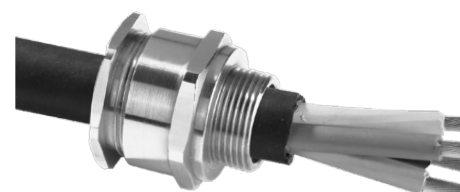




INSTALLATION INSTRUCTIONS FOR A2e / RA2e CABLE GLAND

CABLE GLAND FOR USE WITH UNARMoured AND BRAID ARMoured CABLES

INCORPORATING EU DECLARATION OF CONFORMITY TO DIRECTIVE [2014/34/EU]



A2e - no face seal
RA2e - with face seal

TECHNICAL DATA	
CABLE GLAND TYPE	: A2e / RA2e
INGRESS PROTECTION	: IP66, IP67, IP68
PROCESS CONTROL SYSTEM	: ISO 9001
	: ISO/IEC 80079-34:2011
EXPLOSIVE ATMOSPHERES CLASSIFICATION	
ATEX CERTIFICATION No	: CML 18ATEX1321X, CML 18ATEX4313X
ATEX CERTIFICATION CODE	: II 2G Ex eb IIC Gb, II 1D Ex ta IIIC Da
	: II 3G Ex nR IIC Gc
IECEX CERTIFICATION No	: IECEX 18.0179X
IECEX CERTIFICATION CODE	: Ex eb IIC Gb, Ex ta IIIC Da, Ex nR IIC Gc

INSTALLATION INSTRUCTIONS

- Read all instructions before beginning installation. Installation shall only be performed by competent, suitably trained personnel (in accordance with EN/IEC 60079-14) using the correct tools; spanners should be used for tightening.
- Inspection and maintenance shall only be performed by competent, suitably trained personnel (in accordance with EN/IEC 60079-14 (Initial Inspection) and EN/IEC 60079-17).
- 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 installers 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.
- The standard product temperature range is -60°C to +130°C. The equipment should not be used outside of this range.
- Cable glands do not have any serviceable parts and are therefore not intended to be repaired.
- Cable glands are manufactured from Brass, Nickel Plated Brass, Stainless Steel, Mild Steel or Aluminium, with Silicone seals. The end user shall consider the performance of these materials with regard to attack by aggressive substances that may be present in the hazardous area. Consideration should be given to potential degradation due to galvanic corrosion at the interface of dis-similar metallic materials.
- It is the end user's responsibility to ensure the equipment materials are suitable for their final installation location. If in doubt consult CMP Products Limited.
- Once installed do not dismantle except for inspection. An inspection should be conducted as per IEC / EN 60079-17 by a qualified person. After inspection the gland should be re-assembled as instructed, ensuring the outer seal nut is correctly tightened to ensure the cable is secured.
- 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 will need to be sufficiently strong to support the cable and cable gland assembly. Enclosure entries must 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 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.
- 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 (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).

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

SPECIFIC CONDITIONS OF USE

- All cable gland types and sizes are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
- When the cable glands are supplied with an entry thread that is one size up from the nominal gland size, designated with the letter 'B' after the gland size, e.g. 32B****, they shall not be used with any adaptor device.
- The cable glands shall only be used where the temperature, at the point of entry, is in the following ranges:
 - EPDM (Black): -60°C +130°C

