



# Certificate of Compliance

**Certificate:** 1000784 (LR 272\_0\_00)

**Master Contract:** 154088

**Project:** 70143922

**Date Issued:** 2017-11-03

**Issued to:** Dynisco  
199 Fire Tower Drive  
Tonawanda, New York 14150  
USA  
**Attention:** Joel Neri

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and US Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only*



**Issued by:** Jared Gillespie

## PRODUCTS

### Part A

**CLASS 2258 02** - PROCESS CONTROL EQUIPMENT –For Hazardous Locations

**Class I, Div. 1, Groups A, B, C and D; Class II, Div. 1 Groups E, F and G; Class III; Enclosure Type 4; Dual Seal**

- Pressure Transducers, Models 570abcdMEe, 571abcdMEe, 574abcdMEe, 870abcdMEe and 970bcdMEe rated 4-20mA, 40V dc max.

a = Denoted input voltage: 2=10V, 5=24V, 6=28V

b = Pressure Range: AH, AM, AN, AP, AR, AU, AW, AY, AZ, BA, BC, BF, BH, BM, BP, BQ, BR, BS, BU, BW, BZ, EC, EG

c = Pressure Format: A, G, S, V

d = Alternate Pressure Port: Two letters, the first being S, W or Y, the second any letter from A to Z

e = Exotic Metals – wetted parts: QA, QB, QC, QJ, QL, and QK



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NOTE 1: Transmitter must be powered by an approved SELV source, in accordance with CSA standard C22.2 No. 1010.1, Annex H.

NOTE 2: Item d above may be listed individually or as a mod code. If there is a mod code, options will be listed on that document.

NOTE 3: Standard Pressure Ranges: [Minimum Diaphragm Thickness] in inches, for Standard Wetted Material  
PSI:

AH	0-50	[.0100]	AW	0-750	[.0371]	BH	0-7500	[.1171]	BU	0-40K	[.0675]
AM	0-100	[.0100]	AY	0-1000	[.0428]	BM	0-10K	[.1352]	BW	0-50K	[.0805]
AN	0-150	[.0100]	AZ	0-1500	[.0525]	BP	0-15K	[.1655]	BZ	0-60K	[.0855]
AP	0-200	[.0165]	BA	0-2000	[.0606]	BQ	0-20K	[.0395]	EC	0-75K	[.0975]
AR	0-300	[.0178]	BC	0-3000	[.0742]	BR	0-25K	[.0455]			
AU	0-500	[.0227]	BF	0-5000	[.0954]	BS	0-30K	[.0555]			

NOTE 4: Performance Option: ME (CSA Explosion Proof)

## **Part B**

### **CLASS 2258 02** - PROCESS CONTROL EQUIPMENT –For Hazardous Locations

#### **Ex nA IIC:**

**Class I, Div. 2, Groups A, B, C, and D; Class II, Div. 2, Groups F and G; Class III, Div. 2; Enclosure Type 4 (see Note 2), Dual Seal**

- Model 970abcTJde Pressure Transmitter, 4-20 mA, 35 Vdc max., T4 at Ta = 60 °C

a = Pressure Range: AH, AM, AN, AP, AR, AU, AW, AY, AZ, BA, BC, BF, BH, BM, BP, BQ, BR, BS, BU, BW, BZ, EC,

b = Pressure Format: A, G, S (see Note 2)

c = Alternate Pressure Port: Two letters, the first being S, W or Y, the second any letter from A to Z

d = Performance Options: CL, DF, DG, DQ, EA, ME, ND, NG, NH, NJ, NK, NSR, NT, NX, NY, NZ, TB, TF, TK, ZU,

e = Exotic Metals – wetted parts: QA, QB, QC, QJ, QL

NOTE 1: Transmitter must be powered by an approved SELV source, in accordance with CSA standard C22.2 No. 1010.1, Annex H.

NOTE 2: Pressure Format G is not rated for Class II or Class III and is not rated Enclosure Type 4.

NOTE 3: Items c, d and e above may be listed individually or as a mod code. If there is a mod code, options will be listed on that document.

NOTE 4: Reference PART A, NOTE 3 for Standard Pressure Ranges: [Minimum Diaphragm Thickness] Table.

NOTE 5: Performance Option: TJ (CSA DIV/Zone 2 Design/Label)



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**CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

**Ex ia IIC:**

**Class I, Div. 1, Groups A, B, C and D; Class II, Div. 1, Groups E, F and G; Class III, Div. 1; Enclosure Type 4, Dual Seal**

- Pressure Transmitter, Models 570abcdeNX, 571abcdeNX, 572bcdeNX and 584bcdeNX, with Entity parameters:  $V_{max} = 28V$ ,  $I_{max} = 100mA$ ,  $C_i = 14.1 nF$ ,  $L_i = 1.2\mu H$ ; Temperature Code T4 at  $T_a = 80\text{ }^\circ C$ ,  $T_5 = 40\text{ }^\circ C$ ; Intrinsically Safe when installed per drawing No CD0627.

