

CESI

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Capitale sociale 8 550 000 €
interamente versato
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. 19/6/1990, D.M. 20/7/1998 e D.M. 27/9/2000

CERTIFICATE



[1] EC-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use
in potentially explosive atmospheres
Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

CESI 03 ATEX 097

[4] **Equipment:** Cable glands for armoured cables series MALD, MALDS, MAL, MALS and for unarmoured cables series: ML, MLS.

[5] **Manufacturer:** **ELFIT S.p.A.**

[6] **Address:** Via Aquileia 12, Villesse (Gorizia).

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] 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-A3/016373.

[9] 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

[10] 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.

[11] 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.

[12] The marking of the equipment or protective system shall include the following:



I/II M2/2GD EEx d I/IC EEx e I/II IP66/IP68

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

Date May 13th 2003 - Translation issued the May 13th 2003

Prepared
Mirko Balaz

Approved
Ulisse Colombo

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CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Business Unit Certificazione

ITP Responsabile

[13]

Schedule

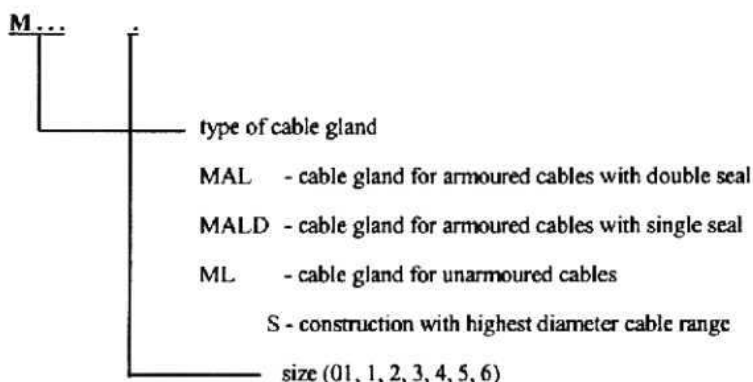
[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 097

[15] **Description of equipment**

The cable glands for armoured cables series MAL, MALS, MALD and MALDS and the cable glands for unarmoured cables series ML, MLS are designed for group I category M2 and group II category 2 GD, with the type protection EEx d I/IIC and EEx e I/II.

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

The above mentioned cable glands are identified by a code as follows:



Operating temperature range of cable glands:

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

Degree of protection

The cable glands subject to this certificate, when coupled with the enclosures as indicated in the annexed documents to this certificate, resulted in conformity with the specifications of the standard EN 60529 (1991) for degree protection IP 66 and IP68 (30 meters).

The cable glands EEx d I/IIC and EEx e I/II can be used in EEx i intrinsic safety circuits.

In this case the cable glands have a part painted light blue.

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

Warning label

None.

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[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 097**

[16] **Report n. EX-A3/016373**

Routine tests

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

Descriptive documents (prot. EX-A3/016376)

