



## TECHNICAL DATA

CABLE GLAND TYPE	: CWe, CXe
INGRESS PROTECTION	: IP66, IP67, IP68, NEMA 4X
DESIGN STANDARDS	: BS 6121:1989, EN 62444, IEC 62444
PROCESS CONTROL SYSTEM	: ISO 9001
	: ISO/IEC 80079-34:2011

## EXPLOSIVE ATMOSPHERES CLASSIFICATION

ATEX CERTIFICATION No	: CML 18ATEX1323X, CML 18ATEX4315X
ATEX CERTIFICATION CODE	: Ⓔ II 2G, II 1D, Ex eb IIC Gb, Ex ta IIIC Da
UKEX CERTIFICATION No	: CML 21UKEX1251X
UKEX CERTIFICATION CODE	: Ⓔ II 2G, II 1D, Ex eb IIC Gb, Ex ta IIIC Da
IECEx CERTIFICATION No	: IECEx CML 18.0180X
IECEx CERTIFICATION CODE	: Ex eb IIC Gb, Ex ta IIIC Da

## INSTALLATION INSTRUCTIONS

- Installation should only be performed by a competent person using the correct tools. Spanners should be used for tightening. Read all instructions before beginning installation.
- The interface between a cable entry device and its associated enclosure / cable entry will require additional sealing to achieve ingress protection (IP) ratings higher than IP54. The minimum protection level is IP54 for explosive gas atmospheres and IP6X for explosive dust atmospheres. Parallel threads (and tapered threads when using a non-threaded entry) require a CMP sealing washer or integral O-ring face seal (where available) to maintain IP66, 67 and 68 (when applicable). It is the installer's responsibility to ensure the IP rating is maintained at the interface.  
Note: When fitted to a threaded entry, all tapered threads will automatically provide an ingress protection rating of IP66.
- A CMP earth tag should be used when it is necessary to provide an earth bond connection. CMP earth tags have been independently tested to comply with Category B rating specified in IEC 62444 (there are no ratings stated in IEC 60079-0). Ratings are shown in the associated table. CMP earth tags slip over the cable gland or accessory entry thread from inside/outside the enclosure and must be secured with a locknut (if fitted internally).
- Metric entry threads comply with ISO 965-1 and ISO 965-3 with a 6g tolerance as required by IEC 60079-1:2014. The CMP standard metric thread pitch is 1.5mm for threads up to M75, and 2.0mm from M90 and above. Special thread pitches between 0.7 – 2.0mm are available on all products on request. See certificate for details of other thread types. NPT threads are in accordance with ASME B1.20.1-2013 gauging to CI 3.2 for external threads. For details of other thread types refer to IECEx certificate.
- Enclosures must be strong enough to support the cable and cable gland assembly. The enclosure surface finish must be smooth and flat to facilitate sealing with an O-ring or Entry Thread Sealing Washer for the required IP rating.
- Enclosure walls must be sufficiently strong enough to support the cable and cable gland assembly. Enclosure entries shall be perpendicular. Any draft angles from the casting/moulding process should have a perpendicular flat spot machined to facilitate sealing with an O-ring or Entry Thread Sealing Washer.
- CMP Products recommends that when using the cable gland with a through-hole, the hole must be circular, free of burrs and the diameter no larger than 0.7mm above the thread major diameter. A suitable CMP Products locknut shall be used to secure the product. See CMP Products catalogue for locknut options.
- Cable glands do not have any serviceable parts and are therefore not intended to be repaired.

CMP Earth Tag Size	Short Circuit Ratings Symmetrical Fault Current (kA) for 1 second
20	3.06
25	4.06
32	5.40
40	7.20
50	10.40
63	10.40
75	10.40

## SPECIAL CONDITIONS FOR SAFE USE

- The glands when used for terminating braided cables are only suitable for fixed installations. Cables must be efficiently clamped to prevent pulling or twisting.

