TECHNICAL DATA

CABLE GLAND TYPE : PXSS2K-REX
INGRESS PROTECTION : IP66, IP67, IP68
PROCESS CONTROL SYSTEM : ISO 9001
: ISO/IEC 80079-34:2011

EXPLOSIVE ATMOSPHERES CLASSIFICATION

ATEX CERTIFICATION No : CML 18ATEX1325X, CML 18ATEX4317X
ATEX CERTIFICATION CODE : ⟨Ex⟩ II 2G 1D, Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da
: ⟨Ex⟩ II 3G Ex nR IIC Gc, ⟨Ex⟩ I M2 Ex db I Mb, Ex eb I Mb

UKEX CERTIFICATION No : CML 21UKEX1214X, CML 21UKEX4215X
UKEX CERTIFICATION CODE : ⟨Ex⟩ II 2G 1D, Ex db IIC Gb, Ex eb IIC Gb, Ex ta IIIC Da
: ⟨Ex⟩ II 3G Ex nR IIC Gc, ⟨Ex⟩ I M2 Ex db I Mb, Ex eb I Mb

IECEx CERTIFICATION No : IECEx CML 18.0182X
IECEx CERTIFICATION CODE : Ex db IIC Gb, Ex eb IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da, Ex db I Mb, Ex eb I Mb
cCSAus CERTIFICATION No. : 2288626
cCSAus CERTIFICATION CODE : Class I, Div 1&2, Groups A, B, C and D; Class II, Div. 2, Groups F and G; Class III, Div. 2; Type 4X; Oil Resistance II
: Class I, Zone 1 AEx d IIC Gb, AEx e IIC Gb, Class I, Zone 2 AEx nR IIC Gc, Class I, Zone 20 AEx ta IIIC Da
cULus CERTIFICATION NO: : E161256 (Divisions)
cULus CERTIFICATION CODE: : Class I Div 1 & 2 Groups A, B, C, and D; Class II Div 1 & 2 Groups F, and G; (Code details depends upon application, please see certificate)

INSTALLATION INSTRUCTIONS

1. 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.
2. 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.
3. 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).
4. 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 Cl 3.2 for external threads. For details of other thread types refer to IECEx certificate.
5. 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.
6. 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.
7. 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
8. Cable glands do not have any serviceable parts and are therefore not intended to be repaired.

SPECIFIC CONDITIONS OF USE

1. The glands when used for terminating braided cables are only suitable for fixed installations.
2. Cables must be effectively clamped to prevent pulling or twisting. The PXB2K, PXB2KX and PXB2KW glands are to be protected from hydraulic fluids, oils, and greases when applied for Group I use.
3. The PX range of cable glands with entry threads smaller than a M25 (or equivalent) size shall not be used for Group I, EPL Mb applications where there is a 'high' risk of mechanical damage.
4. Connectors with metric entry threads are only suitable for Areas Classified in ZONES unless fitted with an approved Metric to NPT thread conversion adaptor.
5. Installation must be according to CEC wiring method for the types of cables that can be used in Class I, Div. 1 and 2 and Class I, Zone 1 and 2 Classified Areas, according to 60079-14 installation wiring method restrictions.
6. Installation must be according to US (NEC) wiring method for the types of cables that can be used in Class I, Div. 1 and 2 and Class I, Zone 1 and 2 Classified Areas, according to 60079-14 installation wiring method restrictions.
7. Prior to comissioning or operation of electrical equipment in the presence of flammable materials, the sealing compound must be cured for 24 hours at a temperature of no less than 5°C (41F).
8. For Metric and NPT threads, the installer shall follow guidance from the NEC or CEC to ensure that the enclosure entry meets the requirements for thread engagement.
9. When the connector 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 entry threads.
10. Before installing the connector, ensure that the connector thread form and enclosure thread form are compatible.
11. For guidance on mixing the RapidEx, please refer to FI320
12. Class I, Div 1, Groups ABCD is only applicable to TC-ER-HL type cables.

