

IECEx CERTIFICATION No

IECEX CERTIFICATION CODE

CABLE GLAND TYPE · PXSS2K-HC-REX INGRESS PROTECTION · IP66 IP67 IP68 PROCESS CONTROL SYSTEM · ISO 9001

: ISO/IEC 80079-34:2011

### **EXPLOSIVE ATMOSPHERES CLASSIFICATION**

CML 18ATEX1325X, CML 18ATEX4317X ATEX CERTIFICATION No ATEX CERTIFICATION CODE (a) II 2G 1D, Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da

🖾 II 3 G Ex nR IIC Gc, 쉾 I M2 Ex db I Mb, Ex eb I Mb

: IECEx CML 18.0182X

: Ex db IIC Gb, Ex eb IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da, Ex db I Mb, Ex eb I Mb

CSA-US CERTIFICATION No. **CSA-US CERTIFICATION CODE** 

Class I, Division 1 and 2, Groups A, B, C and D; Class II, Groups E, F and G; Class III; Type 4X; Oil Resistant II: Ex d IIC Gb; Ex e IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da

(Code details depends upon application - please see certificate)

#### 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 IP68.
- 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 6q 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 Cl 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 cable glands used for terminating braid cable are only suitable for fixed installations. Cables must be effectively clamped to prevent twisting and pulling.
- According to the CEC wiring code, connectors with metric threads are only suitable for Areas Classified in ZONES unless fitted with an approved Metric to NPT thread conversion adaptor.
- Wiring method for type of cables that can be used in Class I, Div. 1, 2, and Class I, Zone 1, 2, Classified Areas according to 60079-14 installation wiring method restrictions.
- Shipboard Cables are for use on Marine Platform or shipboards only and are subject to local authorities having jurisdiction on the installation.
- CAUTION To reduce risk of flame propagation, fittings with ISO metric threads require:
  - a) 5 full threads engaged for gas groups C and D
  - b) 10 full threads engaged for gas groups A and B
- When the gland is supplied with metric entry threads, a CMP Entry Thread Washer should be fitted between the connector and the enclosure to prevent the ingress of moisture or dust into the enclosure. Thread tape must not be applied to the threads.
- Before installing the gland, ensure that the gland thread forms and the enclosure thread form are compatible.
- Entry Threads smaller than M25 (or equivalent) shall not be used for Group I, Category M2 applications where there is a high risk of mechanical damage.

### **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 the following standards:

EN 60079-0: 2018; EN 60079-1: 2014; EN 60079-7: 2015; EN 60079-15: 2015 +A1:2018; EN 60079-31: 2014; EN 62444: 2013; BS 6121: 1989

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# INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPE PXSS2K-HC-REX

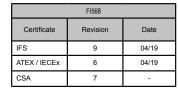
FOR TERMINATION OF UNARMOURED, BRAIDED CABLES AND EXTRA HARD CORD USEAGE CABLES, INCORPORATING A FLEXIBLE HOSE CONNECTION. FOR USE IN EXPLOSIVE ATMOSPHERES



Cable Gland Size	Available Entry Threads (Alternate Metric Thread Lengths Available) Standard		Diameter over	Number of Cores	Overall Cable Diameter		Nominal Hose	Across Flats	Across Corners	Nominal Protrusion Length Without	Hose Connection	Overall	Combined Ordering Reference (*Brass Metric)			Shroud	Cable Gland Weight
	Metric	Min Thread Length (Metric)	conductors	Max	Min	Max	Bore Ø	Max	Max	Hose Connection	Length	Length	Size	Туре	Ordering Suffix		(Kgs)
205/16	M20	15.0	8.6	21	3.1	8.6	13.0	30.0	33.0	51.1	16.0	82.5	20516	PXSS2KREXHC13	1RA	PVC06	0.220
205/16	M20	15.0	8.6	21	3.1	8.6	16.0	30.0	33.0	51.1	16.0	82.5	20516	PXSS2KREXHC16	1RA	PVC06	0.220
205	M20	15.0	11.7	21	6.1	11.7	16.0	30.0	33.0	49.3	16.0	82.5	20S	PXSS2KREXHC16	1RA	PVC06	0.220
20	M20	15.0	12.6	21	6.5	14.0	19.0	30.0	33.0	50.0	20.0	86.9	20	PXSS2KREXHC19	1RA	PVC06	0.220
25	M25	15.0	17.5	30	11.1	20.0	25.0	36.0	39.6	55.3	27.0	98.8	25	PXSS2KREXHC25	1RA	PVC09	0.360
32	M32	15.0	23.6	50	17.0	26.3	32.0	41.0	45.1	55.6	33.0	105.2	32	PXSS2KREXHC32	1RA	PVC10	0.450
40	M40	15.0	30.0	59	22.0	32.1	38.0	50.0	55.0	56.3	41.0	114.1	40	PXSS2KREXHC38	1RA	PVC13	0.650
50\$	M50	15.0	36.6	89	29.5	38.2	51.0	60.0	66.0	57.3	54.0	128.5	50S	PXSS2KREXHC51	1RA	PVC18	1.070
50	M50	15.0	41.0	115	35.6	44.0	51.0	60.0	66.0	62.2	54.0	132.1	50	PXSS2KREXHC51	1RA	PVC18	0.950
635	M63	15.0	47.9	115	40.1	49.9	63.0	70.1	77.1	63.0	70.0	150.1	635	PXSS2KREXHC63	1RA	PVC21	1.730
63	M63	15.0	53.7	115	47.2	55.9	63.0	75.0	82.5	65.0	70.0	152.6	63	PXSS2KREXHC63	1RA	PVC23	1.430
755	M75	15.0	59.9	140	52.8	61.9	76.0	80.4	88.4	65.6	91.5	174.6	755	PXSS2KREXHC76	1RA	PVC26	2.500
75	M75	15.0	64.3	140	59.1	67.9	76.0	85.0	93.5	63.7	91.5	177.4	75	PXSS2KREXHC76	1RA	PVC27	1.960



