

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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Certificate No.:

IECEx SIR 05.0067X

Issue No: 4

Certificate history:

Status:

Current

Issue No. 4 (2018-06-04) Issue No. 3 (2013-05-14)

Date of Issue:

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Issue No. 2 (2012-04-03)

2018-06-04

Issue No. 1 (2009-05-12) Issue No. 0 (2006-05-05)

Applicant:

Weidmüller Interface GmbH & Co. KG

Klingenbergstrasse 16 D-32758 Detmold

Germany

Equipment:

Cable Glands and Stopper Boxes

Optional accessory:

Type of Protection:

Flameproof, Increased Safety and Dust Protection by Enclosure

Marking:

Ex db IIC Gb Ex eb IIC Gb Ex ta III C Da

(As applicable, refer to schedule)

Approved for issue on behalf of the IECEx

Certification Body:

C Ellaby

Position:

Signature:

(for printed version)

Date:

Deputy Certification Manager

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:

SIRA Certification Service CSA Group Unit 6, Hawarden Industrial Park Hawarden, Deeside, CH5 3US United Kingdom







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Manufacturer:

Weidmüller Interface GmbH & Co. KG

Klingenbergstrasse 16 D-32758 Detmold

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 60079-1: 2014-06

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

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

IECEx ATR:

File Reference:

GB/SIR/ExTR06.0040/00 GB/SIR/ExTR12.0070/00

51L14367

GB/SIR/QAR06.0024/00: GB/SIR/ExTR18.0086/00

GB/SIR/ExTR09.0061/00

NL/KEM/QAR06.0006/09

GB/SIR/ExTR13.0092/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

All cable gland and stopper box ranges described and listed in the Annexe to this certificate have type code designations; these designations are shown in a matrix detailed on the manufacturer's documents, they are also shown on the manufacturer's instruction leaflets for the end user. These type codes are unique to each and every cable gland and stopper box, and identify the various design options applicable to each cable gland and stopper box range.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to the Annexe for Specific Conditions of Use.



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DETAILS OF CERTIFICATE CHANGES (for Issues 1 and above):

Refer to the Annexe

Annex:

IECEx SIR 05.0067 Annexe Issue 4.pdf

IECEx SIR 05.0067X Issue 4

Applicant:

Weidmüller Interface GmbH & Co. KG



Apparatus:

Cable Glands and Stopper Boxes

KSG, KSGDS and KCG Range of Cable Glands

The type KSG, KSGDS and KCG ranges of cable glands are intended for use with any cable type where sealing and retention is required by gripping the outer sheath (this includes armoured/screened/braided cables, the armour/screen/braid being clamped inside the terminating equipment). Construction materials are brass, mild steel, stainless steel or aluminium alloy. Glands are available in a single or double seal configuration and utilise either silicone or neoprene seals. The single seal configuration is available with alternative compression nuts, which will accept either male, female or flexible conduit. All the gland types have an IP66 and IP68 (50 meters 7 days) rating.

Glands are available in the size range 12 to 100 mm with ISO metric entry threads of M12 to M100 respectively. Alternative thread sizes and forms ISO metric, NPT, NPSM, BSPT, BSPP, PG and ET are available.

Design Options:

Alternative designs:

- the gland can be fitted with an additional mid-cap, skid washer and elastomeric sealing ring to create a double seal configuration (KSGDS types)
- the single seal configuration outer cap can be replaced with an alternative compression nut, which will accept either male or female conduit (KCG types)

Alternative nearest equivalent and recognised entry body component thread forms:

- NPT to ANSI/ASME B1.20.1:1983, gauging to clause 8
- NPSM to ANSI/ASME B1.20.1:1983, gauging to clause 9
- BSPT to BS 21:1985 (ISO 7/1) standard threads only clause 5.4, gauging to clause 5A, system A
- BSPP to BS 2779:1986 (ISO 228/1) class A full form external threads
- PG to DIN 40430:1971
- ET to BS 31:1940 (1979) Table A

Alternative metallic materials of manufacture:

- Brass to BS 2874:1986 grades CZ121 (3Pb), or CZ121 (4Pb) or CZ122
- Aluminium to BS 1474:1987 grade HE30TF
- Stainless Steel to BS 970:Part 1:1991 grades 316S11, 316S31, 303 or 304
- (Additionally, all metallic materials may be surface coated to limit electrolytic reaction between dissimilar materials, providing the coating does not alter the dimensions of the component part.)

