



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

Certificate No.: IECEx PTB 13.0027X

Issue No: 1

Certificate history:

Issue No. 1 (2017-09-15)

Issue No. 0 (2013-07-22)

Status: Current

Page 1 of 4

Date of Issue: 2017-09-15

Applicant: WISKA Hoppmann GmbH  
Kisdorfer Weg 28  
24568 Kaltenkirchen  
Germany

Equipment: Cable gland type \*MSKE(S)(-L)(-\*\*)(-RDE) \*\*(-\*\*) (LT) (MFD \*\*/\*\*\*(-\*\*/\*\*\*)) (\*\*\*\*\*)

Optional accessory:

Type of Protection: "eb", "tb"

Marking:

Ex eb IIC Gb  
Ex tb III C Db

Approved for issue on behalf of the IECEx  
Certification Body:

Dr.-Ing. Detlev Markus

Position:

Head of Department "Explosion Protection in Energy Technology"

Signature:  
(for printed version)

Date:

14.09.17

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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:

Physikalisch-Technische Bundesanstalt (PTB)  
Bundesallee 100  
38116 Braunschweig  
Germany





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Page 2 of 4

Manufacturer: **WISKA Hoppmann 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:

|                                          |                                                                                      |
|------------------------------------------|--------------------------------------------------------------------------------------|
| <b>IEC 60079-0 : 2011</b><br>Edition:6.0 | Explosive atmospheres - Part 0: General requirements                                 |
| <b>IEC 60079-31 : 2013</b><br>Edition:2  | Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t" |
| <b>IEC 60079-7 : 2015</b><br>Edition:5.0 | 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/ExTR13.0032/01](#)

### Quality Assessment Report:

[DE/PTB/QAR11.0006/03](#)



# IECEx Certificate of Conformity

Certificate No: IECEx PTB 13.0027X

Issue No: 1

Date of Issue: 2017-09-15

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

#### Description

The cable gland type \*MSKE(S)(-L)(-\*)(-RDE) \*\*(-\*\*) (LT) (MFD \*\* / \*\*\*(-\*\* / \*\*)) (\*\*\*\*) is made from brass. It is used for permanently wired cables entering electrical equipment of Increased Safety "eb" and Protection by Enclosure "tb" type of protection.

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

The cable gland consists of an adapter with connection thread; cap nut, polyamide sealing element and elastomeric sealing ring.

Accessories used are: blind plug type BS\*\*, different earthing elements, multiple and specially shaped sealing elements, nut with anti-kink-spiral, connection thread sealing rings and counter nut.

Technical data and Nomenclature see Annex.

### SPECIFIC CONDITIONS OF USE: 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 must be followed.



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Certificate No: IECEx PTB 13.0027X

Issue No: 1

Date of Issue: 2017-09-15

Page 4 of 4

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

- 1) The company's name is changed to "WISKA Hoppmann GmbH".
- 2) Addition of multiple sealing inserts.
- 3) The type reference is changed to type \*MSKE(S)(-L)(-\*)(-RDE) \*\*(-\*\*) (LT) (MFD \*\* / \*\*\*(-\*\* / \*\*\*) (\*\*\*\*\*).
- 4) New test according to IEC 60079-0:2011 (Ed. 6), IEC 60079-7:2015 (Ed. 5) and IEC 60079-31:2013 (Ed. 2)

## Annex:

[COCA130027-01.pdf](#)



Applicant: WISKA Hoppmann GmbH  
Kisdorfer Weg 28  
24568 Kaltenkirchen  
Germany

Electrical Apparatus: Cable gland type \*MSKE(S)(-L)(-\*\*-RDE) \*\*(-\*\*) (LT)  
(MFD \*\*/\*\*\*(-\*\*/\*\*\*\*)) (\*\*\*\*\*)

### Description

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

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

The cable gland consists of an adapter with connection thread in two lengths; sealing element, cap nut and sealing ring at the connection thread.

