Type Examination Certificate CML 19ATEX4114X Issue 1

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment **Range of EC****, CR****, UL-* and LT-C* Cable Glands**

3 Manufacturer **Peppers Cable Glands Limited**

4 Address **Stanhope Road,**
Camberley, Surrey,
GU15 3BT,
United Kingdom

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 CML B.V. , Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of equipment intended for use in potentially explosive atmospheres given in Annex II of Directive 2014/34/EU.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of certification (affecting correct installation or safe use). These are specified in Section 14.

8 This Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Annex VIII apply to the manufacture of the equipment or component.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-15:2010

10 The equipment shall be marked with the following:

II 3 G

Ex nR IIC Gc

(Refer to description for service temperature)

A C Smith
Technical Operations Director

11 Description

The **EC**** Range of Barrier Cable Glands & Stopper Boxes** are metallic and are intended for use with differing cables or conductors, dependent on their type. They allow the entry of the cable or conductors into flameproof, increased safety, restricted breathing and dust protected enclosures without compromising the explosion protection provided by the enclosure, in accordance with relevant codes of practice. All types comprise of various entry thread sizes, which are dependent upon gland size and their cable sealing ability range.

The EC**** Range of Barrier Cable Glands & Stopper Boxes, when installed with the silicone O-ring provided by the manufacturer, have an ingress protection rating of IP66 and IP68 (tested at a depth of 100 m for 7 days) and IPX9.

Ts = -60°C to 135°C for Peppers T1000 Compound

Ts = -60°C to 120°C for Peppers T2000 Compound

Design Options for all EC** Range of Barrier Cable Glands & Conduit Stopper Boxes**

Entry component and EC*-S conduit nut internal thread forms:**

- ISO Metric to BS3643-1:2007 (ISO 965-1) and BS 3643-3:2007 (ISO 965-3) 6g fit (male) 6H (female)
- 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

All entry and conduit threads are within the dimensional parameters of the gland body and comply with clause 5.3 of IEC/EN 60079-1:2014 and Annex C Clause C.2.2.

Alternative metallic materials of manufacture (the asterisk in the type number is replaced with a letter designation for one of the material types below):

- Brass to BS EN 12164 / BS EN 12165 / BS EN 12168 CW614N CuZn39Pb3
- Ecobrass to C69300
- Stainless Steel to EN 10088-3 grades 316S11, 316S31 316L

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 **EC*-U** Range of Barrier Cable** are suitable for use with unarmoured, braided and screened, circular cables; they comprise:

- a threaded entry body to tighten into an associated enclosure; this is optionally fitted with a silicone O-ring and internally coated with a release agent.
- a front and rear ferrule, coupled by an O-ring and also fitted with an external O-ring to aid assembly, which fits into the entry body to make a part chamber into which either “Peppers T1000 Compound” or “Peppers T2000 Compound” is applied to provide an inner seal around the conductors.
- a midcap nut that couples the entry body and ferrule together
- a back nut that screws into the seal housing to compress the outer sheath seal

Design options:

- A brass continuity washer may be fitted to all sizes that are used with lead inner sheathed cables, glands with this modification are designated with a ‘2’ in their type number.

Additional assembly options are described by the following designation coding: -

Gland Type:	**EC*-U****					
Available Part No’s.:	**E**	**C**	*** **1 2**	**U**	*** **2**	*** **B S**

Options:	EC1	Peppers T1000 Compound
	EC2	Peppers T2000 Compound
	2	Lead Sheath Cable Continuity Washer
	B	Brass material
	S	Stainless Steel material

Type EC*-U** Compound-Filled Cable Glands

Gland Size	Standard Entry threads		Max Ø over Cores	Max No of Cores		Outer Sheath		Inner Sheath Min T2000 Only
	Metric	NPT		T1000	T2000	Min	Max	
16S	M16	3/8”	8.9	12	12	3.4	8.4	4.0
16	M20	½”	10.4	15	15	3.4	8.4	4.0
20s	M20	½”	10.4	35	15	4.8	11.7	4.0
20	M20	½”	12.5	40	20	9.5	14.0	4.0
25	M25	¾”	16.5	60	30	11.7	18.5	8.0
32	M32	1	23.5	80	50	18.1	26.3	14.0
40	M40	1	28.8	130	65	22.6	32.2	16.0
50s	M50	1	34.2	200	100	28.2	38.2	20.0
50	M50	2”	39.4	400	100	33.1	44.1	20.0
63s	M63	2”	44.8	400	130	39.3	50.1	30.0
63	M63	2 ½”	50.0	425	130	46.7	56.0	30.0

Gland Size	Standard Entry threads		Max Ø over Cores	Max No of Cores		Outer Sheath		Inner Sheath Min T2000 Only
	Metric	NPT		T1000	T2000	Min	Max	
75s	M75	2 ½"	55.4	425	-	52.3	62.0	-
75	M75	3"	60.8	425	-	58.0	68.0	-
80	M80	3"	64.4	425	-	61.9	72.0	-
85	M85	3"	69.8	425	-	69.1	78.0	-
90	M90	3 ½"	75.1	425	-	74.1	84.0	-
100	M100	3 ½"	80.5	425	-	81.8	90.0	-

The **EC*-X** Range of Barrier Cable Glands** are suitable for use with, unarmoured, braided and screened, circular and non-circular cables. They may also be used as a line bushing for terminating flying leads or for the direct inter-connection of associated enclosures; they comprise:

- A threaded entry body to tighten into an associated enclosure; this is optionally fitted with a silicone O-ring and internally coated with a release agent.
- A front and rear ferrule, coupled by an O-ring and also fitted with an external O-ring to aid assembly, which fits into the entry body to make a part chamber into which either "Peppers T1000 Compound" or "Peppers T2000 Compound" is applied to provide an inner seal around the conductors.
- A midcap nut that couples the entry body and ferrule together

Design option:

- A brass continuity washer may be fitted in the 20S to 100 sizes that are used with lead inner sheathed cables, glands with this modification are designated with a '2' in their type number.

Additional assembly options are described by the following designation coding: -

Gland Type:	**EC*-X****					
Available Part No's.:	**E**	**C**	*****	**X**	*****	*****
			1		**2**	**B**
			2			**S**

Options:		
	EC1	Peppers T1000 Compound
	EC2	Peppers T2000 Compound
	2	Lead Sheath Cable Continuity Washer
	B	Brass material
	S	Stainless Steel material

Type EC*-X** Compound-Filled Cable Glands

Gland Size	Standard Entry threads		Max Ø over Cores	Max No of Cores		Outer Sheath Max	Inner Sheath Min T2000 Only
	Metric	NPT		T1000	T2000		
16S	M16	3/8”	8.9	12	12	10.0	4.0
20s	M20	½”	10.4	35	15	11.7	4.0
20	M20	½”	12.5	40	20	14.0	4.0
25	M25	¾”	16.5	60	30	18.5	8.0
32	M32	1”	23.5	80	50	26.3	14.0
40	M40	1 ¼”	28.8	130	65	32.2	16.0
50s	M50	1 ½”	34.2	200	100	38.2	20.0
50	M50	2”	39.4	400	100	44.1	20.0
63s	M63	2”	44.8	400	130	50.1	30.0
63	M63	2 ½”	50.0	425	130	56.0	30.0
75s	M75	2 ½”	55.4	425	-	62.0	-
75	M75	3”	60.8	425	-	68.0	-
80	M80	3”	64.4	425	-	72.0	-
85	M85	3”	69.8	425	-	78.0	-
90	M90	3 ½”	75.1	425	-	84.0	-
100	M100	3 ½”	80.5	425	-	90.0	-

