



(2) **Equipment and protective systems intended for use in potentially explosive atmospheres
Directive 94/9/EC**

(1) **EC-TYPE EXAMINATION CERTIFICATE**

(3) Number of the EC type examination certificate: **INERIS 10ATEX0029X**

(4) Equipment or protective system:

CABLE GLAND TYPE PM... or PMA...

(5) Manufacturer: **RIBCO s.r.l.**

(6) Address: **Via dei Mille, 12
I - 20061 Carugate (MI)**

(7) This equipment or protective system and any other acceptable alternative of this one are described in the annex of this certificate and the descriptive documents quoted in this annex.

(8) INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC of the 23rd March 1994, certifies that this equipment or protective system fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, described in annex II of the Directive.

The examinations and the tests are consigned in report No 022766/10.


(9) The respect of the Essential Health and Safety Requirements is ensured by:

- conformity with:

EN 60079-0	:	2006	EN 61241-0	:	2006
EN 60079-1	:	2004	EN 61241-1	:	2004
EN 60079-7	:	2007			

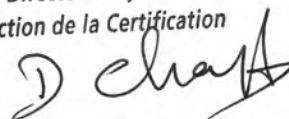
- specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents.

- (10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protective system is subjected to the special conditions for safe use, mentioned in the annex of 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 the protective system will have to contain:

 II 2 GD

Verneuil-en-Halatte, 2010.06.28

Dominique CHARPENTIER
Directeur Adjoint
Direction de la Certification



Director of the Certifying Body,
By delegation
T. HOUËIX
Certification Officer
Certification Division

(13)

ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 10ATEX0029X

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

This serial of cable glands is protected by a flameproof enclosure, by increased safety and by "tD" protection.

These cable glands are foreseen, for armoured cables or non armoured cables with a simple or double sealing. One version can be provided with an additional sealed bushing.

The cable gland get the protection degrees IP66/IP68 according to the standard EN 60 529.

The verification of the international protection IPX8 corresponds to an immersion under 30 meters of water during 7 days.

PARAMETERS RELATING TO THE SAFETY

These cable glands can be used with diameter cables from 4 mm up to 45 mm.

MARKING

Marking has to be readable and indelible; it has to include the following indications:


RIBCO s.r.l.

I - 20061 Carugate (MI)

PM...(1)

INERIS 10ATEX0029X

(Year of construction)

 II 2 GD

Ex d IIC/Ex e II

Ex tD A21 IP(*)

On the sealing ring:

Indication of the minimum and maximum diameters.

On the small cable glands the marking can be reduced at:

RIBCO s.r.l.
P...(1)
INERIS 10ATEX0029X
Ex d/e/tD

On the sealing ring:

Indication of the minimum and maximum diameters.

- (1) Type is completed by letters and numbers corresponding to the size of the threaded joint and the manufacturing variations. Different types are defined in the descriptive documents.
- (*) IP66 or IP66/68.

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

None.

(16) DESCRIPTIVE DOCUMENTS

The descriptive document quoted hereafter constitutes the technical documentation of the equipment, subject of this certificate.

- Certification file n° DC-CG-01 (18 rubrics) dated and signed on 2010 06.06

(17) SPECIAL CONDITIONS FOR SAFE USE

The temperature of the enclosure, at the connection point of the cable gland must not exceed the following value:

Cable entry without sealed bushing:

- . from -40°C to 100°C.

Cable entry with additional sealed bushing:

- . from -20°C to 80°C with resin ARALDITE 2012.
- . from -20°C to 100°C with resin ARALDITE 2021.
- . from -40°C to 100°C with resin ELANTAS MC 62/W363.

The clamping of the cables, for the cable glands size 6 must be realized outside of the enclosure, nearby to the enclosure on which the cable glands are installed.

The other conditions are stipulated on the instructions.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is ensured by:

- Conformity to the standards quoted in clause (9).
- All provisions adopted by the manufacturer and defined in the descriptive documents.

ADDITION

(3) INERIS 10ATEX0029X/01

(4) CABLE GLAND TYPE PM... or PMA...

(5) Made by RIBCO

(15) PURPOSE OF THE ADDITION

- Reduction of the range of the cable gland.
- For the sizes 1 to 4 with conical threaded joint and the sizes 20, 25, 32 and 40 for the cylindrical threaded joints application of the following standards:
 - EN 60079-0 : 2009 IEC 60079-0 : 2011
 - EN 60079-1 : 2007 IEC 60079-1 : 2007
 - EN 60079-7 : 2007 IEC 60079-7 : 2007
 - EN 60079-31 : 2009 IEC 60079-31 : 2008

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are modified as follows:

These cable glands can be used with cables diameter from 4 mm up to 29 mm.