- n. A4 - 968	Rev. 0	del	10.05.2003
- n. A4 - 967	Rev. 0	del	13.05.2003
- n. A4 - 966	Rev. 0	del	13.05.2003
- n. A4 - 965	Rev. 0	del	13.05.2003
- n. A4 - 964	Rev. 0	del	13.05.2003
- n. A4 - 963	Rev. 0	del	13.05.2003
- n. A4 - 962	Rev. 0	del	13.05.2003
- n. A2 - 207	Rev. 0	del	10.05.2003
- n. A2 - 204	Rev. 0	del	09.05.2003
- n. A2 - 206	Rev. 0	del	09.05.2003
- n. A2 - 205	Rev. 0	del	09.05.2003
- n. A2 - 208	Rev. 0	del	10.05.2003
- n. A3 - 327	Rev. 0	del	10.05.2003
- n. A3 - 326	Rev. 0	del	10.05.2003
- n. A3 - 324	Rev. 0	del	10.05.2003
- n. A3 - 325	Rev. 0	del	10.05.2003
- n. A3 - 323	Rev. 0	del	10.05.2003
- n. A3 - 328	Rev. 0	del	10.05.2003
- n. A4 - 945	Rev. 0	del	10.05.2003
- n. A4 - 961	Rev. 0	del	10.05.2003
- n. A4 - 960	Rev. 0	del	10.05.2003
- n. A4 - 959	Rev. 0	del	10.05.2003
- n. A4 - 958	Rev. 0	del	10.05.2003
- n. A4 - 957	Rev. 0	del	10.05.2003
- n. A4 - 956	Rev. 0	del	10.05.2003
- n. A4 - 955	Rev. 0	del	10.05.2003
- n. A4 - 954	Rev. 0	del	10.05.2003
- n. A4 - 953	Rev. 0	del	10.05.2003
- n. A4 - 952	Rev. 0	del	10.05.2003
- n. A4 - 951	Rev. 0	del	10.05.2003
- n. A4 - 950	Rev. 0	del	10.05.2003
- n. A4 - 949	Rev. 0	del	10.05.2003
- n. A4 - 948	Rev. 0	del	10.05.2003
- n. A4 - 947	Rev. 0	del	10.05.2003
- n. A4 - 946	Rev. 0	del	10.05.2003
- n. Annex A31	Rev. 0	del	26.04.2003

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

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Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 097**

- n. CE/012 Rev. 0 del 11.05.2003

One copy of all documents is kept in CESI files.

[17] **Special conditions for safe use**

None.

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

Covered by standards.

EXTENSION n. 01/05



to EC-Type Examination Certificate CESI 03 ATEX 097

Equipment: Cable glands for armoured cables series MALD, MALDS, MAL, MALS and for unarmoured cables series: ML, MLS.

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°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°C $+110^{\circ}\text{C}$.

Descriptive documents (prot. EX-A5/060558)

- Technical note n° A4-968. rev. 1 (4 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 03ATEX097.

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date 22nd December, 2005 - translation issued on 22nd December, 2005

prepared

CERT - M. Balaz

approved

CERT - U. Colombo

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Business Unit Certification
Il Responsabile

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Prot.A5/060557 P: 1

EXTENSION n. 02/08



to EC-Type Examination Certificate CESI 03 ATEX 097

Equipment: Cable glands for armoured cables series MALD, MALDS, MAL, MALS and for unarmoured cables series ML, MLS.

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

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

Admitted variation

- Updating to new standards EN 60079-0 (2006), EN 60079-1 (2004), EN 60079-7 (2003), EN 61241-0 (2006), EN 61241-1 (2004)
- Updating of nameplate

The results of verifications and tests are reported in the confidential report n. EX- A8010707.

Identification and description of the equipment

The marking of the cable glands series MALD, MALDS, MAL, MALS, ML, MLS shall include the following:



I/II M2/2GD Ex d I/II C Ex e I/II Ex tD A21 IP 66/68

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03 ATEX 097.

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date translation issued 10 aprile 2008

prepared Giorgio Chinnici

verified Mirko Balaz

approved Fiorenzo Bregani

Giorgio Chinnici
Mirko Balaz
Fiorenzo Bregani

CESI S.p.A.
Divisione Energia
"Area Tecnica Certificazione" page 1/2
Il Responsabile

EXTENSION n. 02/08

to EC-Type Examination Certificate CESI 03 ATEX 097

Routine tests

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

Descriptive documents (prot. EX- A8010711)

- Technical Note n. A4-968 Rev. 1 (3 pag.)	dated	06/04/2007
- Drawing n. A4-1130 Rev. 0 (1 pag.)	dated	06/04/2007
- Drawing n. A4-1131 Rev. 0 (1 pag.)	dated	06/04/2007
- Drawing n. A3-325 Rev. 1 (1 pag.)	dated	13/02/2007
- Safety Instructions mod. A31 Rev. 1 (13 pag.)	dated	06/04/2007
- EC Declaration of Conformity (1 pag.)	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 combustibile dust.
 General requirements
- EN 61241-1 : 2004 Protection by enclosures "tD"