



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 FTZU 17.0024X

Issue No: 0

Certificate history:

Issue No. 0 (2017-11-21)

Status: **Current**

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Date of Issue: **2017-11-21**

Applicant: **Dwyer Instruments Inc.**
102 Indiana Highway 212
Michigan City
Indiana 46360
United States of America

Equipment: **Series/3400 Smart Pressure Transmitters, Series/3500 Smart Differential Pressure Transmitters**

Optional accessory:

Type of Protection: **Intrinsic safety**

Marking:

Ex ia IIC T4/T5 Ga/Gb
Ex ia IIIC T105°C Da

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

Dipl. Ing. Lukáš Martinák

Position:

Head of the Certification Body

*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:

**Fyzikálně technický zkušební ústav
(Physical -Technical Testing Institute)
Pikartská 7, 71607 Ostrava - Radvanice
Czech Republic**





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Manufacturer: **Dwyer Instruments Inc.**
102 Indiana Highway 212
Michigan City
Indiana 46360
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:

[CZ/FTZU/ExTR17.0024/00](#)

Quality Assessment Report:

[CA/CSA/QAR09.0006/08](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The products Series/3400 Smart Pressure Transmitters and Series/3500 Smart Differential Pressure Transmitters are designed to convert process pressure measurements into a 4 to 20 mA current signal. The apparatus comprises a sensor, several printed circuit boards and liquid crystal display, all housed in a light alloy enclosure. External connections are made via an integral terminal block.

Intrinsically safe input power supply parameters:

Linear power supply output characteristic:

$U_i = 30\text{ V}$; $I_i = 0.1\text{ A}$; $P_i = 0.75\text{ W}$; temperature class T5

Trapezoidal power supply output characteristic:

$U_i = 24\text{ V}$; $I_i = 50\text{ mA}$; $P_i = 0.7\text{ W}$; temperature class T5

Rectangular power supply output characteristic:

$U_i = 24\text{ V}$; $I_i = 25\text{ mA}$; $P_i = 0.6\text{ W}$; temperature class T5

$U_i = 24\text{ V}$; $I_i = 50\text{ mA}$; $P_i = 1.2\text{ W}$; temperature class T4

Next intrinsically safe parameters:

$C_i = 2.5\text{ nF}$; $L_i = 18\text{ }\mu\text{H}$;

Range of permissible ambient temperature: $T_a = -40^\circ\text{C}$ to $+80^\circ\text{C}$ (-40°F to $+176^\circ\text{F}$)

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Versions of transmitter with surge arrester marked on plate "SA", do not meet the requirements of Section 10.3 of the standard EN 60079-11:2012 (500Vrms). This must be taken into account when installing the equipment.
2. Under certain extreme circumstances in dust explosive atmospheres, the device with painting of aluminum enclosure and with plastic tables and with elements of diaphragm seals covered by PTFE may store an ignition-capable level of electrostatic charge. The device shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge.
3. If the diaphragm seal contains titan parts, it must be protected against mechanical drops.