CESI

CERTIFICATE

[1] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective System intended for use in potentially explosive atmospheres Directive 2014/34/EU**

[3] Supplementary EU-Type Examination Certificate number:

CESI 03 ATEX 085 X /03

[4] Product: **Sealing fittings series EYS.. , EZS.. , EYD.. , EZD..**

[5] Manufacturer: **EL.FIT S.p.A.**

[6] Address: **Via Aquileia, 12 – 34070 Villesse (GO) – Italy**

[7] This supplementary certificate extends EC–Type Examination Certificate CESI 03 ATEX 085X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 17 of the Directive 2014/34/EU of the Parliament and Council of 26 February 2014, 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-B7014147.

[9] In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016

[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 EU-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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:

Ex II 2 G	**Ex db IIC Gb**	*(for EYD and EZD series only)*
	or	
Ex II 2 GD	**Ex db IIC Gb** *and* **Ex tb IIIC Db IP66**	*(for EYS and EZS series only)*

Date 2017.07.11 - Translation issued the 2017.07.11

Prepared	**Verified**	**Approved**
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Schema di certificazione CESI-ATEX

ATEX B6003477-1-EN

ACCREDIA
PRD N. 018B
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

[13] **Schedule**

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 085 X /03**

[15] **Description of the variation to the product**

- Updating to standards EN 60079-0:2012 +A11:2013, EN 60079-1:2014, EN 60079-31:2014.

Description of equipment

The sealing fittings **EYS..**, **EZS..**, **EYD..** and **EZD..** series consist in resin fillable stopping boxes with female threaded joints and can be used for the passage of cables between conduits and/or flameproof enclosures. The sealing fittings **EYS..** and **EZS..** series are also protected against the risk of explosion for the presence of combustible dusts, in this case they have an IP 66 degree of protection.

The sealing fittings types are identified as follows:

- **EYS..** for sealing in vertical position;
- **EZS..** for sealing in horizontal and/or vertical position;
- **EYD..** for sealing in vertical position complete with drain valve;
- **EZD..** for sealing in horizontal and/or vertical position complete with drain valve.

Sealing fittings series **EYS..** are provided of two coaxial threaded They are used for vertical connections. These fittings are divided on two construction types:

- from size ½" up to 1" the body of fitting have one lateral threaded hub used for glass fibre positioning and for compound filling;
- from size 1"1/4 up to 3" the body of fitting have two lateral threaded hubs, one at 45° from vertical axis used for compound filling and one bigger at 90° from vertical axis for glass fibre positioning.

The glass fibre is used to containing the compound into sealing fitting during filling operation. At the end of filling operation, the lateral threaded hubs are plugged by certified threaded plugs PLG series with CESI 02 ATEX 049X certificate.

Sealing fittings series **EZS..** are provided of two coaxial threaded hubs. They are used for each horizontal and vertical connections. These fittings have the same construction form for all sizes from ½" up to 3". They are complete with a threaded cover at 90°C from vertical axis used for glass fibre positioning. The cover has a threaded hub for compound filling. The glass fibre is used to containing the compound into sealing fitting during filling operation. At the end of filling operation, the threaded hub on the cover is plugged by certified threaded plugs PLG series with CESI 02 ATEX 049X certificate.

Sealing fittings series **EYD..** are provided of two coaxial threaded hubs. They are used for vertical connections. These fittings are divided on two construction types:

- from size ½" up to 1" the body of fitting have one lateral threaded hub used for glass fibre positioning and for compound filling;
- from size 1"1/4 up to 3" the body of fitting have two lateral threaded hubs, one at 45° from vertical axis used for compound filling and one bigger at 90° from vertical axis for glass fibre positioning.

The glass fibre is used to containing the compound into sealing fitting during filling operation. At the end of filling operation, the lateral threaded hubs are plugged by certified threaded plugs PLG series with CESI 02 ATEX 049X certificate. Furthermore, **EYD..** fittings are also complete with drain valve type ECD110 with CESI 01 ATEX 081U certificate.