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04 June 2018

Date:

IECEx SIR 05.0067X Issue 4

Applicant:

Weidmüller Interface GmbH & Co. KG



Apparatus:

Cable Glands and Stopper Boxes

KDSW/KDSX, KISW/KISX and KOSW/KISX Range of Cable Glands

These devices are intended for use with SWA/Tape/Woven Steel Wire armoured cables; the KDSW/KDSX and The KDSW, KDSX, KOSW and KOSX ranges of cable glands are intended for use with SWA/Tape/Woven Steel Wire/Braided armoured cables. KDSW and KDSX glands comprise a threaded entry body, inner elastomeric sealing ring, armour cone, clamp ring and compression cap; and a rear seal assembly comprising a back nut, skid washer and outer sealing ring. The entry body is available with an optional outer deluge seal or an integral earthing clamp. KOSW and KOSX glands are of the same construction but without the inner elastomeric sealing ring. Sealing rings are available in silicone or neoprene.

Glands are available in the size range 16 to 100 with ISO metric entry threads of M16 to M100 respectively. Alternative thread sizes and forms ISO metric, NPT, NPSM, BSPT, BSPP, PG and ET are available. The KDSW and KDSX glands have an ingress protection rating of IP66 and IP68 (50 metres 7 days) and the KOSW and KOSX glands have an ingress protection rating of IP66..

Design Options:

Alternative nearest equivalent and recognised entry body component thread forms:

- NPT to ANSI/ASME B1.20.1:1983, gauging to clause 8
- NPSM to ANSI/ASME B1.20.1:1983, gauging to clause 9
- BSPT to BS 21:1985 (ISO 7/1) standard threads only clause 5.4, gauging to clause 5A, system A
- BSPP to BS 2779:1986 (ISO 228/1) class A full form external threads
- PG to DIN 40430:1971
- ET to BS 31:1940 (1979) Table A

Alternative metallic materials of manufacture:

- Brass to BS 2874:1986 grades CZ121 (3Pb), or CZ121 (4Pb) or CZ122
- Steel to BS 970:Part 1:1991 grades 220MO7Pb or 230MO7Pb
- Stainless Steel to BS 970:Part 1:1991 grades 316S11, 316S31, 303 or 304
- (Additionally, all metallic materials may be surface coated to limit electrolytic reaction between dissimilar materials, providing the coating does not alter the dimensions of the component part.)

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Applicant:

Weidmüller Interface GmbH & Co. KG



Apparatus:

Cable Glands and Stopper Boxes

The KISW/KISX types vary from the KDSW/KDSX by:

- the replacement of outer cap, skid washer, outer sheath elastomeric seal and mid-cap with an alternative cap tightening onto the entry body component
- not having the option to be fitted with the outer deluge seal, integral earth or continuity washer

The KOSW/KOSX types vary from the KDSW/KDSX by:

- the removal of the inner sheath elastomeric seal, armour ring and armour cone
- not having the option to be fitted with the outer deluge seal or continuity washer.

KUB, KBOS and KB Barrier Cable Gland Ranges & KSB Stopper Box Range

These devices are intended for use with differing cables or conductors depending on type as listed below. They are coded Ex db I/Ex db IIC and have an ingress protection rating of IP68, tested for a depth of up to 100 m for a duration of 7 days.

Design Options:

Alternative nearest equivalent and recognised entry body component and KSB conduit nut internal thread forms:

- NPT to ANSI/ASME B1.20.1:1983, gauging to clause 8
- NPSM to ANSI/ASME B1.20.1:1983, gauging to clause 9
- BSPT to BS 21:1985 (ISO 7/1) standard threads only clause 5.4, gauging to clause 5A, system A
- BSPP to BS 2779:1986 (ISO 228/1) class A full form external threads
- PG to DIN 40430:1971
- ET to BS 31:1940 (1979) Table A

Alternative metallic materials of manufacture:

- Brass to BS 2874:1986 grades CZ121 (3Pb), or CZ121 (4Pb) or CZ122
- Stainless Steel to BS 970:Part 1:1991 grades 316S11, 316S31, 303 or 304
- (Additionally, all metallic materials may be surface coated to limit electrolytic reaction between dissimilar materials, providing the coating does not alter the dimensions of the component part.)

