

**TECHNICAL DATA**

CABLE GLAND TYPE : C2K
INGRESS PROTECTION : IP66, IP67, IP68
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 1D, Ex eb IIC Gb, Ex ta IIIC Da
UKEX CERTIFICATION No : CML 21UKEX1251X
UKEX CERTIFICATION CODE : Ⓔ II 2G 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

C2K cable glands are only suitable for fixed installations when used with braid cables. Cables must be effectively clamped to prevent twisting and pulling

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

Malcolm Webber - Product Engineering Manager - (Authorised Person)
CMP Products Limited, Cramlington, NE23 1WH, UK

EU Economic Operator: CMP Products Germany GmbH. Address: Lukasstraße 25a, 52070 Aachen
17th March 2020

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

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

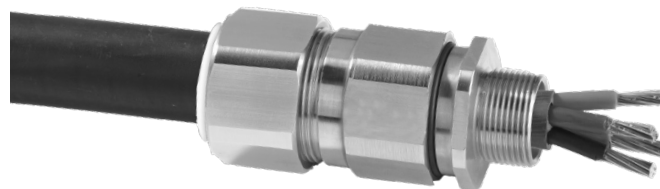
www.cmp-products.com



INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES C2K

FOR TERMINATION OF CABLES WITH WIRE BRAID, TAPE ARMOUR (STA/ DSTA), STRIP ARMOUR OR SINGLE WIRE ARMOUR (SWA).
FOR USE WITH INCREASED SAFETY Ex e EQUIPMENT

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



Outer Seal Tightening Guide													
Number of turns to tighten	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 selection table																			
Cable Gland Size	Available Entry Threads					Cable Bedding Diameter	Overall Cable Diameter		Armour Wire Diameter				Across Flats	Across Corners	Protrusion Length	Combined Ordering Reference (*Brass Metric)			Cable Gland Weight (kgs)
	Standard				Option				Grooved Cone (x)		Stepped Cone (w)					Combined Ordering Reference (*Brass Metric)			
Metric	Thread Length (Metric)	NPT	Thread Length (NPT)	NPT	Max	Min	Max	Min	Max	Min	Max	Min	Max	Size	Type	Ordering Suffix			
20S/16	M20	15.0	1/2"	19.9	3/4"	8.7	6.1	13.1	0.3	1.0	0.8	1.25	30.5	33.6	65.0	20S/16	C2K	1RA	0.23
20S	M20	15.0	1/2"	19.9	3/4"	11.7	9.5	15.9	0.3	1.0	0.8	1.25	30.5	33.6	62.0	20S	C2K	1RA	0.24
20	M20	15.0	1/2"	19.9	3/4"	14.0	12.5	20.9	0.4	1.0	0.8	1.25	30.5	33.6	63.0	20	C2K	1RA	0.22
25S	M25	15.0	3/4"	20.2	1"	20.0	14.0	22.0	0.4	1.2	1.25	1.6	37.5	41.3	69.5	25S	C2K	1RA	0.35
25	M25	15.0	3/4"	20.2	1"	20.0	18.2	26.2	0.4	1.2	1.25	1.6	37.5	41.3	69.5	25	C2K	1RA	0.35
32	M32	15.0	1 1/4"	25.0	1 1/4"	26.0	23.7	33.9	0.4	1.2	1.6	2.0	46.0	50.6	75.0	32	C2K	1RA	0.55
40	M40	15.0	1 1/4"	25.6	1 1/2"	32.2	27.9	40.4	0.4	1.6	1.6	2.0	55.0	60.5	75.0	40	C2K	1RA	0.75
50S	M50	15.0	1 1/2"	26.1	2"	38.2	35.2	46.7	0.4	1.6	2.0	2.5	60.0	66.0	77.0	50S	C2K	1RA	0.86
50	M50	15.0	2"	26.9	2 1/2"	44.1	40.4	53.0	0.6	1.6	2.0	2.5	70.1	77.1	77.0	50	C2K	1RA	1.13
63S	M63	15.0	2"	26.9	2 1/2"	50.0	45.6	59.4	0.6	1.6	2.0	2.5	75.0	82.5	80.0	63S	C2K	1RA	1.35
63	M63	15.0	2 1/2"	39.9	3"	56.0	54.6	65.8	0.6	1.6	2.0	2.5	80.0	88.0	80.0	63	C2K	1RA	1.34
75S	M75	15.0	2 1/2"	39.9	3"	62.0	59.0	72.0	0.6	1.6	2.0	2.5	90.0	99.0	87.0	75S	C2K	1RA	2.02
75	M75	15.0	3"	41.5	3 1/2"	64.2	66.7	78.4	0.6	1.6	2.5	3.0	100.0	110.0	88.0	75	C2K	1RA	2.48
90	M90	24.0	3 1/2"	42.8	4"	78.6	76.2	90.3	0.8	1.6	3.15	4.0	115.0	126.5	102.0	90	C2K	1RA	3.52
100	M100	24.0	4"	44.0	5"	91.0	86.1	101.4	0.8	1.6	3.15	4.0	127.0	139.7	114.0	100	C2K	1RA	4.58
115	M115	24.0	4"	44.0	5"	98.0	101.5	110.2	0.8	1.6	3.15	4.0	133.4	146.7	114.0	115	C2K	1RA	6.50
130	M130	24.0	5"	46.8	6"	115.0	110.2	123.2	0.8	1.6	3.15	4.0	152.4	167.6	114.0	130	C2K	1RA	8.50
Dimensions are displayed in millimetres unless otherwise stated																			

