An-Institut der TU Bergakademie Freiberg

# [1] 2<sup>nd</sup> Addition to EC-TYPE EXAMINATION CERTIFICATE IBExU08ATEX1063 X

according to Directive 94/9/EC, Annex III

(Translation)



[2] Equipment: Cable Entry

Type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\*

[3] Manufacturer: U. I. Lapp GmbH

[4] Address: Schulze-Delitzsch-Straße 25

70565 Stuttgart GERMANY

#### [5] Additions/Modifications

The Cable Entries type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\* mentioned under [2] are manufactured in future according to the standards EN 60079-0:2012, EN 60079-7:2007 and EN 60079-31:2009 and marked with the equipment protection level.

All technical data and parameters remain unchanged.

#### [6] Test report

The proof of explosion protection of the additions mentioned under [5] is recorded in the test report IB-12-3-086 of 13 November 2012. The test documents are part of the test report.

#### [7] Test result

IBExU certifies that the equipment mentioned under [2] fulfils the Essential Health and Safety Requirements given in Annex II to the Directive 94/9/EC by compliance with EN 60079-0:2012, EN 60079-7:2007 and EN 60079-31:2009.

The Cable Entries type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\* fulfil, also in combination with the Sealing Plugs SKINTOP® SDV-M\*\* ATEX \*\*\* respectively SKINTOP® SDVR-M\*\* ATEX \*\*\*, the requirements of explosion protection for equipment of Group II, Category 2G, type of protection Increased safety "e" as well as Category 1D, type of protection protection by enclosure "t".

The marking of the equipment mentioned under [2] shall include the following:

(x) II 2G Ex eb IIC

(Ex) II 1D Ex ta IIIC

#### [8] Special conditions for safe use

The special conditions contained in the Schedule to the EC-Type Examination Certificate IBExU08ATEX1063 X keep their validity.

This Addition is only valid in combination with the EC-Type Examination Certificate IBExU08ATEX1063 X of 25 June 2008 with 1<sup>st</sup> Addition.

IBExU Institut für Sicherheitstechnik GmbH

Authorised for certifications -Explosion protection-

By order

(Dr. Wagner)



Freiberg, 13 November 2012

Certificates without signature and seal are not valid.
Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

An-Institut der TU Bergakademie Freiberg

# [1] 1<sup>st</sup> Addition to EC-TYPE EXAMINATION CERTIFICATE IBExU08ATEX1063 X

according to Directive 94/9/EC, Annex III (Translation)



[2] Equipment:

Cable entry

Type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\*

a) Thread sizes according to

b) Added thread sizes

IBExU08ATEX1063 X

M12x1.5; M16x1.5; M20x1.5 and M25x1.5

M32x1.5; M40x1.5; M50x1.5 and M63x1.5

[3] Manufacturer:

U. I. Lapp GmbH

[4] Address:

Schulze-Delitzsch-Straße 25

70565 Stuttgart GERMANY

#### [5] Additions/Modifications

The Cable entries type SKINTOP® K(R)-M\*\* ATEX plus \*\*\* are extended with the thread sizes M32x1.5; M40x1.5; M50x1.5 and M63x1.5 mentioned under [2] b).

#### Type series:

Type designation	Thread size	Cable diameter (mm)	Torque (Nm)
SKINTOP® K-M32 ATEX plus ***	M32x1.5	12 - 21	12
SKINTOP® K-M40 ATEX plus ***	M40x1.5	19 - 28	18
SKINTOP® K-M50 ATEX plus ***	M50x1.5	27 - 35	22.5
SKINTOP® K-M63 ATEX plus ***	M63x1.5	36 - 45	24

Type designation (design with reduced seal insert)	Thread size	Cable diameter (mm)	Torque (Nm)
SKINTOP® KR-M32 ATEX plus ***	M32x1.5	9 - 15	12
SKINTOP® KR-M40 ATEX plus ***	M40x1.5	16 - 23	18
SKINTOP® KR-M50 ATEX plus ***	M50x1.5	22 - 29	22.5
SKINTOP® KR-M63 ATEX plus ***	M63x1.5	29 - 39	24

