



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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX LCI 10.0009U** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2015-05-07\)](#)
[Issue 0 \(2010-05-11\)](#)
Date of Issue: 2022-10-21
Applicant: **SIB – Solutions Industry & Building**
25 rue Théophile Somborn
Boulay-Moselle 57220
France
Ex Component: Range of threaded stopping plugs, thread amplifiers and thread reducers in plastic – Type: EEx e
This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).
Type of Protection: **Ex eb ; Ex tb**
Marking: Ex eb IIC Gb
Ex tb IIIC Db
(refer to Annex for full marking)

Approved for issue on behalf of the IECEx
Certification Body:

Julien Gauthier

Position:

Certification Officer

Signature:
(for printed version)



2022-10-21

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
Fontenay-aux-Roses FR-92260
France





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Manufacturer: **SIB – Solutions Industry & Building**
25 rue Théophile Somborn
Boulay-Moselle 57220
France

Manufacturing locations: **SIB – Solutions Industry & Building**
25 rue Théophile Somborn
Boulay-Moselle 57220
France

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 component 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 60079-31:2013](#) 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 component listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[FR/LCI/ExTR10.0012/00](#)

[FR/LCI/ExTR10.0012/01](#)

[FR/LCIE/ExTR22.0066/00](#)

Quality Assessment Report:

[FR/LCI/QAR10.0003/14](#)



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Ex Component(s) covered by this certificate is described below:

Range of threaded stopping plugs, thread amplifiers and thread reducers made of plastic having types of protection increased safety “e” and “t”.

The stopping plugs are used to close unused entries (plain holes or threaded holes) into the wall of an Ex e or Ex t enclosure. They comprise a hexagonal head and a cylindrical body with an external male thread.

Thread amplifiers and reducers enable adaptation of the thread size and type of a cable gland to the hole (plain or threaded) of the Ex e or Ex t enclosure that will host it.

- Reducers comprise an external male thread and an internal female thread of smaller size.
- Amplifiers comprise an external male thread and an internal female thread of larger size.

The plastic materials used in the construction of the body of the entry device are: Polycarbonate (PC) or Polyamide 6 (PA 6).

A locknut in brass is used to mount these entry devices in plain holes.

All entry devices comprise a flat seal in neoprene to guarantee the IP when they are mounted on an enclosure.

Range details: Refer to Annex.

Ratings: Refer to Annex.

SCHEDULE OF LIMITATIONS:

Refer to Annex for full Schedule of limitations.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1:

- Normative update according to IEC 60079-0 Ed 6.0 and IEC 60079-31 Ed. 1 standards.
- Update of marking.
- Update of the applicant's/manufacture's name.

Issue 2:

- Normative updates according to IEC 60079-0 Ed. 7.0, IEC 60079-7 Ed. 5.1 and IEC 60079-31 Ed. 2 standards.
- Adding of a new plastic material in PC as an alternative to the existing one.
- Update of the applicant's/manufacture's name.
- Update of the schedule of limitations.

Annex:

[Annex 01 to certificate IECEx LCI 10.0009U issue 2.pdf](#)



Annex 01 to Certificate IECEX LCI 10.0009U issue 2



MARKING

Complete marking:

SIB - Solutions Industry & Building
Address: ...
Type: EEx e
Model: *Thread type & size* ⁽¹⁾
Serial number: ...
Year of construction: ...
Ex eb IIC Gb
Ex tb IIIC Db ⁽²⁾
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-xx °C ≤ T_{service} ≤ +xx °C ⁽³⁾

Allowed reduced marking:

SIB
Type: EEx e
Model: *Thread type & size* ⁽¹⁾
Ex eb IIC Gb
Ex tb IIIC Db ⁽²⁾
IECEX LCI 10.0009U

- ⁽¹⁾ The model corresponds to the thread type and its size (with the pitch for ISO metric).
⁽²⁾ Ex tb marking does not apply to cable glands with PG thread.
⁽³⁾ See the Ratings below

RANGE DETAILS

The following table details the products and their approved thread size ranges.

Product designation	Male thread	Female thread
Stopping plug	M12 to M63	--
	PG 9 to PG 48	--
Reducer	M16 to M63	M12 to M50
	PG13 to PG 48	PG 11 to PG 29
Amplifier	M12 to M50	M16 to M63
	PG 11 to PG 21	PG 13 to PG 29

RATINGS

Service temperature ranges:

-35 °C ≤ T_{service} ≤ +90 °C for products in PA 6 (polyamide 6).
-35 °C ≤ T_{service} ≤ +95 °C for products in PC (polycarbonate).

The thread forms and sizes can be:

- ISO metric pitch 1.5 (ISO 965-1 and ISO 965-3), sizes M12 to M63;
- PG (DIN 40430) only for Ex eb application, sizes PG 9 to PG 48.

The following table indicates the material of the body of the entry device depending on the thread form.

Material	Stopping plug		Reducer		Amplifier	
	ISO Metric	PG	ISO Metric	PG	ISO Metric	PG
PA 6	X	--	X	--	X	--
PC	X	X	--	X	--	X
Note : « X » means that the material is used.						

FULL SCHEDULE OF LIMITATIONS

- a. Service temperature ranges:
 -35 °C ≤ T_{service} ≤ +90 °C for products in PA 6 (polyamide 6).
 -35 °C ≤ T_{service} ≤ +95 °C for products in PC (polycarbonate).
- b. These entry devices shall only be exposed to a low risk of mechanical danger.
- c. For products with sizes M40 to M63 and PG 36 to PG 48: because it may be a potential electrostatic charging hazard, clean only with a damp cloth.
- d. The mounting instructions of the manufacturer shall be respected.