



Member of the FM Global Group

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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

5a37-bcdefg-hi-jklm. Digital Positioner.

5a42-bcdefg-hi-jklm. Digital Positioner.

IS/I/1/ABCD/T4 Ta = -20°C to 85°C, T6 Ta = -52°C to 45°C; - 291780; Entity; Type 4X, IP66;
 I/O/AEx ia IIC/T4 Ta = -20°C to 85°C, T6 Ta = -52°C to 45°C; - 291780; Entity; Type 4X, IP66;
 NI/I/2/ABCD/ T4 Ta = -20°C to 85°C, T6 Ta = -52°C to 45°C; Type 4X, IP65;
 I/2/AEx nA IIC/T4 Ta = -20°C to 85°C, T6 Ta = -52°C to 45°C; Type 4X, IP65;
 21/AEx tb IIIC/T100°C Ta = -52°C to +85°C; Type 4X, IP65

Entity Parameters:

	4-20 Input / V to I	MFC Card	Limit Switch	Limit Switch	Limit Switch	Limit Switch	Remote Mount Terminals	
			-02	-03 <i>5a42 only</i>	-04 <i>5a42 only</i>	-05 <i>5a42 only</i>		
Ui (V)	30	30	10.6	16	16	16	Uo (V)	5
Ii (mA)	100	100	29.7	25	25	25	Io (mA)	79
Pi (mW)	800	800	79	34	34	34	Po (mW)	129
Ci (nF)	0	0	1	40	30	30	Co (µF)	2
Li (µH)	47	0	1	50	100	100	Lo (µH)	100

a = Communication and Diagnostics: 05+, 10+, 20MD+, 21MD+ or 22MD+.

b = Housing: W, Y, B or A.

c = Threaded Connection: 1, 2 or 3.

d = Shaft: D or R.

e = Action: 1, 2 or 3.

f = Position Indicator: 0, F or D.

g = Special Options: 0 or 1.

h = Manifold: 00 or GM.

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

j = LCD: 0 or 1.

To verify the availability of the Approved product, please refer to www.approvalguide.com

k = Auxiliary Card slot 1: 0, 1 or 2.

l = Auxiliary Card slot 2: 0 or 1.

m = Limit Switch or Remote Mount: 2, 3, 4, 5 or 7. (3, 4, 5 for 5a42 only)

Special Conditions of Use:

1. To prevent the risk of electrostatic sparking the enclosure shall only be cleaned 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 overvoltage protection to a level not to exceed 140% of the rated input voltage.
4. For type nA or type tb installation only air or inert gas may be connected to the air supply line.

420-40-abc-de. Digital Positioner.

IS/I/1/ABCD/T4 Ta = -20°C to 85°C, T6 Ta = -52°C to 45°C - 314746; Entity

I/0/AEx ia IIC/T4 Ta = -20°C to 85°C, T6 Ta = -52°C to 45°C - 314746; Entity

I/2/AEx nA IIC/T4 Ta = -20°C to 85°C, T6 Ta = -52°C to 45°C;

21/AEx tb IIIC/T100°C Ta = -52°C to +85°C;

Type 4X, IP66

Entity Parameters:

	4-20 Input
Ui (V)	30
Ii (mA)	100
Pi (mW)	80
Ci (nF)	0
Li (µH)	47

a = General Option: W or N.

b = Threaded Connection: 1, 2 or 3.

c = Feedback Shaft: D or R.

d = Gauge: 0, 1, 2, 3, 4, A or B.

e = Display: 0, 1 or 2.

Special Conditions of Use:

1. To prevent the risk of electrostatic sparking the enclosure shall only be cleaned 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 overvoltage protection to a level not to exceed 140% of the rated input voltage.
4. For type nA or type tb installation only air or inert gas may be connected to the air supply line.

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Equipment Ratings:

Intrinsically Safe for Class I, Division 1, Groups A, B, C and D, indoor and outdoor (Type 4X, IP66) in accordance with drawing 291780 and 314746; Intrinsically Safe for Class I, Zone 0, AEx ia IIC indoor and outdoor (Type 4X, IP66) in accordance with drawing 291780 and 314746; Nonincendive for Class I, Division 2, Groups A, B, C and D, indoor and outdoor (Type 4X, IP65 or IP66 for Logix 420); Class I, Zone 2, AEx nA IIC indoor and outdoor (Type 4X, IP65 or IP66 for Logix 420); Zone 21, AEx tb IIC indoor and outdoor (Type 4X, IP65 or IP66 for Logix 420) hazardous (Classified) locations.

FM Approved for:

Flowsolve US Inc
Springville, UT United States

To verify the availability of the Approved product, please refer to www.approvalguide.com



This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	2011
Class 3610	2010
FM3611	2004
FM3810	2005
ANSI/NEMA 250	2003
ANSI/IEC 60529	2004
ANSI/ISA 60079-0	2013
ANSI/ISA 60079-11	2011
ANSI/ISA 60079-15	2012
ANSI/ISA 60079-31	2013

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Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
3047577	November 21, 2012		
130104	January 11, 2013		
3049443	January 20, 2014		
140124	March 12, 2014		
141009	February 3, 2015		
3050616	March 30 2015		
RR201580	December 13, 2015		

FM Approvals LLC

J. E. Marquedant
Manager, Electrical Systems

13 December 2015

Date

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