Resin to be ordered separately





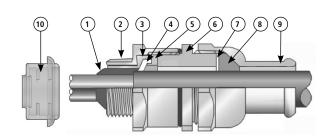
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## INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES PXSS2K-HC-REX

### CABLE GLAND COMPONENTS

- 1. Resin
- 2. Entry Component
- 3. Compound Tube
- 4. Resin Dam
- 6 Main Item
- 7. Skid Washer
- 8. Outer Sea
- 9. Outer Seal Nut Hose connection
- 10. Thread Shield



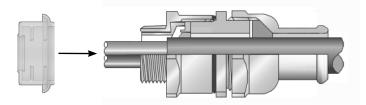
## PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

1. Prepare the cable by stripping back the outer sheath to suit the equipment. Remove any bedding or fillers from around the cable cores. If the cable cores have screens, these should be unravelled and then twisted together to form a single core. This single core and/or any drain wires present should be sleeved with some heat shrink tubing.

Electrical tape MUST be wrapped around the tips of the cable cores. This is to ensure the cable cores are together and also to cover any sharp edges that could potentially tear the Resin Dam during installation.

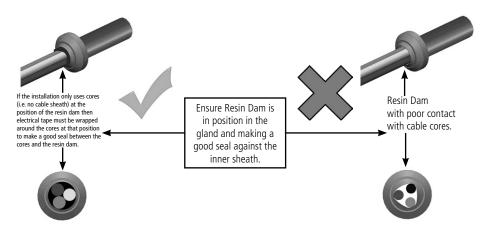


2. Feed the cable carefully through the cable gland, it may be necessary to slacken off the hose connection (9). Adjust the position of the cable if necessary so that the outer sheath just protrudes through the resin dam. (Use length 'L' as a guide to position the cable) Tighten the outer seal nut enough to secure the gland. Make sure thread shield is in place.



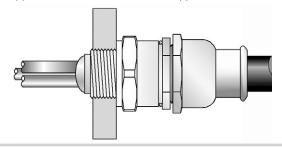
Note: If the outer sheath is too large to pass through the spacer then wrap some electrical tape around the cores at the point they pass through the resin dam.

3. Refer to 'RapidEx Resin' assembly instructions to fill the connector Compound Tube with the required amount of resin. The resin should not be mixed or applied at temperatures below 5°C (40°F). If the general ambient temperature is below 5°C (40°F) please follow the instructions on CMP TDS 613 before proceeding. (Available on CMP wesbite)



Do not disassemble the gland to inspect the Resin Dam, diagrams are for representation.

- 4. Once the resin has cured remove the thread shield, loosen the outer seal nut and remove the main item (6) and outer seal nut assembly (7,8,9) from the entry item (2). Fit the entry item into the equipment.
- 5. Re-install the cable assembly into the entry item and fully tighten the main item (6) onto the entry item (2). Tighten the outer seal nut (9) until it comes to an effective stop. This will occur when:
  - A) The outer seal nut (9) has clearly engaged the cable and cannot be further tightened without the use of excessive force by the installer.
  - B) The outer seal nut (9) is metal to metal with the main item (6).



6. Fit a jubilee clip over the hose, attach the hose to the hose connection and tighten the jubilee clip to secure.

