



Certificate of Compliance

Certificate: 1812440

Master Contract: 220043

Project: 70218374

Date Issued: 2019-05-24

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

PRODUCTS

PART A:

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

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

RT-Ex15-Ex Digital Flow Monitor, Input Rating 200 mA @ 5-24 Vdc Class 2, Analog Loop Outputs 4-20 mA @ 12-24 Vdc Class 2, Limit Outputs 50 mA @ 5-24 Vdc Class 2, and Reset Input 5-24 Vdc Class 2.
Temperature Range: -40°C to +60°C
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.

Conditions of Certification:



Certificate: 1812440

Master Contract: 220043

Project: 70218374

Date Issued: 2019-05-24

1. The RT-Ex15-Ex Digital Flow Monitors must be used with a meter body whose sensor hole is manufactured according to control drawing RT30990F including meter material of construction as noted on drawing. If the flow monitor is not supplied with a meter body, the customer must be supplied with control drawing RT30990F for proper installation of meter body.
2. The RT-Ex15-Ex Flow Monitor must be installed in accordance to the RT-Ex15-Ex Flow Monitor Installation Manual.
3. * The RT-Ex15 Digital Flow Monitor certification does NOT include Type 4 or Type 4X when the optional "Swivel Union" is used. The Swivel Union is installed between the enclosure and adapter hub to allow the product to be positioned properly for installation.

PART B:

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:

RT-30Ex Gear and TM-30Ex Turbine (with or without HART communication) Digital Flow Monitor
Input Rating 200 mA @ 9-24 Vdc Class 2/SELV, Analog Loop Output 4-20 mA @ 9-24 Vdc Class 2/SELV,
Limit Outputs 40 mA @ 5-30 Vdc Class 2/SELV, and Reset Input 12-24 Vdc Class 2/SELV.

Ambient Temperature Range: -20°C to +60°C

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.

Part Number: aa-30Ex-bccd

aa = Meter type (RT or TM)

b = Enclosure Style (S, T, or D)

cc = Sensor version (00, 01 or 32)

d = Communication protocol (Blank or H)

Conditions of Certification:

1. The RT/TM-30Ex Digital Flow Monitor remote version shall be used only with the remote sensor pickup model number HUB-40EX.
2. The RT/TM-30Ex Digital Flow Monitor 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 flow monitor or remote sensor is not supplied with a meter body, the customer must be supplied with control drawing RT30990F for proper installation of meter body.
3. The RT/TM-30Ex Flow Monitor shall be installed in accordance to the RT/TM-30Ex Flow Monitor Installation Manual.



Certificate: 1812440
Project: 70218374

Master Contract: 220043
Date Issued: 2019-05-24

APPLICABLE REQUIREMENTS

PART A:

CAN/CSA C22.2 No. 0-M91 (R2006)	General Requirements - Canadian Electrical Code, Part II
CAN/CSA C22.2 No. 142-M1987 (R2009)	Process Control Equipment Industrial Products - Third Edition; Incorporating General Instruction No 1: 5/1987; No 2: 6/1987, No 3: 6/1988, No 4: 2/1989, No 5: 9/1990
CAN/CSA C22.2 No. 94.1-07	Enclosures for Electrical Equipment, Non-Environmental Considerations - First Edition
CAN/CSA C22.2 No. 94.2-07	Enclosures for Electrical Equipment, Environmental Considerations - First Edition
CAN/CSA C22.2 No. 25-1966 (R2009)	Enclosures for Use in Class H Groups E, F, and G Hazardous Locations - Incorporating General Instruction No 1: 9/1966
CAN/CSA C22.2 No. 30-M1986 (R2007)	Explosion-Proof Enclosures for Use in Class I Hazardous Locations Industrial Products - Third Edition; General Instruction No 1-2
ANSI/UL 508	UL Standard for Safety Industrial Control Equipment - Seventeenth Edition; Reprint with Revisions Through and Including April 15, 2010
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

PART B:

CAN/CSA C22.2 No. 0-M91 (R2006)	General Requirements - Canadian Electrical Code, Part II
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. 30-M1986 (R2016)	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CAN/CSA C22.2 NO. 25-17	Enclosures for use in Class II, Division 1, Groups E, F, and G hazardous locations - Fourth Edition
CAN/CSA C22.2 No. 94.1-07	Enclosures for Electrical Equipment, Non-Environmental Considerations - First Edition
CAN/CSA C22.2 No. 94.2-07	Enclosures for Electrical Equipment, Environmental Considerations - First Edition
ANSI/UL 61010-1	UL Standard for Safety Electrical Equipment For



Certificate: 1812440
Project: 70218374

Master Contract: 220043
Date Issued: 2019-05-24

	Measurement, Control, and Laboratory Use; Part 1: General Requirements - Third Edition
ANSI/UL 1203	UL Standard for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations - Fifth Edition; Reprint with revisions through and including April 16, 2019
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.

