

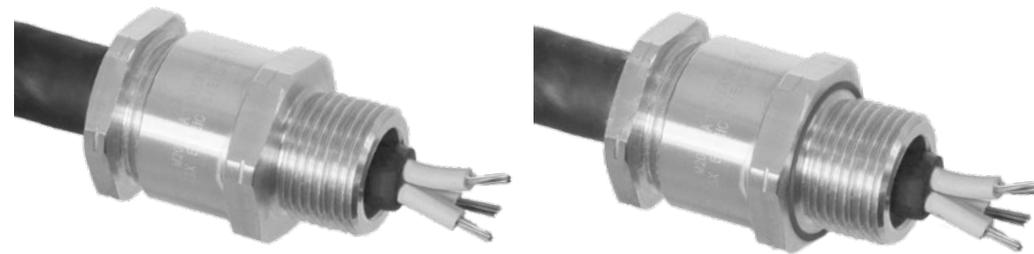


INSTALLATION INSTRUCTIONS FOR A2F100, RA2F100 CABLE GLAND

CABLE GLAND FOR USE WITH UNARMoured AND BRAID ARMoured CABLES

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

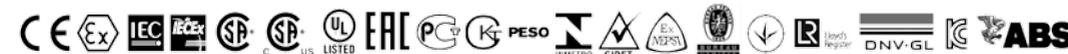
CABLE GLAND TYPES A2F100 RA2F100



A2F100 - no face seal
RA2F100 - with face seal



FI492		
Certificate	Revision	Date
IFS	6	3/17
ATEX / IECEx	0	5/16



Logos shown for illustration purposes only. Please check certification for details

TECHNICAL DATA
CABLE GLAND TYPE : A2F100, RA2F100
INGRESS PROTECTION : IP66, IP67, IP68
PROCESS CONTROL SYSTEM : BS EN ISO 9001
 ISO/IEC 80079-34:2011

EXPLOSIVE ATMOSPHERES CLASSIFICATION
ATEX CERTIFICATION No : SIRA16ATEX1018, SIRA16ATEX4020
ATEX CERTIFICATION CODE : II 2G Ex db IIC Gb, II 2G Ex eb IIC Gb, II 1D Ex ta IIIC Da
 II 3G Ex nRc IIC
IECEx CERTIFICATION No : IECEx SIR 16.0006
IECEx CERTIFICATION CODE : Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da, Ex nRc IIC Gc

IMPORTANT NOTES FOR INSTALLERS

- 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).
- Ingress Protection Statement; The interface between a cable entry device and its associated enclosure / cable entry cannot be defined. It is the user's responsibility to ensure that a minimum protection level (IP54 for explosive gas atmospheres and IP6X for explosive dust atmospheres) is maintained at the interface. Entry component threads may need additional sealing to maintain the ingress protection rating and/or restricted breathing performance as applicable to the equipment to which it will be attached, such as by either a sealing washer, thread sealant or integrated 'O' ring face seal (RA2F100). Reference should also be made to the information from EN 60079-14:2014, Clause 10, Table 10, (Note: When fitted to a threaded entry, all tapered threads will automatically provide an ingress protection rating of IP6X).
- 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 or Mild Steel 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 dissimilar 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.
- Ex db marked cable glands can only be supplied with metric or NPT entry threads.
- 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.

