An-Institut der TU Bergakademie Freiberg

1st Addition to [1] **EC-TYPE EXAMINATION CERTIFICATE IBEXU06ATEX1012 X**

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



[2] Equipment: Conduit-Cable Gland

a) Types according to IBExU06ATEX1012 X: Type SILVYN® MSK-M16 ATEX ***

b) added types:

SILVYN® MSK-M** ATEX ***, SILVYN® MSKR-M** ATEX ***, SILVYN® MSK-M** ATEX BRUSH *** and SILVYN® MSKR-M** ATEX BRUSH ***

[3] Manufacturer: U. I. Lapp GmbH

[4] Address: Schulze-Delitzsch-Straße 25

70565 Stuttgart **GERMANY**

Additions/Modifications [5]

The additions/modifications of the equipment mentioned in [2] compared to the already certified equipment relate to:

Extension of the series from M16 to the in [6] mentioned types

Use of a ring brush as a low-ohmic shield contact for an optimum EMC protection.

All components relevant for explosion protection remain unchanged.

Description of the component [6]

Addition of type series:

Type designation	Thread size	Cable diameter (mm)	Tightening torque (Nm)
SILVYN® MSK-M12 ATEX ***	M12 x 1.5	3-7	7
SILVYN® MSK-M16 ATEX ***	M16 x 1.5	4.5-10	7
SILVYN® MSK-M20 ATEX ***	M20 x 1.5	7-13	12
SILVYN® MSK-M25 ATEX ***	M25 x 1.5	9-17	12
SILVYN® MSK-M32 ATEX ***	M32 x 1.5	11-21	17
SILVYN® MSK-M40 ATEX ***	M40 x 1.5	19-28	17
SILVYN® MSK-M50 ATEX ***	M50 x 1.5	26-35	20
SILVYN® MSK-M63 ATEX ***	M63 x 1.5	34-45	20
SILVYN® MSK-M63 PLUS ATEX ***	M63 x 1.5	44-55	30
SILVYN® MSKR-M12 ATEX ***	M12 x 1.5	2-5	7
SILVYN® MSKR-M16 ATEX ***	M16 x 1.5	4-7	7
SILVYN® MSKR-M20 ATEX ***	M20 x 1.5	5-10	12
SILVYN® MSKR-M25 ATEX ***	M25 x 1.5	6-13	12
SILVYN® MSKR-M32 ATEX ***	M32 x 1.5	7-15	17
SILVYN® MSKR-M40 ATEX ***	M40 x 1.5	16-23	17
SILVYN® MSKR-M50 ATEX ***	M50 x 1.5	19-29	20
SILVYN® MSKR-M63 ATEX ***	M63 x 1.5	32-39	20

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Type designation	Thread size	Cable diameter (mm)	Tightening torque (Nm)
SILVYN® MSK-M25 ATEX BRUSH ***	M25 x 1.5	9-17	12
SILVYN® MSK-M32 ATEX BRUSH ***	M32 x 1.5	11-21	17
SILVYN® MSK-M40 ATEX BRUSH ***	M40 x 1.5	19-28	17
SILVYN® MSK-M50 ATEX BRUSH ***	M50 x 1.5	26-35	20
SILVYN® MSK-M63 ATEX BRUSH ***	M63 x 1.5	34-45	20
SILVYN® MSK-M63 PLUS ATEX BRUSH ***	M63 x 1.5	44-55	30
SILVYN® MSKR-M12 ATEX BRUSH ***	M12 x 1.5	2-5	7
SILVYN® MSKR-M16 ATEX BRUSH ***	M16 x 1.5	4-7	7
SILVYN® MSKR-M20 ATEX BRUSH ***	M20 x 1.5	5-10	12
SILVYN® MSKR-M25 ATEX BRUSH ***	M25 x 1.5	6-13	12
SILVYN® MSKR-M32 ATEX BRUSH ***	M32 x 1.5	7-15	17
SILVYN® MSKR-M40 ATEX BRUSH ***	M40 x 1.5	16-23	17
SILVYN® MSKR-M50 ATEX BRUSH ***	M50 x 1.5	19-29	20
SILVYN® MSKR-M63 ATEX BRUSH ***	M63 x 1.5	32-39	20
SILVYN® MSK-M25 ATEX BRUSH ***	M25 x 1.5	9-17	12
SILVYN® MSK-M32 ATEX BRUSH ***	M32 x 1.5	11-21	17
SILVYN® MSK-M40 ATEX BRUSH ***	M40 x 1.5	19-28	17

[7] Test report

The proof of explosion protection of the addition/modification mentioned in [5] is explained in the test report IB-13-3-106 of 12 March 2014. The test documents are part of the test report.

[8]

IBExU certifies that the equipment mentioned in [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 60079-31:2009.