## ACCESSORIES

The following accessories are available from CMP Products, as optional extras, to assist with fixing, sealing and earthing :-  
Locknut, Earth Tag, Serrated Washer, Entry Thread (I.P.) Sealing Washer, Shroud

CMP Products Limited on its sole responsibility declares that the equipment referred to herein conforms to the requirements of the ATEX Directive 2014/34/EU and UK statutory requirements SI 2016 No. 1107 (as amended). This is shown in the following harmonised/designated standards;

EN 60079-0:2018, EN 60079-7:2015 + A1:2018, EN 60079-15:2017, EN 60079-31:2014, BS 6121:1989, EN 62444:2013

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**CE 2776**  
**UK 2503**

Notified Body: CML B.V., Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands

Approved Body: Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ

**www.cmp-products.com**



# INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES CWe & CXe

FOR TERMINATION OF CABLES WITH WIRE BRAID USING GLAND TYPE CXe OR SINGLE WIRE ARMOUR (SWA) USING GLAND TYPE CWe FOR USE IN EXPLOSIVE ATMOSPHERES.

INCORPORATING EU DECLARATION OF CONFORMITY TO DIRECTIVE 2014/34/EU AND UK STATUTORY REQUIREMENTS SI 2016 No. 1107 (AS AMENDED)



CWe = SWA, AWA  
CXe = Braid, Tape, etc armour

Number of turns to tighten	Outer Seal Tightening Guide												
	GLAND SIZE												
	20S16	20S	20	25S	25	32	40	50S	50	63S	63	75S	75
	CABLE DIAMETER												
0.5	13.2	15.9	20.9	22.0	26.2	33.9							
1	12.5	15.3	20.0	21.2	25.4	32.9	40.4	46.7	52.8	59.2	65.9	72.1	78.5
1.5	11.9	14.7	19.0	20.4	24.6	31.9	39.0	45.4	51.4	57.7	64.6	70.6	77.2
2	11.2	14.2	18.1	19.6	23.8	30.8	37.6	44.1	50.0	56.2	63.4	69.2	75.9
2.5	10.5	13.6	17.2	18.8	23.0	29.8	36.2	42.9	48.7	54.7	62.1	67.7	74.6
3	9.8	13.0	16.2	18.0	22.2	28.8	34.8	41.6	47.3	53.2	60.9	66.3	73.3
3.5	9.2	12.4	15.3	17.2	21.4	27.8	33.5	40.3	45.9	51.6	59.6	64.8	71.9
4	8.5	11.8	14.4	16.4	20.6	26.8	32.1	39.0	44.5	50.1	58.4	63.4	70.6
4.5	7.8	11.2	13.4	15.6	19.8	25.7	30.7	37.8	43.2	48.6	57.1	61.9	69.3
5	7.1	10.7	12.5	14.8	19.0	24.7	29.3	36.5	41.8	47.1	55.9	60.5	68.0
5.5	6.5	10.1	12.0	14.0	18.2	23.7	27.9	35.2	40.4	45.6	54.6	59.0	66.7
6	5.8	9.5											

