



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 PTB 13.0034X | Issue No: 1 | Certificate history: |
| Status: | Current | Page 1 of 4 | Issue No. 1 (2015-09-04) Issue No. 0 (2013-10-25) |
| Date of Issue: | 2015-09-04 | | |
| Applicant: | WISKA Hoppmann & Mulsow GmbH Kisdorfer Weg 28 24568 Kaltenkirchen Germany | | |
| Electrical Apparatus: | Cable gland type *SKE/1(S)(-L)-*(-RDE) ** (LT) (**-***) | | |
| Optional accessory: | | | |
| Type of Protection: | "e", "tb" | | |
| Marking: | Ex e IIC Gb Ex tb IIIC Db | | |


Approved for issue on behalf of the IECEx
Certification Body:

Dr.-Ing. Uwe Klausmeyer

Position:

Head of Department Explosion Protection in Energy Technology

Signature:
(for printed version)


09.09.2015

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](http://www.iecex.com).

Certificate issued by:



IECEX Certificate of Conformity

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Manufacturer: **WISKA Hoppmann & Mulsow GmbH**
Kisdorfer Weg 28
24568 Kaltenkirchen
Germany

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 60079-31 : 2013 Edition:2 | 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:

[DE/PTB/ExTR13.0049/01](#)

Quality Assessment Report:

[DE/PTB/QAR11.0006/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description

The cable gland type *SKE/1(S)(-L)-*(-RDE) ** (LT) (**-*** is made from polyamide. It is used for permanently wired cables entering electrical equipment of Increased Safety "e" and Protection by enclosure "tb" type of protection.

The cable gland is installed in enclosures with threaded holes and through-holes.

The cable entry consists of an adapter with connection thread; cap nut, elastomeric sealing insert and gasket at the connection thread. Accessories are a blind plug type BS** and a nut with anti-kink-spiral .

Technical data and Nomenclature see Annex.

CONDITIONS OF CERTIFICATION: YES as shown below:

Only permanently wired cables may be entered. The user shall provide for the required strain relief.

Degree of protection will be safeguarded only when sealing and cable entry fittings are properly fitted. The manufacturer's instructions have to be followed.

The ambient temperature range of the cable glands type ESKE/1 (S)(-L)(-*)(-RDE) 12 and ESKE/1 (S)(-L)(-*)(-RDE) 12 LT is restricted to +15 °C up to +65 °C.

The types with low impact energy are suitable in the approved ambient temperature range for installation in apparatus with the risk of mechanical hazard "low" of group II and III.

Outside of this ambient temperature range these types have to be mounted into an apparatus in such a way that they are adequately protected against mechanical hazard.



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

- 1) An additional elastomeric material for the sealing ring and the flat gasket of the normal type can be used.
- 2) A flat gasket instead of the O-ring of the LT-type can be used.
- 3) The impact energy and the ambient temperature range of the Types ESKE/1 (S)(-L)(-*)(-RDE) 12, ESKE/1 (S)(-L)(-*)(-RDE) 12 LT, ESKE/1 (S)(-L)(-*)(-RDE) 16 and ESKE/1 (S)(-L)(-*)(-RDE) 16 LT is changed (see table above).
- 4) The cable gland has been retested according to IEC 60079-31:2013 Ed. 2.

Annex:

[CoCA PTB 13.0034X-Issue 1.pdf](#)



Applicant: WISKA Hoppmann & Mulsow GmbH
Kisdorfer Weg 28
24568 Kaltenkirchen
Germany

Electrical Apparatus: Cable gland type *SKE/1(S)(-L)-*(-RDE) ** (LT) (**-***)

Description of equipment

The cable gland type *SKE/1(S)(-L)-*(-RDE) ** (LT) (**-*** is made from polyamide. It is used for permanently wired cables entering electrical equipment of Increased Safety "e" and Protection by enclosure "tb" type of protection.

The cable gland is installed in enclosures with threaded holes and through-holes.

The cable entry consists of an adapter with connection thread; cap nut, elastomeric sealing insert and gasket at the connection thread.

Accessories are a blind plug type BS** and a nut with anti-kink-spiral.