The **KBOS Barrier Cable Gland Range** is suitable for use with circular, unarmoured braided and screened cables; the glands comprise:

- a threaded entry body, including a groove to accommodate an optional O-ring seal, which tightens into an associated enclosure and is internally coated with a release agent
- a ferrule, fitted with an external nitrile O-ring. This fits into the entry body to make a two-part chamber into
 which a two-part elastomeric epoxy putty setting compound is applied, to provide a flameproof seal around the
 conductors
- a union nut that couples the entry body and ferrule together
- a seal housing, enclosing a white silicone elastomeric cable outer sheath seal and a skid washer, that is screwed and secured into the ferrule with Loctite 2701 adhesive
- a back nut that screws into the seal housing to compress the outer sheath seal

Glands are available in the size range 16 to 100 mm with ISO metric entry threads of M20 to M100 respectively.

Specific type design option:

04 June 2018

• A brass continuity washer may be fitted in the 20S to 100 mm sizes for use with lead inner sheathed cables.

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Form 9530 Issue 1

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IECEx SIR 05.0067X Issue 4

Applicant:

Weidmüller Interface GmbH & Co. KG



Apparatus:

Cable Glands and Stopper Boxes

The KB Barrier Cable Gland Range is suitable for use with circular, unarmoured, braided and screened cables; the glands comprise:

- a threaded entry body, including a groove to accommodate an optional O-ring seal, which tightens into an associated enclosure and is internally coated with a release agent
- a ferrule, fitted with an external nitrile O-ring. This fits into the entry body to make a two-part chamber into which a two-part epoxy putty setting compound is applied to provide a flameproof an inner seal around the conductors
- a union nut that couples the entry body and ferrule together
- a back nut that is screwed and secured into the ferrule with Loctite 2701 adhesive

Glands are available in the size range 20S to 100 mm with ISO metric entry threads of M20 to M100 respectively.

Specific type design option:

A brass continuity washer may be fitted that are used with lead inner sheathed cables. Glands with this modification are designated with an 'L' in their type number.

The KUB Barrier Cable Gland Range is suitable for use with circular, pliable wire, single wire and steel tape armoured cables along with braided/screened and unarmoured cables; the glands comprise:

- a threaded entry body, including a groove to accommodate an optional O-ring seal, which tightens into an associated enclosure and is internally coated with a release agent
- a cone, fitted with an external nitrile O-ring. This fits into the entry component to make a two-part chamber into which a two part elastomeric epoxy putty setting compound is applied to provide a flameproof seal around the conductors
- a clamp ring that secures cable armour to the cone and also provides earth protection
- a mid-cap component that fastens to the entry body to captivate the clamp ring, cone and epoxy putty.
- a back nut, enclosing a white, silicone, elastomeric, cable outer sheath seal and skid washer, that screws onto the external thread of the mid cap. The elastomeric sealing ring also being available in red with a reduced bore

Glands are available in the size range 16 to 100 mm with ISO metric entry threads of M20 to M100 respectively.

Specific type design option:

a brass continuity washer may be fitted in the 20S to 100 mm sizes that are used with lead inner sheathed cables, glands with this modification are designated with an 'L' in their type number

The KSB Conduit Stopper Box Range is suitable for use with conductors carried in conduit or for converting cable glands into a flameproof barrier; the stopper boxes comprise:

- a threaded entry body, including a groove to accommodate an optional O-ring seal, which tightens into an associated enclosure and is internally coated with a release agent
- a ferrule, fitted with an external nitrile O-ring. This fits into the entry body to make a two-part chamber into which a two-part epoxy putty setting compound is applied to provide a flameproof seal around the conductors
- a union nut that couples the entry body and ferrule together
- a conduit nut that is screwed and secured into the ferrule with Loctite 2701 adhesive

These devices are available in the size range 20 to 100 mm with ISO metric entry threads of M20 to M100 respectively.