Sealing fittings series **EZD..** are provided of two coaxial threaded hubs. They are used for each horizontal and vertical connections. These fittings have the same construction form for all sizes from ½" up to 3". They are complete with a threaded cover at 90°C from vertical axis used for glass fibre positioning. The cover has a threaded hub for compound filling. The glass fibre is used to containing the compound into sealing fitting during filling operation. At the end of filling operation, the threaded hub on the cover is plugged by certified threaded plugs PLG series CESI 02 ATEX 049X. Furthermore, **EZD..** fittings are also complete with drain valve type ECD110 with CESI 01 ATEX 081U certificate.

[13] **Schedule**

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 085 X /03**

To guarantee the IP 66 degree of protection of **EYS..** and **EZS..** sealing fittings it is applied a sealant put at least on two complete threads engaged of the threaded coupling.

The ambient temperature range of the sealing fittings are:

- from -20°C up to +60°C for series **EYD..** and **EZD..** with drain valve;
- from -20°C up to +100°C for series **EYS..** and **EZS...**

All sealing fitting types are suitable for the service temperature range from -20°C up to +100°C.

Constructional characteristics

Degree of protection (EN 60529): IP 66 for **EYS..** and **EZS..** sealing fittings only.

Identification of sealing fittings

CODE- ☐ ☐ ☐

Code of the series:
EYS, EZS, EYD, EZD

Size of thread:
1 = 1/2" (or M20)
2 = 3/4" (or M25)
3 = 1" (or M32)
4 = 1"1/4 (or M40)
5 = 1"1/2 (or M50)
6 = 2" (or M63)
7 = 2"1/2 (or M75)
8 = 3" (or M90)

Type of thread:
N = NPT ANSI ASME B1.20.1
I = ISO metric pitch 1,5mm
NC = NPSM ANSI ASME B1.20.1
P = PG DIN 40430
C = GAS UNI 228/1
Blank = Gk CEI EN 60079-1:2008 Annex 1

Type of material:
Blank = aluminium
S = stainless steel

Other suffix can be added on the code for particular configurations.

[16] **Report n.** EX- B7014147.

Routine tests

None.

[13] **Schedule**

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 085 X /03**

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

- The total cross-sectional area of the cables, including insulation, shall be not more than 40% of the cross sectional area of the fitting according to EN 60079-14.
- The minimum length of the compound shall be ≥ 20mm and at least 20% of that cross-sectional area shall be filled with compound.
- The sealing fittings shall be coupled with the enclosure or with cable conduit as indicated by the manufacturer's documents in order to not jeopardise the type of protection of the electrical apparatus on which the sealing fittings are mounted.
- The sealing fittings are approved to be used with setting compound provided by manufacturer and may be applied by installer or user of electrical apparatus following the manufacturer's instructions.
- The service temperature range of the sealing fittings is from -20°C up to +100°C.
- The ambient temperature range of the sealing fittings is:
  - from -20°C up to +60°C for series **EYD..** and **EZD..** with drain valve and;
  - from -20°C up to +100°C for series **EYS..** and **EZS...**

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

Compliance with the Essential Health and Safety Requirements has been assured by compliance to the following standards:

EN 60079-0: 2012	Explosive atmospheres – Part 0: Equipment - General requirements;
EN 60079-0/A11: 2013	Explosive atmospheres – Part 0: Equipment - General requirements;
EN 60079-1: 2014	Explosive atmospheres – Part 1: Equipment protection by flameproof enclosure "d";
EN 60079-31: 2014	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t".

[19] **Descriptive documents** (prot. EX- B7014150).

- Technical note A4-1138 (pg. 7)	rev.1	dated	2017.05.15
- Safety, Maintenance and Mounting Instructions A5 (pg. 12)	rev.3	dated	2017.05.15
- EU Declaration of Conformity FACSIMILE no. 0142 (pg. 1)		dated	2017.05.15
- Drawing A3-320 (1 sheet)	rev.3	dated	2017.05.15

One copy of all documents is kept in CESI files.

Certificate history

Issue nr	Issue Date	Summary description of variation
03	2017.07.11	Updating to standards EN60079-0:2012 +A11:2013, EN60079-1:2014, EN60079-31:2014.
02	2015.04.20	Update to new edition of EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-31: 2009. Use of new type of resin. New maximum service temperature of +100°C and Special conditions for safe use (X) were added.
01	2007.05.18	Updating to standards EN 60079-0 (2006), EN60079-1 (2004), EN 61241-0 (2006), EN 61241-1 (2004).
00	2003.08.20	First Issue of the Certificate.