Dimensions are displayed in millimetres unless otherwise stated

*Stepped cone is for single wire armour and grooved cone is for all other armours



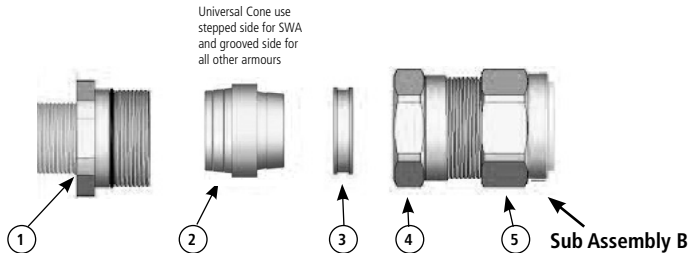
Glasshouse Street • St. Peters • Newcastle upon Tyne • NE6 1BS
Tel: +44 191 265 7411 • Fax: +44 1670 715 646
E-Mail: customerservices@cmp-products.co.uk • Web: www.cmp-products.com

F1440		
Certification	Revision	Revision
IFS	14	03/24
ATEX / IECEx	10	04/19
UKEX	0	04/21

INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES C2K

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

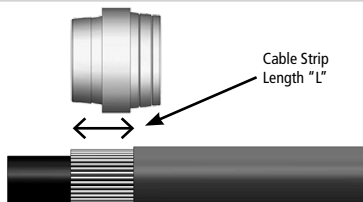
- 1. Entry Component
- 2. Detachable Armour Cone
- 3. AnyWay Clamping Ring
- 4. Body
- 5. Outer Seal Nut



PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

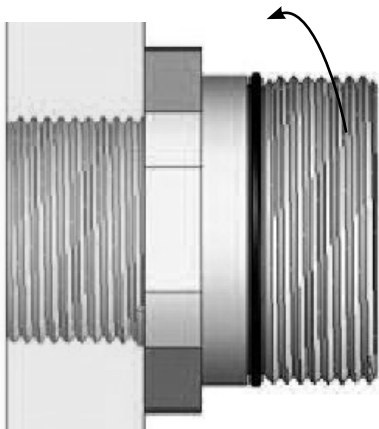
1.Slacken the Outer Seal Assembly (5), but do not remove it from the Body (4). Separate the gland components by removing the Body (4) and the Outer Seal Assembly (5) as one unit. (Note that the Reversible Armour Cone (2) and AnyWay Clamping Ring (3) are loose items). Pass the Body (4), Outer Seal Assembly (5) and AnyWay Clamping Ring (3) over the cable, Outer Seal Assembly (5) first.

2. Prepare the cable by stripping back the cable outer sheath and armour to suit the equipment geometry. Expose the armour by stripping back the outer sheath further using the table below as a guide.

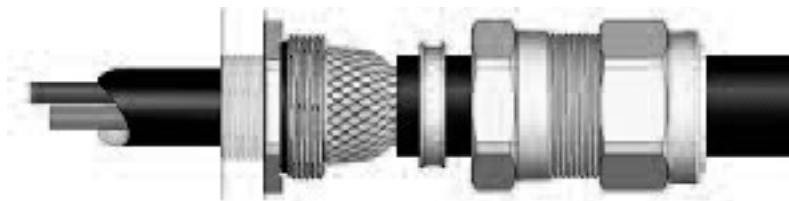


CABLE GLAND SIZE	20S/16, 20S, 20	25S, 25, 32, 40	50S, 50, 63S, 63	75S, 75, 90,100,115,130
CABLE STRIP LENGTH "L"	12 mm (0.472 inches)	15 mm (0.591 inches)	18 mm (0.709 inches)	20 mm (0.787inches)

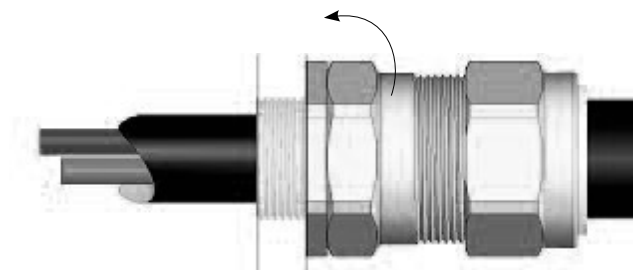
3. Secure the Entry Component (1) to the equipment by tightening with a spanner.



4. Locate the Reversible Armour Cone (2) in the Entry Component (1). Stepped side outwards for SWA, grooved side outwards for all other cable types. Pass the cable through the Cone (2) and Entry Component (1), evenly spacing the braid or armour around the Cone (2).



5. While continuing to gently push the cable forward to keep the braid or armour in contact with the Cone (2), tighten the Body (4) first by hand and then with a spanner until the Body (4) is fully tightened onto the Entry Component (1) and no threads are visible.



6. 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.