The **EC*-C*** Range of Barrier Cable Glands** are suitable for use with circular, pliable wire, single wire and steel tape armoured cables along with braided/screened and unarmoured cables; they comprise:

- A threaded entry body to tighten into an associated enclosure, this optionally fitted with a silicone O-ring and internally coated with a release agent.
- A front ferrule and cone, coupled by an O-rig and also fitted with an external O-ring to aid assembly, which fits into the entry component to make a part chamber into which either “Peppers T1000 Compound” or “Peppers T2000 Compound” is applied to provide an inner seal around the conductors.
- A clamp ring that secures cable armour to the cone and also provides earth protection.
- A middle cap nut that fastens to the entry body to captivate the clamp ring, cone and compound.
- 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.

Design option:

- A brass continuity washer may be fitted in all the sizes that are used with lead inner sheathed cables, glands with this modification are designated with a '2' in their type number.

Additional assembly options are described by the following designation coding: -

Gland Type:	**EC*-C***						
Available Part No's.:	**E**	**C**	*** 1 2**	**C**	*** 2**	*** B S**	*** R**

Options:		
	EC1	Peppers T1000 Compound
	EC2	Peppers T2000 Compound
	2	Lead Sheath Cable Continuity Washer
	B	Brass material
	S	Stainless Steel material
	R	Reduced Bore option

Type EC*-C** Compound-Filled Cable Glands

Gland Size	Standard Entry thread		Inner sheath Min	Inner Sheath	Outer Sheath		Reduced Bore		Max dia over cores	Max No of cores T1000	Max No of cores T2000
	Metric	NPT	T2000 Only	Max	Min	Max	Min	Max			
16S	M16	3/8"	4.0	10.0	8.4	13.5	6.7	10.3	8.9	12	12
16	M20	½"	4.0	11.7	8.4	13.5	6.7	10.3	10.4	15	15
20S	M20	½"	4.0	11.7	11.5	16.0	9.4	12.5	10.4	35	15
20	M20	½"	4.0	14.0	15.5	21.1	12.0	17.6	12.5	40	20
25	M25	¾"	8.0	18.5	20.3	27.4	16.8	23.9	16.5	60	30
32	M32	1"	14.0	26.3	26.7	34.0	23.2	30.5	23.5	80	50
40	M40	1 ¼"	16.0	32.2	33.0	40.6	28.6	36.2	28.8	130	65
50S	M50	1 ½"	20.0	38.2	39.4	46.7	34.8	42.4	34.2	200	100
50	M50	2"	20.0	44.1	45.7	53.2	41.1	48.5	39.4	400	100
63S	M63	2"	30.0	50.1	52.1	59.5	47.5	54.8	44.8	400	130
63	M63	2 ½"	30.0	56.0	58.4	65.8	53.8	61.2	50.0	425	130
75S	M75	2 ½"	-	62.0	64.8	72.2	60.2	68.0	55.4	425	-
75	M75	3"	-	68.0	71.1	78.0	66.5	73.4	60.8	425	-
80	M80	3"	-	72.0	77.0	84.0	71.9	79.4	64.4	425	-
85	M85	3"	-	78.0	79.6	90.0	75.0	85.4	69.8	425	-
90	M90	3 ½"	-	84.0	88.0	96.0	82.0	91.4	75.1	425	-
100	M100	3 ½"	-	90.0	92.0	102.0	87.4	97.4	80.5	425	-

The **EC*-S** Range of Conduit Stopper Boxes** are suitable for use with circular cables, non-circular cables or conductors carried in conduit, providing a flameproof barrier entry into enclosures. Additionally, they may be used as a line bushing for terminating flying leads or for the direct inter-connection of associated enclosures; they comprise:

- A threaded entry body to tighten into an associated enclosure, this is optionally fitted with a silicone O-ring and internally coated with a release agent.
- A ferrule, fitted with an external O-ring to aid assembly, which fits into the entry body to make a part chamber into which eithera “Peppers T1000 Compound” or “Peppers T2000 Compound” is applied to provide an inner seal around the cable conductors or flying leads.
- A union nut that couples the entry body and ferrule together
- A conduit nut that is screwed and secured into the ferrule with adhesive.

Additional assembly options are described by the following designation coding: -

Gland Type:	**EC*-S****					
Available Part No’s.:	**E**	**C**	*** **1** **2**	**S**	*** **B** **S**	*** **C** **F** **M**

Options:		
	1	Peppers T1000 Compound
	2	Peppers T2000 Compound
	B	Brass material
	S	Stainless Steel material
	C	Spiral Conduit Option
	F	Female conduit option
	M	Male conduit option

Type EC*-S** Compound-Filled Cable Glands

Stopper box size	Standard male connection thread size		Standard female connection thread sizes		Max Cable size inside fitting	Max Diameter over Cores	Max No of Cores		Min Cable Inner Sheath T2000 Only
	Metric	NPT	Metric	NPT			T1000	T2000	
16S	M16	3/8”	M16	3/8”	10.0	8.9	12	12	4.0
20	M20	½”	M20	½”	14.0	12.5	40	20	4.0
25	M25	¾”	M25	¾”	20.0	17.8	60	30	8.0
32	M32	1”	M32	1”	26.3	23.5	80	50	14.0
40	M40	1 ¼”	M40	1 ¼”	32.2	28.8	130	65	16.0
50s	M50	1 ½”	M50	1 ½”	38.2	34.2	200	100	20.0
50	M50	2”	M50	2”	44.1	39.4	400	100	20.0
63s	M63	2”	M63	2”	50.1	44.8	400	130	30.0

Stopper box size	Standard male connection thread size		Standard female connection thread sizes		Max Cable size inside fitting	Max Diameter over Cores	Max No of Cores		Min Cable Inner Sheath T2000 Only
	Metric	NPT	Metric	NPT			T1000	T2000	
63	M63	2 ½"	M63	2 ½"	56.0	50.0	425	130	30.0
75s	M75	2 ½"	M75	2 ½"	62.0	55.4	425	-	-
75	M75	-	M75	2 ½"	68.0**	60.8**	425	-	-
75	-	3"	-	3"	68.0	60.8	425	-	-
80	M80	3"	M80	3"	72.0	64.4	425	-	-
85	M85	3"	M85	3"	78.0	69.8	425	-	-
90	M90	3 ½"	M90	3 ½"	84.0	75.1	425	-	-
100	M100	3 ½"	M100	3 ½"	90.0	80.5	425	-	-
100	-	4"	-	4"	90.0	80.5	425	-	-
Note:	* 2 ½" NPT thread option (Max Cable Diameter = 65.0) (Max Diameter over Cores = 58.1) * 2 ½" NPSM thread option (Max Cable Diameter = 67.0) (Max Diameter over cores = 59.9)								

Design options:

1. All gland types may be manufactured with a larger thread size than the standard entry thread listed within the product description.
2. All gland types with the following alternate threaded entry threads complying with the requirements of EN 60079-1 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 EN 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.