Technical data

| | |
|---|--|
| Connection thread size | Metric, EN 60423: M12x1.5 to M63x1.5 |
| Connection thread length | 9 mm to 18 mm |
| Minimum wall thickness of housing | Threaded hole, metal housing: 3 mm Threaded hole, plastic housing: 3 mm Through-hole, metal housing: 1 mm Through-hole, plastic housing: 2 mm |
| Suited for cable diameters | Subject to nominal size, between 1 mm and 48 mm |
| Suited for equipment with the mechanical risk level | Depending on the size and the ambient temperature. See list below. |
| Ambient temperature range | Normal type max. -40 °C to +75 °C LT type max. -60 °C to +75 °C See table below. |
| Ingress protection | IP66 / IP68 (5 bar, 30 min.) according to EN 60529 |

| Sealing range / Anchorage range [mm] | Type of cable gland | Reduced sealing range / Anchorage range [mm] (-RDE) | Type of cable gland | Test torques [Nm] | |
|--------------------------------------|----------------------------|---|--------------------------------|-------------------|---------|
| | | | | Adapter | Cap nut |
| 3 - 6 | ESKE/1 (S)(-L)(-*) 12 (LT) | 1 - 3 | ESKE/1 (S)(-L)(-*)-RDE 12 (LT) | 2.0 | 2.0 |
| 4.5 - 9 | ESKE/1 (S)(-L)(-*) 16 (LT) | 2 - 6 | ESKE/1 (S)(-L)(-*)-RDE 16 (LT) | 1.8 | 1.3 |
| 7 - 13 | ESKE/1 (S)(-L)(-*) 20 (LT) | 4 - 8 | ESKE/1 (S)(-L)(-*)-RDE 20 (LT) | 2.3 | 1.5 |
| 10 - 17 | ESKE/1 (S)(-L)(-*) 25 (LT) | 7 - 12 | ESKE/1 (S)(-L)(-*)-RDE 25 (LT) | 3.0 | 2.0 |
| 13 - 21 | ESKE/1 (S)(-L)(-*) 32 (LT) | 9 - 14 | ESKE/1 (S)(-L)(-*)-RDE 32 (LT) | 4.5 | 3.0 |
| 17 - 28 | ESKE/1 (-L)(-*) 40 (LT) | 12 - 20 | ESKE/1 (-L)(-*)-RDE 40 (LT) | 1.0 | 10.0 |
| 23 - 35 | ESKE/1 (-L)(-*) 50 (LT) | 16 - 25 | ESKE/1 (-L)(-*)-RDE 50 (LT) | 13.0 | 12.0 |
| 34 - 48 | ESKE/1 (-L)(-*) 63 (LT) | 28 - 38 | ESKE/1 (-L)(-*)-RDE 63 (LT) | 17.0 | 16.0 |

| Type, Normal Version | Ambient temperature | Impact energy |
|-----------------------------|---------------------|---------------|
| ESKE/1 (S)(-L)(-*)(-RDE) 12 | +15 °C to +65 °C | 4 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 16 | -40 °C to +75 °C | 4 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 20 | -40 °C to +75 °C | 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 25 | -40 °C to +75 °C | 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 32 | -40 °C to +75 °C | 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 40 | -40 °C to +75 °C | 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 50 | -40 °C to +75 °C | 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 63 | -40 °C to +75 °C | 7 J |

| Type, LT Version | Ambient temperature | Impact energy |
|--------------------------------|--------------------------------------|---------------|
| ESKE/1 (S)(-L)(-*)(-RDE) 12 LT | +15 °C to +65 °C | 4 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 16 LT | -40 °C to +75 °C | 4 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 20 LT | -60 °C to +75 °C -40 °C to +75 °C | 4 J 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 25 LT | -60 °C to +75 °C -40 °C to +75 °C | 4 J 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 32 LT | -60 °C to +75 °C -40 °C to +75 °C | 4 J 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 40 LT | -60 °C to +75 °C -40 °C to +75 °C | 4 J 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 50 LT | -60 °C to +75 °C -40 °C to +75 °C | 4 J 7 J |
| ESKE/1 (S)(-L)(-*)(-RDE) 63 LT | -60 °C to +75 °C -40 °C to +75 °C | 4 J 7 J |



