## **BUREAU VERITAS** Certification



## **Certificate of Conformity** AWARDED TO APPLICANT SIB SOLUTIONS INDUSTRY & BUILDING

25 RUE THÉOPHILE SOMBORN 57220 – BOULAY – **FRANCE** 

#### REQUESTING SUPPLIER: 2V CONSULTORIA E ENGENHARIA PARA ATMOSFERA EXPLOSIVA LTDA

CNPJ: 47.155.492/0001-58 RUA RAINHA VITORIA EUGENIA,162 VILA CAMPESTRE – SÃO PAULO – SP - **BRAZIL** 

#### MANUFACTURER: SIB SOLUTIONS INDUSTRY & BUILDING

25 RUE THÉOPHILE SOMBORN 57220 – BOULAY – **FRANCE** 

Bureau Veritas Certification certifies that the Product in the scope of supply specified below has been evaluated and found to comply with the requirements of the reference documents.

### **Documents of Reference**

INMETRO ORDINANCE N° 115 OF MARCH 21<sup>TH</sup> 2022, ABNT NBR IEC 60079-0:2020, ABNT NBR IEC 60079-7:2018, ABNT NBR IEC 60079-31:2022 and ABNT NBR IEC 60529:2017

CERTIFICATE ISSUED BASED ON THE MANUFACTURER EVALUATION OF QUALITY MANAGEMENT SYSTEM AND PRODUCT TESTS MODEL

> Scope of Supply CABLE GLAND TYPE ECx TYPE: SIB-TEC MARKING: Ex eb IIC Gb IP66/IP68 (5 bar) Ex tb IIIC Db IP66/IP68 (5 bar)

Initial date of this Certificate: MA Certificate valid until: MA

MARCH 22<sup>TH</sup> 2023. MARCH 21<sup>TH</sup> 2029.

This Certificate of Conformity was issued according to the certification model 5 and is valid only accompanied by pages 1 to 5. The validity of this Certificate is linked to carrying out assessments maintenance and treatment of possible non-conformity in accordance with the Bureau Veritas Certification guidelines and in the specific Inmetro Ordinances (RAC).

To check the updated condition of regularity of this Certificate must be obtained from the product database and Certificate Services on Inmetro site.

Product Certification Contract: 20230002 Certificate since: JUNE 13<sup>TH</sup> 2011. INMETRO Certificate Number: **BVC11.0661-X** 



Renato Paiva Coordenador Técnico de Certificação de Produto

Date of Issue: 26 MAY 2023



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### **SPECIFICATION:**

The plastic cable glands type EC x model SIB-TEC, made of polyamide PA 6 or PA 66, are intended to be fitted on enclosures with type of protection "Ex e" or "Ex t" with non-armoured circular cables. These cable glands can also be used for "Ex i" intrinsically safe circuits and shall be blue-coloured in this case.

The clamping of the cable is realized by a sealing ring in neoprene. The cable glands can be mounted either with a brass locknut or with a plastic locknut for specific cases.

The cable glands can use in zones 1 and 2 for gas group IIA, IIB, IIC and for zones 21 and 22 for group IIIC for combustible dusts or not fuels.

Cable glands with ISO metric or PG thread have a flat seal to guarantee the IP when they are mounted on an enclosure.

The external thread of the cable glands can be:

- ISO metric pitch 1.5 (ISO 965-1 and ISO 965-3);
- NPT (ANSI/ASME B1.20.1);
- PG (DIN 40430) only for Ex eb application.

Table 1: Models and Operating Ambient Temperature:							
Size			Service temperatures depending on the polyamide on which the cable gland body is made of		Material of locknut	Risk of mechanical	
Metric	PG	NPT	Polyamide PA 66	Polyamide PA 6		danger	
12	7		-20 °C to +80 °C	1	V		
16	9	3/8"	-35 °C to +90 °C	1			
16	11		-35 °C to +90 °C				
20	13	1/2"	-35 °C to +90 °C	1	Brass		
20	16		-35 °C to +90 °C	1	Drass	T	
25			-35 °C to +90 °C	1		Low (4 ioulos)	
25	21	3/4"	-35 °C to +90 °C	1		(4 joules)	
32	29	1"	-35 °C to +90 °C	1			
40	36		-35 °C to +90 °C	-35 °C to +90 °C	See notes (1) & (2)		
50	42		-35 °C to +90 °C	-35 °C to +90 °C	See notes (1) & (2)		
63	48		-35 °C to +90 °C	-35 °C to +90 °C	See notes (2) & (3)		

### Table 1: Models and Operating Ambient Temperature

 $^{(1)}$  = Locknutin brass when the body of the cable gland is made of PA 66.