Cable Gland Size	Metric	Thread Length (Metric)	Cable Bedding Diameter			Overall Cable Diameter		Armour Range			Across Flats		Across Corners		Protrusion Length	CW Ordering Reference (Brass Metric)	CX Ordering Reference (Brass Metric)	Shroud	Cable Gland Weight (Kgs)
			Max	Min	Max	Min	Max	Min	Max	Max	Max								
												Grooved Cone (X)	Stepped Cone (W)						
20s16	M20	15.0	8.7	6.1	13.1	0.8	1.25	0.3	1.0	24.0	26.4	48.0	20S16CWEIRA	20S16CXEIRA	PVC04	0.10			
20S	M20	15.0	11.7	9.5	15.9	0.8	1.25	0.3	1.0	24.0	26.4	48.0	20SCWEIRA	20SCXEIRA	PVC04	0.10			
20	M20	15.0	14.0	12.5	20.9	0.8	1.25	0.4	1.0	30.5	33.6	48.0	20CWEIRA	20CXEIRA	PVC06	0.15			
25S	M25	15.0	20.0	20.0	24.0	22.0	1.25	1.6	0.4	1.2	37.5	41.3	56.0	25SCWEIRA	25SCXEIRA	PVC09	0.22		
25	M25	15.0	20.0	18.2	26.2	1.25	1.6	0.4	1.2	37.5	41.3	56.0	25CWEIRA	25CXEIRA	PVC09	0.22			
32	M32	15.0	26.0	23.7	33.9	1.6	2.0	0.4	1.2	46.0	50.6	54.0	32CWEIRA	32CXEIRA	PVC11	0.31			
40	M40	15.0	32.2	27.9	40.4	1.6	2.0	0.4	1.6	55.0	60.5	58.0	40CWEIRA	40CXEIRA	PVC15	0.45			
50S	M50	15.0	38.2	35.2	46.7	2.0	2.5	0.4	1.6	60.0	66.0	61.0	50SCWEIRA	50SCXEIRA	PVC18	0.57			
50	M50	15.0	44.1	40.4	53.0	2.0	2.5	0.6	1.6	70.1	77.1	60.0	50CWEIRA	50CXEIRA	PVC21	0.75			
63S	M63	15.0	50.0	45.6	59.4	2.0	2.5	0.6	1.6	75.0	82.5	74.0	63SCWEIRA	63SCXEIRA	PVC23	1.04			
63	M63	15.0	56.0	54.6	65.8	2.0	2.5	0.6	1.6	80.0	88.0	71.0	63CWEIRA	63CXEIRA	PVC25	1.02			
75S	M75	15.0	62.0	59.0	72.0	2.0	2.5	0.6	1.6	90.0	99.0	86.0	75SCWEIRA	75SCXEIRA	PVC28	1.79			
75	M75	15.0	64.2	66.7	78.4	2.5	3.0	0.6	1.6	100.0	110.0	82.0	75CWEIRA	75CXEIRA	PVC30	2.09			
90	M90	24.0	78.6	76.2	90.3	3.15	4.0	0.8	1.6	114.3	125.7	95.0	90CWEIRA	90CXEIRA	PVC32	3.04			
100	M100	24.0	91.0	86.1	101.4	3.15	4.0	0.8	1.6	123.0	135.3	95.0	100CWEIRA	100CXEIRA	LSF33	3.13			
115	M115	24.0	98.0	101.5	110.2	3.15	4.0	0.8	1.6	133.4	146.7	107.5	115CWEIRA	115CXEIRA	LSF34	4.48			
130	M130	24.0	115.0	110.2	123.2	3.15	4.0	0.8	1.6	152.4	167.6	110.0	130CWEIRA	130CXEIRA	LSF35	5.76			

*\*For material options add the following suffix to the Ordering Reference; Brass (no suffix required); Nickel Plated Brass 'S'; 316 Grade Stainless Steel 'I'; Copper Free Aluminium '1'*

*For NPT options add the following digits to the material suffix; 1/2" = 31; 3/4" = 32; 1" = 33; 1 1/4" = 34; 1 1/2" = 35; 2" = 36; 2 1/2" = 37; 3" = 38; 3 1/2" = 39; 4" = 40 (Brass requires prefix 'O')*

*Examples: 32CWEIRA34 = Nickel Plated Brass 1-1/4" NPT; 50SCWEIRA35 = Brass 1-1/2" NPT; 25CWEIRA42 = Stainless Steel 3/4" NPT; 20CWEIRA3 = Nickel Plated Brass M20*

\*For material options add the following suffix to the Ordering Reference: Brass (no suffix required); Nickel Plated Brass 'S'; 316 Grade Stainless Steel '4'; Copper Free Aluminium '1'  
For NPT options add the following digits to the material suffix: 1/2" = 31; 3/4" = 32; 1" = 33; 1 1/4" = 34; 1 1/2" = 35; 2" = 36; 2 1/2" = 37; 3" = 38; 3 1/2" = 39; 4" = 310 (Brass requires prefix '0')  
Examples: 32CWEIRAS34 = Nickel Plated Brass 1-1/4" NPT; 50SCWEIRAS35 = Brass 1-1/2" NPT; 25CWEIRAS32 = Stainless Steel 3/4" NPT; 20CWEIRAS = Nickel Plated Brass M20

Dimensions are displayed in millimetres unless otherwise stated.

NOTE: \*CMP SOLO LSF Halogen Free Shrouds also available for the full range on request. + Alternative armour clamping range available for non-standard armour sizes.  
Marine Approvals including Lloyds & ABS are also available from CMP Products.



