



# Certificate of Compliance

**Certificate:** 70118144

**Master Contract:** 237484

**Project:** 70191110

**Date Issued:** 2018-08-14

**Issued to:** Automation Products Group Inc  
1025 West 1700 North  
Logan, Utah 84321  
USA  
Attention: Scott Hutchins

*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 - C225804 - PROCESS CONTROL EQUIPMENT** - Intrinsically Safe, Entity-- For Hazardous Locations

**CLASS - C225884 - PROCESS CONTROL EQUIPMENT** - Intrinsically Safe, Entity-- For Hazardous Locations - Certified to US Standards

Class I, Division 1, Groups C, D, T4  
Class I, Zone 0, AEx ia, IIB, T4, Ga  
Ex ia IIB, T4, Ga

Model MNU-IS abcd-efg-hi-xxxx-xxxx Ultrasonic Sensors, rated 8-28 VDC, 25 mA Typ @ 24Vdc; Tamb = -30°C to +60°C.

Intrinsically safe when connected per drawing 9005002

The following configurator options are relevant to the IS certification:

Configurator code “a” represents the range of measurement of the equipment, which corresponds technically to the piezo-transducer that is used.

Configurator code	Option	Description
a – Range	2	1-25 ft. (30mm, 69Khz piezo-transducer)
	3	1.5-40 ft. (51mm, 43Khz piezo-transducer)



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	5	4-79 in. (12mm, 143Khz piezo-transducer)
	6	1-25 ft. (30mm, 69Khz piezo-transducer)
	7	6-144 in. (19mm, 90Khz piezo-transducer)
	8	5-144 in. (19mm, 81Khz piezo-transducer)

Configurator code “c” represents the housing option.

Configurator code	Option	Description
c – Housing	0	2 in. Kynar plastic Cup
	1	Plastic Valox PBT 1” NPT Mnt
	2	Plastic Valox PBT 2” NPT Mnt
	3	Plastic Valox PBT 3” NPT Mnt
	4	Plastic Valox PBT 2” NPT Mnt – recessed sensor

Configurator code “e” represents the type of cable or receptacle to be used.

Configurator code	Option	Description
e – Cable	A	Input cable. See dwg 9005134A.
	B	Input cable. See dwg 9005134A.
	C	Input cable. See dwg 9005134A.
	D	Input cable. See dwg 9005134A.

The following configurator codes are not safety related:

Configurator code	Option	Description
b	1, 4	Lid interface threads for conduit.
d	4, 5, 6, or 7	Filter Options
f	XXXX	Length of cable
g	A, B, C, D, or M	Cable Seal
h	0, 1, 2, or 3	Shield
i	D or N	Dampener
XXXX	XXXX	Customer Specification
XXXX	XXXX	Software Specification

**APPLICABLE REQUIREMENTS**

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



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<b>UL 60079-0: 2013</b>	Standard for Safety – Explosive Atmospheres – Part 0: Equipment – General Requirements, Ed. 6
<b>UL 60079-11:2014</b>	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:**

CSA-Accepted (Class 7922-01, File number 99316) adhesive label stock Product Number 7871 manufactured by 3M, which is suitable for indoor or outdoor use on Plastic Group VII at a maximum service temperature of 80C or higher. The label stock is printed with one of the approved printer and ink combinations as specified in the manufacturers listing and the finished label is affixed to the housing.

The Sensor is marked with the following details on the marking:

1. Manufacturer’s name or registered trade mark;
2. Model Number as in the PRODUCTS section, above;
3. Serial number S/N XXXXXX;
4. Entity Parameters as in drawing 9005002;
5. Ambient Temperature Rating: as specified in the PRODUCTS section above;
6. Alternate Ambient Temperature may be marked as specified by the manufacturer: no lower than -30°C and no higher than +60°C; as specified in the PRODUCTS section above;
7. DC Power Symbol 1, Table 1, IEC 61010-1 **---**
8. Hazardous Location Designation: As specified in PRODUCTS section above;
9. On nameplate: ”Install per DWG# 9005002”.
10. The CSA Mark with “C” and “US” indicators, as shown on the Certificate of Conformity.



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### *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**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
70191110	2018-08-14	Update report 70118144 to include updates to drawings 9005002, 9005149 and 9005150 which include minor update to IS circuitry.
70118144	2018-03-28	Original assessment of model MNU-IS Ultrasonic Sensors for CSA-c\us Certification as Intrinsically safe for Class I, Division 1, Groups CD and Class I, Zone 0: Ex ia IIB, Ga. Main evaluation/testing conducted under the associated ATEX/IECEX project