CESI

CESI S.p.A.
Via Rubattino 54
I-20134 Milano - Italy
Tel: +39 02 21251
Fax: +39 02 21255440
e-mail: info@cesi.it
www.cesi.it

CERTIFICATE

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

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

[3] EU-Type Examination Certificate number:

CESI 24 ATEX 016 X

[4] Product: **Cable glands NEVCF series**

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

[6] Address: **Via Aquileia, 10 – I-34070 Villesse (Go) Italy**

[7] This Product 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 17 of the Directive 2014/34/EU of the European Parliament and Council of 26 February 2014, certifies that this Product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or 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-C4006782.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN 60079-1:2014 EN IEC 60079-7:2015/A1:2018 EN 60079-31:2014

except in respect of those requirements listed at item 18 of the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the Product 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 Product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this Product. These are not covered by this certificate.

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

II 2GD Ex db IIC Gb *and* Ex eb IIC Gb *and* Ex tb IIIC Db IP66/68

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Date 21.06.2024 - Translation issued the 21.06.2024

Prepared	**Verified**	**Approved**
Fabio Mariani	Alessandro Fedato	Roberto Piccin

Schema di certificazione CESI-ATEX

ATEX-B6003474 -1-EN

ACCREDIA L'ENTE ITALIANO DI ACCREDITAMENTO
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] **EU-TYPE EXAMINATION CERTIFICATE n. CESI 24 ATEX 016 X**

[15] **Description of Product**

The cable gland type **NEVCF** is suitable for inserting circular cables into Ex db enclosures having threaded entries and Ex eb or Ex tb enclosures having either threaded or plane entries.

An elastomeric inner diaphragm ring is used to realize sealing between the cable and the gland body. To prevent pulling or twisting forces being transmitted to the conductor connections, the cable glands retain the cable armour or the cable braid by specific clamping device. Ingress protection of IP66-and IP68 (50 m for 30 min.) is maintained when the glands are installed in accordance with the manufacturer's instructions.

The Cable glands **NEVCF** type are designed for steel wire armoured, shielded and braided cables suitable for Groups IIC and IIIC.

NEVCF type cable glands are comprised of a male lower body, an upper body, a union diaphragm seal, a lower insert a grounding cone, a reversible braid ring, an O-Ring seal and a cap. The elastomeric inner diaphragm seal is specialized to reduce the pressure on the cables inner sheath. When the upper body is screwed onto the lower body, the armour of the cable is clamped between the grounding cone and the braid ring. The lower insert allows the diaphragm seal to expand elastically according to the cable diameter.

Cable glands **NEVCF** series standard threads series are cylindrical ISO 261 from M16x1.5 up to M100x1.5 and tapered series NPT ANSI/ASME B1.20.1 from 3/8" up to 4".

To guarantee the IP 66 and IP 68 degree of protection the Cable glands **NEVCF** series with cylindrical threads uses a flat washer placed between the male threaded gland body and the enclosure wall, while for tapered threads the IP66 and IP68 degree of protection is achieved with sealant on at least two complete threads engaged of the threaded coupling.

The Cable glands are generally made in Brass (CuZn39Pb3 EN 12164). The following alternative materials can be supplied on demand:

- Nickel-plated Brass type CuZn39Pb3 EN 12164.
- Stainless steel type AISI316; AISI304; AISI303.
- Galvanized carbon steel type FE36; FE37 UNI 10233/4.

The cable glands can be also used for intrinsically safe circuits "Ex i" and should have a part painted in light blue.

Ambient and service temperature range

All the models are admitted for: -60°C ÷ +80°C

Models made of galvanized carbon steel: -20°C ÷ +80°C

Identification of cable glands

NEVCF 1 2 3	1: Thread sizes:	*See following table*	
	2: Thread type:	I	Metric ISO 261
		N	NPT ANSI ASME B1.20.1
	3: Body material:	BB	Brass
		B	Nickel Plated Brass
		S	Stainless Steel
		G	Galvanized Steel

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[13] # Schedule

[14] **EU-TYPE EXAMINATION CERTIFICATE n. CESI 24 ATEX 016 X**

Types and thread sizes of cable glands are listed in the following table.

Size Code		Thread size		Cable Dia. ranges (mm)	
NPT	**ISO**	**NPT**	**ISO pitch 1.5**	**Inner sheath**	**Armour sheath**
01S	16S	3/8”	M 16	3.5-8	6.5-12
01	16	3/8”	M 16	6-11	9-16
1SS	20SS	1/2”	M 20	3.5-8	6.5-12
1S	20S	1/2”	M 20	6-11	9-16
1	20	1/2”	M 20	8.5-14.5	12-20
2S	25S	3/4”	M 25	8.5-14.5	12-20
2	25	3/4”	M 25	12-20	16-26
3S	32S	1”	M 32	12-20	16-26
3	32	1”	M 32	17-26	20-33
4S	40S	1 ¼”	M 40	17-26	20-33
4	40	1 ¼”	M 40	23-32	29-41
5S	50S	1 ½”	M 50	23-32	29-41
5	50	1 ½”	M 50	29-41	36-52
6S	63S	2”	M 63	29-41	36-52
6	63	2”	M 63	40-56	50-65
7S	75S	2 ½”	M 75	40-56	50-65
7	75	2 ½”	M 75	54.5-68	61-78
8S	80S	3“	M 80	54.5-68	61-78
8	80	3“	M 80	67-73	75-89
9	90	3 ½”	M 90	67-77	75-89
10	100	4”	M 100	75-91	88-104

Warning labels
None

[16] **Report n. EX-C4006782**

Routine tests
None

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[13] # Schedule

[14] **EU-TYPE EXAMINATION CERTIFICATE n. CESI 24 ATEX 016 X**

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

- The coupling of the cable glands with the enclosures shall be made as indicated by the manufacturer in the documents annexed to this certificate 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 are for steel wire armoured cables, shielded or braided cables.
- The cable glands for use with shielded or braided cables are only suitable for fixed installations. The cables must be effectively clamped to prevent pulling and twisting.
- The cable glands shall be installed in such a way that the temperature at the mounting point will remain within the service temperature ranges accordingly to the marking.
- The degree of protection IP 66 and IP68 according to the EN 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 as indicated in the manufacturer instruction.

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

The Essential Health and Safety Requirements (EHSRs) are covered by compliance the standards listed at item 9.

[19] **Descriptive documents** (prot. EX-C4006821)

- Technical note CA4-TN-CF rev 00 (6 pgs.)	dated	29.01.2024
- Safety, maintenance and mounting instructions CA4-MI-CF rev 0 (13 pgs.)	dated	29.01.2024
- Cable glands metric thread NEVCF type CA3-NEVCF...I rev 00	dated	29.01.2024
- Cable Glands type NEVCF with NPT Thread CA3-NEVCF...N rev 00	dated	29.01.2024
- Marking information for NEVCF cable gland CA3-IEC.183 rev 00	dated	29.01.2024

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

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