



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

Certificate No.: IECEx CSA 14.0037X Issue No: 0 Certificate history:
Issue No. 0 (2014-07-31)

Status: **Current** Page 1 of 4

Date of Issue: **2014-07-31**

Applicant: **American Sensor Technologies, Inc.**
450 Clark Dr., Mount Olive
New Jersey 07828, USA
United States of America

Electrical Apparatus: **Pressure Transducer series AST 44xx and AST45xx**
Optional accessory:

Type of Protection: **Ex ia**

Marking:
Ex ia IIC T4 Ga, Tamb:-40°C to +80°C for AST 4401
Ex ia IIB T4 Ga, Tamb:-40°C to +80°C for AST 4400, AST 44LP, AST4500, AST4510, AST4520
Ex ia IIB T4 Ga, Tamb:-0°C to +60°C for AST4530

*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:



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CSA International
178 Rexdale Boulevard
Toronto, Ontario M9W 1R3
Canada
and
1707 - 94th Street
Edmonton, AB T6N 1E6
Canada





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Manufacturer: **American Sensor Technologies, Inc.**
450 Clark Dr., Mount Olive
New Jersey 07828, 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 electrical 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/ExTR14.0035/00](#)

Quality Assessment Report:

[CA/CSA/QAR14.0002/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Model AST44xx and AST45xx Series Pressure Transducers utilize a mechanical diaphragm to convert a mechanical pressure measurement into an electric signal. The transducers are manufactured as 1-piece stainless steel, sealed assemblies, containing a maximum of 3 PCBs. Depending on the order codes as shown in the Annex attached to this certificate, the user connections can be made using several different types of connectors and can supply 4-20mA current or a range of voltage outputs. The various outputs (current or voltage) are shown in installation Drawing A08949. Output connections are with cables of lengths up to 1000 ft. (for outputs of 4-20mA) or 150ft (for all other electrical outputs).

CONDITIONS OF CERTIFICATION: YES as shown below:

- i. Since models AST4401, AST4400, AST44LP, AST4500, AST4510, AST4520 and AST4530 Pressure Transducers are not earthed and a charge-generating mechanism may be present when in contact with non-metallic charge generating materials, the device shall be grounded before use.
- ii. Under certain extreme circumstances, exposed plastic and unearthed metal parts of the enclosure may store an ignition-capable level of electrostatic charge. Therefore, the user/installer shall implement precautions to prevent the build up of electrostatic charge, e.g. locate the equipment where a charge-generating mechanism (such as wind-blown dust) is unlikely to be present and clean with a damp cloth.
- iii. The enclosure is manufactured from light metal. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation, particularly if the equipment is installed in a zone 0 location.

Annex:

[Entity_parameters_for_AST44XX, AST45XX.docx](#)