



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx CES 13.0011X Issue No.:1 Certificate history:
Issue No. 1 (2014-5-16)
Issue No. 0 (2013-8-2)

Status: **Current**

Date of Issue: 2014-05-16 Page 1 of 4

Applicant: **CORTEM S.p.A.**
Via Aquileia 10
I - 34070 Villesse (GO)
Italy

Electrical Apparatus: **Cable glands series REV... for non-armoured cables and Cable glands series REVD... for armoured cables**

Optional accessory:

Type of Protection: **Flameproof enclosures 'd'; increased safety 'e'; Dust ignition protection 't'**

Marking: **Ex d IIC Gb
Ex e IIC Gb
Ex tb IIIC Db
IP 66/67**


Approved for issue on behalf of the IECEx
Certification Body:

Mirko Balaz

Position:

Head of IECEx CB

Signature:
(for printed version)


16-5-2014

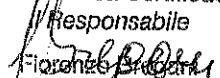
Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

CESI
Centro Elettrotecnico
Sperimentale Italiano S.p.A.
Via Rubattino 54
20134 Milano
Italy

CESI
CESI S.p.A.
Testing & Certification Division
Business Area Certification

Responsabile

Florence, Italy



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Manufacturer: **CORTEM S.p.A.**
Via Aquileia 10
I - 34070 Villesse (GO)
Italy

Additional Manufacturing location
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:
IT/CES/ExTR13.0014/00

IT/CES/ExTR13.0014/01

Quality Assessment Report:

IT/CES/QAR06.0002/08



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

CABLE GLANDS series REV... for non armoured cables and series REVD... for armoured cables.

The cable glands types REV, REVD, are suitable for inserting circular cables into "Ex d" enclosures having threaded entries and into "Ex e" or "Ex tb" enclosures having either threaded or plain entries.

Attachment of the glands to an enclosure or a terminal box is by means of the male threaded portion on the male body.

All metallic parts of cable glands are made of the same material: generally brass, but in alternative galvanized steel (A203) or stainless steel materials can be used.

The cable glands characteristics are further described in the Annexe of this certificate.

CONDITIONS OF CERTIFICATION: YES as shown below:

- The coupling of the cable glands with the enclosures shall be made as indicated by the manufacturer in order to respect the type of protection of the electrical apparatus on which cable glands are mounted. The cable glands shall be mounted at the electrical apparatus in such a way that accidental rotation and loosening will be prevented.
- The cable glands shall be installed in order to respect the temperature at the mounting point within the foreseen service temperature range (- 40 ÷ +110 °C).
- The degree of protection IP 66/67 according to the IEC 60529 standard will be guaranteed for the cable glands if the holes into which cable glands are mounted are suitably sealed. To this scope the correct positioning of the gaskets (for cylindrical threads) or the application of sealant on the threads (for tapered threads), shall be done strictly respecting the manufacturer instruction.
- Glands type REV.. , REVD.. size 7 ÷ 10 and REVS.., REVDS size 7 ÷ 10 are suitable for fixed installations only; the cable for glands size 7 ÷ 10 must be effectively clamped to prevent pulling and twisting.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 1

Variation 1.1

- cable glands for non armoured cables type REVL... with thread from 1/2" to 2" (size 1 + 6) with reduced cable range passage

Variation 1.2

- cable glands for armoured cables type REVDL... with thread from 1/2" to 2" (size 1 + 6) with reduced cable range passage

Variation 1.3

- cable glands for non armoured cables type REV... and type REVS with thread from 2"1/2 to 4" (size 7 + 10)

Variation 1.4

- cable glands for armoured cables type REVD... and type REVDS with thread from 2"1/2 to 4" (size 7 + 10)

Variation 1.5

- new gasket material (black color)



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Prot: B4015668

Annex to certificate:

IECEX CES 13.0011X Issue No.:1 of 2014-05-16

Applicant:

CORTEM S.p.a.,

Via Aquileia 10, I - 34070 Villesse (GO), Italy

Electrical Apparatus:

**Cable Glands series REV... for non-armoured cables and
Cable Glands series REVD... for armoured cables**

General product information:

The cable glands types REV, REVD, are suitable for inserting circular cables into "Ex d" enclosures having threaded entries and into "Ex e" or "Ex tb" enclosures having either threaded or plain entries.

The glands may also be used with intrinsically safe circuits, in which case the glands will have specific parts painted in light blue.