04 June 2018 Date:

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Form 9530 Issue 1

IECEx SIR 05.0067X Issue 4

Applicant:

Weidmüller Interface GmbH & Co. KG



Apparatus:

Cable Glands and Stopper Boxes

KDSU, KOSU and KISU Ranges of Cable Glands

These ranges of cable glands are intended for use with differing cables depending on gland type as listed below and having ISO metric entry threads. The KOSU Range of Cable Glands has an ingress protection rating of IP66 and is coded Ex e II. The KDSU and KISU Ranges of Cable Glands have an ingress protection rating of IP68, tested for a depth of up to 25 m for a duration of 7 days and coded Ex db IIC/Ex eb II.

Design Options:

Alternative nearest equivalent and recognised Entry body component thread forms:

- NPT to ANSI/ASME B1.20.1:1983, gauging to clause 8
- NPSM to ANSI/ASME B1.20.1:1983, gauging to clause 9
- BSPT to BS 21:1985 (ISO 7/1) standard threads only clause 5.4, gauging to clause 5A, system A
- BSPP to BS 2779:1986 (ISO 228/1) class A full form external threads
- PG to DIN 40430:1971
- ET to BS 31:1940 (1979) Table A

Alternative metallic materials of manufacture:

- Brass to BS 2874:1986 grades CZ121 (3Pb), or CZ121 (4Pb) or CZ122
- Stainless Steel to BS 970:Part 1:1991 grades 316S11, 316S31, 303 or 304
- (Additionally, all metallic materials may be surface coated to limit electrolytic reaction between dissimilar materials, providing the coating does not alter the dimensions of the component part.)

The KDSU Range of Cable Glands is suitable for armoured or unarmoured cables and comprises:

- threaded entry body, including a groove to accommodate an optional O-ring seal, which tightens into an associated enclosure
- silicone or neoprene sealing ring, which fits into the entry body to provide a flameproof seal around the inner sheath of the cable
- armour ring and armour cone to clamp onto armour/screen/braid (when applicable to installation), compression nut and skid washer. The compression nut with the skid washer compressing the seal onto the inner sheath of the cable, minimising cable twist upon assembly
- mid-cap for coupling internal locking mechanisms onto the entry body
- outer cap, skid washer and silicone or neoprene elastomeric sealing ring. The cap tightens onto the mid-cap whilst compressing the seal onto the outer sheath of the cable and a skid washer minimising cable twist upon assembly. The elastomeric sealing ring also being available in red with a reduced bore

Glands are available in the size range 16 to 100 mm with ISO metric entry threads of M20 to M100 respectively.

Specific type design option:

04 June 2018

Cable glands fitted with neoprene flameproof elastomeric sealing rings may be fitted with a brass continuity washer in the 20S to 100 sizes that are used with lead inner sheathed cables, glands with this modification are designated with an 'L' in their type number.

The KISU Range of Cable Glands is suitable for armoured or unarmoured cables and varies from the KDSU by:

the replacement of outer cap, skid washer and outer sheath elastomeric seal with an alternative cap tightening onto the entry body component

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not having the option to be fitted with brass continuity washer

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IECEx SIR 05.0067X Issue 4

Applicant:

Weidmüller Interface GmbH & Co. KG



Apparatus:

Cable Glands and Stopper Boxes

The KOSU Range of Cable Glands is suitable for armoured cables and varies from the KDSU by:

- the removal of the inner sheath elastomeric seal and skid washer
- not having the option to be fitted with brass continuity washer

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Applicant:

Weidmüller Interface GmbH & Co. KG



Apparatus:

Cable Glands and Stopper Boxes

Specific Conditions of Use

The KSG, KSGDS and KCG Range of Cable Glands

- The KSG, KSGDS and KCG Range of Cable Glands shall not be used in enclosures where the temperature at the point of entry/mounting exceeds the following.
 - -35°C to +90°C for the Neoprene seal variants
 - -60°C to +180°C for the Silicone seal variants
- ii. The cable entries are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
- iii. The KSG, KSGDS and KCG range of cable glands, when installed in accordance with the manufacturer's instructions and with an appropriate enclosure on which they are fixed, are capable of providing an ingress protection of IP66 and IP68 (50 metres, 7 days).
- iv. The threaded entry component threads without interface O-ring seals installed in an explosive dust atmosphere, within threaded entries, shall only be fitted into enclosures that have either:
 - parallel entries that will ensure that a minimum of 5 full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014,
 - tapered entries that will ensure that a minimum of 3 ½ full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014