The in [2] mentioned Conduit-cable glands of the types SILVYN® MSK-M** ATEX ***, SILVYN® MSKR-M** ATEX ***, SILVYN® MSK-M** ATEX BRUSH *** and SILVYN® MSKR-M** ATEX BRUSH *** in [2] fulfil the requirements of the 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 in [2] shall include the following:

(Ex) II 2G Ex eb IIC

⟨Ex⟩ | | 1D | Ex ta | | | C

[9] Special conditions

- The Conduit-Cable Gland of the types SILVYN® MSK-M** ATEX ***, SILVYN® MSKR-M** ATEX ***, SILVYN® MSK-M** ATEX BRUSH *** and SILVYN® MSKR-M** ATEX BRUSH *** may be used only for a fixed installation. The operating company has to ensure an appropriate cable strain relief.
- The use of the cable shield in the function as the sole protection or bonding conductor is not permitted.

This addition is only valid in connection of the EC-Type Examination Certificate IBExU06ATEX1012 X of 27 January 2006.

IBExU Institut für Sicherheitstechnik GmbH

Fuchsmühlenweg 7

- 09599 Freiberg, Germany

Authorised for certifications -Explosion protection-

(Dr. Wagner)

IBEXU Institut für Sicherheits technik GmbH Seal -(ID no. 0637)

Freiberg, 13 March 2014

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.

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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: IBExU06ATEX1012 X

[4] Equipment:

Conduit-Cable Gland

Type SILVYN® MSK-M** ATEX ***

[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 this equipment 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-05-3-376 of 27 January 2006.

- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 50014:1997 +A1 +A2, EN 50019:2000 and EN 50281-1-1:1998+A1.
- [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.
- [12] The marking of the equipment mentioned under [4] shall include the following:

(€x) II 2G EEx e II

€ II 1D IP 6X

IBExU Institut für Sicherheitstechnik GmbH

Fuchsmühlenweg 7 - 09599 Freiberg, Germany

密 +49 (0) 3731 3805-0 - 曷 +49 (0) 3731 23650

Authorised for certifications -Explosion protection-

Bv order

(Dr. Lösch)

IBEXU
Institut für
Sicherheitstechnik
GmbH

- Seal -(ID no. 0637) Freiberg, 27 January 2006

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.

Schedule

An-Institut der TU Bergakademie Freiberg

[13] Schedule

[14] to the EC-TYPE EXAMINATION CERTIFICATE IBEXU06ATEX1012 X

[15] Description of equipment

The Conduit-Cable Gland type SILVYN® MSK-M** ATEX *** serves for a safe dust and water tight cable entry in potentially explosive atmospheres for unarmoured and fixed installed cables, which must be mechanically protected too. It consists of a cable gland with additional conduit-mounting.

Technical data:

Type designation:
 SILVYN[®] MSK-M16 ATEX ***

(*** - Manufacturer's indications without special meaning for

the explosion protection (e.g. longer connection threads)

- Thread size: M16x1,5

Permissible cable Ø:4.5 mm up to 10 mm

Bolt torque: 7 Nm

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

Operating temperature range: -30 °C up to +90 °C

[16] Test report

The test results are recorded in the test report IB-05-3-376 of 27 January 2006. The test documents are listed in the annex to the test report.

Summary of the test results:

The Conduit-Cable Gland type SILVYN® MSK-M** ATEX *** fulfils the requirements of explosion protection for equipment of Group II, Category 2G, type of protection Increased safety and Category 1D by application of the protective measure "Protected by enclosure".

Safety instructions:

- To ensure the degree of protection of the apparatus, the cable gland is to screwed in durably sealed into the provided bore of the apparatus.
- The service temperature on the Conduit-Cable Gland must not exceed the allowed operating temperature of 90 °C.

[17] Special conditions for safe use

The Conduit-Cable Gland type SILVYN® MSK-M** ATEX *** may only be used for fixed installation exclusively. The operating company has to ensure an appropriate clamping.

[18] Essential Health and Safety Requirements

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

By order

Freiberg, 27 January 2006

(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 13.0033X

Issue No: 0

Certificate history:

Issue No. 0 (2013-12-06)

Status:

Current

Page 1 of 3

Date of Issue:

2013-12-06

Applicant:

U.I. Lapp GmbH

Schulze-Delitzsch-Str. 25

70565 Stuttgart

Germany

Electrical Apparatus:

Cable Entries

Optional accessory:

SILVYN® MSK-M** ATEX, SILVYN® MSKR-M** ATEX, SILVYN® MSK-

M** BRUSH ATEX and SILVYN® MSKR-M** BRUSH ATEX

Type of Protection:

increased safety "e", dust ignition protection by enclosure "t"

Marking:

Ex eb IIC

Ex ta IIIC

Approved for issue on behalf of the IECEx

Certification Body:

Prof. Dr. Tammo Redeker

OCITINODITION DO

Position:

Head of Certification Body

Signature:

(for printed version)

Date:

2013-12-08

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.

