



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: 3

Certificate history:

Status: **Current**

Issue No. 3 (2018-05-02)

Issue No. 2 (2017-05-05)

Date of Issue: **2018-05-02**

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Issue No. 1 (2015-09-04)

Issue No. 0 (2013-10-25)

Applicant: **WISKA Hoppmann GmbH**
Kisdorfer Weg 28
24568 Kaltenkirchen
Germany

Equipment: **Cable gland type *SKE/1(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:

27.04.18

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:

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





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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 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 Explosive atmospheres - Part 0: General requirements
Edition:6.0
IEC 60079-31 : 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2
IEC 60079-7 : 2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

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/ExTR13.0049/03](#)

Quality Assessment Report:

[DE/PTB/QAR11.0006/04](#)



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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) (MFD ** / * **(-** / * **)) is made from polyamide. 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 entry consists of an adapter with connection thread; cap nut, elastomeric sealing insert and gasket at the connection thread.

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

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 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):

New plastic material for the cap nut and new elastomeric materials for the sealing insert.

Annex:

[COCA130034X-03.pdf](#)



Applicant: WISKA Hoppmann GmbH
Kisdorfer Weg 28
24568 Kaltenkirchen
Germany

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

Description

The cable gland type *SKE/1(S)(-L)-*(-RDE) ** (LT) (MFD **/***(-**/***)) is made from polyamide. 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 entry consists of an adapter with connection thread; cap nut, elastomeric sealing insert and gasket at the connection thread.

Accessories are a multiple sealing insert, 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 mechanical risk level	Depends on the size and the ambient temperature. See table 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]	
				Adapt-er	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)	11,0	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	4J
ESKE/1 (S)(-L)(-*)(-RDE) 16	-40 °C to +75 °C	4J
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	4 J
	-40 °C to +75 °C	7 J
ESKE/1 (S)(-L)(-*)(-RDE) 25 LT	-60 °C to +75 °C	4 J
	-40 °C to +75 °C	7 J
ESKE/1 (S)(-L)(-*)(-RDE) 32 LT	-60 °C to +75 °C	4 J
	-40 °C to +75 °C	7 J
ESKE/1 (S)(-L)(-*)(-RDE) 40 LT	-60 °C to +75 °C	4 J
	-40 °C to +75 °C	7 J
ESKE/1 (S)(-L)(-*)(-RDE) 50 LT	-60 °C to +75 °C	4 J
	-40 °C to +75 °C	7 J
ESKE/1 (S)(-L)(-*)(-RDE) 63 LT	-60 °C to +75 °C	4 J
	-40 °C to +75 °C	7 J

Nomenclature

*	S	K	E/1	(S)	(-L)	(-*)	(-RDE)	**	(LT)	(MFD **/***(-**/****))			
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
 - (N = NPT-connection thread acc. to ANSI B1.20.1 → not part of this certificate, later option)
- 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 multiple sealing insert and sealing insert gaskets for special and flat cable forms (see below)

Nomenclature of multiple sealing insert

MFD		**	/	***	(-**	/	***)
1	2	3	4	5	6	7	8

- 1 = Type of insert
MFD = multiple sealing insert
- 2 = space
- 3 = number of holes, e.g. 01 = 1
- 4 = slash
- 5 = size of holes, e.g. 063 = 6.3 mm*
- 6 = optional second number of holes
- 7 = optional slash
- 8 = 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

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