, B, or C.
- i = Electrical Connections Code: CA, CB, CC, CD, CE, CF, CG, CW, CX, or CY.
- j = Temperature Sensors Code: ZZ or TB.
- k = Option Code: (four digits alpha-numeric)

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3a43Ebcdefghijk. SPX-T Smart Pressure Transmitter.

- a = Accuracy Code: 2 or 3.
- b = Process Diaphragm Material Code: A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W, X, or Y.
- c = Process Connection Code: 25 to 46, A6
- d = Engineering Units Code: B, C, K, M, or P.
- e = Pressure Range Code: 08 to 27
- f = Rigid Snout Length Code: representing 1.19" to 36.5"
- g = Flex Length Code: representing 0" to 35.3"
- h = Hart Communications Code: A, B, or C.
- i = Electrical Connections Code: CA, CB, CC, CD, CE, CF, CG, CW, CX, or CY.
- j = Temperature Sensors Code: ZZ or TB.
- k = Option Code: (four digits alpha-numeric)

3a9bEcddefghijkl. SPX-T Smart Pressure Transmitter.

- a = Accuracy Code: 2 or 3.
- b = Mounting Configuration Code: 0 or 1.
- c = Process Diaphragm Material Code: A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W, X, or Y.
- d = Process Connection Code: 24, 48-68, 70-79.
- e = Engineering Units Code: B, C, K, M, or P.
- f = Pressure Range Code: 08 to 23.
- g = Rigid Snout Length Code: representing 1.19" to 18".
- h = Flex Length Code: representing 0" to 35.3"
- i = Hart Communications Code: A, B, or C.
- j = Electrical Connections Code: CA, CB, CC, CD, CE, CF, CG, CW, CX, or CY.
- k = Temperature Sensors Code: ZZ or TB.
- l = Option Code: (four digits alpha-numeric)

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

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

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16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
June 24 th , 2009	Original Issue.
23 rd October 2019	<u>Supplement 2:</u> Report Reference: – RR220986 dated 23 rd October 2019. Description of the Change: (1) Model Code options added (2) FM3600 and FM3615 updated to latest edition (2018) (3) Certificate updated to latest format

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