Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin
Nationales Metrologieinstitut

(1) # EU-TYPE EXAMINATION CERTIFICATE

(Translation)

(2) Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

PTB 13 ATEX 1015 X **Issue: 02**

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

(5) Manufacturer: WISKA Hoppmann GmbH

(6) Address: Kisdorfer Weg 28, 24568 Kaltenkirchen, Germany

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential Test Report PTB Ex 18-17089.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 + A11:2013, EN 60079-7:2015, EN 60079-31:2014

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:

Ex II 2 G Ex eb IIC Gb

Ex II 2 D Ex tb IIIC Db

Konformitätsbewertungsstelle, Sektor Explosionsschutz
On behalf of PTB:

Braunschweig, May 2, 2018

Dr.-Ing. D. Markus
Direktor und Professor

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT 80

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(13) # SCHEDULE

(14) **EU-Type Examination Certificate Number PTB 13 ATEX 1015 X, Issue: 02**

(15) Description of Product

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

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

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

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	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

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Sealing range / Ancho-rage range [mm)	Type of cable gland	Reduced sealing range / Ancho-rage 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)	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 -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

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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 = for 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 (see below)

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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 = diameter of holes in 1/10 mm, 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)

Details of change

Optionally a new plastic material for the cap nut and the plug type BS** as well as a new elastomeric material for the sealing insert can be used.

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(17) Specific 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 adequate protected against mechanical hazard.

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(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

According to Article 41 of Directive 2014/34/EU, EC-type examination certificates which have been issued according to Directive 94/9/EC prior to the date of coming into force of Directive 2014/34/EU (April 20, 2016) may be considered as if they were issued already in compliance with Directive 2014/34/EU. By permission of the European Commission supplements to such EC-type examination certificates and new issues of such certificates may continue to hold the original certificate number issued before April 20, 2016.

Konformitätsbewertungsstelle, Sektor Explosionsschutz
On behalf of PTB:

Braunschweig, May 2, 2018

Dr.-Ing. D. Markus
Direktor und Professor

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