The KOSW/KOSX, KDSW/KDSX and KISW/KISX ranges

- i. The KDSW, KDSX, KOSW and KOSX range of cable glands shall not be used in enclosures where the temperature, at the point of contact exceeds the following temperatures:
 - -35°C to +90°C for neoprene seal variants
 - -60°C to +180°C for the silicone seal variants
- ii. The **KDSW** and **KDSX** range of cable glands, when installed in accordance with the manufacturer's instructions and with an appropriate enclosure on which they are fixed, are capable of providing an ingress protection of IP66 and IP68 (50 metres 7 days).
- iii. The **KOSW** and **KOSX** range of cable glands, when installed in accordance with the manufacturer's instructions and with an appropriate enclosure on which they are fixed, are capable of providing an ingress protection of IP66.
- The threaded entry component threads without interface O-ring seals installed in an explosive dust atmosphere, within threaded entries, shall only be fitted into enclosures that have either:
 - parallel entries that will ensure that a minimum of 5 full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014,
 - tapered entries that will ensure that a minimum of 3 ½ full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014
- v. If the KDSW, KDSX, KOSW and KOSX type cable glands only grip the cable sheath and do not clamp the armour, or if they are used to terminate unarmoured, braided or screened cables, then they shall only be used for fixed installations, hence the cables shall be effectively clamped to prevent pulling or twisting.

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IECEx SIR 05.0067X Issue 4

Applicant:

Weidmüller Interface GmbH & Co. KG



Apparatus:

Cable Glands and Stopper Boxes

KUB, KBOS, KB and KSB Cable Glands and Stopper Box Range

- i. The cable glands/stopper boxes shall not be used in enclosures where the temperature, at the point of entry/mounting, is outside of the range -60° C to $+135^{\circ}$ C.
- The interface seals comply with the requirements of the standards listed in this report when the cable glands are fitted to a representative enclosure having a smooth flat mounting surface. In practice the interface between the male thread of the glands and their associated enclosure cannot be defined, therefore it is the users' responsibility to ensure that the appropriate ingress protection level is maintained at these interfaces.
- The threaded entry component threads without interface O-ring seals installed in an explosive dust atmosphere, within threaded entries, shall only be fitted into enclosures that have either:
 - parallel entries that will ensure that a minimum of 5 full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014,
 - tapered entries that will ensure that a minimum of 3 ½ full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014

The KDSU, KOSU and KISU Cable Gland Ranges

- i. Glands fitted with neoprene sealing rings (black) shall not be used in enclosures where the temperature, at the point of mounting, is outside the range of -35°C to +90°C.
- ii. Glands fitted with silicone sealing rings (white or red) shall not be used in enclosures where the temperature, at the point of mounting, is outside the range of -60°C to +180°C.
- When the gland is used with increased safety and/or dust protected equipment, the entry thread shall be suitably sealed to maintain the ingress protection rating of the associated enclosure.
- iv. If the **KDSU**, **KISU** and **KOSU** types of cable glands only grip the cable sheath of the cable and do not clamp the cable armour or if they are used to terminate unarmoured, braided or screened cables, then they shall only be used for fixed installations, hence, the cables shall be effectively clamped to prevent pulling or twisting.
- v. The **KDSU and KISU** cable glands, when installed in accordance with the manufacturer's instructions and with an appropriate enclosure on which they are fixed, are capable of providing an ingress protection of IP66 and IP68 (50 metres 7 days).
- vi. The **KOSU** range of cable glands, when installed in accordance with the manufacturer's instructions and with an appropriate enclosure on which they are fixed, are capable of providing an ingress protection of IP66.
- vii. The threaded entry component threads without interface O-ring seals installed in an explosive dust atmosphere, within threaded entries, shall only be fitted into enclosures that have either:
 - parallel entries that will ensure that a minimum of 5 full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014,
 - tapered entries that will ensure that a minimum of 3 $\frac{1}{2}$ full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014

Full Certificate Change History

Issue 1 – this Issue introduced the following change:	
1	To transfer ownership of the Certificate to the parent site in Germany and allow the UK site to be an
	alternative manufacturer
Issue 2 – this Issue introduced the following change:	
1	The UK manufacturing site was removed from the certificate.