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

Sealing ranges for UL Marking		
Size	**Min**	**Max**
20S	6.2	12.0
20	6.5	13.9
20L	10.0	15.9
25	11.1	19.9
32	17.0	26.2
32L	20.0	27.4
40	22.0	32.1
50S	29.5	38.1
50	35.6	44.0
63S	40.1	49.9
63	47.2	55.9
75S	52.8	61.9
75	59.1	67.9
90	66.6	79.3

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 IEC 60079-0: 2018, EN 60079-1: 2014, EN IEC 60079-7: 2015 + A1: 2018, EN IEC 60079-15: 2019, EN 60079-31: 2014

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17th March 2020

CE 2776
UK CA 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

SCAN FOR INSTALLATION VIDEOS

INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPE PXSS2K-REX

FOR TERMINATION OF UNARMOURED, BRAIDED CABLES AND EXTRA HARD CORD USEAGE CABLES, 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)

RAPID Ex

UL LISTED

TYPE TC CABLE SEALING FITTING FOR USE IN HAZARDOUS LOCATIONS 5PO7

Cable Gland Slection Table

Cable Gland Size	Available Entry Threads (Alternate Metric Thread Lengths Available)					Number of Cores	Diameter Over Conductors	Cable Bedding Diameter	Overall Cable Diameter		Across Flats	Across Corners	Protrusion Length	Combined Ordering Reference (*Brass Metric)			Shroud	Cable Gland Weight (Kgs)
	Standard				Option													
	Metric	Thread Length (Metric)	NPT	Thread Length (NPT)	NPT	Max	Max	Max	Min	Max	Max	Max		Size	Type	Ordering Suffix		
20s16	M20	15.0	1/2"	19.9	3/4"	21	8.6	8.6	3.1	8.6	30.0	33.0	53.1	20S16	PXSS2KREX	1RA	PVC06	0.200
20S	M20	15.0	1/2"	19.9	3/4"	21	11.7	11.7	6.1	11.7	30.0	33.0	53.1	20S	PXSS2KREX	1RA	PVC06	0.200
20	M20	15.0	1/2"	19.9	3/4"	21	12.6	12.9	6.5	14.0	30.0	33.0	54.2	20	PXSS2KREX	1RA	PVC06	0.200
20L	M20	15.0	1/2"	19.9	3/4"	21	12.6	12.9	10.5	15.9	30.0	33.0	54.2	20L	PXSS2KREX	1RA	PVC06	0.200
25	M25	15.0	3/4"	20.2	1"	30	17.5	17.9	11.1	20.0	36.0	39.6	60.0	25	PXSS2KREX	1RA	PVC09	0.330
32	M32	15.0	1"	25.0	1 1/4"	50	23.6	23.9	17.0	26.3	41.0	45.1	61.1	32	PXSS2KREX	1RA	PVC10	0.590
32L	M32	15.0	1"	25.0	1 1/4"	50	23.6	23.9	20.0	27.4	41.0	45.1	61.1	32L	PXSS2KREX	1RA	PVC10	0.390
40	M40	15.0	1 1/4"	25.6	1 1/2"	59	30.0	30.3	22.0	32.1	50.0	55.0	62.4	40	PXSS2KREX	1RA	PVC13	0.560
50S	M50	15.0	1 1/2"	26.1	2"	89	36.6	36.9	29.5	38.2	55.0	60.5	65.2	50S	PXSS2KREX	1RA	PVC15	0.660
50	M50	15.0	2"	26.9	2 1/2"	89	41.0	41.3	35.6	44.0	60.0	66.0	67.6	50	PXSS2KREX	1RA	PVC18	0.730
63S	M63	15.0	2"	26.9	2 1/2"	115	47.9	48.4	40.1	49.9	70.0	77.0	71.1	63S	PXSS2KREX	1RA	PVC21	1.070
63	M63	15.0	2 1/2"	39.9	3"	115	53.7	54.0	47.2	55.9	75.0	82.5	70.4	63	PXSS2KREX	1RA	PVC23	1.060
75S	M75	15.0	2 1/2"	39.9	3"	140	59.9	60.2	52.8	61.9	80.0	88.0	75.3	75S	PXSS2KREX	1RA	PVC25	1.300
75	M75	15.0	3"	41.5	3 1/2"	140	64.3	64.2	59.1	67.9	85.0	93.5	74.9	75	PXSS2KREX	1RA	PVC27	1.300
90	M90	20.0	3 1/2"	42.8	4"	140	75.3	75.6	66.6	79.4	108.0	118.8	94.8	90	PXSS2KREX	1RA	PVC31	3.020
100	M100	20.0	3 1/2"	42.8	4"	200	83.6	85.9	76.0	90.9	123.0	135.3	86.3	100	PXSS2KREX	1RA	LSF33	4.000

