



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx CSA 18.0008X

Issue No: 1

Certificate history:

Issue No. 1 (2018-12-14)

Issue No. 0 (2018-03-29)

Status: **Current**

Page 1 of 4

Date of Issue: **2018-12-14**

Applicant: **Flowline Inc.**  
10050 Humbolt Street  
Los Alamitos, CA 90720 USA  
**United States of America**

Equipment: **Echotouch Ultrasonic Level Sensor US01/US03/U06 Series**

*Optional accessory:*

Type of Protection: **Ex ia**

Marking:

Ex ia IIC T4 Ga

Ex ia IIIC T135°C Da

Tamb: -40°C to 80°C

*Approved for issue on behalf of the IECEx  
Certification Body:*

Dorin Stochitoiu

*Position:*

Technical Advisor

*Signature:  
(for printed version)*

*Date:*

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**CSA Group**  
178 Rexdale Boulevard  
Toronto, Ontario M9W 1R3  
Canada





# IECEX Certificate of Conformity

Certificate No: IECEX CSA 18.0008X Issue No: 1

Date of Issue: 2018-12-14 Page 2 of 4

Manufacturer: **Flowline Inc.**  
10050 Humbolt Street  
Los Alamitos, CA 90720 USA  
**United States of America**

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

## STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

**IEC 60079-0 : 2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0

**IEC 60079-11 : 2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

## TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

Test Report:

[CA/CSA/ExTR18.0009/00](#) [CA/CSA/ExTR18.0009/01](#)

Quality Assessment Report:

[DE/TUR/QAR16.0007/01](#)



# IECEX Certificate of Conformity

Certificate No: IECEx CSA 18.0008X

Issue No: 1

Date of Issue: 2018-12-14

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The US01/US03/US06 series ultrasonic level instrument is intrinsic safety (Ex ia IIC T4 Ga and Ex ia IIIC T135°C Da). US01/US03 housed in a plastic enclosure all electronic circuits are encapsulated internal to the enclosure. The US06 metal/plastic enclosure the DSP PCB and sensor are encapsulated with conformally coated Display. The output signal is 4-20mA.

#### Entity Parameters

$U_i=28V_{dc}$

$I_i=100mA$

$P_i=840mW$

$C_i=0$

$L_i=2.46mH$

$L_i/R_i = 5.36\mu H/ohm$

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The Echotouch Ultrasonic Level Sensor operate only according to the technical data in intrinsically safety circuit.
2. Warning: POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTION
3. The (US06) enclosure is manufactured from Aluminum. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation.



# IECEX Certificate of Conformity

Certificate No: IECEX CSA 18.0008X

Issue No: 1

Date of Issue: 2018-12-14

Page 4 of 4

**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Issue 1:

Update to include the replacement of the transformer T1 in the DSP PCB common to all models, and in conjunction with revised entity parameter, all models were updated for use in gas group IIC.