Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(1) # EC-TYPE-EXAMINATION CERTIFICATE

(Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

PTB 13 ATEX 1015 X

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

(5) Manufacturer: WISKA Hoppmann & Mulsow GmbH

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

(7) This equipment and any acceptable variation thereto are 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 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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 13-13028.

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

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2009

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

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

II 2 G Ex e IIC Gb

II 2 D Ex tb IIIC Db

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, January 13, 2014

Dipl.-Phys. U. Völkel

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

(13) # S C H E D U L E

(14) ## EC-TYPE-EXAMINATION CERTIFICATE PTB 13 ATEX 1015 X

(15) Description of equipment

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

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

It is installed in housings with trough-holes or threaded holes, with or without counter nut from metal.

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
(N = NPT- connection thread according to ANSI B1.20.1 → not included in this EC-Type Examination 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 = cap nut with anti-kink spiral
6 = optional declaration for a special connection thread:
-L = long connection thread (only for thread E)
7 = type of protection:
-e = for (apparatus with the type of protection) “Increased safety – "e"
-i = for (apparatus with the type of protection) “Intrinsic safety –"i",
marked by a blue cap nut
8 = optional declaration for an additional reduced sealing insert:
-RDE = reduced sealing insert
9 = space

10 = nominal size of the connection thread, e.g.:
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 (not approved yet)

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 of device group II with the mechanical risk level	Depends on the size and the ambient temperature. See list below.
Operating temperature range	Normal type -40°C to +75°C LT type -60°C to +75°C
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)	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

(16) Test report PTB Ex 13-13028

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 13 ATEX 1015 X

(17) Special conditions for safe use

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

Degree of protection IP66 will be safeguarded only when sealing and cable entry fittings are properly fitted. The manufacturer's instructions must be followed.

Types with a low impact force shall be mounted into the enclosure in such a way that they are mechanically protected against impact force.

The EC-Type Examination Certificate as well as future supplements thereto apply as supplement to EC-Type Examination Certificate PTB 05 ATEX 1068 X at the same time.

(18) Essential health and safety requirements

Met by compliance with afore mentioned standards.

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, January 13, 2014

Dipl.-Phys. U. Völkel