CR** Range of Barrier Cable Glands and Stopper Boxes**

The CR** Range of Barrier Cable Glands & Stopper Boxes** are metallic and are intended for use with differing cables or conductors dependent on their type. They allow the entry of the cable or conductors into flameproof, increased safety, restricted breathing and dust protected enclosures without compromising the explosion protection provided by the enclosure, in accordance with relevant

codes of practice. All types comprise of various entry thread sizes, which are dependent upon gland size and their cable sealing ability range.

The CR**** Range of Barrier Cable Glands & Stopper Boxes, when installed with the silicone O-ring provided by the manufacturer, have an ingress protection rating of IP66 and IP68 (tested at a depth of 100 m for 7 days).

Design Options for all CR** glands and conduit stopper boxes:**

The entry component and conduit nut internal thread forms:

- ISO Metric to BS3643-1:2007 and BS 3643-3:2007 6g fit (male) 6H (female)
- 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 from external threads'
- PG to DIN 40430:1971
- ET to BS 31:1940 (1979) Table 'A'

Alternative material of construction is as follow and denoted by letter designation in the type number: -

- Brass to BS EN 12164 / BS EN 12165 / BS EN 12168 CW614N CuZn39Pb3
- Ecobrass to C69300
- Stainless Steel to EN 10088-3 grades 316S11, 316S31 316L

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 CR-U Range of Barrier Cable Glands** are suitable for use with unarmoured, braided and screened, circular cables; they comprise:

- A threaded entry body to tighten into an associated enclosure; this is fitted with a silicone O-ring and internally coated with a release agent.
- A ferrule, fitted with an external nitrile O-ring, which fits into the entry body to make a part chamber into which a two-part "PEPPERS T1000 COMPOUND" epoxy putty setting compound is applied to provide an inner 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 plastic skid washer, that is screwed and secured into the ferrule with adhesive.
- A back nut that screws into the seal housing to compress the outer sheath seal.

Type CR – U** Compound – Filled Cable Glands:

Gland Size	Standard Entry Threads		Max Diameter Over Cores	Max No. of Cores	Outer Sheath	
	Metric	NPT			Min	Max
16	M20	½"	10.4	15	3.4	8.4
20S	M20	½"	10.4	35	4.8	11.7

20	M20	½”	12.5	40	9.5	14.0
25	M25	¾”	17.8	60	11.7	20.0
32	M32	1”	23.5	80	18.1	26.3
40	M40	1 ¼”	28.8	130	22.6	32.2
50S	M50	1 ½”	34.2	200	28.2	38.2
50	M50	2”	39.4	400	33.1	44.1
63S	M63	2”	44.8	400	39.3	50.1
63	M63	2 ½”	50.0	425	46.7	56.0
75S	M75	2 ½”	55.4	425	52.3	62.0
75	M75	3”	60.8	425	58.0	68.0
80	M80	3”	64.4	425	61.9	72.0
85	M85	3”	69.8	425	69.1	78.0
90	M90	3 ½”	75.1	425	74.1	84.0
100	M100	3 ½”	80.5	425	81.8	90.0

Design options:

A brass continuity washer may be fitted in the 20S to 100 sizes that are used with lead inner sheathed cables, glands with this modification are designated with a ‘2’ in their type number.

Additional assembly options are described by the following designation coding: -

Glands Type:	CR – U				
Available Part Numbers	C	R	U	*	*
				2	B
					S

Options:	2	Lead Sheath Cable Continuity Washer
	B	Brass material
	S	Stainless Steel material

The CR-X Range of Barrier Cable Glands** are suitable for use with, unarmoured, braided and screened, circular and non-circular cables. They may also be used as a line bushing for terminating flying leads or for the direct inter-connection of associated enclosures; they comprise:

- A threaded entry body to tighten into an associated enclosure; this is fitted with a silicone O-ring and internally coated with a release agent
- A ferrule, fitted with an external nitrile O-ring, which fits into the entry body to make a part chamber into which a two-part “PEPPERS T1000 COMPOUND” epoxy putty setting compound is applied to provide 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 adhesive.

Type CR – X** Compound filled Cable Glands

Gland Size	Standard Entry Threads		Max Diameter Over Cores	Max No. of Cores	Outer Sheath Max
	Metric	NPT			
20S	M20	½"	10.4	35	11.7
20	M20	½"	12.5	40	14.0
25	M25	¾"	17.8	60	20.0
32	M32	1"	23.5	80	26.3
40	M40	1 ¼"	28.8	130	32.2
50S	M50	1 ½"	34.2	200	38.2
50	M50	2"	39.4	400	44.1
63S	M63	2"	44.8	400	50.1
63	M63	2 ½"	50.0	425	56.0
75S	M75	2 ½"	55.4	425	62.0
75	M75	3"	60.8	425	68.0
80	M80	3"	64.4	425	72.0
85	M85	3"	69.8	425	78.0
90	M90	3 ½"	75.1	425	84.0
100	M100	3 ½"	80.5	425	90.0

Design option:

A brass continuity washer may be fitted in the 20S to 100 sizes that are used with lead inner sheathed cables, glands with this modification are designated with a '2' in their type number.

Additional assembly options are described by the following designation coding: -

Glands Type:	CR – X				
Available Part Numbers	C	R	X	*	*
				2	B
					S

Options:	2	Lead Sheath Cable Continuity Washer
	B	Brass material
	S	Stainless Steel material

The CR-C* Range of Barrier Cable Glands** are suitable for use with circular, pliable wire, single wire and steel tape armoured cables along with braided/screened and unarmoured cables; they comprise:

- A threaded entry body to tighten into an associated enclosure, this fitted with a silicone O-ring and internally coated with a release agent.
- A cone, fitted with an external nitrile O-ring, which fits into the entry component to make a part chamber into which a two part "PEPPERS T1000 COMPOUND" epoxy putty setting compound is applied to provide an inner 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.