Accessories used are: blind plug type BS\*\*, different earthing elements, multiple and specially shaped sealing elements, nut with anti-kink-spiral, connection thread sealing rings and counter nut.

### Technical data

|                                                                         |                                                                                                                                                            |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection thread size                                                  | Metric, EN 60423: M12x1.5 to M75x1.5<br>Metric, DIN 89280: M16x1.5 to M72x2<br>NPT, ANSI 1.20.1: NPT 1/4" up to NPT 2 1/2"<br>Pg, DIN 40430: Pg 7 to Pg 48 |
| Connection thread length                                                | 5 mm to 15 mm                                                                                                                                              |
| Minimum wall thickness of housing                                       | Threaded hole, metal housing: 3 mm<br>Threaded hole, plastic housing: 5 mm<br>Through-hole, metal housing: 1 mm<br>Through-hole, plastic housing: 2 mm     |
| Suited for cable diameters                                              | Subject to nominal size,<br>between 1 mm and 62 mm                                                                                                         |
| Suited for equipment of device group IIC with the mechanical risk level | high                                                                                                                                                       |
| Operating temperature range                                             | Normal type -40 °C ...+75 °C<br>LT type -60 °C ...+75 °C                                                                                                   |
| Ingress protection                                                      | IP66 / IP68 (5 bar, 30 min)                                                                                                                                |