Dimensions are displayed in millimetres unless otherwise stated

FI403		
	REVISION	DATE
UKEX	0	04/21
IFS	14	10/21
ATEX / IECEx	9	01/19
cCSAus	9	01/19
UL	1	03/20

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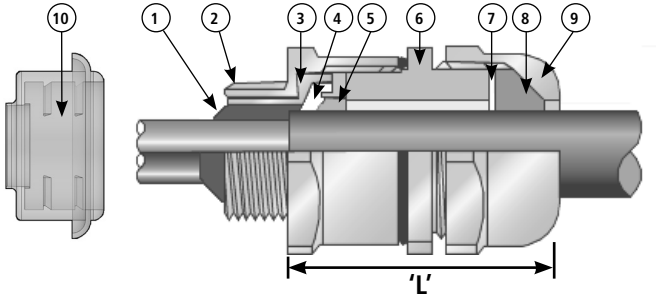
INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES PXSS2K-REX

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

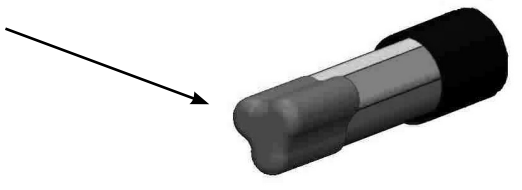
1. Resin
2. Entry Component "A"
3. Compound Tube
4. Resin Dam
5. Spacer
6. Main Item
7. Skid Washer
8. Outer Seal
9. Outer Seal Nut
10. Thread Shield



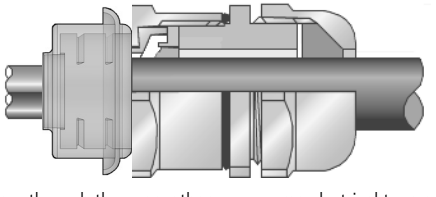
PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

1. 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 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.



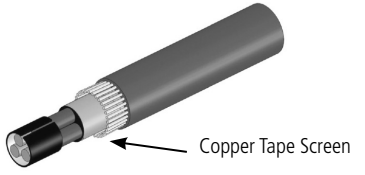
2. Feed the cable carefully into the entry item (2) through the resin dam (4). Reassemble the gland and adjust the position of the cable if necessary to that the outer sheath just protrudes through the resin dam. (Use length 'L' as a guide for positioning the cable). Tighten the outer seal nut enough to secure the gland. Make sure thread shield is in place.



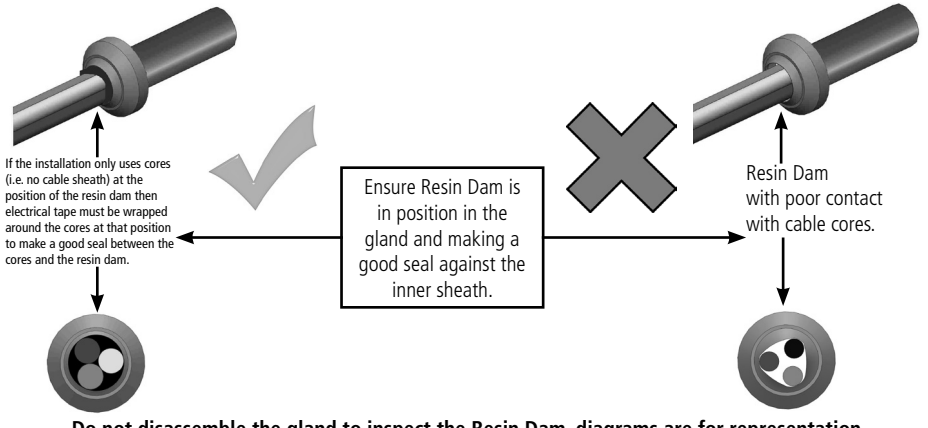
Note: If the outer sheath is too large to pass through the spacer then wrap some electrical tape around the cores at the point they pass through the resin dam.

3. The copper tape screen should be trimmed to a length that ensures the earth continuity device is in contact, but not long enough to come into contact with the resin dam. The inner bedding should preferably be 5 mm longer than the exposed length of the copper tape screen as outlined in the table above.

Remove any bedding or fillers from around the cable cores.



4. 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 (avaiable on CMP website)



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

5. Once the resin has cured remove the thread shield (10). Loosen the outer seal nut, 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.

6. 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).