Type CR-C*** (inc CX-C***) Compound-Filled Cable Glands:

Gland Size	Standard Entry Threads		Max Ø Over Cores	Max No. of Cores	Inner Sheath	Outer Sheath		Reduced Bore		Armour Dia/Thickness (Universal)
	Metric	NPT			Max	Min	Max	Min	Max	
16	M20	½"	10.4	15	11.7	8.4	13.5	6.7	10.3	0.15 – 1.25
20S	M20	½"	10.4	35	11.7	11.5	16.0	9.4	12.5	*0.15 – 1.25
20	M20	½"	12.5	40	14.0	15.5	21.1	12.0	17.6	**0.15 – 1.25
25	M25	¾"	17.8	60	20.0	20.3	27.4	16.8	23.9	0.15 – 1.6
32	M32	1"	23.5	80	26.3	26.7	34.0	23.2	30.5	0.15 – 2.0
40	M40	1 ¼"	28.8	130	32.2	33.0	40.6	28.6	36.2	0.2 – 2.0
50S	M50	1 ½"	34.2	200	38.2	39.4	46.7	34.8	42.4	0.2 – 2.5
50	M50	2"	39.4	400	44.1	45.7	53.2	41.1	48.5	0.2 – 2.5
63S	M63	2"	44.8	400	50.1	52.1	59.5	47.5	54.8	0.3 – 2.5
63	M63	2 ½"	50.0	425	56.0	58.4	65.8	53.8	61.2	0.3 – 2.5
75S	M75	2 ½"	55.4	425	62.0	64.8	72.2	60.2	68.0	0.3 – 2.5
75	M75	3"	60.8	425	68.0	71.1	78.0	66.5	73.4	0.3 – 2.5
80	M80	3"	64.4	425	72.0	77.0	84.0	71.9	79.4	0.45 – 3.15
85	M85	3"	69.8	425	78.0	79.6	90.0	75.0	85.4	0.45 – 3.15
90	M90	3 ½"	75.1	425	84.0	88.0	96.0	82.0	91.4	0.45 – 3.15
100	M100	3 ½"	80.5	425	90.0	92.0	102.0	87.4	97.4	0.45 – 3.15

Design options:

A brass continuity washer may be fitted in the 20S to 100 sizes that are used with lead inner sheathed cables, glands with this modification are designated with a '2' in their type number.

The CR-C** size 20s and 20 cable glands to be used with an alternative, cone component; in this form, the glands are designated CX-C** (see details below) and are only suitable for braided cables.

Entry thread size	Gland Size	Max Ø Over Cores (mm)	Max No. of Cores	Max Inner Sheath (mm)	Outer Sheath (standard) (mm)		Braid dia.	
					Min	Max	Min	Max
M20 x 1.5	20S	10.4	8	11.7	11.5	16.0	0.15	0.35
M20 x 1.5	20	12.5	14	14.0	15.5	21.1	0.15	0.5

The CR-C** may be used with of an alternative outer sheath seal that is red in colour and has a reduced bore size that accommodates an alternative range of outer sheath cable sizes; in this form, the glands are designated CX-C**R** (see details below):

Entry thread size	Gland Size	Max Ø Over Cores (mm)	Max No. of Cores	Max Inner Sheath (mm)	Outer Sheath (standard) (mm)		Braid dia.	
					Min	Max	Min	Max
M20 x 1.5	20S	10.4	8	11.7	9.4	12.5	0.15	0.35
M20 x 1.5	20	12.5	14	14.0	12.0	17.6	0.15	0.5

Additional assembly options are described by the following designation coding: -

Glands Type:	CR – C						
Available Part Numbers	C	R	C	*	*	*	
				2	B	R	
					S		

Options:		
	2	Lead Sheath Cable Continuity Washer
	B	Brass material
	S	Stainless Steel material
	R	Reduced bore option

The CR-S* Range of Conduit Stopper Boxes are suitable for use with circular cables, non-circular cables or conductors carried in conduit, providing a flameproof barrier entry into enclosures. Additionally, they may be used as a line bushing for terminating flying leads or for the direct inter-connection of associated enclosures; they comprise:

- a threaded entry body to tighten into an associated enclosure, this is fitted with a silicone O_ring and internally coated with a release agent.
- a ferrule, fitted with an external nitrile O-ring, which fits into the entry body to make a part chamber into which a two-part “PEPPERS T1000 COMPOUND” epoxy putty setting compound is applied to provide an inner seal around the conductors or flying leads.
- a union nut that couples the entry body and ferrule together
- a conduit nut that is screwed and secured into the ferrule with adhesive.

Stopper Box Size	Standard Entry Threads		Max Cable Diameter	Max Ø over cores	Max no of Cores	Standard male connection thread size		Standard female connection thread sizes	
	Metric	NPT				Metric	NPT	Metric	NPT
20	M20	½"	14.0	12.5	40	M20	½"	M20	½"
25	M25	¾"	20.0	17.8	60	M25	¾"	M25	¾"
32	M32	1"	26.3	23.5	80	M32	1"	M32	1"
40	M40	1 ¼"	32.2	28.8	130	M40	1 ¼"	M40	1 ¼"
50S	M50	1 ½"	38.2	34.2	200	M50	1 ½"	M50	1 ½"
50	M50	2"	44.1	39.4	400	M50	2"	M50	2"
63S	M63	2"	50.1	44.8	400	M63	2"	M63	2"
63	M63	2 ½"	56.0	50.0	425	M63	2 ½"	M63	2 ½"
75S	M75	2 ½"	62.0	55.4	425	M75	2 ½"	M75	2 ½"
75	M75	-	68.0*	60.8*	425	M75	-	M75	2 ½" *
75	-	3"	68.0	60.8	425	-	3"	-	3"
80	M80	3"	72.0	64.4	425	M80	3"	M80	3"
85	M85	3"	78.0	69.8	425	M85	3"	M85	3"
90	M90	3 ½"	84.0	75.1	425	M90	3 ½"	M90	3 ½"
100	M100	3 ½"	90.0	80.5	425	M100	3 ½"	M100	3 ½"
Note:	2 ½" NPT thread option (Max Cable Diameter = 65.0) (Max Diameter over Cores = 58.1) *								
	2 ½" NPSM thread option (Max Cable Diameter = 67.0) (Max Diameter over Cores = 59.9) *								

Additional assembly options are described by the following designation coding: -

Glands Type:	CR – S				
Available Part Numbers	C	R	S	*	*
				B	F
				S	M

Options:	B	Brass material
	S	Stainless Steel material
	F	Female conduit option
	M	Male conduit option

UL-C, UL-U and UL-X Range of Barrier Cable Glands

The **UL-* Range of Barrier Cable Glands** are metallic and are intended for use with armoured, unarmoured, braided, tape or screened cables. They allow the entry of the cable or conductors into

enclosures without compromising the explosion protection provided by the enclosure, in accordance with relevant codes of practice.

The UL-* Range of Barrier Cable Glands, when installed with or without a sealing ring in threaded holes and in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP 66. The UL-* Range of Barrier Cable Glands fitted with sealing rings, when installed in threaded holes or clearance holes with a lock nut and in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP66 and IP68 to 100 metres for 7 days.

The UL-* range comprises:

- UL-U cable glands comprising a range of sizes between 16 and 75.
- UL-X cable glands comprising a range of sizes between 20s and 75.
- UL-C cable glands comprising a range of sizes between 16 and 75.

Each size has a specified cable diameter range.

UL-U* Range of Barrier Cable Glands

The UL-U* Range of Barrier Cable Glands are suitable for use with circular, unarmoured, braided or screened cables; they comprise from front (enclosure side) to rear (incoming cable side):

Sizes 16, 20S and 20

- Entry body to tighten into an associated enclosure which is fitted with an optional sealing ring. The front and rear having male threads.
- Front ferrule that fits into the entry body. The ferrule body is one part of a two parts chamber where a two-part "PEPPERS T-1000 COMPOUND" epoxy putty setting compound is applied to provide an inner seal around the conductors. The external face when fitted into the entry body makes an unthreaded cylindrical flamepath.
- O-ring fitted over the rear of the front ferrule to provide an ingress seal to the unthreaded flamepath between the entry body and front ferrule.
- Rear ferrule, second part of a two part compound chamber, unthreaded flamepath between the entry body and front ferrule.
- Middle cap that has female thread at the front and secures ferrules in place within the entry body; the rear of the middle cap has a male thread to accept the back nut.
- Elastomeric, cable outer sheath seal, fitted within the middle cap
- Stainless steel skid washer, fitted to back of outer sheath seal.
- Back nut with male thread that screws into the seal housing to compress the outer sheath seal.

