



TECHNICAL DATA

CABLE GLAND TYPE : PX2KW/M, PX2KW/MF, PX2KX/M, PX2KX/MF
INGRESS PROTECTION : IP66, IP67, IP68
PROCESS CONTROL SYSTEM : ISO 9001
: ISO/IEC 80079-34:2011

EXPLOSIVE ATMOSPHERES CLASSIFICATION

ATEX CERTIFICATION No : CML 18ATEX1325X
ATEX CERTIFICATION CODE : ⊕ I M2 Ex db I Mb, Ex eb I Mb
IECEx CERTIFICATION No : IECEx CML 18.0182X
IECEx CERTIFICATION CODE : Ex db I Mb, Ex eb I Mb
MA/FT

ATEX CERTIFICATION No : CML 18ATEX1332U
ATEX CERTIFICATION CODE : I M2 Ex db I Mb
IECEx CERTIFICATION No : IECEx CML 18.0189U
IECEx CERTIFICATION CODE : Ex db I Mb

- INSTALLATION INSTRUCTIONS**
- Installation should only be performed by a competent person using the correct tools. 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 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.
 - 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

- SPECIFIC CONDITIONS OF USE**
- The glands, when used for terminating braided cables are only suitable for fixed installations.
 - PX range of cable glands with entry threads smaller than M25 (or equivalent) size shall not be used for Group 1, EPL Mb 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

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											

CMP Products Limited hereby declare 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 + A1:2018; EN 60079-31: 2014; EN 62444: 2013; BS 6121: 1989

David Willcock

David Willcock - Certification Engineer (Authorised Person)
CMP Products Limited, Cramlington, NE23 1WH, UK
15 April 2019
Notified Body: CML B.V. Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands

CE 2776

www.cmp-products.com



INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES PX2KW/M, PX2KW/MF, & PX2KX/M, PX2KX/MF

FOR TERMINATION OF CABLES WITH WIRE BRAID, TAPE ARMOUR (STA/DSTA), STRIP ARMOUR, PLIABLE WIRE (PX2KX/M & MF) & SINGLE WIRE ARMOUR (SWA) (PX2KW/M & MF). FOR USE IN GROUP I MINING LOCATIONS.