Nomenclature

| * | S | K | E/1 | (S) | (-L) | (-*) | (-RDE) | | ** | | (LT) | | (**_***) |
|---|---|---|-----|-----|------|------|--------|---|----|----|------|----|----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

- 1 = Type of connection thread
E = metric connection thread according to EN 60423
- 2 = code for the cable gland system
S = WISKA SPRINT System
- 3 = code for the product type
K = cable gland (Kabelverschraubung)
- 4 = code for the application area
E/1 = explosionproof area, 1st revision of this type
- 5 = optional declaration for a special cable protection
S = with anti-kink spiral
- 6 = optional declaration for a special connection thread
-L = long connection thread (only for thread E – see position 1)
- 7 = type of protection:
-e = for apparatus in the type of protection Increased Safety "e"
-i = für apparatus in the type of protection Intrinsic Safety "i", marked by a blue cap nut
- 8 = optional declaration for a additional reduced sealing insert
-RDE = reduced sealing insert
- 9 = space
- 10 = nominal size of the connection thread, for example:
16 = metric thread M16x1.5
40 = metric thread M40x1.5
- 11 = space
- 12 = optional declaration of a special temperature range
LT = low temperature configuration (-60 °C)
- (13 = space)
- (14 = optional declaration of special gaskets (not approved yet))

Conditions of Use

Only permanently wired cables may be entered. The user shall provide for the required strain relief.

Degree of protection will be safeguarded only when sealing and cable entry fittings are properly fitted. The manufacturer's instructions have to be followed.

The ambient temperature range of the cable glands type ESKE/1 (S)(-L)(-*)(-RDE) 12 and ESKE/1 (S)(-L)(-*)(-RDE) 12 LT is restricted to +15 °C up to +65 °C.

The types with low impact energy are suitable in the approved ambient temperature range for installation in apparatus with the risk of mechanical hazard "low" of group II and III.

Outside of this ambient temperature range these types have to be mounted into an apparatus in such a way that they are adequately protected against mechanical hazard.

IECEx Technical Report: DE/PTB/ExTR13.0049/01 details

| | |
|--|--|
| ExTR : | |
| ExTR Reference Number *: (automatic numbering) | DE/PTB/ExTR13.0049/01 |
| Status*: | Issued |
| ExTR Free Reference Number*: | DE/PTB/ExTR13.0049/00 |
| Date of Issue*: (yyyy-mm-dd) | 2015-09-04 |
| Details of change*: | <p>1) An additional elastomeric material for the sealing ring and the O-ring of the normal type can be used.</p> <p>2) An additional elastomeric material for the O-ring of the LT-type can be used.</p> <p>3) The impact energy and the ambient temperatur range of the Types ESKE/1 (S)(-L)(-*)(-RDE) 12, ESKE/1 (S)(-L)(-*)(-RDE) 12 LT, ESKE/1 (S)(-L)(-*)(-RDE) 16 and ESKE/1 (S)(-L)(-*)(-RDE) 16 LT is changed (see table above).</p> <p>4) The cable gland has been retested according to IEC 60079-31:2013 Ed. 2.</p> |
| List of Standards Covered*: | IEC 60079-0 (Ed.6.0); IEC 60079-31 (Ed.2); IEC 60079-7 (Ed.4) |
| Issuing ExTL*: | PTB - Physikalisch-Technische Bundesanstalt (PTB) |
| Endorsing ExCB*: | PTB - Physikalisch-Technische Bundesanstalt (PTB) |
| Manufacturer*: | WISKA Hoppmann & Mulsow GmbH Kisdorfer Weg 28 24568 Kaltenkirchen |
| Country of Manufacture*: | Germany |
| Ex Protection*: | Ex e IIC Gb Ex tb IIIC Db |
| Ratings: | see certificate |
| Product*: | Cable gland |
| Model Reference*: | type *SKE/1(S)(-L)(-*)(-RDE) ** (LT) (**-***) |
| Related IECEx Certificates: | IECEx PTB 13.0034X issue: 1 [Current] |
| Comment: | |
| Attachment: | |

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