Certificate issued by:

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





IECEx Certificate of Conformity

Certificate No:

IECEX IBE 13.0033X

Issue No: 0

Date of Issue:

2013-12-06

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Manufacturer:

U.I. Lapp GmbH

Schulze-Delitzsch-Str. 25

70565 Stuttgart

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/ExTR13.0051/00

Quality Assessment Report:

DE/IBE/QAR13.0003/00



IECEx Certificate of Conformity

Certificate No:

IECEx IBE 13.0033X

Issue No: 0

Date of Issue:

2013-12-06

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The conduit Cable Entries types SILVYN® MSK-M** ATEX, SILVYN® MSKR-M** ATEX (with reduced seal insert) serves for a safe dust and water tight cable entry in potentially explosive atmospheres for unarmoured and fixed installed cables, which must be mechanically protected too. It consists of a cable gland with additional conduit-mounting.

The Cable entries type SILVYN® MSK-M** ATEX BRUSH *** and SILVYN® MSKR-M** ATEX BRUSH *** use a ring brush as a low-resistance shield contact for optimal EMC protection.

Degree of protection:

IP 66, IP 68 (10 bar, 30 min) according to IEC 60529

Operating temperature range:

-30 °C up to +90 °C

For types see Annex

CONDITIONS OF CERTIFICATION: YES as shown below:

The conduit Cable Entries type SILVYN $^{\circledR}$ MSK-M** ATEX, SILVYN $^{\circledR}$ MSKR-M** ATEX, SILVYN $^{\circledR}$ MSK-M** BRUSH ATEX and SILVYN $^{\circledR}$ MSKR-M** BRUSH ATEX may only be used for fixed installation.

The service temperature must not exceed 90 °C at the Cable entry.

The use of the cable shield of the cable entries SILVYN[®] type MSK-M** ATEX BRUSH *** and SILVYN[®] MSKR-M** BRUSH ATEX in the function as the only earthed conductor or equipotential bonding conductor is not permitted.

Annex:

Annex IECExIBE13_0033 X.pdf



IECEx Certificate of Conformity



IECEX IBE 13.0033X

Date: 2013-10-01

Type designation	Thread size	Cable diameter (mm)	Torque (Nm)
SILVYN® MSK-M12 ATEX ***	M12 x 1.5	3-7	7
SILVYN® MSK-M16 ATEX ***	M16 x 1.5	4.5-10	7
SILVYN® MSK-M20 ATEX ***	M20 x 1.5	7-13	12
SILVYN® MSK-M25 ATEX ***	M25 x 1.5	9-17	12
SILVYN® MSK-M32 ATEX ***	M32 x 1.5	11-21	17
SILVYN® MSK-M40 ATEX ***	M40 x 1.5	19-28	17
SILVYN® MSK-M50 ATEX ***	M50 x 1.5	26-35	20
SILVYN® MSK-M63 ATEX ***	M63 x 1.5	34-45	20
SILVYN® MSK-M63 PLUS ATEX ***	M63 x 1.5	44-55	30
SILVYN® MSKR-M12 ATEX ***	M12 x 1.5	2-5	7.
SILVYN® MSKR-M16 ATEX ***	M16 x 1.5	4-7	7
SILVYN® MSKR-M20 ATEX ***	M20 x 1.5	5-10	12
SILVYN® MSKR-M25 ATEX ***	M25 x 1.5	6-13	12
SILVYN® MSKR-M32 ATEX ***	M32 x 1.5	7-15	17
SILVYN® MSKR-M40 ATEX ***	M40 x 1.5	16-23	. 17
SILVYN® MSKR-M50 ATEX ***	M50 x 1.5	19-29	20
SILVYN® MSKR-M63 ATEX ***	M63 x 1.5	32-39	20
SILVYN® MSK-M25 ATEX BRUSH	M25 x 1.5	9-17	12
SILVYN® MSK-M32 ATEX BRUSH	M32 x 1.5	11-21	17
SILVYN® MSK-M40 ATEX BRUSH	M40 x 1.5	19-28	17
SILVYN® MSK-M50 ATEX BRUSH	M50 x 1.5	26-35	20
SILVYN® MSK-M63 ATEX BRUSH	M63 x 1.5	34-45	20



IECEx Certificate of Conformity

IBEXU

IECEX IBE 13.0033X

Date: 2013-10-01

SILVYN® MSK-M63 PLUS ATEX BRUSH ***	M63 x 1.5	44-55	30
SILVYN® MSKR-M25 ATEX BRUSH ***	M25 x 1.5	6-13	12
SILVYN® MSKR-M32 ATEX BRUSH ***	M32 x 1.5	7-15	17
SILVYN® MSKR-M40 ATEX BRUSH ***	M40 x 1.5	16-23	17
SILVYN® MSKR-M50 ATEX BRUSH ***	M50 x 1.5	19-29	20
SILVYN® MSKR-M63 ATEX BRUSH ***	M63 x 1.5	32-39	20

Operating temperature range: -30 °C up to +90 °C

Degree of protection

according to IEC 60529: IP 66, IP 68 (10 bar, 30 min)