TECHNICAL DATA

CABLE GLAND TYPE	: PX-REX
INGRESS PROTECTION	: IP66, IP67, IP68, Type 4X; Oil Resistant II
PROCESS CONTROL SYSTEM	: BS EN ISO 9001
	: ISO/IEC 80079-34:2011

EXPLOSIVE ATMOSPHERES CLASSIFICATION

ATEX CERTIFICATION No	: SIRA 13ATEX1072X, SIRA 13ATEX4078X
ATEX CERTIFICATION CODE	: Ⓔx II 2G, II 1D, Ex d IIC Gb, Ex e IIC Gb, Ex ta IIIC Da Ⓔx II 3G Ex nR IIC Gc, Ⓔx I M2 Ex d I Mb, Ex e I Mb
IECEx CERTIFICATION No	: IECEx SIR 13.0027X
IECEx CERTIFICATION CODE	: Ex d IIC Gb, Ex e IIC Gb, Ex nR IIC Gc, Ex ta IIIC Da, Ex d I Mb, Ex e I Mb
cCSAus CERTIFICATION NO	: 2288626
cCSAus CERTIFICATION CODE	: Class I, Div 1,2, Groups A,B,C,D; Class II, Groups E,F,G, Class III, Div. 1,2; 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, NEMA 4 X, Oil Resistant II
	(Code details depends upon application - please see certificate)

INSTALLATION INSTRUCTIONS

Installation should only be performed by a competent person using the correct tools. Read all instructions before beginning installation.

SPECIAL CONDITIONS FOR SAFE USE

1. The cable glands used for terminating braid cable are only suitable for fixed installations. Cables must be effectively clamped to prevent twisting and pulling.
2. 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.
3. 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.
4. Shipboard Cables are for use on Marine Platform or shipboards only and are subject to local authorities having jurisdiction on the installation.
6. 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
7. 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.
8. Before installing the gland, ensure that the gland thread forms and the enclosure thread form are compatible.

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

Number of turns to tighten	Outer Seal Tightening Guide												
	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 Size	Available Entry Threads (Alternate Metric Thread Lengths Available)					Number of Cores	Diameter Over Conductors	*Cable Bedding Diameter	Overall Cable Diameter		Armour Range				Across Flats	Across Corners	Protrusion Length	Combined Ordering Reference (Brass Metric)			Shroud	Cable Gland Weight (Kgs)
	Standard				Option						Grooved Cone (X)		Stepped Cone (W)					Size	**Type	Ordering Suffix		
	Metric	Thread Length (Metric)	NPT	Thread Length (NPT)	NPT	Max	Max	Max	Min	Max	Min	Max	Min	Max	Max	Max						
20s16	M20	15.0	1/2"	19.9	3/4"	11	11.7	11.7	6.1	13.1	0.3	1.0	0.8	1.25	30.5	33.6	62.0	20S16	PX2KREX	1RA	PVC06	0.24
20S	M20	15.0	1/2"	19.9	3/4"	11	11.7	11.7	9.5	15.9	0.3	1.0	0.8	1.25	30.5	33.6	62.0	20S	PX2KREX	1RA	PVC06	0.23
20	M20	15.0	1/2"	19.9	3/4"	11	12.6	12.9	12.5	20.9	0.4	1.0	0.8	1.25	30.5	33.6	63.0	20	PX2KREX	1RA	PVC06	0.24
25S	M25	15.0	3/4"	20.2	1"	21	17.5	17.9	14.0	22.0	0.4	1.2	1.25	1.6	37.5	41.3	69.5	25S	PX2KREX	1RA	PVC09	0.37
25	M25	15.0	3/4"	20.2	1"	21	17.5	17.9	18.2	26.2	0.4	1.2	1.25	1.6	37.5	41.3	69.5	25	PX2KREX	1RA	PVC09	0.37
32	M32	15.0	1"	25.0	1 1/4"	38	23.6	23.9	23.7	33.9	0.4	1.2	1.6	2.0	46.0	50.6	75.0	32	PX2KREX	1RA	PVC11	0.57
40	M40	15.0	1 1/4"	25.6	1 1/2"	59	30.0	30.3	27.9	40.4	0.4	1.6	1.6	2.0	55.0	60.5	75.0	40	PX2KREX	1RA	PVC15	0.80
50S	M50	15.0	1 1/2"	26.1	2"	89	36.6	36.9	35.2	46.7	0.4	1.6	2.0	2.5	60.0	66.0	77.0	50S	PX2KREX	1RA	PVC18	0.90
50	M50	15.0	2"	26.9	2 1/2"	89	41.0	41.3	40.4	53.0	0.6	1.6	2.0	2.5	70.0	77.0	77.0	50	PX2KREX	1RA	PVC21	1.19
63S	M63	15.0	2"	26.9	2 1/2"	115	47.9	48.4	45.6	59.4	0.6	1.6	2.0	2.5	75.0	82.5	79.7	63S	PX2KREX	1RA	PVC23	1.39
63	M63	15.0	2 1/2"	39.9	3"	115	53.7	54.0	54.6	65.8	0.6	1.6	2.0	2.5	80.0	88.0	80.3	63	PX2KREX	1RA	PVC25	1.41
75S	M75	15.0	2 1/2"	39.9	3"	140	59.9	60.2	59.0	72.0	0.6	1.6	2.0	2.5	90.0	99.0	86.8	75S	PX2KREX	1RA	PVC28	2.09
75	M75	15.0	3"	41.5	3 1/2"	140	64.2	64.2	66.7	78.4	0.6	1.6	2.5	3.0	100.0	110.0	88.3	75	PX2KREX	1RA	PVC30	2.54
90	M90	20.0	3 1/2"	42.8	4"	24.0	75.3	75.6	76.2	90.3	0.8	1.6	3.15	4.0	115.0	126.5	102.1	90	PX2KREX	1RA	PVC32	3.71
100	M100	20.0	4"	44.0	5"	24.0	85.6	85.9	86.1	101.4	0.8	1.6	3.15	4.0	127.0	139.7	114.0	100	PX2KREX	1RA	LSF33	4.81