MARKING

The marking is modified as follows:


RIBCO s.r.l

I - 20061 Carugate (MI)

PM... or PMA... (*)

INERIS 10ATEX0029X

(Year of construction)

 II 2 GD

Ex d IIC Gb

Ex e IIC Gb

Ex tb IIIC Db IP66

On the sealing ring:

Indication of the minimum and maximum diameters.

The sealing ring shall be also identified allowing the user to determine if the ring is appropriate for the cable gland.

On the small cable glands the marking can be reduced at:

RIBCO - I
PM... or PMA... (*)
INERIS 10ATEX0029X
Ex d/e/tb

On the sealing ring:

Indication of the minimum and maximum diameters.

The sealing ring shall be also identified allowing the user to determine if the ring is appropriate for the cable gland.

(*) Type is completed by letters and numbers corresponding to the size of the threaded joint and the manufacturing variations. Different types are defined in the descriptive documents.

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

None.

(16) DESCRIPTIVE DOCUMENTS

The descriptive document quoted hereafter constitutes the technical documentation describing the modifications of the equipment, subject of this present addition.

- Certification file n° DC-CG-01 rev.1 of 2014.02.06 (19 rubrics) Signed on 2014.02.06

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use are modified as follow:

- The temperature of the enclosure, at the connection point of the cable gland must not exceed the following values:
 - 100°C with sealing ring in EPDM with or without sealing compound.
 - 180°C with sealing ring in SILICON with or without sealing compound.
- The minimum temperature for use is -40°C for sealing ring in EPDM and -60°C for sealing ring in SILICON.
- The user shall use cables with thermal stability in accordance with the temperature of the sealing ring.
- The clamping of the cables, for the cable glands must be realized outside of the enclosure, nearby to the enclosure on which the cable glands are installed.

The other conditions are stipulated in the instructions.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is completed or modified as follows:

- Conformity to the standards quoted in clause (15)
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2014.03.06



The Chief Executive Officer of INERIS
By delegation
T. HOUEIX
Ex Certification Officer



ADDITION

(3)

INERIS 10ATEX0029X/02

(4)

CABLE GLAND TYPE PM... or PMA... or PA... or PMS... or PMM... or PMF...

(5)

Made by RIBCO

(15) PURPOSE OF THE ADDITION

- Addition of the new "NPT" sizes 5 and 6; and the new "ISO" sizes 50 and 63.
- Application of the following standards:
 - EN 60079-0 : 2012/A11: 2013
 - EN 60079-1 : 2007
 - EN 60079-7 : 2007
 - EN 60079-31 : 2009

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are modified as follows:

These cable glands can be used with cables diameter from 4 mm up to 45 mm.

MARKING

The marking is modified as follows:


RIBCO s.r.l

I - 20061 Carugate (MI)

PM... or PMA... or PA... or PMS... or PMM... or PMF (*)

INERIS 10ATEX0029X

(Year of construction)

 II 2 GD

Ex d IIC Gb

Ex e IIC Gb

Ex tb IIIC Db IP66

On the sealing ring:

Indication of the minimum and maximum diameters.

The sealing ring shall be also identified allowing the user to determine if the ring is appropriate for the cable gland.

On the small cable glands the marking can be reduced at:

RIBCO - I

PM... or PMA... or PA... or PMS... or PMM... or PMF...(*)

INERIS 10ATEX0029X

Ex d/e/tb

On the sealing ring:

Indication of the minimum and maximum diameters.

The sealing ring shall be also identified allowing the user to determine if the ring is appropriate for the cable gland.

(*) Type is completed by letters and numbers corresponding to the size of the threaded joint and the manufacturing variations. Different types are defined in the descriptive documents.

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

None.

(16) DESCRIPTIVE DOCUMENTS

The descriptive document quoted hereafter constitutes the technical documentation describing the modification of the equipment, subject of this present addition.

- Certification file n°DC-CG-02 rev.2 of 2014.03.10 (22 rubrics) Signed on 2014.08.25

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use are modified as follows:

The temperature of the enclosure, at the connection point of the cable gland must not exceed:

- +100°C with sealing ring in EPDM and with or without ELANTAS MC62/W363;
- +80°C with sealing ring in EPDM and with ARALDITE 2012;
- +180°C with sealing ring in SILICON;
- +155°C with sealing ring in SILICON and with ELANTAS MC62/W363).

The minimum temperature for use are:

- -40°C for sealing ring in EPDM and with or without ELANTAS MC62/W363;
- -20°C with sealing ring in EPDM and with ARALDITE 2012;
- -60°C for sealing ring in SILICON and with or without ELANTAS MC62/W363.

The user shall use cables with thermal stability in accordance with the rated service temperature.

Due to the tensile test performed at 25% of the load, the clamping of the cables, for the cable entries must be realized outside of the enclosure, nearby to the enclosure on which the cable glands are installed.

(18) **ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is completed or modified as follows:

- Conformity to the standards quoted in clause (15).
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2014.10.14



The Chief Executive Officer of INERIS
By delegation
T. HOUEIX
Ex Certification Officer