



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 11.0017X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 6	Issue 5 (2022-01-06)
Date of Issue:	2023-05-24		Issue 4 (2019-11-29)
Applicant:	BARTEC F.N. S.R.L. Via M. Pagano, 3 I - 20090 Trezzano sul Naviglio (MI) Italy		Issue 3 (2014-07-16)
Equipment:	Cable glands type P** or P**N or P**R or P**NR or P**B or P**NB		Issue 2 (2014-02-28)
Optional accessory:			Issue 1 (2013-06-24)
Type of Protection:	db, eb, ia, nR, tb and tc		Issue 0 (2011-12-22)
Marking:	Ex db IIC Gb / Ex eb IIC Gb / Ex ia IIC Gb or Ex nR IIC Gc Ex tb IIIC Db or Ex tc IIIC Dc IP66 or IP66/68		

Approved for issue on behalf of the IECEx
Certification Body:

Position:

Signature:
(for printed version)

Date:
(for printed version)



Thierry HOUËIX

Ex Certification Officer

Signé électroniquement
Digitally signed by
Thierry HOUËIX
Ex Certification Officer
Délégué Certification

2023-05-24

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France



controlling risks
for sustainable development



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Manufacturer: **BARTEC F.N. S.R.L.**
Via M. Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Manufacturing locations: **BARTEC F.N. S.R.L.**
Via M. Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

FENEX S.r.l
Via Carducci, 16
I - 34070 MORARO (GO)
Italy

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 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-15:2017](#) Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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/ExTR11.0018/06](#)

Quality Assessment Reports:

[IT/CES/QAR09.0003/15](#)

[IT/CES/QAR12.0006/09](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Cable entries type P** or P**R or P**B protected by flameproof enclosure, increased safety, intrinsic safety and dust protection for size 00 to 9.

Cable entries type P**N or P**NR or P**NB protected by restricted-breathing "nR" for size 00 to 9.

These cable entries are foreseen, in accordance with the type, for armoured cables or non armoured cables. In accordance with the type, the cable gland can be realized with a simple sealing ring or double sealing ring.

The cable glands type P**R and P**NR are provided with a sealed bushing.

The barrier cable glands type P**B and P**NB are provided with sealing chamber to meet the requirements of cl. 10.6.2 of IEC 60079-14.

These cable entries gets the protection degrees IP66 or IP66/68 according to the standard IEC 60529. The verification of the protection degree IPX8 corresponds to an immersion under 10 meters of water during 6 hours.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The service temperature of the enclosure, at the connection point of the cable entry must not exceed the following values :

- +90°C for all models of cable gland (P** and P**N, P**R and P**NR and P**B and P**NB) with seal in Black EPDM.
- +180°C for cable glands P**, P**N, P**R and P**NR with seal in Red SILICONE60.
- +100°C for barrier cable glands P**B and P**NB with seal in Red SILICONE60.

The minimum temperature for use is -40°C for sealing ring in Black EPDM and -60°C for sealing ring in Red SILICONE60.

The user shall use cables with thermal stability in accordance with the temperature of the sealing ring.

The clamping of the cables must be realized outside of the enclosure, nearby to the enclosure on which the cable glands are installed.

In order to guarantee the IPX8, the cable entry shall be fitted on enclosure witch satisfies an immersion test under 10 meters of water during 6 hours.

The other specific conditions are stipulated in the user manual



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue n°6:

- Introduction of barrier cable glands type P**B and P**NB
- Adding new threading options
- Introduction of the type of protection "nR" according to the standard IEC 60079-15: 2017 with type codes P**N or P**NR or P**NB.

Issue n°5:

- Change of the name and address of the applicant and manufacturer
- Update of the marking plates

Issue n°4:

- Application of the IEC 60079-11 with type protection "ia".
- Modification of the cable gland size 0 for use with type protection "d".- Modification of marking.- Modification of the name of the manufacturer FEAM instead of F.E.A.M S.r.l

Issue n°3:

- Introduction of a new size 00.
- Modification for size 0 of the axial height of the sealing ring who becomes 15 mm for all type protection.- Introduction of the new pitch 2 mm.

Issue n°2:

- Possibility to use different types of flat gaskets.
- Modification of the compression element and the internal bushing, which contains a thread part, for non-armoured cable sizes 1 up to 9.

Issue n°1:

- Change of the compound to seal the conductors.
- Application of the last edition of the standards

Annex:

[IECEX INE 11.0017X-06_Annex.pdf](#)



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PARAMETERS RELATING TO THE SAFETY

These cable glands can be used with diameter cables 4 mm to 92 mm for size 0 to 9.

These cable glands are intended with the following threaded joints:

- Conical thread: NPT: 3/8" up to 4"
- Cylindrical thread: ISO 262: M16 x 1.5mm or 2 mm up to M115 x 1.5 mm or 2 mm
ISO 228: 3/8" up to 4"
DIN 40430: Pg11 up to Pg 48

In addition to the sealing ring, the barrier cable glands type P**B and P**NB are provided with sealing chamber filled with compound to meet the requirements of cl. 10.6.2 of IEC 60079-14. Considering the cylindrical flameproof joint between the sealing chamber and the body of the cable gland, the non-transmission tests referring to the type of protection "Ex db" have been carried out for a maximum ambient temperature of +60°C.

MARKING

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

- BARTEC FN ⁽²⁾
- I-20090 Trezzano Sul Naviglio (MI)
- P** or P**N or P**R or P**NR or P**B or P**NB ⁽¹⁾
- IECEx INE 11.0017X
- (Serial number)
- Ex db IIC Gb / Ex eb IIC Gb / Ex ia IIC Gb or Ex nR IIC Gc
- Ex tb IIIC Db or Ex tc IIIC Dc
- IP66 or IP66/68

On the small cable glands, the marking can be reduced at:

- BARTEC FN ⁽²⁾
- P** or P**N or P**R or P**NR or P**B or P**NB ⁽¹⁾
- IECEx INE 11.0017X
- Ex db / eb / ia / tb or Ex nR / tc

On the sealing ring : indication of the minimum and maximum diameters.

The sealing ring shall be also identified allowing the user to determine if the ring is appropriate for the cable gland.

⁽¹⁾ The type is completed by numbers and/or letters in accordance with the manufacturing variations.

⁽²⁾ Optional Brands "BARTEC FEAM" or "BARTEC NASP" can be added in the marking with the sentence "manufactured by BARTEC FN"

ROUTINE EXAMINATIONS AND TESTS

None.