

# CESI

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Codice fiscale e numero  
iscrizione CCIAA 00793580150

Registro Imprese di Milano  
Sezione Ordinaria  
N. R.E.A. 429222  
P.I. IT00793580150

Schema di certificazione

# CESI-ATEX

Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/8/1990, D.M. 20/7/1998 e D.M. 27/9/2000

# CERTIFICATE



## EC-TYPE EXAMINATION CERTIFICATE

- [1] **Equipment or Protective System intended for use in potentially explosive atmospheres**  
**Directive 94/9/EC**
- [2] EC-Type Examination Certificate number:  
**CESI 02 ATEX 081 X**
- [3] **Equipment:** Cable glands series FGA and FGAD for armoured cables and series FG, FGF and FGN for non-armoured cables.
- [4] **Manufacturer:** **EL.FIT S.p.A.**
- [5] **Address:** Via Aquileia 12, Villesse (Gorizia - Italy)
- [6] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [7] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in confidential report n. EX-A2/027978.
- [8] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 50014: 1997 + A1..A2 EN 50018: 2000+A1 EN 50019:2000 EN 50281-1-1:1998+A1**
- [9] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- [10] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- [11] The marking of the equipment or protective system shall include the following:



**II 2 GD EEx d IIC EEx e II IP 66/67**

This certificate may only be reproduced in its entirety and without any change, schedule included.

**Date** September 20<sup>th</sup>, 2002      translation issued on September 20<sup>th</sup>, 2002

**Prepared**  
Mirko Balaz

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**Approved**  
Ulisse Colombo

**CESI**

**CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO**  
Business Unit Certificazione

31/12/2002

COPY TRUE  
TO THE  
ORIGINAL

[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 081 X**

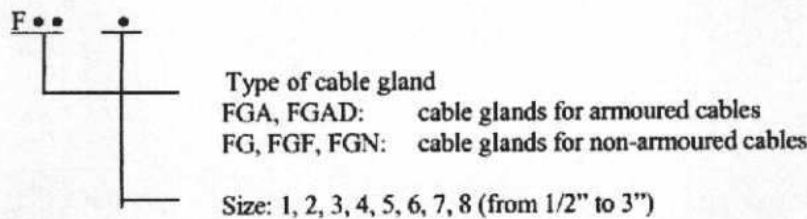
[15] **Description of equipment**

The cable glands series FGA, FGAD, FG, FGF and FGN are designed for the type of protection flameproof enclosures EEx d IIC and for the type of protection increased safety EEx e II.

The cable glands of the series above-mentioned are also protected against the risk of explosion for the presence of combustible dusts according to the standard EN 50281-1-1.

These cable glands can be used in EEx i intrinsic safety circuits. In this case the cable glands have a part painted in light blue.

The various types of cable glands are identified by a code as follows:



The constructional characteristics and the identification of the different types of cable glands are reported in the documents annexed to this certificate.

Degree of protection (EN 60529 – 1991): IP 66/67

Operating temperature range of the cable glands:

- with elastomeric sealing ring of SINCRO IP55/1: - 20 ÷ + 80 °C
- with elastomeric sealing ring of FORPRENE: - 25 ÷ + 100 °C

The cable glands shall be coupled with the enclosures as indicated by the manufacturer in the documents annexed to this certificate in order not to jeopardise the type of protection of the electrical apparatus on which the cable glands are installed.

[16] **Report n. EX-A2/027978**

**Routine tests**

The manufacturer shall carry out the routine tests prescribed at clause 24 of the EN 50014 standard.

**Descriptive documents (prot. EX-A2/027980)**

- n° A4-867 Rev. 0 (3 p.)	dated	03.09.2002
- n° A4-862 Rev. 0	dated	04.09.2002
- n° A4-863 Rev. 0	dated	04.09.2002
- n° A4-864 Rev. 0	dated	02.09.2002
- n° A4-865 Rev. 0	dated	02.09.2002
- n° A4-866L Rev. 0	dated	02.09.2002

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[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 081 X**

### Descriptive documents (follows)

- n° A4-868 Rev. 0	dated	16.09.2002
- n° A4-869 Rev. 0	dated	10.09.2002
- n° A4-870 Rev. 0	dated	07.09.2002
- n° A4-871 Rev. 0	dated	09.09.2002
- n° A4-872 Rev. 0	dated	09.09.2002
- n° A4-873 Rev. 0	dated	09.09.2002
- n° A4-874 Rev. 0	dated	08.09.2002
- n° A4-875 Rev. 0	dated	08.09.2002
- n° A4-876 Rev. 0	dated	07.09.2002
- n° A4-877 Rev. 0	dated	07.09.2002
- n° A4-878 Rev. 0	dated	07.09.2002
- n° A4-880 Rev. 0	dated	08.09.2002
- n° A4-881 Rev. 0	dated	08.09.2002
- n° A4-882 Rev. 0	dated	08.09.2002
- n° A4-883 Rev. 0	dated	07.09.2002
- n° A4-884 Rev. 0	dated	07.09.2002
- n° A4-885 Rev. 0	dated	07.09.2002
- n° A4-886 Rev. 0	dated	07.09.2002
- n° A3-297 Rev. 0	dated	31.08.2002
- n° A3-298 Rev. 0	dated	31.08.2002
- n° A3-299 Rev. 0	dated	31.08.2002
- n° A3-300 Rev. 0	dated	31.08.2002
- n° A3-301 Rev. 0	dated	31.08.2002
- n° A3-302 Rev. 0	dated	02.09.2002
- n° A3-303 Rev. 0	dated	03.09.2002
- n° A3-304 Rev. 0	dated	03.09.2002
- n° A3-305 Rev. 0	dated	03.09.2002
- Safety instructions Annexe A/25 Rev. 0 (9 p.)	dated	16.09.2002
- EC declaration of conformity n° CE/010	dated	02.09.2002