| Sealing range / Anchorage range [mm] | Type of cable gland                                                                                                                                                                                                          | Reduced sealing range / Anchorage range [mm] (-RDE) | Type of cable gland                                                                                                                                                                                                                                      | Test torques [Nm] |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 4 ... 7                              | EMSKE(S)(-L) 12 (LT) (****)<br>PMSKE(S)(-L) 7-12 (LT) (****)<br>NMSKE(S) 1/4 (LT) (****)                                                                                                                                     | 1 ... 3                                             | EMSKE(S)(-L)-RDE 12 (LT) (****)<br>PMSKE(S)(-L)-RDE 7-12 (LT) (****)<br>NMSKE(S)-RDE 1/4 (LT) (****)                                                                                                                                                     | 4                 |
| 5 ... 10                             | EMSKE(S)(-L) 16 (LT) (****)<br>EMSKE(S)(-L) 12-16 (LT) (****)<br>NMSKE(S) 3/8 (LT) (****)<br>PMSKE(S)(-L) 7-16 (LT) (****)<br>PMSKE(S)(-L) 9-16 (LT) (****)<br>PMSKE(S)(-L) 11-16 (LT) (****)<br>MMSKE(S) 16 (LT) (****)     | 2 ... 6                                             | EMSKE(S)(-L)-RDE 16 (LT) (****)<br>EMSKE(S)(-L)-RDE 12-16 (LT) (****)<br>NMSKE(S)-RDE 3/8 (LT) (****)<br>PMSKE(S)(-L)-RDE 7-16 (LT) (****)<br>PMSKE(S)(-L)-RDE 9-16 (LT) (****)<br>PMSKE(S)(-L)-RDE 11-16 (LT) (****)<br>MMSKE(S)-RDE 16 (LT) (****)     | 4                 |
| 6 ... 13                             | EMSKE(S)(-L) 20 (LT) (****)<br>EMSKE(S)(-L) 16-20 (LT) (****)<br>NMSKE(S) 1/2 (LT) (****)<br>PMSKE(S)(-L) 11-20 (LT) (****)<br>PMSKE(S)(-L) 13.5-20 (LT) (****)<br>PMSKE(S)(-L) 16-20 (LT) (****)<br>MMSKE(S) 18 (LT) (****) | 4 ... 8                                             | EMSKE(S)(-L)-RDE 20 (LT) (****)<br>EMSKE(S)(-L)-RDE 16-20 (LT) (****)<br>NMSKE(S)-RDE 1/2 (LT) (****)<br>PMSKE(S)(-L)-RDE 11-20 (LT) (****)<br>PMSKE(S)(-L)-RDE 13.5-20 (LT) (****)<br>PMSKE(S)(-L)-RDE 16-20 (LT) (****)<br>MMSKE(S)-RDE 18 (LT) (****) | 8                 |
| 10 ... 17                            | EMSKE(S)(-L) 25 (LT) (****)<br>EMSKE(S)(-L) 20-25 (LT) (****)<br>NMSKE(S) 3/4 (LT) (****)<br>PMSKE(S)(-L) 13.5-25 (LT) (****)<br>PMSKE(S)(-L) 16-25 (LT) (****)<br>PMSKE(S)(-L) 21-25 (LT) (****)<br>MMSKE(S) 24 (LT) (****) | 7 ... 12                                            | EMSKE(S)(-L)-RDE 25 (LT) (****)<br>EMSKE(S)(-L)-RDE 20-25 (LT) (****)<br>NMSKE(S)-RDE 3/4 (LT) (****)<br>PMSKE(S)(-L)-RDE 13.5-25 (LT) (****)<br>PMSKE(S)(-L)-RDE 16-25 (LT) (****)<br>PMSKE(S)(-L)-RDE 21-25 (LT) (****)<br>MMSKE(S)-RDE 24 (LT) (****) | 10                |
| 13 ... 21                            | EMSKE(S)(-L) 32 (LT) (****)<br>EMSKE(S)(-L) 25-32 (LT) (****)<br>NMSKE(S) 1 (LT) (****)<br>PMSKE(S)(-L) 21-32 (LT) (****)<br>MMSKE(S) 30 (LT) (****)                                                                         | 9 ... 14                                            | EMSKE(S)(-L)-RDE 32 (LT) (****)<br>EMSKE(S)(-L)-RDE 25-32 (LT) (****)<br>NMSKE(S)-RDE 1 (LT) (****)<br>PMSKE(S)(-L)-RDE 21-32 (LT) (****)<br>MMSKE(S)-RDE 30 (LT) (****)                                                                                 | 20                |
| 16 ... 28                            | EMSKE(S)(-L) 40 (LT) (****)<br>EMSKE(S)(-L) 32-40 (LT) (****)<br>NMSKE(S) 1 1/4 (LT) (****)<br>PMSKE(S)(-L) 29-40 (LT) (****)<br>MMSKE(S) 36 (LT) (****)                                                                     | 12 ... 20                                           | EMSKE(S)(-L)-RDE 40 (LT) (****)<br>EMSKE(S)(-L)-RDE 32-40 (LT) (****)<br>NMSKE(S)-RDE 1 1/4 (LT) (****)<br>PMSKE(S)(-L)-RDE 29-40 (LT) (****)<br>MMSKE(S)-RDE 36 (LT) (****)                                                                             | 20                |
| 21 ... 35                            | EMSKE(S)(-L) 50 (LT) (****)<br>EMSKE(S)(-L) 40-50 (LT) (****)<br>NMSKE(S) 1 1/2 (LT) (****)<br>PMSKE(S)(-L) 36-50 (LT) (****)<br>PMSKE(S)(-L) 42-50 (LT) (****)<br>MMSKE(S) 45 (LT) (****)                                   | 16 ... 25                                           | EMSKE(S)(-L)-RDE 50 (LT) (****)<br>EMSKE(S)(-L)-RDE 40-50 (LT) (****)<br>NMSKE(S)-RDE 1 1/2 (LT) (****)<br>PMSKE(S)(-L)-RDE 36-50 (LT) (****)<br>PMSKE(S)(-L)-RDE 42-50 (LT) (****)<br>MMSKE(S)-RDE 45 (LT) (****)                                       | 30                |
| 34 ... 48                            | EMSKE(S)(-L) 63 (LT) (****)<br>EMSKE(S)(-L) 50-63 (LT) (****)<br>NMSKE(S) 2 (LT) (****)<br>PMSKE(S)(-L) 48-63 (LT) (****)<br>MMSKE(S) 56 (LT) (****)                                                                         | 28 ... 38                                           | EMSKE(S)(-L)-RDE 63 (LT) (****)<br>EMSKE(S)(-L)-RDE 50-63 (LT) (****)<br>NMSKE(S)-RDE 2 (LT) (****)<br>PMSKE(S)(-L)-RDE 48-63 (LT) (****)<br>MMSKE(S)-RDE 56 (LT) (****)                                                                                 | 40                |
| 48 ... 62                            | EMSKE(S)(-L) 75 (LT) (****)<br>EMSKE(S)(-L) 63-75 (LT) (****)<br>NMSKE(S) 2 1/2 (LT) (****)<br>MMSKE(S) 72 (LT) (****)                                                                                                       | ---                                                 | ---                                                                                                                                                                                                                                                      | 50                |