PART A:

Markings for RT-Ex15-Ex are on a 0.5 mm (0.02 inch) minimum thick aluminum or stainless steel label which is fixed to the enclosure by stainless steel screws or drive pins.

- CSA Monogram
- Company Name and/or File Number #220043
- Model number
- Serial Number
- Supply Electrical Rating: 24 VDC, 200 mA Max. Class 2
- Hazardous Location Designation
- Ambient Temperature Range: -40°C to +60°C
- Temperature Code: T6 (Optional)
- Maximum Working Pressure or MWP: 103.4 MPa (15kpsi), 62.1MPa (9kpsi) or 34.4MPa (5kpsi)
- Warning or Caution; “SEE INSTRUCTIONS & INSTALLATION MANUAL FOR ADDITIONAL ELECTRICAL RATINGS AND WARNINGS”
- Warning or Caution; “KEEP COVER TIGHT WHILE CIRCUITS ARE ALIVE” and “GARDER LE COUVERCLE BIEN FERME TANT QUE LES CIRCUITS SONT SOUS TENSION” or equivalent.



Certificate: 1812440

Master Contract: 220043

Project: 70218374

Date Issued: 2019-05-24

- Warning or Caution; “For Class I, Group A, A EXPLOSIONPROOF SEAL SHALL BE INSTALLED WITHIN 450 mm (18 inches) OF THE ENCLOSURE” or equivalent.
- "The RT-Ex15-Ex Flow Monitor must be installed in accordance to the RT-Ex15-Ex Flow Monitor Installation Manual"
- Meter Bodies to be marked with associated model codes and/or additional coding indicating meter is machined according to control drawing RT30990F.
- Meter Bodies to have MWP: 103.4 MPa (15kpsi), 62.1MPa (9kpsi) or 34.4MPa (5kpsi)

PART B:

Common markings for RT-30Ex, TM-30Ex are on a 0.5 mm (0.02 inch) minimum thick aluminum or stainless steel label which is fixed to the 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 ratings: 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: As specified in the PRODUCTS section, above (may be abbreviated).
- Temperature code: As specified in the PRODUCTS section, above. (Optional if T6 or T5)
- Rated maximum working pressure (MWP) as specified in the PRODUCTS section, above. Optional marking if MWP is already provided on the meter body.
- The following words or equivalent:
 - “Remove Power Before Servicing Unit” and “Coupez l'alimentation avant entretien de l'unité” 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”
 - "The RT-30Ex Flow Monitor must be installed in accordance to Installation Manual" or "The TM-30Ex Flow Monitor must be installed in accordance to Installation Manual"
 - Warning or Caution; “SEE INSTRUCTIONS & INSTALLATION MANUAL FOR ADDITIONAL ELECTRICAL RATINGS AND WARNINGS”
- “WARNING: DISCONNECT POWER TO THE HUB ADAPTER BEFORE LOOSENING OR ADJUSTING THE SWIVEL COLLAR”
- Optional marking: “XP rated”



Supplement to Certificate of Compliance

Certificate: 1812440

Master Contract: 220043

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
70218374	2019-05-24	Update to report 1812440 to add an alternate stainless steel enclosure for model RT-30Ex. Update includes a reassessment per Notice 25A, using CAN/CSA C22.2 No. 61010-1-12 and equivalent ANSI/UL 61010-1.
70010048	2014-09-25	Evaluation for update of report 1812440 to add Carrier Option board. No change to Product Listing / Cert Record. Assumes no effect to method of protection.
70006982	2014-08-22	Evaluation for update of report 1812440 to include 1 mm membrane option, remove specific models of flow meter models listed in report, and include optional nipple welded to assembly. Assumes one set of testing needed on seal.
2471428	2012-02-29	Update report 1812440 to include models RT-30Ex and HUB-40EX.
1812440	2007-02-09	RT-Ex15-Ex for Class I, Division 1, Groups ABCD, Class II Groups EFG Class III, Hazardous Locations