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



PX2KW/MF
PX2KX/MF

PX2KW/MF & PX2KX/MF
- PX2KW/M & PX2KX/M

Assembly with Flange Mount Type MA/FT



PX2KW/M
PX2KX/M

PX2KW/M & PX2KX/M
- PX2KW/PX2KX Gland for Mining Applications

Cable Gland Size	Available Entry Threads (Alternate Metric Thread Lengths Available)					Maximum Number Of Cores	Diameter Over Conductors	Cable Bedding Diameter	Overall Cable Diameter		Pliable Wire or Tape Armour Range Diameter		Armour Wire Diameter		Across Flats	Across Corners	Protusion Length	Ordering Reference PX2KX/M (Brass Metric)**	Ordering Reference PX2KW/M (Brass Metric)**	Shroud	Cable Gland Weight (Kgs)										
	Standard		Option		Min				Max	Min	Max	Min	Max	Max								Max									
	Metric	Thread Length (Metric)	NPT	Thread Length (NPT)	11				11.7	11.7	9.5	15.9	0.8	7/0.45								0.8	1.25	30.5	33.6	62.0	205	PX2KW/M	1RA	PVC06	0.230
	11	11.7	12.5	12.5	20.9				0.8	7/0.45	0.8	1.25	30.5	33.6								63.0	20	PX2KW/M	1RA	PVC06	0.240				
20	M20	15.0	1/2"	19.9	3/4"	11	11.7	11.7	9.5	15.9	0.8	7/0.45	0.8	1.25	30.5	33.6	62.0	205	PX2KW/M	1RA	PVC06	0.230									
20	M20	15.0	1/2"	19.9	3/4"	11	12.6	12.9	12.5	20.9	0.8	7/0.45	0.8	1.25	30.5	33.6	63.0	20	PX2KW/M	1RA	PVC06	0.240									
25S	M25	15.0	3/4"	20.2	1"	21	17.5	17.9	14.0	22.0	1.25	7/0.45	1.25	1.6	37.5	41.3	69.5	255	PX2KW/M	1RA	PVC09	0.370									
25	M25	15.0	3/4"	20.2	1"	21	17.5	17.9	18.2	26.2	1.25	7/0.45	1.25	1.6	37.5	41.3	69.5	25	PX2KW/M	1RA	PVC09	0.370									
32	M32	15.0	1"	25.0	1 1/4"	38	23.6	23.9	23.7	33.9	1.6	7/0.45	1.6	2.0	46.0	50.6	75.0	32	PX2KW/M	1RA	PVC11	0.570									
40	M40	15.0	1 1/4"	25.6	1 1/2"	59	30.0	30.3	27.9	40.4	1.6	7/0.71	1.6	2.0	55.0	60.5	75.0	40	PX2KW/M	1RA	PVC15	0.800									
50S	M50	15.0	1 1/2"	26.1	2"	89	36.6	36.9	35.2	46.7	2.0	7/0.71	2.0	2.5	60.0	66.0	77.0	505	PX2KW/M	1RA	PVC18	0.900									
50	M50	15.0	2"	26.9	2 1/2"	89	41.0	41.3	40.4	53.0	2.0	7/0.71	2.0	2.5	70.1	77.1	77.0	50	PX2KW/M	1RA	PVC21	1.190									
63S	M63	15.0	2"	26.9	2 1/2"	115	47.9	48.4	45.6	59.4	2.0	7/0.71	2.0	2.5	75.0	82.5	79.7	635	PX2KW/M	1RA	PVC23	1.390									
63	M63	15.0	2 1/2"	39.9	3"	115	53.7	54.0	54.6	65.8	2.0	7/0.71	2.0	2.5	80.0	88.0	80.3	63	PX2KW/M	1RA	PVC25	1.410									
75S	M75	15.0	2 1/2"	39.9	3"	140	59.9	60.2	59.0	72.0	2.0	7/0.71	2.0	2.5	90.0	99.0	86.8	755	PX2KW/M	1RA	PVC28	2.090									
75	M75	15.0	3"	41.5	3 1/2"	140	64.2	64.2	66.7	78.4	2.5	7/0.71	2.5	3.0	100.0	110.0	88.3	75	PX2KW/M	1RA	PVC30	2.540									

*For material options add the following suffix to the Ordering Reference: Brass (no suffix required); Nickel Plated Brass '5'; 316 Grade Stainless Steel '4'; Copper Free Aluminium '1'
For NPT options please add the following digits to the material suffix; 1/2" = 31, 3/4" = 32, 1" = 33, 1 1/4" = 34, 1 1/2" = 35, 2" = 36, 2 1/2" = 37, 3" = 38 (Brass requires prefix '0')
Examples: 32PX2KW/M1RA534 = Nickel Plated Brass 1-1/4" NPT, 50SPX2KW/M1RA035 = Brass 1-1/2" NPT, 25PX2KW/M1RAA32 = Stainless Steel 3/4" NPT, 20PX2KW/M1RA5 = Nickel Plated Brass M20
Dimensions are displayed in millimetres unless otherwise stated

** Codes shown are for PX2KW/M & PX2KX/M glands, for flange mounted glands amend the ordering references as follows - PX2KW/MF or PX2KX/MF add "F" e.g. 20PX2KW/M1RA/F, 20PX2KX/M1RA/F

FI452		
Certificate	Revision	Date
IFS	12	08/19
IECEX	-	-



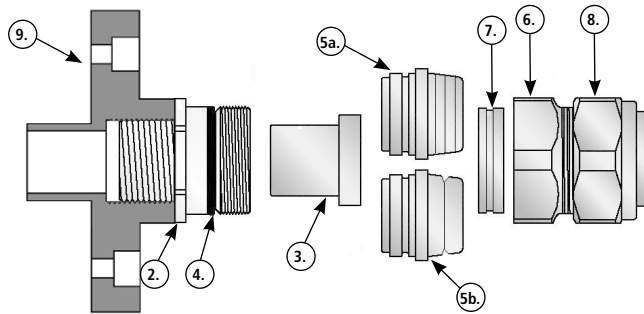
Glasshouse Street • St. Peters • Newcastle upon Tyne • NE6 1BS
Tel: +44 191 265 7411 • Fax: +44 1670 715 646
E-Mail: customerservices@cmp-products.co.uk • Web: www.cmp-products.com

