



[1] EU-TYPE EXAMINATION CERTIFICATE

[2] Component intended for use in potentially explosive atmospheres - Directive 2014/34/EU – Annex III – MODULE B (EU-TYPE EXAMINATION)

[3] EU-type Examination Certificate number: **IMQ 22 ATEX 057 U**

[4] COMPONENT: **Fittings for flexible conduit**

TYPE/SERIES: **ESP**

[5] MANUFACTURER: **Cortem S.p.A.**

[6] ADDRESS: **Via Aquileia 10 - 34070 Villesse (GO) – Italy**

[7] This component and any acceptable variation thereto are specified in the annex to this certificate and the documents therein referred to.

[8] IMQ, notified body N° 0051, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component 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 Report No.: **AT21-0072092-01**




[9] Compliance with Essential Health and Safety Requirements, except in respect of those listed at item 18 of the annex, has been assured by compliance with:

EN IEC 60079-0:2018; EN 60079-7:2015; EN IEC 60079-7:2015/A1:2018; EN 60079-31:2014

[10] If the sign "U" is placed after the certificate number indicates that this certificate shall not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified component. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:

 II 2G	Ex eb IIC Gb	
 II 2D	Ex tb IIIC Db	or
 II 2GD	Ex eb IIC Gb	
	Ex tb IIIC Db	

THIS CERTIFICATE CANCELS AND REPLACES THE PREVIOUS ONE. IT INCLUDES 1 ANNEX.

FIRST ISSUE 2023/02/08

CURRENT ISSUE 2023/02/08

PREVIOUS ISSUE ---

EXPIRING DATE 2033/02/07

B.U. PRODUCT CONFORMITY ASSESSMENT
CERTIFICATION SECTOR - MANAGER

This Certificate may only be reproduced in its entirety and without any change. It is subject to the general rules for assessing conformity to community directives for which IMQ operates as notified body n°. 0051 and to the special requirements for Directive 2014/34/EU (ATEX) "Equipment and protective systems for potentially explosive atmospheres" annex III - MODULE B – EU Type-examination.



PRD N° 005 B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreements

[13] **Annex**

[14] **EU-TYPE EXAMINATION CERTIFICATE NUMBER: IMQ 22 ATEX 057 U**

[15] **Component description:**

The fittings for flexible conduits, series ESP, are used to connect increased safety or dust tight equipment that is offset, housing or equipment subject to vibrations such as electrical motors.

The fixed model of fitting is composed of:

- Body of fittings suitable for Metric thread or NPT thread or Gas thread (conical ISO 7/1 or cylindrical type ISO 228/1) in male or female versions;
- Sealing ring
- Locknut
- Shell
- O-ring (used only for cylindrical thread of the body)

For Revolving model there are also these components in addition to the previous:

- intermediate nipple
- metallic snap ring
- O-ring (on the intermediate nipple and on the body with cylindrical thread)

Body, locknut and intermediate nipple of fittings can be made of stainless steel material or Nickel plated brass, metallic snap ring is made of Fe while the shell is made of zamak alloy (Zinc).

Sealing ring can be made of Silicone or PA6 while O-ring of Silicone.

The component is suitable for gas Group IIC and dust Group IIIC.
It has respectively the types of protection "Ex eb" and "Ex tb".

The component is also compliant to IEC 60079-31:2022

Trademark: CORTEM; ELFIT; CORTEM GROUP

[13] **Annex**

[14] **EU-TYPE EXAMINATION CERTIFICATE NUMBER: IMQ 22 ATEX 057 U**

[15.1] **Models/Series Identification:**

Key code	
ESP-	■ ■ ■ ■ ■ ■ ■
Thread size	
M16x1.5 or 3/8"	01
M20x1.5 or 1/2"	1
M25x1.5 or 3/4"	2
M32x1.5 or 1"	3
M40x1.5 or 1 1/4"	4
M50x1.5 or 1 1/2"	5
M63x1.5 or 2"	6
Type of thread	
Gas taper (ISO 7/1)	
Metric	I
NPT	N
Gas cylindrical (UNI 228-1)	C
Type of connection	
Female	F
Male	
Model	
Fixed	
Revolving	R
Material	
Inox	S
Nickel plated brass	B
Version	
For -60°C (with silicone)	
For -40°C (with PA)	PA
Other particular descriptions	
Part of coding not pertaining on Ex safety	