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

Cable Gland Size	Available Entry Threads (Alternate Metric Thread Lengths Available)					Overall Cable Diameter		RA2e Across Flats	RA2e Across Corners	A2e Across Flats	A2e Across Corners	Protrusion Length	Combined Ordering Reference (*Brass Metric)			Shroud (A2e)	Shroud (RA2e)	Cable Gland Weight (Kgs)
	Standard			Option		Min	Max						Max	Max	Max			
	Metric	Thread Length (Metric)	NPT	Thread Length (NPT)	NPT	Min	Max	Max	Max	Max	Max	Max						
16	M16	10.0	-	-	-	3.2	8.7	27.0	29.7	24.0	26.4	28.2	16	RA2E	IRA	PVC04	PVC05	0.060
20x16	M20	10.0	1/2"	19.9	3/4"	3.2	8.7	27.0	29.7	24.0	26.4	25.4	20x16	RA2E	IRA	PVC04	PVC05	0.070
205	M20	10.0	1/2"	19.9	3/4"	6.1	11.7	27.0	29.7	24.0	26.4	25.4	205	RA2E	IRA	PVC04	PVC05	0.060
20	M20	10.0	1/2"	19.9	3/4"	6.5	14.8	27.0	29.7	27.0	29.7	27.3	20	RA2E	IRA	PVC05	PVC05	0.070
25	M25	10.0	3/4"	20.2	1"	11.1	20.0	36.0	39.6	36.0	39.6	35.8	25	RA2E	IRA	PVC09	PVC09	0.130
32	M32	10.0	1"	25.0	1 1/4"	17.0	26.3	41.0	45.1	41.0	45.1	34.5	32	RA2E	IRA	PVC10	PVC10	0.150
40	M40	15.0	1 1/4"	25.6	1 1/2"	23.5	32.2	50.0	55.0	50.0	55.0	35.7	40	RA2E	IRA	PVC13	PVC13	0.200
505	M50	15.0	1 1/2"	26.1	2"	31.0	38.2	60.0	66.0	60.0	66.0	32.5	505	RA2E	IRA	PVC15	PVC18	0.260
50	M50	15.0	2"	26.9	2 1/2"	35.6	44.0	60.0	66.0	60.0	66.0	36.3	50	RA2E	IRA	PVC18	PVC18	0.270
635	M63	15.0	2"	26.9	2 1/2"	41.5	49.9	75.0	82.5	70.5	77.6	33.8	635	RA2E	IRA	PVC21	PVC23	0.430
63	M63	15.0	2 1/2"	39.9	3"	47.2	55.9	75.0	82.5	75.0	82.5	36.0	63	RA2E	IRA	PVC23	PVC23	0.400
755	M75	15.0	2 1/2"	39.9	3"	54.0	61.9	90.0	99.0	80.0	88.0	36.2	755	RA2E	IRA	PVC24	PVC27	0.520
75	M75	15.0	3"	41.5	3 1/2"	61.1	67.9	89.0	97.9	84.0	92.4	40.9	75	RA2E	IRA	PVC26	PVC27	0.500
90	M90	24.0	3 1/2"	42.8	4"	66.6	79.9	108.0	118.8	108.0	118.8	55.4	90	RA2E	IRA	PVC31	PVC31	1.600
100	M100	24.0	3 1/2"	42.8	4"	76.0	91.0	122.0	135.3	122.0	135.3	55.4	100	RA2E	IRA	LSF33	LSF33	1.780
115	M115	24.0	4"	44.0	5"	86.0	97.8	133.4	146.7	133.4	146.7	65.4	115	RA2E	IRA	LSF34	LSF34	2.670
130	M130	24.0	5"	46.8	-	97.0	114.9	152.4	167.6	152.4	167.6	74.1	130	RA2E	IRA	LSF35	LSF35	3.800

Dimensions are displayed in millimetres unless otherwise stated

Above ordering reference for RA2e, Remove 'R' for A2e with no face seal included
Standard Seal (Black) Temperature Range = -60°C to +130°C
For high temperature variants (-60°C to +200°C) see A2eHT/RA2eHT products.

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 the following standards:

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

J. Hichens

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17th March 2020

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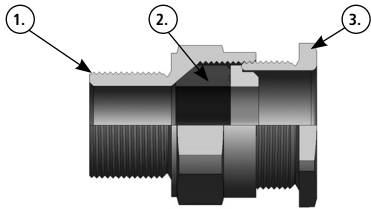
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F1441		
Certification	Revision	Date
IFS	14	08/20
ATEX / IECEx	12	08/20

INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES RA2e, A2e

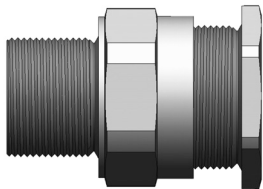
CABLE GLAND COMPONENTS

- 1. Entry Item
- 2. Seal
- 3. Seal Nut

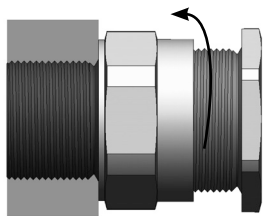


PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

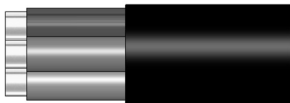
1. It is not necessary to dismantle the gland any further than illustrated below.



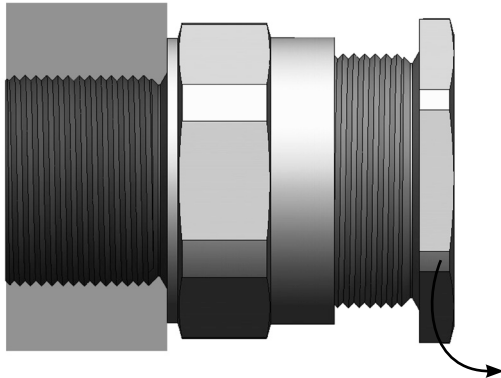
2. Fit the gland into the equipment and fully tighten the entry item (1). RA2e 'O' ring face seal will engage when fully tightened



3. Determine the conductor length required to suit the installation and prepare the cable accordingly, removing part of the outer sheath where required to reveal the insulated conductors.



4. Slacken the seal nut (3) to relax the seal (2).



5. Pass the cable through the gland to the desired position, then tighten the seal nut by hand until resistance is felt (when the seal contacts the cable). Tighten with a spanner one further turn.