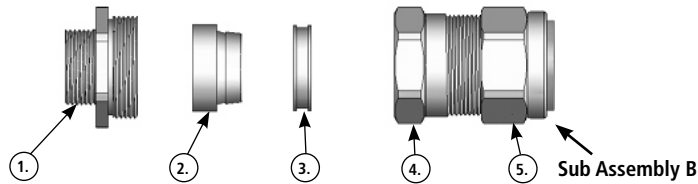
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FI438		
Certification	Revision	Revision
UKEX	0	04/21
IFS	11	10/21
ATEX / IECEx	8	04/19

# INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES CWe & CXe

**CABLE GLAND COMPONENTS** - It is not necessary to dismantled the cable gland any further than illustrated below

- 1. Entry Component
- 2. Detachable Armour Cone
- 3. AnyWay Clamping Ring
- 4. Body
- 5. Outer Seal Nut



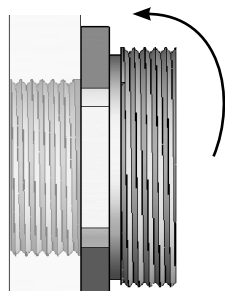
## PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

1. Separate components (1), (2) and (3) from Sub-Assembly B. If required, fit a shroud over the cable outer sheath. Prepare the cable by removing the cable outer sheath and the braid/armour to suit the geometry of the equipment. Remove a further 18mm (max) of outer sheath to expose the armour. If applicable remove any tapes or wrappings to expose the inner sheath.

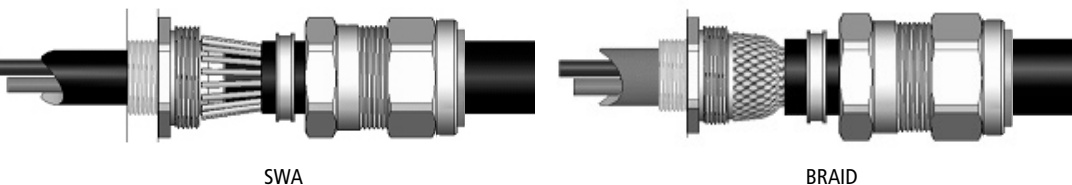
NOTE: On maximum size cables the clamping ring may only pass over the armour.



2. Secure the Entry Component (1) into the equipment as indicated.

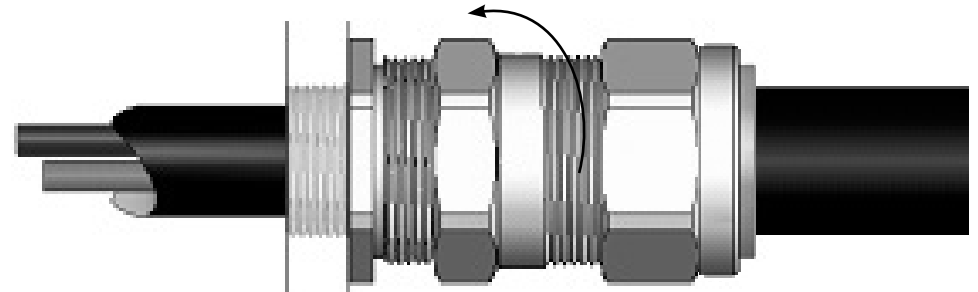


3. Locate the Detachable Armour Cone (2) into the Entry Component. Pass the cable through the entry item and evenly space the braid/armour around the cone.



4. While continuing to push the cable forward to maintain contact between the braid armour and the Cone (2), tighten the Body (4) by hand until the AnyWay Clamping Ring (3) is felt to have engaged the braid/armour.

Hold the Entry Component (1) with a spanner and tighten the Body (4) using a spanner until all available threads are used, the body and entry item are metal to metal and cannot be tightened further.



5. Only using finger pressure, tighten the outer seal nut assembly (5) until light resistance to tightening is met.

Then either use the outer seal tightening guide tape or table on the rear of the page to determine how much further to tighten the seal using a spanner (using the outer seal tightening guide is recommended).

Wrap the outer seal tightening guide tape around the cable to show the amount of spanner turns needed (as shown here). Make sure the correct side of the outer seal tightening guide tape is used depending on the cable gland size.