Sizes 25 and above

- Entry body to tighten into an associated enclosure which is fitted with an optional sealing ring. The front and rear have male threads.
- Front ferrule that fits into the entry body, the ferrule body is one part of a two part chamber where a two-part "PEPPERS T-1000 COMPOUND" epoxy putty setting compound is applied to provide an inner seal around the conductors. The external face when fitted into the entry body makes an unthreaded cylindrical flamepath.

- O-ring fitted over the rear of the front ferrule to provide an ingress seal to the unthreaded flamepath between the entry body and front ferrule.
- Rear ferrule, second part of a two part compound chamber, unthreaded at front female thread to accept seal housing at rear.
- Union nut that secures ferrules together within the rear of the entry body.
- Seal housing, has male thread at front which is screwed and secured with adhesive into the rear ferrule. Rear of seal housing contains outer sheath seal and skid washer.
- Elastomeric, cable outer sheath seal, fitted within the seal housing.
- Stainless steel skid washer, fitted to back of outer sheath seal.
- Back nut with male thread that screws into the seal housing to compress the outer sheath seal.

The following table details the available thread sizes, maximum number of cores that the gland can accept and the range of acceptable cable sizes for the UL-U range.

Gland Size	Standard Entry threads		Standard Alternative Entry threads		Max. number of cores	Max. Ø over cores mm	Outer sheath size mm	
	Metric	NPT	Metric	NPT			Min	Max
16	M20	½”	M25	¾”	15	10.4	3.4	8.4
20S	M20	½”	M25	¾”	35	10.4	4.8	11.7
20	M20	½”	M25	¾”	40	12.5	9.5	14.0
25	M25	¾”	M32	1”	60	17.8	11.7	20.0
32	M32	1”	M40	1 ¼”	80	23.5	18.1	26.3
40	M40	1 ¼”	M50	1 ½”	130	28.8	22.6	32.2
50S	M50	2”	M63	-	200	34.9	28.2	38.2
50	M50	2”	M63	-	400	39.4	33.1	44.1
63S	M63	2 ½”	M75	-	400	44.8	39.3	50.1
63	M63	2 ½”	M75	-	425	50.0	46.7	56.0
75S	M75	3”	-	-	425	55.4	52.3	62.0
75	M75	3”	-	-	425	60.8	58.0	68.0

UL-X* Range of Barrier Cable Glands

The UL-X* Range of Barrier Cable Glands are suitable for use with, unarmoured, braided and screened, circular and non-circular cables. They may also be used as a line bushing for terminating flying leads or for the direct inter-connection of associated enclosures; they comprise:

Sizes 20S and 20

- Entry body to tighten into an associated enclosure which is fitted with an optional sealing ring. The front and rear having male threads.
- Front ferrule that fits into the entry body, the ferrule body is one part of a two part chamber where a two-part “PEPPERS T-1000 COMPOUND” epoxy putty setting

compound is applied to provide an inner seal around the conductors. The external face when fitted into the entry body makes an unthreaded cylindrical flamepath.
- O-ring fitted over the rear of the front ferrule to provide an ingress seal to the unthreaded flamepath between the entry body and front ferrule
- Rear ferrule, second part of a two part compound chamber, unthreaded flamepath between the entry body and front ferrule.
- Union nut that secures front and rear ferrules together with the rear of the entry body.

Sizes 25 and above

- Entry body to tighten into an associated enclosure which is fitted with an optional sealing ring. The front and rear having male threads.
- Front ferrule that fits into the entry body, the ferrule body is one part of a two part chamber where a two-part "PEPPERS T-1000 COMPOUND" epoxy putty setting compound is applied to provide an inner seal around the conductors. The external face when fitted into the entry body makes an unthreaded cylindrical flamepath.
- O-ring fitted over the rear of the front ferrule to provide an ingress seal to the unthreaded flamepath between the entry body and front ferrule.
- Rear ferrule, second part of a two part compound chamber, unthreaded at front female thread to accept seal housing at rear.
- Union nut that secures ferrules together within the rear of the entry body.
- Union retaining cap, male thread which is screwed and secured with adhesive into rear ferrule thread.

The following table details the available thread sizes, maximum number of cores that the gland can accept and the range of acceptable cable sizes.

Type UL-X* Marine Shipboard Cable Glands

Gland Size	Standard Entry threads		Standard Alternative Entry threads		Max. number of cores	Max. Ø over cores mm	Max Outer sheath Szie mm
	Metric	NPT	Metric	NPT			
20S	M20	½"	M25	¾"	35	10.4	11.7
20	M20	½"	M25	¾"	40	12.5	14.0
25	M25	¾"	M32	1"	60	17.8	20.0
32	M32	1"	M40	1 ¼"	80	23.5	26.3
40	M40	1 ¼"	M50	1 ½"	130	28.8	32.2
50	M50	2"	M63	-	400	39.4	44.1
63	M63	2 ½"	M75	-	425	50.0	56.0
75	M75	3"	-	-	425	60.8	68.0

UL-C* Range of Barrier Cable Glands

The UL-C* Range of Barrier Cable Glands are suitable for use with circular, pliable wire, single wire and steel tape armoured cables along with braided/screened and un-armoured cables; they comprise:

- Entry body to tighten into an associated enclosure which is fitted with an optional sealing ring. The front and rear having male threads.
- Front ferrule that fits into the entry body, the ferrule body is one part of a two part chamber where a two-part “PEPPERS T-1000 COMPOUND” epoxy putty setting compound is applied to provide an inner seal around the conductors. The external face when fitted into the entry body makes an unthreaded cylindrical flamepath.
- O-ring fitted over the rear of the front ferrule to provide an ingress seal to the unthreaded flamepath between the entry body and front ferrule
- Rear ferrule/ cone, second part of a two part compound chamber at front and cone for clamping cable armour at rear.
- Clamp ring that secures cable armour to the cone and also provides earth protection
- Middle cap that has female thread at the front and secures ferrules in place within the entry body; the rear of the middle cap has a male thread to accept the outer cap
- Elastomeric, cable outer sheath seal, fitted into outer cap
- Nylon 66 skid washer, fitted into outer cap
- Outer cap, female thread, containing cable outer sheath seal and skid washer; outer cap is screwed on to the middle cap to compress the outer sheath seal

