

# CESI

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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, D.M. 27/9/2000 e D.M. 02/02/2006

# 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 09 ATEX 019X**

[4] Equipment: Cable glands type A2F for non-armoured cables and type EIF for armoured cables

[5] Manufacturer: Hummel AG

[6] Address: Lise – Meitner – Strasse 2, D-79211 Denzlingen - Germany

[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-A9011180.

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

**EN 60079-0: 2004 EN 60079-1: 2004**

[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:

**II 2G Ex d IIC**

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

**Date** 12 May 2009 - Translation issued the 12 May 2009

**Prepared**  
tm

**Verified**  
Mirko Balaz

**Approved**  
Fiorenzo Bregani

**CESI** S.p.A.  
Divisione Energia  
"Area Tecnica Certificazione"  
IDRes 0026

[13]

## Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 09 ATEX 019X

[15] **Description of equipment**

The cable glands type A2F and E1F made in stainless steel (AISI 316), aluminium alloy (ASTM B 221/83), brass or nickel plated brass (TM 464) with elastomeric sealing ring in Neoprene, are designed for the type of protection flameproof enclosure Ex d IIC.

Cable gland type A2F are for non-armoured cable and type E1F are for armoured cable. Available thread size are NPT 1/2", 3/4", 1", 1.1/4", 1.1/2", 2", 2.1/2" or M16, M20, M25, M32, M40, M50, M63 x 1,5mm.

All cable glands and their characteristics (size, connecting thread size, gasket and cable dimension, etc.) are clearly identified by product code number.

The detailed description of the cable glands and their constructional characteristics are reported into manufacturer documents.

Operating temperature range :  $-20 \div +80$  °C

**Warning label**

None.

[16] **Report n. EX-A9011180**

**Routine tests**

The manufacturer shall carry out the routine tests prescribed at clause 27 of the EN 60079-0 standard.

**Descriptive documents (prot. EX-A9011187)**

- Technical file cable glands type A2F and E1F	(244 pag.)	Rev. 0	dated	11.05.2009
- EC declaration of conformity	(1 pag.)	Rev. 0	dated	24.03.2009
- Installation instruction A2F and E1F	(3 pag.)	Rev. 0	dated	26.03.2009

One copy of all documents is kept in CESI files.

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[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 09 ATEX 019X**

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

The installer shall ensure that, taking into account the presence of an undercut, at least five full threads are in engagement when the cable glands are assembled on to the flame-proof enclosure.

Cable glands with cap nut but without a strain-relief device are suitable only for use with permanently installed cables. The installer is responsible for providing appropriate strain-relief device.

Cable glands type A2F and E1F are suitable for use within an operating temperature range of -20°C to +80°C.

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

Covered by EN standards mentioned at page 1.