Dimensions are displayed in millimetres unless otherwise stated

** Codes shown are for PX2K-REX glands, for PX2KW-REX or PX2KX-REX add "W" or "X" respectively, e.g. 20PX2KWREX1RA, 20PX2KXREX1RA
*Please note that the overall maximum cable bedding diameter for "PB" variants should be reduced by 1mm to allow for the inner lead sheath.

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: - EN60079-0:2012, EN60079-1:2007, EN60079-7:2007, EN60079-15:2010, EN60079-31:2009, BS6121:1989, EN62444:2013

David Willcock – Certification Engineer (Authorised Person)
CMP Products Limited, Cramlington, NE23 1WH, UK
24th June 2015

CE 0518

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

INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES PXREX

FOR TERMINATION OF CABLES WITH WIRE BRAID, TAPE ARMOUR (STA/DSTA), STRIP ARMOUR & SINGLE WIRE ARMOUR (SWA) (WITH LEAD INNER SHEATH ON PB VARIANTS) . FOR USE IN EXPLOSIVE ATMOSPHERES.

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

CABLE GLAND TYPES PX2KREX, PX2KWREX, PX2KXREX & PB VARIANTS

RAPID Ex

Cable Gland Selection Table

CMP

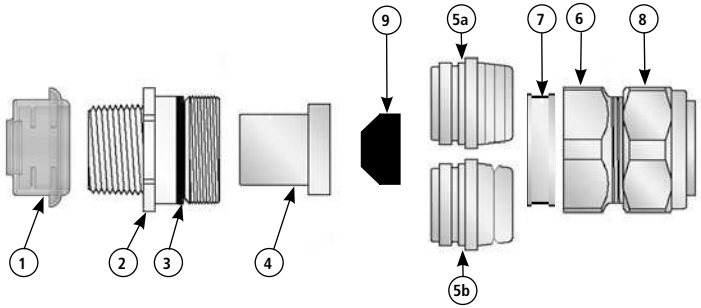
FI402		
Revision Reason	Revision Number	Revision Date
IFS	14	18/10/16
ATEX / IECEx	10	-
CSA / cCSAus	10	-
UL	10	-

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

INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES PX2KREX, PX2KWREX, PX2KPBREX & PX2KXREX

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

1. Thread Shield
2. Entry Component
3. Deluge "O" Ring
4. Compound Tube
5a. Grooved Armour Cone (XYZ)
5b. Stepped Armour Cone (W)
6. Body
7. AnyWay Clamping Ring
8. Outer Seal Nut Assembly
9. Resin Dam