- $^{(2)}$  = Locknut in PA 6 25% fiberglass when the body of the cable gland is made of PA 6
- (3) = Locknut in brass or in PA 66 when the body of the cable gland is made of PA 66



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### **TECHNICAL DOCUMENTATION:**

- Certificate of Conformity IECEx LCI 10.0008X/03 of 2022/04/01;
- Certificate of Conformity LCIE 07 ATEX 6082X of 2007/10/16;
- Certificate of Conformity LCIE 07 ATEX 6082X/01 of 2008/04/14;
- Certificate of Conformity LCIE 07 ATEX 6082X/02 of 2008/07/10;
- Certificate of Conformity LCIE 07 ATEX 6082X/03 of 2009/09/08;
- Certificate of Conformity LCIE 07 ATEX 6082X/04 of 2015/05/07;
- Certificate of Conformity LCIE 07 ATEX 6082X/05 of 2022/04/01;
- Test Report LCIE n° 98683-595881 of 2010/05/04;
- Test Report LCIE n° 133536-668141-01 of 2015/05/07;
- Test Report LCIE n° FR/LCIE/ExTR22.0025/00 of 2022/03/31;
- Technical Dossier n° TR/011/01 of 2011/02/30;
- Descriptive Note n° ND/021/06 of 2021/10/27;
- Analysis Report (RA) n° 001/2011 of 2011/03/14;
- Analysis Report (RA) n° 002/2023 of 2023/05/12;
- Factory Inspection performed in 2023/02/21;
- Manual in Portuguese.

DRAWING	DESCRIPTION	REVISION	DATE
F 7000 000 E	Presse-Etoupe Sib-Tec Ex e PG Polyamide	В	2021/10/29
F 7000 000 E	Cable Glands Sib-Tec Ex e PG Polyamide	В	2021/10/29
F 7020 000 E	Presse-Etoupe Sib-Tec Ex e Métrique Polyamide	С	2021/10/28
F 7020 000 E	Cable Glands Sib-Tec Ex e ISO Polyamide	С	2021/10/28
F 7030 000 E	Presse-Etoupe Sib-Tec Ex e Métrique Long Polyamide	В	2021/10/28
F 7030 000 E	Cable Glands Sib-Tec Ex E Metric Long Polyamide	В	2021/10/28
F 7040 000 E	Presse-Etoupe Sib-Tec Ex e NPT Polyamide	В	2021/10/28
F 7040 000 E	Cable Glands Sib-Tec Ex e NPT Polyamide	В	2021/10/28
ASSEMBLY	Sib-Tec ISO Ex e Cable Gland Polyamide	А	2010/04/28
MONTAGE	Presse Etoupe Sib-Tec EX e Plastique ISO	А	2010/04/12



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### **OBSERVATIONS:**

1. The letter "X" after the Certificate number means the following special conditions for safe use:

Service temperature ranges:

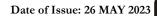
-20 °C  $\leq$  Tservice $\leq$  +80 °C for cable glands of size M12 and PG7. -35 °C  $\leq$  Tservice $\leq$  +90 °C for the range of EC x (SIB-TEC) cable glands, except for sizes M12 and PG7.

The installation shall guarantee that the cable glands will be only exposed to a low risk of mechanical danger.

For cable glands in PA 6 of sizes M40 to M63 and PG36 to PG48: the use of a locknut in brass is not allowed. Only PA 6 25% fiberglass locknuts can be used. For cable glands of sizes M40 to M63 and PG36 to PG48: because it may be a potential electrostatic charging hazard under certain extreme circumstances, clean only with a damp cloth.

The mounting instructions of the manufacturer shall be followed.

- 2. This Certificate is valid only for products with the same model and type as the tested prototype. Any modification in the project, as well as the use of components apart from those defined by the technical documentation, without previous authorization from Bureau Veritas Certification, will invalid this Certificate.
- 3. The cable glads shall be marked on the external surface and in a visible place, the conformity mark and the technical characteristics according to the specifications from standards ABNT NBR IEC 60079-0 / ABNT NBR IEC 60079-7 / ABNT NBR IEC 60079-31 / ABNT NBR IEC 60529 and the conformity assessment requiremnts, attached to INMETRO Ordinance n° 115, published in March 21<sup>th</sup> 2022. This marking must be readable and durable, taking into consideration possible chemical corrosion.
- 4. The equipment must be installed in compliance with the relevant standards in electrical installations in explosive atmospheres and the manufacturer's recommendations
- 5. The activities of installation, inspection, maintenance, repair, overhaul and recovery of equipment are the responsibility of users and must be implemented in accordance with the requirements of current technical standards and the manufacturer's recommendations.







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6. The Manufacturer shall provide manual of installation and safe use written in Portuguese.

<b>REVISIONS HISTORY</b>					
DATE OF ISSUE	DESCRIPTION				
2011/06/13	Initial Issue				
2014/06/17	Revision 1 – Recertification				
2017/03/20	Revision 2 - Recertification				
2020/07/16	Revision 3 – Recertification and alteration of the company name of the applicant and manufacturer				
2023/05/26	Revision 4 – Recertification and Adaptation to the New Inmetro Ordinance 115/2022				



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