Date: 04 June 2018

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Apparatus:

Cable Glands and Stopper Boxes

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	e 3 – this Issue introduced the following changes:
1	Following appropriate reassessment to demonstrate compliance with the requirements of the latest editions of the IEC 60079 series of standards, the documents previously listed in section 9, IEC 60079-0:2004, IEC 60079-1:2001, IEC 60079-7:2001, IEC 61241-0:2004 and IEC 61241-1:2004 were replaced by those currently listed, the markings were undeted assembled and the appeals and the provider of the latest compliance.
	replaced by those currently listed, the markings were updated accordingly and the special condition for safe use was amended to recognise the new standards.
2	Type of protection Ex t is upgraded from EPL Db to EPL Da. Following appropriate reassessment to
	demonstrate compliance with the additional requirements for Ex ta, the markings were updated accordingly.
3	The introduction of an alternative silicone seal material was approved.
4	The cable glands, when installed in accordance with the manufacturer's instructions and with an appropriate enclosure on which they are fixed, are capable of providing an ingress protection of IP66
5	and IP68 (50 metres 7 days).
	The metric interface thread M25 x 1.5 metric has been added to the product description. e 4 – this Issue introduced the following changes:
1	To modify/introduce the following changes to type KDSU & KOSU Cable Glands:
	KDSU, gland size 16, revised 'standard' outer seal cable range from: 9.0/13.5 to: 8.4/13.5
	KISU, gland size 16, revised 'standard' outer seal cable range from: 9.0/13.5 to: 8.4/13.5 KISU, gland size 305, revised 'standard' outer seal cable range from: 9.0/13.5 to: 8.4/13.5
	KDSU, gland size 20S, revised 'standard' outer seal cable range from: 12.9/16.0 to: 11.5/16.0 KDSU, gland size 20S, revised 'standard' outer seal cable range from: 12.9/16.0 to: 11.5/16.0 KDSU, gland size 20S, revised 'standard' outer seal cable range from: 12.9/16.0 to: 11.5/16.0
	KISU, gland size 20s, revised `standard' outer seal cable range from: 12.9/16.0 to: 11.5/16.0
	KDSU, gland size 16H was introduced.
2	The recognition of the 'standard' entry threads associated with every gland type's gland sizes.
3	To permit all gland types, of parallel threaded entry threads, marked suitable for 'Exe' only to be modified to have a minimum thread length increased to 10 mm from 8 mm.
4	To permit all gland types of parallel threaded entry threads to be manufactured with a longer than 'standard' thread length to suit the end use application.
5	To permit all gland types to be manufactured with a size larger than the 'standard' entry threads listed within the product description.
6	The brass materials of manufacture were updated and corrected.
7	To recognise the actual seal 'material specification' reference as a replacement for the seal 'material supplier'.
8	To recognise all gland types with the following alternate threaded entry threads complying with the requirements of IEC 60079-1: 2001 are intended to be used as replacement entry devices within existing installations with equipment that have threaded entries no longer permitted by the current edition of IEC 60079-1.
	NPSM ANSI/ASME B1.20.1:1983
	BSPT BS21:1985 (ISO 7/1; BS EN 10226-1:2004 'standard threads'
	BSPP BS EN ISO 228-1:2003; BS EN ISO 2228-2:2003 class A full form 'external threads'
	PG DIN 40430:1971
	• ET BS 31:1940 (1979) Table 'B'
	All alternative trade size thread forms are manufactured within the dimensional parameter of the standard
	entry threads of the gland entry body, and relevant constructional compliance length and engagement
	requirements in accordance with their product markings.
9	Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-1:2007 Ed 6, IEC 60079-7:2006 Ed 4 and IEC 60079-31:2008 Ed 1, were replaced by IEC 60079-1:2014 Ed 7, IEC 60079-7:2015 Ed 5 and IEC 60079-31:2013 Ed 2, the markings were updated accordingly, and a Condition of Certification modified and amended to recognise the new standard edition. In addition the description was modified to clarify the certified cable gland types, the standard gland size 'entry threads', and gland size range taking capabilities inclusive of changes carried out under this certificate variation.

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