Attachment of the glands to an enclosure or a terminal box is by means of the male threaded portion on the male body. All metallic details of cable glands are made of the same material: generally brass, but in alternative galvanized steel (A203) or stainless steel materials can be used.

The cable glands types REV... are designed for non-armoured cables and are essentially comprised of a metallic male body, a lower gasket, a non-metallic ring made in Ryton R4 and a metallic clamping nut. When the nut is screwed, into the male threaded body, the gasket is compressed onto the outer sheath of the cable.

The cable glands types REVD... are designed for armoured cable and are comprise of a main metallic body, a lower gasket, an armoured tightening ring, a ring nut, an intermediate body, an upper gasket and clamping nut.

The cable glands are provide with the following main mounting threads types:

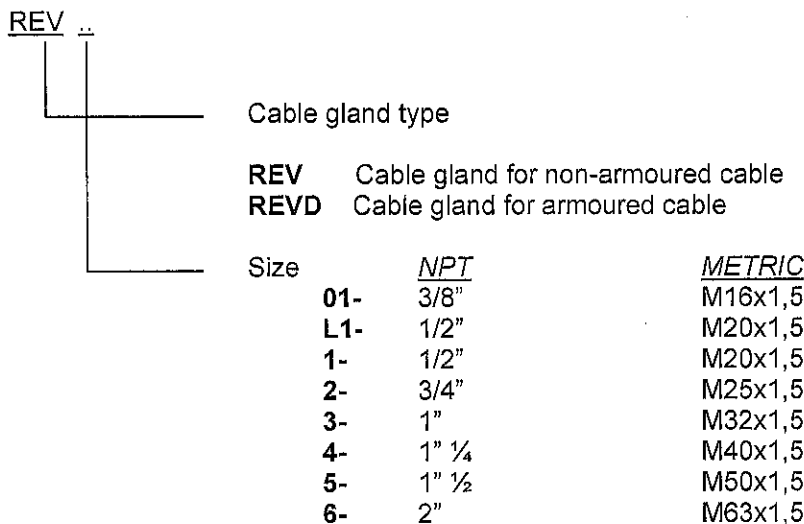
- NPT ANSI ASME B1.20.1
- ISO metric pitch 1.5

In alternative the other threads can be requested.

The cable glands series REV... for non armoured cables and series REVD... for armoured cables, are divided into three groups:

- 1) - REV., REVD size 1+6 (threads from 3/8" to 2")
- 2) - REVL., REVDL size 1+6 (threads from 3/8" to 2")
- 3) - REV., REVD size 7+10 (threads from 2" 1/2 to 4")

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



Other suffix can be added on the code for particular configurations: REVN... – REFV... (*)

(*) = REVN... ; variation to REV .. with metallic ring male hub
REFV... ; variation to REV.. with metallic ring female hub

In both cases the metallic ring (male or female hub) are specially designed to have a threaded gland to allow the connection of a conduit, or flexible, or similar.

PAD B4015668 (1962793) - USO AZIENDALE



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Applicant:

CORTEM S.p.a.,

Via Aquileia 10, I - 34070 Villesse (GO), Italy

Electrical Apparatus:

Cable Glands series REV... for non-armoured cables and
Cable Glands series REVD... for armoured cables

General product information (follows)

Range of cable passage for size of the single "CORTEM" cable glands type REV.

Tipo pressacavo Cable gland type	Filettatura Thread	Range Ø d min-max Range Ø d min-max
REV 01	3/8" NPT	5 - 10
REVL 1	1/2" NPT	5 - 10
REV 1	1/2" NPT	7 - 12
REV 2	3/4"NPT	12 - 18
REV 3	1" NPT	18 - 24
REV 4	1" 1/4 NPT	24 - 30
REV 5	1" 1/2 NPT	30 - 35
REV 6	2" NPT	35 - 45

Range of cable passage for size of the single "CORTEM" cable glands type REVD..