SPECIAL CONDITIONS FOR SAFE USE None

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

Number of turns to tighten	Outer Seal Tightening Guide																					
	GLAND SIZE																					
	16	20S16	20S	20	20L	25	25L	32	32L	40	50S	50	63S	63	75S	75	90	100	115	130		
1.0										32.2			44.0	49.6		61.9				89.0		114.7
1.5	8.0	8.0			14.0	19.5	20.0	25.9	25.9	31.5	37.7	43.4	48.9	54.5	61.3	67.5				87.9	97.9	113.4
2.0	7.1	7.1	11.2	13.0	13.0	18.7	19.2	25.0	25.0	30.7	36.9	42.7	48.2	53.9	60.6	66.7				87.2	96.9	112.1
2.5	6.0	6.0	10.6	11.9	11.9	17.8	18.4	24.1	24.1	29.9	36.0	42.0	47.5	53.2	59.9	65.8				86.5	95.9	110.8
3.0	4.8	4.8	9.9	10.8	10.8	16.9	17.7	23.1	23.1	29.1	35.3	41.3	46.8	52.4	59.2	65.0	79.7			85.7	94.8	109.6
3.5	3.2	3.2	9.1	9.7	9.7	15.9	16.9	22.0	22.0	28.2	34.6	40.7	46.1	51.7	58.4	64.1	77.4			85.0	93.8	108.3
4.0			8.0	8.6	8.7	14.8	16.2	20.9	20.9	27.4	33.9	40.0	45.4	50.8	57.5	63.3	75.1			84.3	92.7	107.1
4.5			6.5	7.5		14.0	15.4	19.6	20.2	26.5	33.3	39.3	44.6	49.9	56.6	62.4	72.9			83.6	91.7	105.8
5.0						12.1	14.7			25.5	32.6	38.7	43.8	48.8	55.5	61.6	70.7			82.8	90.6	104.6
5.5							14.0				32.1	38.0	43.1		54.0		68.6			82.1	89.6	103.4
6.0											31.5	37.3	42.3				66.6			81.4	86 to 89	102.2
6.5											31.0	36.7	41.5							80.7		101.0
7.0												36.0								76 to 79.9		99.8
7.5																						98.6
8.0																						97.5

Cable Gland Size	Available Entry Threads (Alternate Metric Thread Lengths Available)					Overall Cable Diameter		RA2F100 Across Flats	RA2F100 Across Corners	A2F100 Across Flats	A2F100 Across Corners	Protrusion Length	Combined Ordering Reference (*Brass Metric)		
	Standard			Option									Size	Type	Ordering Suffix
	Metric	Thread Length (Metric)	NPT	Thread Length (NPT)	NPT	Min	Max	Max	Max	Max	Max	Max	Size	Type	Ordering Suffix
16	M16	15.0	-	-	-	3.2	8.0	24.0	26.4	24.0	26.4	34.9	16	A2F100	1RA
20S/16	M20	15.0	1/2"	19.9	3/4"	3.2	8.0	27.0	29.7	24.0	26.4	31.4	20S16	A2F100	1RA
20S	M20	15.0	1/2"	19.9	3/4"	6.5	11.2	27.0	29.7	24.0	26.4	32.1	20S	A2F100	1RA
20	M20	15.0	1/2"	19.9	3/4"	7.0	13.5	27.0	29.7	27.0	29.7	35.8	20	A2F100	1RA
20L	M20	15.0	1/2"	19.9	3/4"	8.7	14.0	27.0	29.7	27.0	29.7	34.3	20L	A2F100	1RA
25	M25	15.0	3/4"	20.2	1"	11.5	19.5	36.0	39.6	36.0	39.6	40.4	25	A2F100	1RA
25L	M25	15.0	3/4"	20.2	1"	14.0	20.0	36.0	39.6	36.0	39.6	43.3	25L	A2F100	1RA
32	M32	15.0	1"	25.0	1 1/4"	19.0	25.5	41.0	45.1	41.0	45.1	38.5	32	A2F100	1RA
32L	M32	15.0	1"	25.0	1 1/4"	20.2	26.3	41.0	45.1	41.0	45.1	38.9	32L	A2F100	1RA
40	M40	15.0	1 1/4"	25.6	1 1/2"	25.0	32.2	50.0	55.0	50.0	55.0	39.1	40	A2F100	1RA
50S	M50	15.0	1 1/2"	26.1	2"	31.0	38.2	60.0	66.0	60.0	66.0	41.4	50S	A2F100	1RA
50	M50	15.0	2"	26.9	2 1/2"	35.6	44.0	60.0	66.0	60.0	66.0	45.8	50	A2F100	1RA
63S	M63	15.0	2"	26.9	2 1/2"	41.5	49.9	75.0	82.5	70.5	77.6	43.3	63S	A2F100	1RA
63	M63	15.0	2 1/2"	39.9	3"	48.2	54.9	75.0	82.5	75.0	82.5	43.6	63	A2F100	1RA
75S	M75	15.0	2 1/2"	39.9	3"	54.0	61.9	89.9	98.9	84.0	92.4	45.4	75S	A2F100	1RA
75	M75	15.0	3"	41.5	3 1/2"	61.1	67.9	89.9	98.9	84.0	92.4	49.0	75	A2F100	1RA
90	M90	24.0	3 1/2"	42.8	4"	66.6	79.9	108.0	118.8	108.0	118.8	66.0	90	A2F100	1RA
100	M100	24.0	3 1/2"	42.8	4"	76.0	89.0	123.0	135.3	123.0	135.3	72.2	100	A2F100	1RA
115	M115	24.0	4"	44.0	5"	86.0	97.9	133.4	146.7	133.4	146.7	69.9	115	A2F100	1RA
130	M130	24.0	5"	46.8	-	97.0	114.9	152.4	167.6	152.4	167.6	81.1	130	A2F100	1RA