\*\*\* = Manufacturer's indications without special meaning for the explosion protection

(e. g. longer connection threads)

Operating temperature range:

-20 °C up to +80°C

Degree of protection according to EN 60529:

IP 66, IP 68 (10 bar, 30 min)

To close unneeded Cable entries type SKINTOP® K-M\*\* ATEX plus \*\*\* respectively SKINTOP® KR-M\*\* ATEX plus \*\*\* the respective Sealing plug SKINTOP® SDV-M\*\* ATEX \*\*\* respectively SKINTOP® SDVR-M\*\* ATEX \*\*\* can be used.

#### Technical data Sealing plugs:

Type series SDV-M\*\*:

M32, M40, M50 and M63

Type series SDVR-M\*\*:

M32

Max. operating temperature:

-20 °C up to +70 °C

Degree of protection according to EN 60529:

IP 66, IP 68 (10 bar, 30 min)

All other electrical and mechanical parameters remain unchanged.

#### [6] Test report

The proof of explosion protection of the additions mentioned under [5] is recorded in the test report IB-09-3-358 of 04 February 2010. The test documents are part of the test report.

An-Institut der TU Bergakademie Freiberg

#### [7] Test result

IBExU certifies that the equipment mentioned under [2] b) fulfils the Essential Health and Safety Requirements given in Annex II to the Directive 94/9/EC by compliance with EN 60079-0:2006, EN 60079-7:2007, EN 61241-0:2006 and EN 61241-1:2004 +Cor.:2006.

The Cable entries type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\* fulfil, also in combination with the Sealing plugs SKINTOP® SDV-M\*\* ATEX \*\*\* respectively SKINTOP® SDVR-M\*\* ATEX \*\*\*, the requirements of explosion protection for equipment of Group II, Category 2G, type of protection Increased safety "e" as well as of Category 1D, type of protection Protection by enclosures "tD".

The marking of the equipment mentioned under [2] b) shall include the following:

⟨Ex⟩ II 2G Exell

⟨Ex⟩ II 1D Ex tD A20 IP 6X

#### [8] Special conditions for safe use

The special conditions contained in the Schedule to the EC-Type Examination Certificate IBExU08ATEX1063 X keep their validity.

This Addition is only valid in combination with the EC-Type Examination Certificate IBExU08ATEX1063 X of 25 June 2008.

IBExU Institut für Sicherheitstechnik GmbH

Fuchsmühlenweg 7 - 09

- 09599 Freiberg, GERMANY

★ +49 (0) 3731 3805-0 - ♣ +49 (0) 3731 23650

Authorised for certifications -Explosion protection-

By order

(Dr. Wagner)

Wayner

IBEXU Institut für Sicherheits-technik GmbH

- Seal -(ID no. 0637) Freiberg, 04 February 2010

Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

An-Institut der TU Bergakademie Freiberg

[1] EC-TYPE EXAMINATION CERTIFICATE

according to Directive 94/9/EC, Annex III (Translation)



[2] Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres, Directive 94/9/EC

[3] EC-Type Examination Certificate Number: IBExU08ATEX1063 X

[4] Equipment:

Cable entry

type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\*

[5] Manufacturer:

U. I. Lapp GmbH

[6] Address:

Schulze-Delitzsch-Straße 25

70565 Stuttgart GERMANY

[7] The design of the equipment mentioned under [4] and any acceptable variations thereto are specified in the schedule to this EC-Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY number 0637 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that the equipment mentioned under [4] has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The test results are recorded in the test report IB-08-3-080 of 25 June 2008.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2006, EN 60079-7:2007, EN 61241-0:2006 and EN 61241-1:2004 +Cor.:2006.

- [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 under [17] in the schedule to this EC-Type Examination Certificate.
- [11] This EC-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this directive apply to the manufacture and supply of this equipment.

