



Member of the FM Global Group

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CERTIFICATE OF COMPLIANCE

HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

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/Ex 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/Ex nA IIC/ T4 Ta = -20°C to 85°C, T6 Ta = -52°C to 45°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.

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

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

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. Provision 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.

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

I/2/Ex nA IIC/T4 Ta = -20°C to 85°C, T6 Ta = -52°C to 45°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. Provision 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.

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Equipment Ratings:

Intrinsically Safe for Class I, Division 1, Groups A, B, C and D indoor and outdoor (Type 4X and IP66) hazardous locations in accordance with drawing 291780 and 314746; Intrinsically Safe for Class I, Zone 0, Group IIC indoor and outdoor (Type 4X and IP66) hazardous locations in accordance with Control Drawing 291780 and 314746; Nonincendive for Class I, Division 2, Groups A, B, C and D indoor and outdoor (Type 4X and IP66) hazardous locations; Class I, Zone 2, Ex nA IIC indoor and outdoor (Type 4X and IP66) hazardous locations.

FM Approved for:

Flowserve 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:

CAN/CSA C22.2 No. 157	2012
CAN/CSA C22.2 No. 213	2008
CAN/CSA C22.2 No. 1010.1	2009
CAN/CSA No. 60079-0	2011
CAN/CSA No. 60079-11	2014
CAN/CSA No. 60079-15	2012
CAN/CSA C22.2 No. 60529	2005

Original Project ID: 3044377c

Approval Granted: September 7, 2012

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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