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 QPS 19.0001X

Issue No: 0

Certificate history:
Issue No. 0 (2019-04-03)

Status: **Current**

Date of Issue: **2019-04-03**

Applicant: **Anton Paar GmbH**
Anton-Paar-Strasse 20
Graz, 8054
Austria

Equipment: **Density and Sound Velocity Sensor**

Optional accessory:

Type of Protection: **d**

Marking:

IECEx QPS 19.0001X

Ex db IIB T4/T5 Gb

See EQUIPMENT section for full marking details

Approved for issue on behalf of the IECEx Certification Body: D. Adams P.Eng.

Position: Manager, Hazardous Locations Department [Ex Equipment]

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.

Certificate issued by:

QPS
Evaluation Services Inc.
81 Kelfield St
Unit 8
Toronto, Ontario M9W 5A3
Canada

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Manufacturer: **Anton Paar GmbH**
Anton-Paar-Strasse 20
Graz, 8054
Austria

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 : 2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1 : 2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

*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/QPS/ExTR19.0003/00

Quality Assessment Report:

DE/TPS/QAR14.0002/02

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The L-Com 5500 Series Density and Sound Velocity Sensors are process measuring instruments that are used to measure the density and sound velocity values of liquids. The sensor consists of the encapsulated sensing element and a sensor board, which is connected to the sensing element with a feedthrough. The sensor board is connected to the process instrumentation controller (Pico 3000) or to an external evaluation unit. The Pico 3000 can be installed in the electronic housing of the sensor or in an optional remote operating housing (Pico 3000 RC). The Pico 3000 can be used with an optional HMI (Pico 3000 HMI).

The limitation of the ambient temperature for the sensor, the sensor with Pico 3000 and the sensor with Pico 3000 + Pico 3000 HMI is different.

L-Com 5500 HAS Ex d: Ta = -25 to 65 °C

L-Com 5500 HAS Ex d with Pico 3000: Ta = -25 to 55 °C

L-Com 5500 HAS Ex d with Pico 3000 and Pico 3000 HMI: Ta = -20 to 55 °C

Ratings: 24 Vdc ± 20%, max. 5 W (without Pico 3000) / 8 W (with Pico 3000).

The relationship between process media temperature is as follow:

- For Tp = -25°C to +95°C ⇒ T5 temperature class assignment;

- For Tp = -25°C to +125°C ⇒ T4 temperature class assignment.

Model Nomenclature:

Model	Markings
L-Com 5500 HAS Ex d	Ex db IIB T4/T5 Gb
L-Com 5500 HAS NPT Ex d	Ta= -25°C to 65°C
	Tp= -25°C to 95°C(T5)/125°C(T4)
	Maximum process pressure: 50 bar
L-Com 5500 HAS Ex d (with Pico 3000)	Ex db IIB T4/T5 Gb
L-Com 5500 HAS NPT Ex d (with Pico 3000)	Ta= -25°C to +55°C
	Tp= -25°C to 95°C(T5)/125°C(T4)
	Maximum process pressure: 50 bar
L-Com 5500 HAS Ex d (with Pico 3000 and HMI)	Ex db IIB T4/T5 Gb
L-Com 5500 HAS NPT Ex d (with Pico 3000 and HMI)	Ta= -20°C to 55°C
	Tp= -25°C to 95°C(T5)/125°C(T4)
	Maximum process pressure: 50 bar

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SPECIFIC CONDITIONS OF USE: YES as shown below:

Density and Sound Velocity Sensor L-Com 5500 HAS Ex d is suitable for application at an extended ambient temperature range and such is having defined special conditions for safe use as follow:

1. For power cable, use only a cable whose thermal stability of its insulation is minimum 90°C.
2. For cable entrances use only already certified Ex d or Ex db cable glands suitable for application and rated for a minimum of 80°C.
3. Unused openings shall be closed by use of already certified Ex d or Ex db stopping plugs suitable for application.