Gland Size	Standard Entry thread		Standard Alternative Entry threads		Max. No of cores	Max. Ø over cores mm	Max Inner Sheath mm	Outer sheath size mm				Armour Dia./ Thickness Universal mm
	Metric	NPT	Metric	NPT				Standard		Reduced Bore		
								Min	Max	Min	Max	
M16	M20	½”	M25	¾”	15	10.4	11.7	9.2	13.5	6.7	10.3	0.15 - 1.25
M20S	M20	½”	M25	¾”	35	10.4	11.7	11.5	16	9.4	12.5	0.15 - 1.25
M20	M20	½”	M25	¾”	40	12.5	14.0	15.5	21.1	14.3	17.6	0.15 - 1.25
M25	M25	¾”	M32	1”	60	17.8	20.0	20.3	27.4	17.5	23.9	0.15 - 1.6
M32	M32	1”	M40	1 ¼”	80	23.5	26.3	26.7	34.0	25.0	30.5	0.15 - 2.0
M40	M40	1 ¼”	M50	1 ½”	130	28.8	32.2	33.0	40.6	29.3	36.2	0.20 - 2.0
M50S	M50	2”	M63	-	200	34.9	38.2	39.4	46.7	38.1	42.4	0.20 - 2.5
M50	M50	2”	M63	-	400	39.4	44.1	45.7	53.2	41.1	48.5	0.20 - 2.5
M63S	M63	2 ½”	M75	-	400	44.8	50.1	52.1	59.5	46.9	54.8	0.30 - 2.5
M63	M63	2 ½”	M75	-	425	50.0	56.0	58.4	65.8	53.8	61.2	0.30 - 2.5
M75S	M75	3”	-	-	425	55.4	62.0	64.8	72.2	62.7	68.0	0.30 - 2.5
M75	M75	3”	-	-	425	60.8	68.0	71.1	78.0	66.5	73.4	0.30 - 2.5

Alternative metallic materials of manufacture:

The UL-* Range of Barrier Cable Glands may be manufactured from the following materials:

- Brass grade CW614 (CuZn 39Pb3)/ CZ121 3Pb
- Stainless Steel 1.4401/ 316 S31
- Stainless Steel 1.4404/ 316 S11/316L

Additionally, all metallic materials may be surface coated to limit electrolytic reaction between dissimilar materials, as long as they do not dimensionally alter the components.

Product Type Ref:
The product type is derived from the following options:
UL-abc-ddd-eee

a	Product Type		
	X	=	For use with unarmoured cable, no outer seal
	U	=	For use with unarmoured cable and fitted with elastomeric outer seal
	C	=	For use with cables utilising SWA armour, braid, tape or screen and fitted with elastomeric outer seal
b	Material of manufacture		
	B	=	Brass
	S	=	Stainless steel
c	Bore (UL-C only)		
	Blank	=	Standard bore
	R	=	Reduced bore
d	Gland size		
	16, 20S, 20, 25, 32, 40, 50S, 50, 63S, 63, 75S, 75		
e	Thread type and size		
	Mxx, x" NPT		

1.1.1 LT-C* Range of Barrier Cable Glands CML 19ATEX1171X and IECEx CML 19.0049X

When used in accordance with relevant codes of practice, the LT-C* Range of Barrier Cable Glands allow circular and non-circular cable or conductors to enter into an enclosure without compromising the explosion protection that it provides. The glands are intended for use on liquid tight, flexible, metallic conduit that is wired with circular, unarmoured cables that are provided with or without braids or screens. The LT-C* Range of Barrier Cable Glands fitted with sealing rings, when installed in threaded holes or clearance holes with a lock nut and in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP66 and IP68 to 100 metres for 7 days. They are manufactured from stainless steel or brass and comprise from front (enclosure side) to rear (incoming cable side) the following component parts:

- Entry body to tighten into an associated enclosure which is fitted with an optional interface o-ring seal on metric threaded variants. The front and rear of the body having male threads.

- Front ferrule that fits into the entry body. The ferrule body is one part of a two part chamber where a two-part “elastomeric” epoxy putty setting compound is applied to provide an inner seal around the conductors. The external face, when fitted into the entry body, makes an unthreaded cylindrical flamepath.
- O-ring fitted over the rear of the front ferrule to provide an ingress seal to the unthreaded flamepath between the entry body and front ferrule.
- Rear ferrule anchor, second part of a two part compound chamber, unthreaded flamepath between the entry body and front ferrule.
- Conduit olive that is compressed and seals the associated liquid tight conduit onto the rear external spiral feature of the rear ferule via the outer cap.
- Outer cap that has female thread at the front and secures the olive against the rear ferrule, in turn ensuring the front ferrule is in place within the entry body when tightened onto the rear of the entry body.

The following table details typical thread sizes and cable/conduit that can be accommodated within the LT-C Barrier Glands:

Gland Size	Standard Trade Size		Max Diameter Over Cores	Max No. of Cores	Max Cable Inner Sheath	Typical Conduit I/D	Conduit Outer Sheath
	Metric	NPT			mm	mm	mm
20S-1	M20	½”	5.0	9	5.0	6.2 – 7.1	11.4 – 12.9
20S-2	M20	½”	7.8	20	7.8	9.8 – 10.3	14.2 – 15.6
20-1	M20	½”	10.4	35	10.4	12.1 – 13.0	17.0 – 19.1
20-2	M20	½”	12.5	40	13.3	15.8 – 16.3	20.8 – 22.3
25-1	M25	¾”	17.8	60	18.0	20.8 – 21.3	26.0 – 27.8
32-1	M32	1”	23.5	80	23.6	26.0 – 27.1	32.7 – 34.5
40-1	M40	1 ¼”	28.8	130	31.8	34.8 – 35.8	41.1 – 43.3
50-1	M50	2”	37.0	200	37.0	40.0 – 40.6	47.3 – 49.4
63-1	M63	2 ½”	48.0	300	48.0	50.5 – 51.9	59.4 – 61.4
75-1	M75	3”	59.3	325	59.3	62.9 – 63.9	72.1 – 74.1
75-2	M75	3”	60.8	425	68.0	77.9 – 78.7	87.8 – 90.0

Design Options:

1. As detailed on drawing number PCG/ETDUL, glands can be manufactured with alternative entry thread and hexagon dimensions.
2. These glands are typically manufactured with Metric or NPT threaded entries; however, as detailed on drawing number PCG/ETDMV other thread types are available.
3. These glands have the option to be plated.
4. Type LT-C* Barrier Gland for Liquid Tight Conduit
5. Parallel threaded glands with thread length increased to 10mm are suitable for increased safety application.
6. The cable gland types in the description, may be manufactured with a size larger than the standard size on the entry component.

7. The cable glands type in the description may manufactured to the following standards:

   - 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

Notes:

Sira 14ATEX1303X and IECEx SIR 14.0106X are superseded by certificates CML 19ATEX1171X and IECEx CML 19.0049X.

The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 14ATEX1303X and IECEx SIR 14.0106X.

Where Sira 14ATEX1303X and/or IECEx SIR 14.0106X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

Sira 03ATEX1479X, Sira 09ATEX4124X and IECEx SIR 07.0098X are superseded by certificates CML 19ATEX1344X, CML 19ATEX4114X and IECEx CML 19.0046X.

The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 03ATEX1479X, Sira 09ATEX4124X and IECEx SIR 07.0098X.

