

1 EC-TYPE EXAMINATION CERTIFICATE



2 Equipment or Protective systems intended for use in Potentially
Explosive Atmospheres - Directive 94/9/EC

3 EC-Type Examination Certificate No: FM13ATEX0097X

4 Equipment or protective system: Logix 420 Digital Positioner
(Type Reference and Name)

5 Name of Applicant: Flowserve US Inc

6 Address of Applicant: 1350 Mountain Springs Pkwy
Springville Operations
PO Box 2200
Springville UT 84663
United States

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 9 of Directive 94/9/EC of 23 March 1994, 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:

3050985 dated 18th December 2013

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:

EN 60079-0:2012, EN 60079-1:2007, EN 60529:1991 + A1: 2000

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. 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 2 G Ex d IIB+H2 T4 Ta = -52°C to +85°C, T6 Ta = -52°C to +45°C Gb IP66

Mick Gower
Certification Manager, FM Approvals Ltd.

Issue date: 29th May 2014

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

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS
T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: atex@fmapprovals.com www.fmapprovals.com

SCHEDULE



Member of the FM Global Group

to EC-Type Examination Certificate No. FM13ATEX00097X

13 Description of Equipment or Protective System:

The Logix 420 Digital Positioner assembly consists of an aluminum housing that includes a 5/16 inch 18-UNC and M6 mounting entry, two ¼ inch NPTF Pneumatics threaded connections, one ½ inch or M20x1.5 wiring entry and a one ¼ inch vent. The housing is composed of 3 main sections, the Cover (Lid) assembly, Enclosure, and Operating Rod. The Cover (Lid) utilizes a Lid with internal o-ring clamp, O-ring seal, and Window (Sodalime Glass). The enclosure body contains flame arrestors that are embedded into the enclosure's body. The electrical entry connection is ½ inch NPTF (Female) or M20x1.5. The equipment is provided with an internal and external grounding facility. The equipment has an approximate free internal volume of less than 500 cubic cm. The operating rod or feedback shaft is constructed of stainless steel and transfers the valve position to the electronics.

The Logix 420 Digital Positioner supply is 30 V, 4-20mA.

Product Model Code:

Logix 42040bcdef. Digital Positioner

b= General options: W, N

c= Threaded connections: 1, or 2

d= Feedback Shaft: D or R

e= Gauges: 0, 1, 2, 3, 4, A, or B

f= Display: 0, 1, or 2

14 Specific Conditions of Use:

- 1) To avoid possibility of static discharge, clean only with a damp Cloth.
- 2) Contact Flowserve for flamepath information.

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 EC-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.

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

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS
T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: atex@fmapprovals.com www.fmapprovals.com

SCHEDULE



Member of the FM Global Group

to EC-Type Examination Certificate No. FM13ATEX00097X

18 Certificate History

Details of the supplements to this certificate are described below:

Date	Description
18th December 2013	Original Issue.
29 th May 2014	Supplement 1 Report Reference: 3050985 rev140117 dated 22 nd May 2014 Description of the Change: Minor changes to drawing not affecting safety or compliance.

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

FM Approvals Ltd. 1 Windsor Dials, Windsor, Berkshire, UK. SL4 1RS
T: +44 (0) 1753 750 000 F: +44 (0) 1753 868 700 E-mail: atex@fmapprovals.com www.fmapprovals.com

Blueprint Report

Flowserve US Inc (1000002350)

Class No 3615

Original Project I.D. 3050985

Certificate I.D. FM13ATEX0097X

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>	<u>Electronic Drawing</u>
FCD LGENIM0106-04	10/13	User Instructions - Logix® 420 Series Digital Positioners	3050985	Yes (pdf)
121532	0	O-Ring	1/17/14	Yes (pdf)
130822	3	FLAME ARRESTOR, .25 DIA., .50 LONG, LOGIX 1000 DIGITAL POSITIONER	3050985	Yes (pdf)
221742	1	WINDOW, LCD DISPLAY, .366 THICK GLASS, STARPAC 3	3050985	Yes (pdf)
226669	1	RETAINING RING, THREADED, WINDOW GLASS, MAIN COVER, STARPAC 3	3050985	Yes (pdf)
262636	1	SHAFT, FEEDBACK, D-TYPE, LOGIX LOW PROFILE, REMOTE MOUNT	3050985	Yes (pdf)
264356	0	BUSHING, LOGIX LOW PROFILE REMOTE MOUNT	3050985	Yes (pdf)
301538	3	COVER, STANDARD, MACHINE, LOGIX420 POSITIONER	1/17/14	Yes (pdf)
307213	2	FLAME PATHS OF LOGIX 420 DIGITAL POSITIONER	1/17/14	Yes (pdf)
307370	0	STICKER, CERTIFICATION LABEL, BLANK, ZEBRA PRINTED	3050985	Yes (pdf)