Tipo pressacavo Cable gland type	Filettatura * Thread	Range Ø d min-max Range Ø d min-max	Range Ø D min-max Range Ø D min-max
REVD 01	3/8" NPT	5 - 10	8 - 15
REVDL 1	1/2" NPT	5 - 10	8 - 15
REVD 1	1/2" NPT	7 - 12	11 - 16
REVD 2	3/4"NPT	12 - 18	16 - 24
REVD 3	1" NPT	18 - 24	24 - 31
REVD 4	1" 1/4 NPT	24 - 30	31 - 37
REVD 5	1" 1/2 NPT	30 - 35	37 - 43
REVD 6	2" NPT	35 - 45	43 - 53

The cable glands REV.. REVD size 1 + 6, are provided with the following main mounting threads types:

- NPT ANSI ASME B1.20.1
- ISO METRIC pitch 1.5

In alternative the following threads can be used:

- ISO metric pitch 2, PG DIN 40430, UNI ISO 228/1, N.P.S.M and Gk CEI EN 60079-1.



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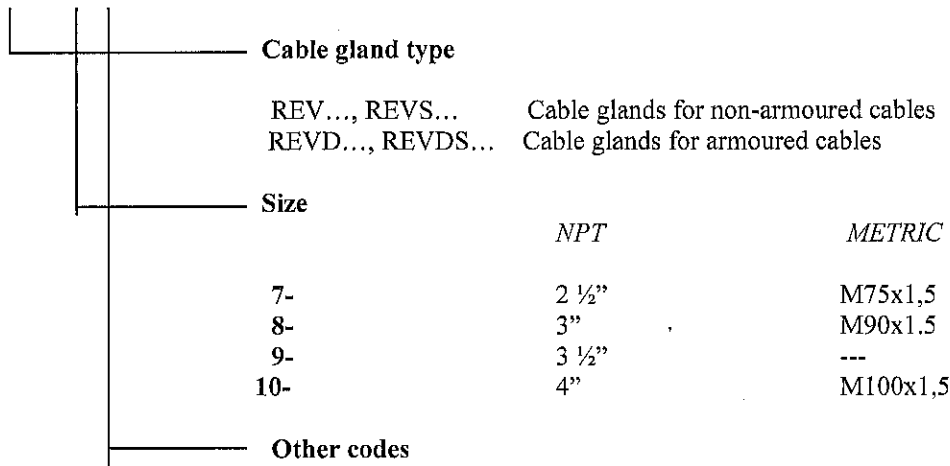
Electrical Apparatus:

Cable Glands series REV... for non-armoured cables and
Cable Glands series REVD... for armoured cables

General product information (follows)

The cable glands type REV..., and REVS... (for non armoured cables) and type REVD..., e REVDS (for armoured cables), with thread from 2" ½ to 4" (sizes from 7 + to 10) are identified by the following code:

REV.. ..



Range of non-armoured cable passage of the cable glands "CORTEM" type REV..., REVS size 7 + 10

Cable gland type	Thread type	Range Φ d min-max
REV 7	2" ½ NPT	46 – 55
REVS 7	2" ½ NPT	55 – 62
REV 8	3" NPT	62 – 70
REVS 8	3" NPT	70 – 78
REV 9	3" ½ NPT	76 – 84
REVS 9	3" ½ NPT	84 – 92
REV 10	4" NPT	76 – 84
REVS 10	4" NPT	84 – 92

Range of armoured cable passage of the cable glands "CORTEM" type REVD..., REVDS size 7 + 10

Cable gland type	Thread type	Range Φ d min-max	Range Φ D min-max
REV 7	2" ½ NPT	46 – 55	54-78
REVS 7	2" ½ NPT	55 – 62	
REV 8	3" NPT	62 – 70	64 - 90
REVS 8	3" NPT	70 – 78	
REV 9	3" ½ NPT	76 – 84	88 - 104
REVS 9	3" ½ NPT	84 – 92	
REV 10	4" NPT	76 – 84	88 - 104
REVS 10	4" NPT	84 – 92	



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CESI

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Via Aquileia 10, I - 34070 Villesse (GO), Italy

Electrical Apparatus:

**Cable Glands series REV... for non-armoured cables and
Cable Glands series REVD... for armoured cables**

General product information (follows)

The cable glands REVL.. REVDL size 1 + 6 and REV... , REVS... , REVD... , REVDS size 7-8-9-10: are provided with the following main mounting threads types:

- NPT ANSI ASME B1.20.1

- ISO METRIC pitch 1.5

In alternative the following threads can be used:

- ISO pitch 2, PG DIN 40430, UNI ISO 228/1, N.P.S.M and Gk CEI EN 60079-1.

Service temperature

The service temperature of the cable glands is in the range – 40 °C + + 110 °C.