Dimensions are displayed in millimetres unless otherwise stated

In the above example ordering references, add 'R' for RA2F100 cable glands (with 'O' Ring face seal included) e.g. 32RA2F1001RA4

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 60079-0:2012/A11:2013, EN 60079-1:2014, EN 60079-7:2015, EN 60079-15:2010, EN 60079-31:2013, BS 6121:1989, EN 62444:2013

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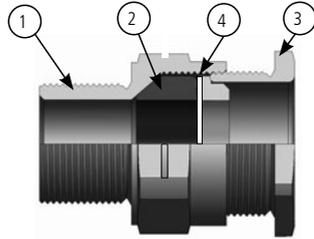
Notified Body: Sira Certification Service, Unit 6, Hawarden Industrial Park, Hawarden, CH5 3US, UK

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INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES A2F100, RA2F100

CABLE GLAND COMPONENTS

- 1. Entry Item
- 2. Seal
- 3. Seal Nut
- 4. Removable Ingress Disc

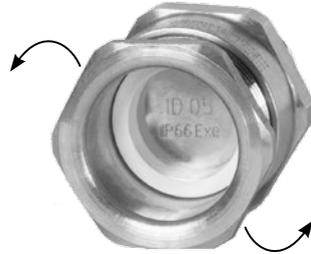


PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

USING CMP INGRESS DISCS

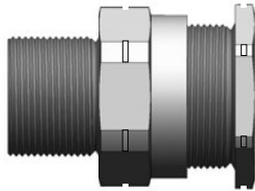
CMP Ingress Discs are used as a means of maintaining the integrity of the enclosure and exclude dust and moisture, enabling the Cable Gland to be installed prior to the cable.

Ingress discs are rated to IP66 and provide an Increased Safety (Ex e) form of protection when tightened*.

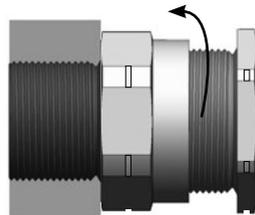


*Seal nut (3) should be loosened to relax the seal (2) then tightened using finger pressure until light resistance is felt, then turn the seal nut:
20s16 – 25 = 2 turns
32 – 90 = 2.5 turns
100 – 130 = 3 turns
 with a spanner

1. It is not necessary to dismantle the gland any further than illustrated below. if an ingress disc is fitted please remove the seal nut (3), discard the ingress disc and re-assemble the cable gland.



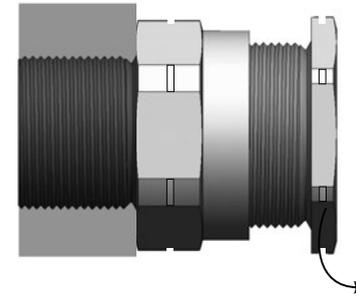
2. Fit the gland into the equipment and fully tighten the entry item (1). RA2F100 'O' ring face seal will engage when fully tightened



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. Only using finger pressure, tighten the seal nut until light resistance to tightening is met.

Then either use the 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 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 seal tightening guide tape is used depending on the cable gland size.