Suffixes denote the following options:

- a = 6, denotes input voltage  $\leq 28V$  (not used with all models)
- b = Pressure Range: AH, AM, AN, AP, AR, AU, AW, AY, AZ, BA, BC, BF, BH, BM, BP, BQ, BR, BS, BU, BW, BZ, EC, EG
- c = A, S or G, denoting pressure format
- d = Alternate Pressure Port: Two letters, the first being S, W or Y, the second any letter from A to Z (if applicable)
- e = 2 letter code denoting performance options and electrical connector codes; multiple options may be chosen (if applicable)
- f = Optional exotic metal for wetted parts (if applicable)

**SPECIAL CONDITION OF SAFE USE:** Connect per Installation drawing CD0627.

NOTE 1: Models with alternate electrical connector codes B, C or Z are suitable only for Class I hazardous locations; these models are also excluded from the Type 4 enclosure rating.

NOTE 2: Options d, e, and f above may be listed individually or as a mod code. If there is a mod code, options will be listed on that document.

NOTE 3: Reference PART A, NOTE 3 for Standard Pressure Ranges: [Minimum Diaphragm Thickness] table.

- Model 970abcNXdef Pressure Transmitter, Entity parameters:  $V_{max} = 28V$ ,  $I_{max} = 100mA$ ,  $C_i = 14.1 nF$ ,  $L_i = 1.2\mu H$ ; Temperature Code T4 at  $T_a = 50\text{ }^\circ C$ ; intrinsically safe when installed per drawing CD0637

- a = Pressure Range: AH, AM, AN, AP, AR, AU, AW, AY, AZ, BA, BC, BF, BH, BM, BP, BQ, BR, BS, BU, BW, BZ, EC, (see Note 1)
- b = Pressure Format: A, G, S (see Note 2)
- c = Alternate Electrical Connections: Two letter code, the first letter either B, C or Z, the second any letter from A to Z (see Note 3)
- d = Alternate Pressure Port: Two letter code, the first letter being S, W or Y, the second any letter from A to Z
- e = Performance Options: CL, DF, DG, DQ, EA, ME, ND, NG, NH, NJ, NK, NSR, NT, NY, NZ, TA, TB, TF, TJ, TK (see Note 4 to 6)
- f = Exotic Metals – wetted parts: QA, QB, QC, QL



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SPECIAL CONDITION OF SAFE USE: Connect per Installation drawing CD0637.

NOTE 1: Transmitter certified for pressure up to 75,000 psi

NOTE 2: Pressure Format G is not rated for Class II or Class III and is not rated Enclosure Type 4.

NOTE 3: Any alternate electrical connection is not rated for Class II or Class III and is not rated Enclosure Type 4.

NOTE 4: There may be multiple option codes and options d, e, and f may be in any order.

NOTE 5: Reference PART A, NOTE 3 for Standard Pressure Ranges: [Minimum Diaphragm Thickness] table.

NOTE 6: Performance Option: NX (CSA Intrinsically Safe Label)

### **Part C**

**CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

**CLASS 2258 84** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - - For Hazardous Locations - Certified to US Standards

**Ex ia IIC T5...T4:**

**Class I, Zone 0, AEx ia IIC T5...T4:**

**Class I, Div. 1, Groups A, B, C and D; Class II, Div. 1, Groups E, F and G; Class III, Div. 1; Enclosure Type 4, Dual Seal**

• Pressure Transmitter, Models 570abcdeNX, with Entity parameters:  $V_{max} = 28V$ ,  $I_{max} = 100mA$ ,  $C_i = 14.1 nF$ ,  $L_i = 1.2\mu H$ ; Temperature Code T4 at  $T_a = 80^\circ C$ ,  $T_5 = 40^\circ C$ ; Intrinsically Safe when installed per drawing No CD0627.

Suffixes denote the following options:

a = 6, denotes input voltage  $\leq 28V$  (not used with all models)

b = Pressure Range: AH, AM, AN, AP, AR, AU, AW, AY, AZ, BA, BC, BF, BH, BM, BP, BQ, BR, BS, BU, BW, BZ, EC, EG

c = A, S or G, denoting pressure format

d = Alternate Pressure Port: Two letters, the first being S, W or Y, the second any letter from A to Z (if applicable)

e = 2 letter code denoting performance options and electrical connector codes; multiple options may be chosen (if applicable)

f = Optional exotic metal for wetted parts (if applicable)

SPECIAL CONDITION OF SAFE USE: Connect per Installation drawing CD0627.

NOTE 1: Models with alternate electrical connector codes B, C or Z are suitable only for Class I hazardous locations; these models are also excluded from the Type 4 enclosure rating.

NOTE 2: Options d, e, and f above may be listed individually or as a mod code. If there is a mod code, options will be listed on that document.



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NOTE 3: Reference PART A, NOTE 3 for Standard Pressure Ranges: [Minimum Diaphragm Thickness] table.