Where Sira 03ATEX1479X and/or Sira 09ATEX4124X and/or IECEx SIR 07.0098X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

Sira 09ATEX1066X, Sira 09ATEX4124X and IECEx SIR 09.0033X are superseded by certificates CML 19ATEX1349X, CML 19ATEX4114X and IECEx CML 19.0107X.

The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 09ATEX1066X, Sira 09ATEX4124X and IECEx SIR 09.0033X.

Where Sira 09ATEX1066X and/or Sira 09ATEX4124X and/or IECEx SIR 09.0033X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

Variation 1

This variation introduces the following modifications:

i. To update the scope of the certificate to include the CR****, UL-* and LT-C* Cable Glands.

12 Certificate history and evaluation Reports

Issue	Date	Associated report	Notes
0	14 Aug 2019	R12370A/00	Issue of Prime Certificate
1	10 Oct 2019	R12627B/00	Introduction of Variation 1

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

None.

14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

14.1 The EC**** 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°C for Peppers T1000 Compound and -60°C to +120°C for Peppers T2000 Compound.

14.2 The CR****, UL-* and LT-C* 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°C.

14.3 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.

14.4 The parallel threaded entry component threads will be suitably sealed using a method that is applicable to the associated equipment to which the gland will be attached. This will be in accordance with the relevant installation code of practice and will ensure that any ingress protection and restricted breathing sealing requirements are maintained.

14.5 After initial assembly of the LT-C* type cable glands, the Outer Cap shall be released to enable inspection of the Olive Seal. There shall be no gap between the Olive Seal and the Ferrule Anchor. This ensures that all internal components are correctly sited and prevents the possibility of generating a source of ignition due to the release of an internal ignition. If there is a gap between the Olive Seal and the Ferrule Anchor, the Olive Seal shall be replaced. Consult the manufacturer.

14.6 Cable glands sizes 75 up to 100 are not available with the Peppers T2000 Compound material option.

Certificate Annex

Certificate Number	**CML 19ATEX4114X**
Equipment	**Range of EC****, CR****, UL-* and LT-C* Cable Glands**
Manufacturer	**Peppers Cable Glands Limited**

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/EC-C	1 of 1	1	14 Aug 19	GA – Barrier glands for armoured and unarmoured cable, EC-C family
PCG/ATX/EC-U	1 of 1	1	14 Aug 19	GA – Barrier cable glands for unarmoured cable, EC-U and EC-X families
PCG/ATX/EC-S	1 of 1	1	14 Aug 19	GA – Barrier gland range conduit stopper box EC-S family
PCG/ATX/2M	1 of 1	11	14 Aug 19	ATEX Component seal – Parts 2MI, 2MIS, 2MO, 2MOS, 2MOZS
PCG/ATX/3B	1 of 1	1	14 Aug 19	ATEX Component rear ferrulle part 3B
PCG/ATX/5B	1 of 1	1	14 Aug 19	ATEX Component Middle CAP Part 5B
PCG/ATX/6M	1 of 1	6	14 Aug 19	ATEX Component Outer CAP Part 6M
PCG/ATX/6U	1 of 1	1	14 Aug 19	ATEX Component outer CAP Part 6U
PCG/ATX/10MU	1 of 1	1	14 Aug 19	ATEX Component Clamp Ring Parts 10MU
PCG/ATX/11M	1 of 1	3	14 Aug 19	ATEX Component SKID Washer Parts 11MO
PCG/ATX/31B	1 of 1	2	14 Aug 19	ATEX Component Barrier Gland Entry Body Part 31B
PCG/ATX/31BT	1 of 1	1	14 Aug 19	ATEX Component Barrier Gland Entry Body Tapered Threads Part 31BT
PCG/ATX/33B	1 of 1	1	14 Aug 19	ATEX Component Barrier Gland Cone Part 33B – for all cables
PCG/ATX/34B	1 of 1	1	14 Aug 19	ATEX Component Barrier Gland Front Ferrule Part 34B
PCG/ATX/34V	1 of 1	4	14 Aug 19	ATEX Component Ferrule Part 34V
PCG/ATX/35BC	1 of 1	1	14 Aug 19	ATEX Component Rotating Conduit Nut, SPIRAL Part 35BC
PCG/ATX/35V	1 of 1	6	14 Aug 19	ATEX Component Conduit Nut Metric Thread Part 35V
PCG/ATX/35VC	1 of 1	6	14 Aug 19	ATEX Component Conduit Nut, Non-standard Sizes & Threads Part 35VC
PCG/ATX/35VT	1 of 1	8	14 Aug 19	ATEX Component Conduit Nut, NPT Thread Part 35VT
PCG/ATX/36B	1 of 1	1	14 Aug 19	ATEX Component Union Nut Part 36B
PCG/ATX/36U	1 of 1	1	14 Aug 19	ATEX Component Middle Cap Part 36U

Certificate Annex

Certificate Number **CML 19ATEX4114X**
Equipment **Range of EC****, CR****, UL-* and LT-C* Cable Glands**
Manufacturer **Peppers Cable Glands Limited**

Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/36V	1 of 1	5	14 Aug 19	ATEX Component Union Nut Part 36V
PCG/ATX/82N	1 of 1	8	14 Aug 19	ATEX Component Seal Parts 82NI & 82NIS
PCG/ATX/82V	1 of 1	7	14 Aug 19	ATEX Component Seal Parts 82VIN, 82VIS
PCG/ATX/88NMM	1 of 1	7	14 Aug 19	ATEX Conduit NUT, Male Part 88NMM
PCG/ATX/91A	1 of 1	4	14 Aug 19	Component SKID Washer – Parts 91AS, 91AB, 91ABT
PCG/ATX/91V	1 of 1	6	14 Aug 19	ATEX Component SKID Washer – Parts 91V, 91VB, 91VBT
PCG/ATX/PEXMP	1 of 1	4	14 Aug 19	Hazardous Area Approved Products – Marking Plan
PCG/ETDMV	1 of 1	9	14 Aug 19	Standard Thread Chart ATEX Certified Glands Using “M”, “V” & “N” Components
PCG/ETOR	1 of 1	12	14 Aug 19	Accessory Component Entry Thread O-ring Seal Part OR
PCG/LW1	1 of 1	8	14 Aug 19	Accessory Component Continuity Washer Part LW1
PCG/MATS/SB	1 of 1	5	14 Aug 19	Standard Materials ATEX Certified Glands Using “M”, “V” and “N” Components
PCG/OR	1 of 1	15	14 Aug 19	Accessories Component – O-ring Seal CR & UL Barrier Cable Gland Range Internal O-ring Seals
PCG/ORGD	1 of 1	6	14 Aug 19	Component Male Threaded Entry Component O-ring Groove Detail