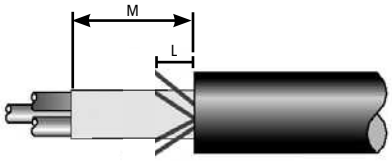


PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

1. The PX2K-REX type cable gland is supplied as a Universal Kit with two armour cones, the grooved armour cone (5a) is suitable for Strip Armour, Tape Armour and Braided Cables, and the stepped cone (5b) is suitable for Wire Armour (SWA) cables. The PX2KX-REX gland only has one cone (5a) and the PX2KW-REX only has one cone (5b). (PB Variants have an earthing device for the lead sheath).

2. Separate the gland components by removing the body and outer seal nut assembly. Pass the body and outer seal nut assembly (6),(8), and the AnyWay clamping ring (7) over the cable, outer seal nut first.

3. Prepare the cable by stripping back the outer sheath and braid / armour to suit the equipment. Expose the braid or armour further so that it can be formed around the armour cone by cutting back the outer sheath by a length "L". This length varies slightly depending upon cable diameter, but typical values are shown below. The inner sheath should be long enough to just pass through the resin dam when installed. (Typical length of inner sheath is shown as 'M' below.) On lead sheathed cables, the lead sheath should be long enough to just pass through the armour cone when installed.



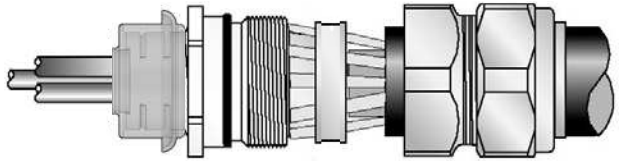
CABLE GLAND SIZE	20S/16, 20S, 20	25S, 25, 32, 40	50S, 50, 63S, 63	75S, 75, 90
CABLE STRIP LENGTH "L"	12 mm (0.472 inches)	15 mm (0.591 inches)	18 mm (0.709 inches)	20 mm (0.787inches)
CABLE BEDDING"M"	35	40	42	50

4. 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.

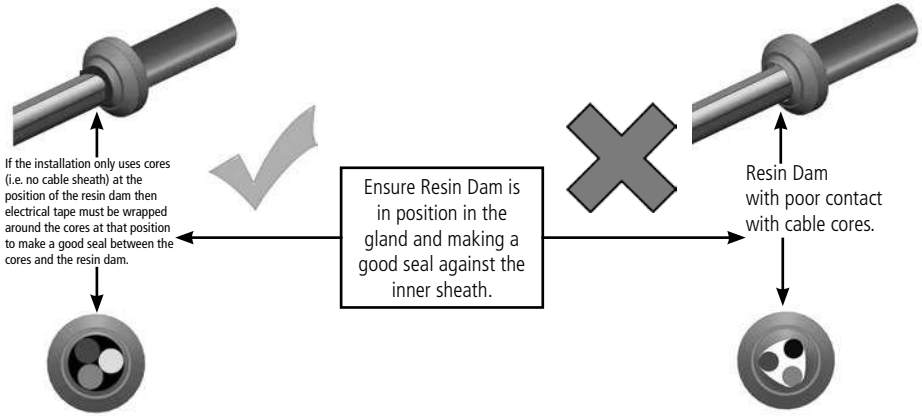
Electrical tape MUST be wrapped around the tips of the cable cores. This is to ensure the cable cores are together and also to cover any sharp edges that could potentially tear the Resin Dam during installation.

5. Insert the armour cone (5a or 5b) into the entry item (2) and pass the cable through them and the resin dam until the braid or armour contacts the cone and make sure it is evenly spaced around it. Tighten the body (6) metal to metal ensuring all threads are used to lock the braid or armour. Do not tighten the outer seal nut at this stage. (On PB variants the earthing device automatically makes contact with the lead sheath).

Fit the thread shield over the entry threads to protect them prior to installing the resin.



6. Refer to 'RapidEx Resin' assembly instructions to fill the gland Compound Tube with the required amount of resin (1). 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 the CMP website).



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

7. Once the resin has cured remove the thread shield, loosen the body and remove the assembly from the entry item. Fit the entry item into the equipment.

8. Only using finger pressure, tighten the outer seal nut assembly (6)(8) 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 recomended).

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.