

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM16US0011X
3. **Equipment:** Logix 3200MD+
(Type Reference and Name) Digital Valve Positioner
4. **Name of Listing Company:** Flowserve US Inc.
5. **Address of Listing Company:** 1350 Mountain Springs Pkwy
Springville Operations
PO Box 2200
Springville UT, 84663
United States
6. The examination and test results are recorded in confidential report number:

3056447 dated 20th May 2016
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, FM Class 3616: 2011
ANSI/ISA 60079-0:2013, ANSI/UL 60079-1:2015, 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.

Certificate issued by:

J. E. Marquedant
Manager, Electrical Systems

20th May 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
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SCHEDULE



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10. Equipment Ratings:

Explosionproof for Class I, Division 1, Groups B, C and D; Dust-ignitionproof for Class II, Division 1, Groups E, F and G; Class III, Division 1; Flameproof for Class I, Zone 1, AEx db IIB+H2 T4/T6 Gb hazardous (classified) locations, indoors and outdoors (Type 4X, IP65) with an ambient temperature rating of Ta = -50°C to 45° and Ta = -50°C to 80°C.

11. The marking of the equipment shall include:

Class I Division 1, Groups B, C, D; T4 Ta = -50°C to 80°C, T6 Ta = -50°C to 45°C; Type 4X, IP65

Class II, Division 1, Groups E, F, G, Class III, Division 1; T4 Ta = -50°C to 80°C, T6 Ta = -50°C to 45°C; Type 4X, IP65

Class I, Zone 1, AEx db IIB+H2 T4 Ta = -50°C to 80°C, T6 Ta = -50°C to 45°C Gb; Type 4X, IP65

12. **Description of Equipment:**

General - The Logix 3200MD+ Digital Positioner is an electro-pneumatic positioner designed to control a variety of pneumatic actuators. Positioning is based on a balance of two signals; one proportional to the command input signal and the other proportional to the valve stem position. The positioner utilizes Hart Communications protocol via a two-wire 4-20 mA input signal. The Logix 3200MD+ is available in either painted cast aluminum or stainless steel.

Construction - The Logix 3200MD+ Digital Positioner consists of a dual compartment enclosure, a termination compartment with threaded cover and an electronics compartment with threaded cover. The enclosure has two access openings to the terminal facility which accommodate suitably certified cable entry devices. The enclosure is available with two ½ - 14 NPT conduit entries. In addition to the cable entries the enclosure incorporates four threaded joints for the Main Housing Cover (6.00-16UN), Field Termination Cover (2.625-16UN), Spool Valve Cover (2.375-16UN), and Manifold Driver Module (2.032-20UN). Nonthreaded joints are provided; between the sintered elements and their associated holes, between the display window and the main housing cover, between the bearing and shaft arrangement, and between the bearing and the main housing arrangement. The main housing and field covers are retained by locking screws. The spool valve cover is recessed and can only be removed by the use of a special tool (Allen Key). The manifold driver module is situated within the enclosure so it cannot be removed without removing the spool valve cover.

Ratings - The Logix 3200MD+ Digital Positioner operate at 30Vdc, 4-20mA (less than 1 watt). The transmitters are rated for use in an ambient temperature range of -50°C to 45°C and -50°C to 80°C.

32aaMD+bcde0fghi, Digital Valve Positioner.

aa = Diagnostics: 00 (Standard Diagnostics), 10 (Advanced w/ Pressure Sensor) or 20 (Pro Diagnostics w/ pressure sensing and Full ValveSight Diagnostics)

b= Certification: 34 (FM/CSA).

c= Housing: W (Aluminum, White Paint), S (Stainless Steel, No Paint), B (Aluminum, Black Paint, Automax), A (Aluminum, Black Paint, Accord).

d= Conduit Connections: 1 (NPT).

e= Feedback shaft: V (DD-316 Stainless Steel Shaft), R (NAMUR-316 Stainless Steel Shaft), D (316 Stainless Steel Shaft, 3rd party actuators).

f= Action: 1 (Four-way), 2 (Three-way), 3 (Three-way Purge), 4 (Four-way Vented), 5 (Three-way Vented).

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g= Pressure Gauges: 0 (No gauge), 1 (SS with Brass Internals, bar/kPa), 2 (SS with SS internals, bar/kPa), 3 (SS with Brass Internals, kg/cm²), 4 (SS with SS internals, kg/cm²), A (UCC Press Test Plug), B (Valve, Tank).

h= Auxiliary Card Slot: 0 (no card), 1 (Multi-function Card)

i= Remote Mount: 0 (No Remote Mount Feedback), 1 (Aluminum Remote Mount Feedback), S (SS Remote Mount Feedback).

13. **Specific Conditions of Use:**

1. The flamepaths of the equipment are not intended to be repaired. Consult the manufacturer if repair of the flamepath joints is necessary.
2. To avoid possibility of static discharge clean only with a damp cloth
3. Using the box provided on the nameplate, the User shall permanently mark the type of protection chosen for the specific installation. Once the type of protection has been marked it shall not be changed

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.

16. **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
20 th May 2016	Original Issue.

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