## Nomenclature

| * | M | S | K | E | (S) | (-L) | (-**) | (-RDE) |    | ** | (-**) |    | (LT) |    | (MFD **/***<br>(-**/****)) | (*****) |
|---|---|---|---|---|-----|------|-------|--------|----|----|-------|----|------|----|----------------------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6   | 7    | 8     | 9      | 10 | 11 | 12    | 13 | 14   | 15 | 16                         | 17      |

1 = Type of connection thread

- E = metric connection thread according to EN 60423
- N = NPT connection thread according to ANSI B1.20.1
- P = Pg connection thread according to DIN 40430
- M = metric connection thread according to DIN 89280

2 = material

- M = brass (Messing)

3 = code for the cable gland system

- S = WISKA SPRINT System

4 = code for the product type

- K = cable gland (Kabelverschraubung)

5 = code for the application area

- E = explosion proof area

6 = optional declaration for a special cable protection

- S = with anti-kink spiral

7 = optional declaration for a special connection thread

- L = long connection thread (only for E and P – see position 1)

8 = declaration of the material surface

- Ni = nickel plated (standard for E, N and P – see position 1)
- Cr = chromium plated
- Bl = blank (standard for M – see position 1)

9 = optional declaration for a additional reduced sealing insert

- RDE = reduced sealing insert

10 = space

11 = nominal size of the connection thread, for example:

- 16 = metric thread M16x1.5, 40 = metric thread M40x1.5
- 1/2 = NPT thread 1/2", 1 1/4 = NPT thread 1 1/4"
- 13.5 = Pg thread Pg 13.5, etc.

12 = optional declaration of the sealing range (base is the metric sealing range) – obligatory for Pg- and enlargement- cable glands, for example:

- 12 = sealing range from the cable gland M12
- 25 = sealing range from the cable gland M25
- etc.

13 = space

14 = optional declaration of a special temperature range

- LT = low temperature configuration (-60 °C)

15 = space

16 = see below

17 = optional declaration of the EMC configuration

- EMV-Z = configuration with earthing cones
- EMV-S = configuration with contact cage made of stainless steel
- EMV-C = configuration with contact cage made of copper-beryllium



|      |   |    |   |     |       |   |       |
|------|---|----|---|-----|-------|---|-------|
| (MFD |   | ** | / | *** | (- ** | / | ***)) |
| 16   |   |    |   |     |       |   |       |
| A    | B | C  | D | E   | F     | G | H     |

A = Type of insert

MFD = multiple sealing insert

B = space

C = number of holes, e.g. 01 = 1

D = slash

E = diameter of holes in 1/10 mm, e.g. 063 = 6.3 mm

F = optional second number of holes

G = optional slash

H = optional second size of holes

The sealing range of the multiple sealing inserts is between the given diameter of the hole and this diameter - 10 % (max. 1 mm less than the given diameter)

#### 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 must be followed.