



Certificate of Compliance

Certificate: 2538542

Master Contract: 220043

Project: 70218372

Date Issued: 2019-04-19

Issued to: AW-Lake Company
2440 W Corporate Preserve Dr.
Suite #600
Oak Creek, Wisconsin 53154
UNITED STATES
Attention: Chris Husson

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

DECLARATIONS

Flow meter and meter body are one and the same in this report.

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations – to U.S. Requirements

Class I, Division 1, Groups C and D; Class II, Division 1, Groups E, F and G; Class III; T6; Type 4X:

HUB-40EX Sensor

Input Rating 65mA @ 10-24Vdc Class 2 /SELV Supply, Output Signal Pulse 50mA @ 0-23.3Vdc Class 2,
Ambient Temperature Range: -20°C to +60°C



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Maximum Working Pressure (MWP) per drawing RT30990F. Sensor Hole Style 1 MWP is 34.4MPa (5kpsi) and Sensor Hole Style 2 MWP is 62.1MPa (9kpsi) or 103.4MPa (15kpsi) depending on sensor hole membrane thickness.

Model Nomenclature

HUB-40EXa-S1-bc-dd

a – Junction box option

- 1 = No junction box
- 2 = Aluminum Junction box
- 3 = 316 Stainless Steel Junction Box

b – Sensor output

- G = Hall sensor, sinking version
- H = Hall sensor, sourcing version

c – Signal Termination

- 1 = Terminal block
- 2 = Flying leads (3 individual signal wires, minimum of 18 AWG)

dd – Lead length (in feet)

Note: If option **c** = 2 then **dd** will indicate the length (in feet) of attached lead wires.

Conditions of Acceptability:

1. The HUB-40EX shall be used with a meter body whose sensor hole is manufactured according to control drawing RT30990F including meter material of construction as noted. If the sensor is not supplied with a meter body, the customer must be supplied with control drawing RT30990F for proper installation of meter body.
2. The HUB-40EX remote sensor pickup shall be installed in accordance to the HUB-40EX Installation Manual.
3. Wiring to or from this equipment, which enters or leaves the system enclosure, must utilize wiring methods suitable for Class I, Division 1 Hazardous Locations, as appropriate for the installation.



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APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 0-M91 (R2006)	General Requirements - Canadian Electrical Code, Part II - Eighth Edition
CAN/CSA-C22.2 NO. 61010-1-12 (R2017)	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements - Third Edition
CAN/CSA C22.2 No. 94.1-07 (R2012)	Enclosures for Electrical Equipment, Non-Environmental Considerations - First Edition
CAN/CSA C22.2 No. 94.2-07 (R2012)	Enclosures for Electrical Equipment, Environmental Considerations - First Edition
CAN/CSA C22.2 No. 25-1966 (R2009)	Enclosures for Use in Class II Groups E, F, and G Hazardous Locations – Incorporating General Instruction No 1
CAN/CSA C22.2 No. 30-M1986 (R2016)	Explosion-proof enclosures for use in class I hazardous locations - Third Edition
ANSI/UL 61010-1-12	UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements - Third Edition; Including Revisions through November 21, 2018
ANSI/UL 1203	UL Standard for Safety Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations - Fourth Edition; Reprint with Revisions through and Including October 28, 2009
ANSI/UL 50	UL Standard for Safety Enclosures for Electrical Equipment, Non-Environmental Considerations - Twelfth Edition
ANSI/UL 50E	UL Standard for Safety Enclosures for Electrical Equipment, Environmental Considerations - First Edition

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.



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Markings for HUB-40EX1 (fitting) are laser etched on a stainless steel nameplate at least 0.5 mm thick and is attached with a 1/32" diameter stainless steel tether with a yield strength of at least 10 lbf directly to the swivel union bottom per drawing number HUBH501.

Markings for HUB-40EX2 and HUB-40EX3 (with junction box) are on an aluminum or stainless steel nameplate and is attached to the junction box enclosure by stainless steel screws or drive pins.

- Manufacturer's name: "AWL Co", or CSA Master Contract Number "220043", adjacent to the CSA Mark in lieu of manufacturer's name.
- Model number: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Manufacturing date in MMY format, or serial number, traceable to month of manufacture.
- Enclosure rating: As specified in the PRODUCTS section, above.
- The CSA Mark w/wo the "C" and/or "US" indicators, as explained on the Certificate of Conformity.
- Hazardous Location designation (may be abbreviated): CL I Div1 GR C,D; CL II Div1 GR E,F,G; CL III;
- Temperature code: As specified in the PRODUCTS section, above (Optional if T6 or T5).
- Rated maximum working pressure (MWP) per drawing RT30990F. Sensor hole style 1 MWP is 34.4MPa (5kpsi) and Sensor hole style 2 MWP is 62.1MPa (9kpsi) or 103.4MPa (15kpsi). Optional marking if MWP is already provided on the meter body.
- The following words or equivalent:
 - OPEN CIRCUIT BEFORE SERVICE and "CIRCUIT OUVERT AVANT SERVICE", or KEEP COVER TIGHT WHILE CIRCUITS ARE ALIVE and "GARDER LE COUVERCLE BIEN FERME TANT QUE LES CIRCUITS SONT SOUS TENSION"
 - "SEAL REQUIRED WITHIN 18 INCHES"
 - "Install the HUB-40EX in accordance to Installation Manual"
 - Warning or Caution; "SEE INSTALLATION MANUAL FOR ADDITIONAL ELECTRICAL RATINGS AND WARNINGS"
 - "WARNING: DISCONNECT POWER TO THE UNIT BEFORE LOOSENING OR ADJUSTING THE SWIVEL COLLAR"
- Optional marking: "XP rated"

The following markings shall be on the meter bodies:

- Model number and/or additional coding indicating meter is machined according to control drawing RT30990F.
- Material of construction
- Rated maximum working pressure (MWP) per drawing RT30990F. Sensor hole style 1 MWP is 34.4MPa (5kpsi) and Sensor hole style 2 MWP is 62.1MPa (9kpsi) or 103.4MPa (15kpsi).



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

Project	Date	Description
70218372	2019-04-19	Update to report 2538542 to add stainless steel junction box option for model HUB-40EX and replace obsolete schematic drawing with new version. Update includes a reassessment per Notice 25A, using CAN/CSA C22.2 No. 61010-1-12 and equivalent ANSI/UL 61010-1
70198555	2018-12-14	Continuation of CSA Project 70178939 closed with findings July 27, 2018 due to lack of marking method. Evaluation to update report CSA Report 2538542 to add additional part number to indicate option without enclosure and conduit plug, and to implement suitable method of marking with the HUB0-40Ex. Quote assumes drawing review related only to method marking.
70006983	2014-08-22	Evaluation for update of report 2538524 to include 1 mm membrane option, remove specific models of flow meter models listed in report, and include optional nipple welded to assembly. Assumes testing performed in separate project.
2538542	2012-10-19	Original Certification of HUB-40Ex for Class I, Division 1, Groups C and D; Class II, Division 1, Groups E,F and G; Class III; T6; Type 4X, Hazardous Locations.