



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEX Scheme visit www.iecex.com

Certificate No.: **IECEX INE 14.0045U** Page 1 of 4 Certificate history:
Issue 0 (2014-07-25)

Status: **Current** Issue No: 1

Date of Issue: 2019-12-19

Applicant: **RIBCO S.r.l.**
Via dei Mille, 12
20061 Carugate (MI)
Italy

Equipment: **Breathing and draining devices and bulkheads type V**S or VD**S or VF**S or VDF**S or P**S.****

Optional accessory:

Type of Protection: **db, eb and tb**

Marking: Ex db IIB+H2 T6 Gb or Ex db IIC T6 Gb
Ex db I Mb
Ex eb IIC Gb
Ex tb IIIC Db
IP64 or IP66

Approved for issue on behalf of the IECEX
Certification Body:

Thierry HOUEIX

Ex Certification Officer

Position:

Signature:
(for printed version)



Digitally signed by
Thierry HOUEIX

Date:

2019-12-19

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2. This certificate is not transferable and remains the property of the issuing body.
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Certificate issued by:

INERIS
Institut National de l'Environnement Industriel et des Risques
BP n2 Parc Technologique ALATA
Verneuil-en-Halatte F-60550
France



controlling risks
for sustainable development



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Manufacturer: **RIBCO**
Via dei Mille, 12
20061 Carugate (MI)
Italy

Additional
manufacturing
locations:

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 equipment 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

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

This Certificate **does not** indicate compliance with 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:

[FR/INE/ExTR14.0040/01](#)

Quality Assessment Report:

[IT/CES/QAR11.0001/08](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The breathing and draining or bulkheads devices, made in stainless steel AISI 316L, are intended with conical or cylindrical thread joints. They can be fitted on enclosures with type protection "db", "eb" and "tb".

These devices get the degree of protection IP66 or IP64 according to the IEC 60529 standard

SCHEDULE OF LIMITATIONS:

This Ex component can be fitted, only on the external part, on the following enclosures:

- For group IIC, maximum volume 62.9 dm³.
- For group IIB or IIB+H2, maximum volume 160 dm³.
- Maximum reference pressure 40 bar.
- Without limitation for type protection "Ex eb" and "Ex tb".

The devices Ex db are T6 for an ambient temperature of 60°C (maximum heating of +13.9 K).

The overpressure test was performed at 160 bars.

An impact test has been performed at 20 J.

All devices get the degree of protection IP66, except for the devices series VD**S, V**S and P**S-** that have the degree of protection IP64. The IP test has been performed without O-Ring.

The devices series VD**S can reach the degree of protection IP66 with a plastic cap. The IP test has been performed without the IEC 60079-0 preliminary tests on the plastic cap.



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
For the issue 1 for the certificate IECEX INE 14.0045U:**

- Application of the following standards:

- x IEC 60079-0:2017,
- x IEC 60079-1:2014,
- x IEC 60079-7:2015,
- x IEC 60079-31:2013

- Addition of new type of threads ISO 228 1/4", ISO 228 3/8", ISO 228 1/2" and ISO 228 3/4"

Annex:

[IECEX INE 14.0045U-01_Annex.pdf](#)



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Annex: IECEX INE 14.0045U-01_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

Breathing and draining devices:

Taper threading: 3/8" NPT or 1/2" NPT or 3/4" NPT.

Cylindrical threading: ISO M16x1.5 or ISO M20x1.5 or ISO M25x1.5, or ISO 228 3/8" or ISO 228 1/2" or ISO 228 3/4"

Bulkheads:

Cylindrical threading: ISO M12x1.5 or ISO M16x1.5 or ISO M20x1.5 or M25x1.5, or ISO 228 1/4" or ISO 228 3/8" or ISO 228 1/2" or ISO 228 3/4".

These components can be used in range of the following ambient temperatures:

-20°C, -30°C, -40°C, -50°C, -60°C to +60°C.

MARKING

Marking has to be readable and indelible; it has to include the following indications:

- RIBCO
- I - 20061 Carugate (MI)
- V**S or VD**S or VF**S or VDF**S or P**S-**
- IECEX INE 14.0045U
- Ex db IIB+H2 T6 Gb or Ex db IIC T6 Gb
- Ex db I Mb
- Ex eb IIC Gb
- Ex tb IIIC Db
- IP64 or IP66
-°C < Tamb <°C (*)

On the small equipments the marking can be reduced at:

- RIBCO-I
- V**S or VD**S or VF**S or VDF**S or P**S-**
- IECEX INE 14.0045U
- Ex db/eb/tb
- IP64 or IP66
- ...°C < Tamb. < ...°C (*)

(*) One of the range of ambient temperature stipulated in the parameters relating to the safety.

ROUTINE EXAMINATIONS AND TESTS

None