**APPLICABLE REQUIREMENTS**

CAN/CSA C22.2 No. 0-M91 (R2001)	General Requirements - Canadian Electrical Code, Part II
CSA Std C22.2 No 25-1966	Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
CSA Std C22.2 No 30-1986	Explosion Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA-C22.2 No 94-M91	Special Purpose Enclosures
CSA Std C22.2 No 142-M1987	Process Control Equipment
CAN/CSA-C22.2 No 157-92	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CSA Std C22.2 No 1010.1-1992	Process Control Equipment (Base document with amendment 1)
CSA Std C22.2 No 1010.1B-97	Process Control Equipment (amendment 2)
TIL No. I-29B	Process Control Equipment in extended environments (> 40 °C)
CAN/CSA- E79-0:95	Electrical apparatus for explosive gas atmospheres, Part 0: General Requirements
CAN/CSA- E79-11:95	Electrical apparatus for explosive gas atmospheres, Part 11: Intrinsic safety "i"
ANSI/ISA 12.27.01-2011	Requirements for Process Sealing Between Electrical Systems and Flammable or Combustible Process Fluids

Note: The applicable requirements below pertain to model 570abcdeNX series only.

CAN/CSA-C22.2 No. 61010-1-12	Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements
CAN/CSA-C22.2 60079-0:15	Explosive atmospheres — Part 0: Equipment — General requirements
CAN/CSA-C22.2 No. 60079-11:14	Explosive atmospheres — Part 11: Equipment protection by intrinsic safety "i"
CAN/CSA-C22.2 No. 157-92:16	Intrinsically safe and non-incendive equipment for use in hazardous locations
UL 61010-1:12 Ed. 3	Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements
UL 913:13 Ed. 6	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations
UL 60079-0:13 Ed. 6	Explosive atmospheres – Part 0: Equipment – General requirements
UL 60079-11:13 Ed. 6	Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety "i"



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## **MARKINGS**

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

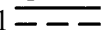

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown without an indicator for Canada only (indicating that products have been manufactured to the requirements of Canadian Standards).

### **Nameplate label material approval information:**

The following are laser etched onto external surface of the enclosure:

(Refer to Descriptive Documents Package for Label Drawing(s), i.e. ES0723, AP4366 and AP5321.)

- Manufacturers name “Viatran Corporation”, or CSA Master Contract number “154088” adjacent the CSA Mark, in lieu of manufacturers name.
- Model designation, as specified in the PRODUCTS section, above.
- Complete electrical rating, as specified in the PRODUCTS section, above.  
For Model 970 (when followed by TJ suffix)
  - Division 2 certification requires a SELV power supply.
  - IEC 60417 Symbol 5031 , adjacent to DC rating.
- Maximum ambient temperature rating, as specified in the PRODUCTS section, above.
- Date code / Serial number traceable to month and year of manufacture.
- Enclosure type ratings, as specified in the PRODUCTS section, above.
- The CSA mark, as shown on the Certificate of Compliance.
- Hazardous Location designation, as specified in the PRODUCTS section, above.
- Temperature code, as specified in the PRODUCTS section, above.
- Maximum Working Pressure, as specified in the PRODUCTS section, above.
- The symbol “Exia”; (Models under Class 2258 04 and 2258 84)
- Reference to installation instructions
- Caution symbol ISO 3864, B.3.1  (Model 970 only)



## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

<b>Project</b>	<b>Date</b>	<b>Description</b>
70143922	2017-11-03	Update includes evaluation to update applicable requirements for the Model 570 Series as Ex ia IIC and Class I, Div 1, Groups ABCD, Class II/II, Div 1, Grp EFG; Type 4, Dual Seal.
70100119	2017-05-24	Update of CSA Report 1000784 for 570, 571, 574, 870 and 970 Series to include the New FT Tip, with two materials: Inconel 718 (p/n: 005869) and 304 Stainless Steel (p/n: 005856) to the report.
70082001	2016-07-21	Update CSA Report No. 1000784 to include several (19+) drawing updates.
70015752	2015-02-12	Drawing AP5321 update for non CSA markings and additional comments.
2582695	2012-12-04	Update report to cover replacing drawings with latest revision.
2547785	2012-08-29	Update to report 1000784 with revised drawings
2495738	2012-03-19	Update to report 1000784 with revised drawings and new pressure capsule.
2488603	2012-02-29	Update report to include revised drawings.
2445313	2011-09-15	Update to report 1000784 to include models 570abcdME, 571abcdME, 574abcdME, 870abcdME and 970abcdME previously certified in LR 34272-7 (-14) for Explosion Proof protection.
2310415	2010-06-04	Update of report 1000784 to include ISA 12.27.01 Dual Seal Marking and revised drawings.
2233746	2009-11-24	Update to Report 1000784 to review new revisions to drawings and to update the entity parameters.
2188320	2009-07-20	Update report 1000784 to correct discrepancy between CofC and Report.
2134065	2009-01-28	Update report 1000784 to revise critical documents list.
1984844	2008-01-22	Update to cover report revision and addition of similar model 584
1451978	2003-10-23	Add Model 970 Transmitter as intrinsically safe and suitable for Division 2/Zone 2
1469406	2003-08-20	Revised construction including addition of 005245 CE RFI Cap Assembly, generalized electrical connections and pressure ports and other minor construction and drawing changes.