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Institut für Sicherheits-

technik

GmbH

епп-Nr. 06

[12] The marking of the equipment mentioned under [4] shall include the following:

🖾 II 2G Exell

(Ex) II 1D Ex tD A20 IP 6X

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 - 09599 Freiberg, GERMANY 1 +49 (0) 3731 3805-0 - 49 (0) 3731 23650

Authorised for certifications -Explosion protection-

By order

- Seal -(ID no. 0637)

\_\_\_\_\_

Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 26 June 2008

(Dr. Lösch)

Schedule

An-Institut der TU Bergakademie Freiberg

[13] Schedule

#### to the EC-Type Examination Certificate IBExU08ATEX1063 X [14]

#### Description of equipment [15]

The Cable entries SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\* (with reduced seal insert) are suitable for dust tight and waterproof cable insertions (IP 66 according to EN 60529) in the mechanical and instrument engineering, instrumentation and control, chemical industry, plant construction and medical-technical equipment, especially for fixed installed cables in potentially explosive atmospheres.

They consist of distance piece and cover nut of PA6, the sealing ring for the lamella cage of CR/NBR as well as the o-ring for the connection side.

#### Type series:

Type designation	Thread size	Cable diameter (mm)	Torque (Nm)
SKINTOP® K-M12 ATEX plus ***	M12 x 1.5	3-5.5	1.2
SKINTOP® K-M16 ATEX plus ***	M16 x 1.5	7-9	3
SKINTOP® K-M20 ATEX plus ***	M20 x 1.5	7-13	3.8
SKINTOP® K-M25 ATEX plus ***	M25 x 1.5	11-17	5

Type designation (design with reduced seal insert)	Thread size	Cable diameter (mm)	Torque (Nm)
SKINTOP® KR-M12 ATEX plus ***	M12 x 1.5	2-4	1.2
SKINTOP® KR-M16 ATEX plus ***	M16 x 1.5	4-6	3
SKINTOP® KR-M20 ATEX plus ***	M20 x 1.5	5-10	3.8
SKINTOP® KR-M25 ATEX plus ***	M25 x 1.5	6-13	5

Manufacturer's indications without special meaning for the explosion protection

(e. g. longer connection threads)

Operating temperature range:

-20 °C up to +80°C

Degree of protection according to EN 60529: IP 66, IP 68 (10 bar, 30 min)

To close unneeded Cable entries type SKINTOP® K-M\*\* ATEX plus \*\*\* respectively SKINTOP® KR-M\*\* ATEX plus \*\*\* the respective Sealing plug SKINTOP® SDV-M\*\* ATEX \*\*\* respectively SKINTOP® SDVR-M\*\* ATEX \*\*\* can be used.

#### Technical data Sealing plugs:

Type series SDV-M\*\*: Type series SDVR-M\*\*: Max. operating temperature: M12, M16, M20 and M25 M16, M20 and M25

-20 °C up to +70 °C

Degree of protection according to EN 60529: IP 66, IP 68 (10 bar, 30 min)

#### Test report [16]

The proof of explosion protection is recorded in the test report IB-08-3-080 of 25 June 2008. The test documents are listed in the annex to the test report.

### Summary

The Cable entries type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\* fulfil, also in combination with the Sealing plugs SKINTOP® SDV-M\*\* ATEX \*\*\* respectively SKIN-TOP® SDVR-M\*\* ATEX \*\*\*, the requirements of explosion protection for equipment of Group II, Category 2G, type of protection Increased safety "e" as well as of Category 1D, type of protection Protection by enclosures "tD".