One copy of the above mentioned documents is kept in CESI files.

[17] **Special conditions for safe use (X)**

The clamping of the cables must be made by means of a suitable clamping device.

[18] **Essential Health and Safety Requirements**

Covered by standards.



## EXTENSION n. 01/05

to EC-Type Examination Certificate CESI 02 ATEX 081X

Equipment: Cable glands series FGA and FGAD for armoured cables and series FG, FGF and FGN for non-armoured cables

Manufacturer: **EL.FIT S.p.A.**

Address: Via Aquileia 12, Villesse (Gorizia), Italy

### Admitted variation

- Use new type of sealing ring for the service temperature from  $-40^{\circ}\text{C}$  up to  $+110^{\circ}\text{C}$

Report n. EX-A5/060549

### Operating temperature range of cable glands:

With elastomeric sealing ring of SANTOPRENE  $-40^{\circ}\text{C} +110^{\circ}\text{C}$ .

Descriptive documents (prot. EX-A5/060555)


- Technical note n° A4-867 rev. 1 (3 p.) dated 02.08.2005
- Data sheet Santoprene dated 02.08.2005

One copy of all documents is kept in CESI files.

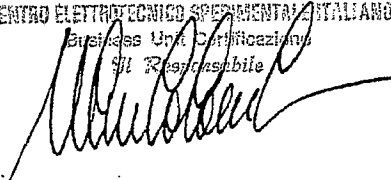
This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02ATEX081X.

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date 22<sup>nd</sup> December, 2005 - translation issued on 22<sup>nd</sup> December, 2005

prepared CERT - M. Balaz 

approved CERT - U. Colombo

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Business Unit Certificazioni  
Il Responsabile  


Prot A5/060554 P: 1

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## EXTENSION n. 02/07



to EC-Type Examination Certificate CESI 02ATEX 081X

Equipment: Cable glands with elastomeric sealing ring of SANTOPRENE  
for armoured cables series: FGA, FGAD and for unarmoured cables series: FG, FGF, FGN.

Manufacturer: EL.FIT S.p.A.

Address: Via Aquileia 12, Villesse (GO)

### Admitted variation

- Upgrade to EN 60079-0 (2006), EN 60079-1 (2004), EN 60079-7 (2003), EN 61241-0 (2006), EN 61241-1 (2004) Standards
- Upgrade of nameplate

### Equipments identification

The equipments shall include the following markings:



II 2GD

Ex d IIC, Ex e II, Ex tD A21 IP66/67

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02ATEX081X.

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date 09/05/2007 - translation issued the 09/05/2007

prepared Sergio Mezzetti

verified Mirko Balaz

approved Fiorenzo Bregani

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Centro Elettrotecnico Sperimentale Italiano  
Giacinto Motta SpA

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## EXTENSION n. 02/07

to EC-Type Examination Certificate CESI 02ATEX 081X

Report n. EX-A7012819

### Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0 (2006) and at par. 24 of the EN 61241-0 (2006) Standards.

### Descriptive documents (prot. EX-A7012822)

- Technical Note A4-867 (3 pg.)	Rev. 02	dated	25/01/2007
- Drawing n°A3-304	Rev. 01	dated	06/04/2007
- Drawing n°A3-305	Rev. 01	dated	06/04/2007
- Drawing n°A4-1130	Rev. 00	dated	06/04/2007
- Drawing n°A4-1131	Rev. 00	dated	06/04/2007
- Safety Instruction A30 (9 pg.)	Rev. 01	dated	06/04/2007
- EC Declaration of Conformity		dated	06/04/2007

One copy of all documents is kept in CESI files.

### Essential Health and Safety Requirements

The Health and Safety Requirements are assured by compliance with the following Standards:

- EN 60079-0 : 2006: Electrical apparatus for explosive gas atmospheres.  
General requirements
- EN 60079-1 : 2004 Flamoproof enclosures "d".
- EN 60079-7: 2003 Increased safety "e"
- EN 61241-0 : 2006 Electrical apparatus for use in the presence of combustible dust.  
General requirements
- EN 61241-1 : 2004 Protection by enclosures "tD"

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