Certificate Annex

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Issue 1

Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/CR-C	1 of 1	10	10 Oct 19	ATEX Barrier Gland Range Barrier Glands for Armoured and Unarmoured Cable, CR-C Family
PCG/ATX/CR-S	1 of 1	8	10 Oct 19	ATEX Barrier Gland Range Conduit Stopper Box CR-S Family
PCG/ATX/CR-U	1 of 1	10	10 Oct 19	ATEX Barrier Gland Range Barrier Glands for Unarmoured Cable, CR-U and CR-X Families
PCG/ATX/31V	1 of 1	9	10 Oct 19	ATEX Component Barrier Gland Entry Body Part 31V
PCG/ATX/31VT	1 of 1	10	10 Oct 19	ATEX Component Barrier Gland Entry Body – Tapered Threads Part 31VT
PCG/ATX/33V	1 of 1	9	10 Oct 19	ATEX Component Barrier Gland Cone Part 33V
PCG/ATX/33VX	1 of 1	4	10 Oct 19	ATEX Component Barrier Gland Cone Part 33VX – For Braided Cables
PCG/ATX/38V	1 of 1	5	10 Oct 19	ATEX Component Union Retaining Cap Part 38V
PCG/ATX/39V	1 of 1	8	10 Oct 19	ATEX Component Seal Housing Part 39V
PCG/ATX/10V	1 of 1	4	10 Oct 19	ATEX Component Armour Clamp Ring-Part 10V
PCG/ATX/11M	1 of 1	4	10 Oct 19	ATEX Component Skid Washer Parts-11MI, 11MO
PCG/ORGD	1 of 1	7	10 Oct 19	Component Entry Body O-ring Groove Detail
PCG/ATX/ULC	1 of 1	5	10 Oct 19	Barrier Gland Range for Armoured & Marine Shipboard Cable UL- C** Family
PCG/ATX/ULU	1 of 1	5	10 Oct 19	Barrier Gland Range for unarmoured Marine Shipboard Cable UL-U* and UL-X* Families
PCG/ATX/5UL	1 of 1	2	10 Oct 19	Middle Cap for UL-C-Part 5UL

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Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/CR-C	1 of 1	10	10 Oct 19	ATEX Barrier Gland Range Barrier Glands for Armoured and Unarmoured Cable, CR-C Family
PCG/ATX/CR-S	1 of 1	8	10 Oct 19	ATEX Barrier Gland Range Conduit Stopper Box CR-S Family
PCG/ATX/CR-U	1 of 1	10	10 Oct 19	ATEX Barrier Gland Range Barrier Glands for Unarmoured Cable, CR-U and CR-X Families
PCG/ATX/31V	1 of 1	9	10 Oct 19	ATEX Component Barrier Gland Entry Body Part 31V
PCG/ATX/31VT	1 of 1	10	10 Oct 19	ATEX Component Barrier Gland Entry Body – Tapered Threads Part 31VT
PCG/ATX/33V	1 of 1	9	10 Oct 19	ATEX Component Barrier Gland Cone Part 33V
PCG/ATX/33VX	1 of 1	4	10 Oct 19	ATEX Component Barrier Gland Cone Part 33VX – For Braided Cables
PCG/ATX/38V	1 of 1	5	10 Oct 19	ATEX Component Union Retaining Cap Part 38V
PCG/ATX/39V	1 of 1	8	10 Oct 19	ATEX Component Seal Housing Part 39V
PCG/ATX/31UL	1 of 1	2	10 Oct 19	Entry Body (all types)-Part 31UL
PCG/ATX/32UL	1 of 1	1	10 Oct 19	Front Ferrule (all types)-Part 32UL
PCG/ATX/33UL	1 of 1	2	10 Oct 19	Cone for UL-C-Part 33UL
PCG/ATX/34UL	1 of 1	2	10 Oct 19	Rear Ferrule for UL-X and UL-U-Part 34UL
PCG/ATX/35UL	1 of 1	2	10 Oct 19	Middle Cap for UL-U-Part 35UL
PCG/ATX/36UL	1 of 1	3	10 Oct 19	Union Nut for UL-X and UL-U-Part 36UL
PCG/ATX/38UL	1 of 1	2	10 Oct 19	Union Retaining Cap for UL-U-Part 38UL

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Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/CR-C	1 of 1	10	10 Oct 19	ATEX Barrier Gland Range Barrier Glands for Armoured and Unarmoured Cable, CR-C Family
PCG/ATX/CR-S	1 of 1	8	10 Oct 19	ATEX Barrier Gland Range Conduit Stopper Box CR-S Family
PCG/ATX/CR-U	1 of 1	10	10 Oct 19	ATEX Barrier Gland Range Barrier Glands for Unarmoured Cable, CR-U and CR-X Families
PCG/ATX/31V	1 of 1	9	10 Oct 19	ATEX Component Barrier Gland Entry Body Part 31V
PCG/ATX/31VT	1 of 1	10	10 Oct 19	ATEX Component Barrier Gland Entry Body – Tapered Threads Part 31VT
PCG/ATX/33V	1 of 1	9	10 Oct 19	ATEX Component Barrier Gland Cone Part 33V
PCG/ATX/33VX	1 of 1	4	10 Oct 19	ATEX Component Barrier Gland Cone Part 33VX – For Braided Cables
PCG/ATX/38V	1 of 1	5	10 Oct 19	ATEX Component Union Retaining Cap Part 38V
PCG/ATX/39V	1 of 1	8	10 Oct 19	ATEX Component Seal Housing Part 39V
PCG/ATX/39UL	1 of 1	2	10 Oct 19	Seal Housing for UL-U-Part 39UL
PCG/ATX/88N	1 of 1	9	10 Oct 19	ATEX Component Nut-Part 88N
PCG/ETDUL	1 of 1	4	10 Oct 19	Entry Thread And Hexagon Size Options For Component PCG/31UL
PCG/MATS/UL	1 of 1	2	10 Oct 19	Standard Materials for UL certified glands
PCG/ATX/34C	1 of 1	2	10 Oct 19	ATEX Component Ferrule Anchor Part 34C
PCG/ATX/36C	1 of 1	2	10 Oct 19	ATEX Component Outer CAP part 36C
PCG/ATX/37C	1 of 1	1	10 Oct 19	ATEX Component Olive Seal Parts 37C

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Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/CR-C	1 of 1	10	10 Oct 19	ATEX Barrier Gland Range Barrier Glands for Armoured and Unarmoured Cable, CR-C Family
PCG/ATX/CR-S	1 of 1	8	10 Oct 19	ATEX Barrier Gland Range Conduit Stopper Box CR-S Family
PCG/ATX/CR-U	1 of 1	10	10 Oct 19	ATEX Barrier Gland Range Barrier Glands for Unarmoured Cable, CR-U and CR-X Families
PCG/ATX/31V	1 of 1	9	10 Oct 19	ATEX Component Barrier Gland Entry Body Part 31V
PCG/ATX/31VT	1 of 1	10	10 Oct 19	ATEX Component Barrier Gland Entry Body – Tapered Threads Part 31VT
PCG/ATX/33V	1 of 1	9	10 Oct 19	ATEX Component Barrier Gland Cone Part 33V
PCG/ATX/33VX	1 of 1	4	10 Oct 19	ATEX Component Barrier Gland Cone Part 33VX – For Braided Cables
PCG/ATX/38V	1 of 1	5	10 Oct 19	ATEX Component Union Retaining Cap Part 38V
PCG/ATX/39V	1 of 1	8	10 Oct 19	ATEX Component Seal Housing Part 39V
PCG/ATX/LTC	1 of 1	4	10 Oct 19	ATEX Barrier Gland Range for Liquid Tight Flexible Conduit LT-C Cable Gland