



Certificate of Compliance

Certificate: 70163251

Master Contract: 178551

Project: 70163251

Date Issued: 2017-12-15

Issued to: **Flowline Incorporated**
10500 Humbolt St
Los Alamitos, California 90720
USA
Attention: Phil Colin

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: *Ronald (Ron) Bell*
Ronald (Ron) Bell

PRODUCTS

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

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

Class I, Division 1, Groups A, B, C, D; Class II, Division1, Groups E, F, G; (T6...T3)

Class I Zone 0 AEx ia IIC (T6...T3) Ga

Zone 20 AEx ia IIIC (T76°C to T146°C) Da

Ex ia IIC (T6...T3) Ga

Ex ia IIIC (T76°C to T146°C) Da

Echo Pro Pulse Radar Level Sensor LR11/16/21/26/31/36/41/46 Series;

T6 Ta = -20°C to +60°C

T5 Ta = -20°C to +70°C

T4 Ta = -20°C to +85°C

T3 Ta = -20°C to +85°C

Intrinsically safe when installed as per drawing 301901.

Condition of Certification:

1. Temperature class depends on maximum ambient temperature as shown in the table.



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2. The Pulse Radar level instrument shall be used with suitable certified cable, glands, and plugs.
3. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. This is particularly important if the equipment is installed in a Zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.

APPLICABLE REQUIREMENTS

C22.2 No. 60079-0:2015	Explosive atmospheres – Part 0: Equipment – General requirements
C22.2 No. 60079-11:2014	Explosive atmospheres — Part 11: Equipment protection by intrinsic safety “i”
C22.2 No. 61010-1-12	Safety Requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements
UL 61010-1:2012	UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements, 3 rd . Ed.
UL 60079-0: 2013	Standard for Safety – Explosive Atmospheres – Part 0: Equipment – General Requirements, Ed. 6
UL 60079-11:2014	Standard for Safety – Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety “I”, Ed. 6

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 with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Nameplate adhesive label material approval information:

The following marking details appear on CSA Accepted Adhesive nameplates (Certified under CSA CLASS numbers 7921 xx or 7923 xx [or equivalent certification from NRTLs for US and Canada], with suitability for adhesion to Stainless Steel surfaces at -20 to +85°C ambient.).

Applicability of Ex marking is secured in production process.

The marking includes the following:

- 1) Manufacturer’s name or registered trade mark;





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- 2) Manufacturer's type identification as in the PRODUCTS section, above;
- 3) Serial number and date code YYMMDD-000000;
- 4) Model Number as in the PRODUCTS section, above;
- 5) Ambient Temperature Rating: as specified in the PRODUCTS section above.
- 6) Temperature Code: as specified in the PRODUCTS section, above.
- 7) Hazardous Location Designation: as specified in the PRODUCTS section, above.
- 8) DC Power Symbol 1, Table 1, IEC 61010-1 
- 9) Earth Ground Symbol 5, Table 1, IEC 61010-1 
- 10) The CSA Mark with "C" and "US" indicators, as shown on the Certificate of Conformity.



Supplement to Certificate of Compliance

Certificate:

Master Contract: 178551 (079326_0_000)

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

Product Certification History

Project	Date	Description
70163251	2017-12-15	Original certification of Echo Pro Pulse Radar Level Sensor LR11/16/21/26/31/36/41/46 Series for Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G; (T6...T3); Class I Zone 0 AEx ia IIC (T6...T3) Ga; Zone 20 AEx ia IIIC (T76°C to T146°C) Da; Ex ia IIC (T6...T3) Ga; Ex ia IIIC (T76°C to T146°C) Da