

1 EU-TYPE EXAMINATION CERTIFICATE



2 **Equipment or Protective systems intended for use in Potentially
Explosive Atmospheres - Directive 2014/34/EU**

3 **EU-Type Examination Certificate No: FM16ATEX0021X**

4 **Equipment or protective system: Digital Positioner Logix 3200MD+
(Type Reference and Name)**

5 **Name of Applicant: Flowserve US Inc**

6 **Address of Applicant: Springville Operations
1350 Mountain Springs Parkway
Springville, UT 84663 USA**

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Ltd, notified body number 1725 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

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

3056334 dated 15th April 2016

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN60079-0:2012, EN60079-11:2012 and EN 60529:1991 + A2:2013

10 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.

11 This EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:



II 1 G Ex ia IIC T4 Ta = -52°C to 85°C, T6 Ta = -52°C to 45°C Ga; IP65

II 1 D Ex ia IIIC T95°C Da Ta = -52°C to 85°C; IP65

Mick Gower
Certification Manager, FM Approvals Ltd.

Issue date: 07th June 2016

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

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SCHEDULE

to EU-Type Examination Certificate No. FM16ATEX0021X

13 Description of Equipment or Protective System:

General product information:

The Logix 3200MD+ Digital Positioner is a two-wire 4-20 mA single/double acting digital positioner. It combines piezo-valve technology with inner-loop feedback to provide control. The Logix 3200MD+ Digital Positioner is designed to be configured at the valve through the local user interface. Colored LED's allow the user to determine the condition of the device via status codes. The positioner is completely powered by the 4-20mA input signal.

The housing for the Logix 3200MD+ Digital Positioner housing is constructed of an aluminum alloy and is essentially curricular in shape with a threaded cover for the main compartment and user interface connection compartment. The metal enclosure is anodized and coated with a Polyester based paint.

The cover for the main compartment a glass viewing window for the LED's, The base of the housing has two ½" – 14 NPT or M20 conduit openings, a cylindrical rotary shaft and two pneumatic output ports with one pneumatic supply port.

The Model Logix 3200MD+ Digital Positioner comprises the following:

- Main Circuit Board
- Internal Pressure board
- Piezo Relay (Optional Single or Double Acting Mechanical Configuration)
- Hall Effect Sensor
- Feedback Potentiometer
- Optional Field Installable Multi Function (MFC) Card

32aMD+28-bcde0-f-gh. Digital Positioner.

Entity Parameters:

	4-20 Input and Remote Mount HART 4-20 Input	MFC Card	Remote Mount Output	
Ui (V)	30	30	Uo (V)	5
Ii (mA)	100	100	Io (mA)	79
Pi (mW)	800	800	Po (mW)	129
Ci (nF)	0	0	Co (µF)	2
Li (µH)	47	0	Lo (µH)	100

aa = Diagnostics: 00, 10 or 20

b = Housing: W, S, B or A

c = Conduit Connection: 1 or 2

d = Shaft: V, R or D

e = Action: 1, 2, 3, 4 or 5

f = Pressure Gauge: 0, 1, 2, 3, 4, A or B

g = Auxiliary Card slot 1: 0 or 1

h = Remote Mount: 0, A or S

14 Specific Conditions of Use:

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1. To avoid possibility of static discharge clean only with a damp cloth.
2. The Digital Positioner enclosure contains aluminum and is considered to present a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.
3. Provisions shall be made externally to provide transient overvoltage protection to a level not to exceed 140% of the peak rated input voltage.
4. For type nA installation only air or inert gas may be connected to the air supply line.
5. 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.

15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

16 Test and Assessment Procedure and Conditions:

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

17 Schedule Drawings

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

18 Certificate History

Details of the supplements to this certificate are described below:

Date	Description
07 th June 2016	Original Issue.

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Blueprint Report

Flowserve US Inc (1000002350)

Class No 3610

Original Project I.D. 3056334

Certificate I.D. FM16ATEX0021X

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>	<u>Electronic Drawing</u>
283434	5	520 PLUS 520MD+	3056334	Yes (pdf)
283499	3	520 PLUS AUX SCHEDULE	3056334	Yes (pdf)
307188	0	LOGIX 3200+ USER INTERFACE BOARD PCB LAYERS	3056334	Yes (pdf)
325102	0	LOGIX 500 PLUS PRESSURE SENSOR PCB LAYERS	3056334	Yes (pdf)
325137	0	3200MD+ HALL SENSOR TOP PCB LAYERS	3056334	Yes (pdf)
325141	0	520 PLUS PCB LAYERS	3056334	Yes (pdf)
325272	0	REMOTE MOUNT POT PCB LAYERS	3056334	Yes (pdf)
331592	0	MAIN BOARD PCB LAYERS	3056334	Yes (pdf)
346348	0E	FLAME PATHS LOGIX 3000 PLUS POSITIONER	3056334	Yes (pdf)
346462	0	CONTROL DRAWING LOGIX 3000+ DIGITAL Positioned	3056334	Yes (pdf)
346483	0	STICKER MODEL NUMBER LOGIX 3000MD+ Positioned	3056334	Yes (pdf)
346484	1	STICKER CERTIFICATION LABEL LOGIX 3200MD+	3056334	Yes (pdf)
LGENIM0110-0	3/16	Logix 3200MD+IOM and Safety Manual FCD	3056334	Yes (pdf)