[15.2] **Ratings:**

-

[15.3] **Safety Ratings:**

-

[15.4] **Ambient temperature and temperature classes:**

-

[15.5] **Degree of protection (IP code):**

Protection degree: IP66 (according to IEC 60079-0 and IEC 60529);

[15.6] **Warnings:**

Not present

[16] **Report:** AT21-0072092-01

[16.1] **Routine (factory) tests:**

The manufacturer shall carry out the routine test prescribed at clauses 27 of the EN 60079-0.

[13] Annex

[14] EU-TYPE EXAMINATION CERTIFICATE NUMBER: IMQ 22 ATEX 057 U

[16.2] Conformity with the documentation:

The manufacturer shall carry out the verifications or tests necessary to ensure that the component complies with the documentation.

Marking the component in accordance with Clause 29 of EN 60079-0, the manufacturer attests on his own responsibility that:

- the component has been constructed in accordance with the applicable requirements of the relevant standards in safety matters;
- the routine verifications and routine tests in 28.1 of EN 60079-0 have been successfully completed with positive results.

[16.3] Installation conditions:

Above referred component is foreseen to be installed in locations where there are environmental conditions, as clearly specified at clause 1, par. 2 of EN 60079-0.

Installation and use in atmospheric and environmental conditions that are out of above-mentioned intervals request special considerations and additional measures by the side of installer or user.

These should be specified to the manufacturer by the user;

It is not a required by applicable standard listed in [9] that the certification body confirm suitability for the adverse conditions.

The component shall be installed according to current edition of IEC 60079-14 (In particular, clauses no. 9.4, 9.5, 9.6, 10.2, 10.3, 10.7 shall be duly considered)

Components are not intended to be make direct connection to the "Ex d" enclosure

It is the end-user's responsibility to ensure that operative temperature limits are complied with during installation keeping into account the ambient temperatures at the place of installation.

For the internal cylindrical thread (female part), an appropriate gasket is required to guarantee the IP protection. When no gasket or seal is used, at least 5 full engaged threads are required (for cylindrical threads) and 3½ threads (for the tapered threads). This must be realized during installation and is the responsibility of the end-user.

In order to ensure the IP Rating, the fitting shall be installed with its relative conduit.

The end user has to ensure that there is electrical continuity between the fitting and the associated enclosure that have to be correctly bonded

[17] Schedule of limitations:

Component (with taper thread) is intended to be coupled only to threaded entries

Appropriate conformity assessment shall be considered during the final installation or application.

Operating temperature: from -40°C to +80°C (PA6);

from -60°C to +80°C (Silicone).

[18] Essential Health and safety Requirements:

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [9].

This Certificate **does not** cover hazards coming from environmental conditions different from those clearly and precisely indicated and covered in clause 1 of EN 60079-0.

ESHR 1.2.7 According Annex VIII of the Directive

ESHR 1.4 Not verified.

ESHR 1.5 Not verified.

ESHR 3 Not applied.

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In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at [9], the following are considered relevant to this component, and conformity is demonstrated in the report:

N/A

[19] **Descriptive documents:**

DL-AT21-0072092-01 of 2022/12/05

[20] **Certification Validity Conditions:**

The use of this Certificate is subject to the Certification Scheme and to the Regulation applicable to holders of IMQ Certificates.

The validity of this certificate is subject to the condition that the manufacturer complies with the results of the document review and of the pertinent requirement if any included, recorded in the relevant copy of documentation as per 19.

One copy of the mentioned documentation is kept in IMQ file.

[21] **Variations**

2023-02 First issue