An-Institut der TU Bergakademie Freiberg

#### [17] Special conditions

- The Cable entries SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\* may only be used for non-armoured and non-braided cables and only for fixed installations.
- The Cable entries of the thread sizes M12, M16 and M20 must be installed and operated mechanically protected in accordance with EN 60079-0, paragraph 26.4.2 due to the low risk of mechanical danger.
- The Sealing Plugs type SKINTOP® SDV-M\*\* ATEX plus \*\*\* respectively SKINTOP® SDVR-M\*\* ATEX plus \*\*\* may only be used in combination with the appropriate Cable entry SKIN-TOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\*.
- The service temperature must not exceed 80 °C at the Cable entry and 70 °C at the Sealing plug.

### [18] Essential Health and Safety Requirements

Confirmed by compliance with standards (see [9]).

By order

Freiberg, 25 June 2008

(Dr. Lösch)



# 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 IBE 13.0027X	issue No.:0	Certificate history:
		,	Transcript State Control of the Cont
Status:	Current		

Date of Issue: 2013-10-17 Page 1 of 3

Applicant: U. I. Lapp GmbH
Schulze-Delitzsch-Straße 25

70565 Stuttgart Germany

Ex eb IIC

Electrical Apparatus: Cable Entries

Optional accessory: Type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\*

Type of Protection: increased safety "e" and protection by enclosure "t"

Ex ta IIIC

Approved for issue on behalf of the IECEx Prof. Dr. Tammo Redeker

Certification Body:

Position: Head of Certification Body

Signature:
(for printed version)

Date:

This certificate and schedule may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.
 The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Marking:

IBExU Institut für Sicherheitstechnik GmbH Certification Body Fuchsmühlenweg 7 09599 Freiberg Germany





# IECEx Certificate of Conformity

Certificate No.:

IECEx IBE 13.0027X

Date of Issue:

2013-10-17

Issue No.: 0

Page 2 of 3

Manufacturer:

U. I. Lapp GmbH Schulze-Delitzsch-Straße 25 70565 Stuttgart GERMANY 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

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-31: 2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 1

IEC 60079-7: 2006-07

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition: 4

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/IBE/ExTR13.0050/00

Quality Assessment Report:

DE/IBE/QAR13.0003/00



# IECEx Certificate of Conformity

Certificate No.:

IECEx IBE 13.0027X

Date of Issue:

2013-10-17

Issue No.: 0

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#### Schedule

#### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Cable entries type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\* (with reduced seal insert) are suitable for dust tight and waterproof cable insertions in the mechanical and instrument engineering, instrumentation and control, chemical industry, plant construction and medical-technical equipment, especially for fixed installed cables in potentially explosive atmospheres.

They consist of distance piece and cover nut of PA6, the sealing ring for the lamella cage of CR/NBR as well as the NBR o-ring for the connection side.

To close unneeded Cable entries type SKINTOP® K-M\*\* ATEX plus \*\*\* respectively SKINTOP® KR-M\*\* ATEX plus \*\*\* the respective Sealing plug SKINTOP® SDV-M\*\* ATEX \*\*\* respectively SKINTOP® SDVR-M\*\* ATEX \*\*\* can be used.

Degree of Protection: IP 66 / IP 68 (10 bar / 30 min) according to IEC 60529
Operating temperature range: -20 °C up to +80 °C (Cable entry)
-20 °C up to +70 °C (Sealing plug)

Type series: see Annex

#### CONDITIONS OF CERTIFICATION: YES as shown below:

The Cable entries type SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\* may only be used for non-armoured and non-braided cables and only for fixed installations.

The Cable entries of the thread sizes M12, M16 and M20 must be installed and operated mechanically protected in accordance with IEC 60079-0, paragraph 26.4.2 due to the low risk of mechanical danger.

The Sealing plugs type SKINTOP® SDV-M\*\* ATEX plus \*\*\* respectively SKINTOP® SDVR-M\*\* ATEX plus \*\*\* may only be used in combination with the appropriate Cable entry SKINTOP® K-M\*\* ATEX plus \*\*\* and SKINTOP® KR-M\*\* ATEX plus \*\*\*.

The service temperature must not exceed +80 °C at the Cable entry and +70 °C at the Sealing plug.