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INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES: PX2KW/M, PX2KW/MF, & PX2KX/M, PX2KX/MF

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

1. Compound
2. Entry Component
3. Compound Tube
4. "O" Ring
- 5a. Grooved Armour Cone (XYZ)
- 5b. Stepped Armour Cone (W)
6. Body
7. AnyWay Clamping Ring
8. Outer Seal Nut Assembly
9. Optional Flanged Adaptor

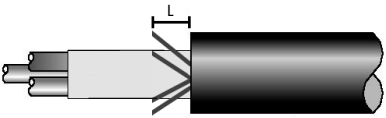


PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

1. The illustration shows 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/M & PX2KX/MF gland only has one cone (5a) and the PX2KW/M & PX2KW/MF only has one cone (5b).

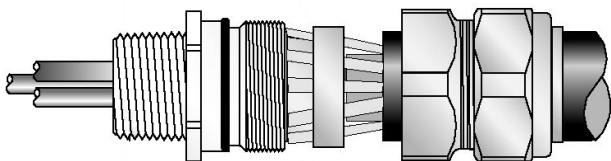
2. Separate the gland components by removing the body and outer seal nut assembly. Pass the body and outer seal nut assembly (6),(8), and the AnyWay clamping ring (7) over the cable, outer seal nut first.

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 armour cone when installed. On lead sheathed cables, the lead sheath should be long enough to just pass through the armour cone when installed.



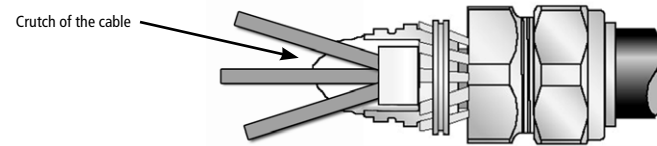
CABLE GLAND SIZE	20S/16, 20S, 20	25S, 25, 32, 40	50S, 50, 63S, 63	75S, 75, 90
CABLE STRIP LENGTH "L"	12 mm (0.472 inches)	15 mm (0.591 inches)	18 mm (0.709 inches)	20 mm (0.787 inches)

4. For direct make-off, fit the entry item to the equipment. Insert the armour cone (5a or 5b) into the entry item (2) and pass the cable through them until the braid or armour contacts the cone and make sure that it is evenly spaced around it. Tighten the body (6) to lock the braid or armour and then slacken and remove the body again, withdrawing the cable with it. (On PB variants the earthing device automatically makes contact with the lead sheath).

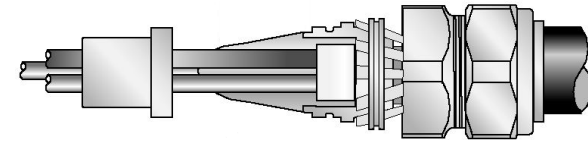


5. Remove any bedding or fillers from around the cable cores. If the cable cores have screens, these should be unravelled and then twisted together to form a single core. Wearing the protective gloves supplied, mix all of the two-part epoxy compound (1) until it is pliable and an even colour is achieved (minimum mixing temperature 10°C).

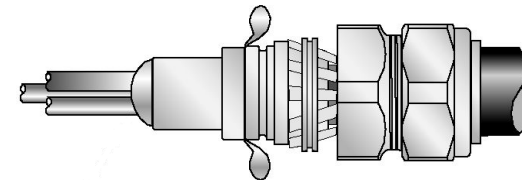
6. Separate the cores and apply the compound to the crutch of the cable for a distance of about 6mm and pack into place. If a drain wire is present then it should be sleeved using some heat shrink tubing which is pushed into the compound before shrinking with the application of some heat. If screens have been twisted together at stage 5, also be sleeved using heat shrink sleeving.



7. Bring the cores together again and pack more compound around them to a length and diameter sufficient to fill the compound tube (ensuring compound is packed between each of the cable cores) before ending in a taper.



8. Pass the compound tube (3) over the conductors until the stepped end is fully located with the armour cone (5). Pack more compound into place until the compound tube is fully filled.

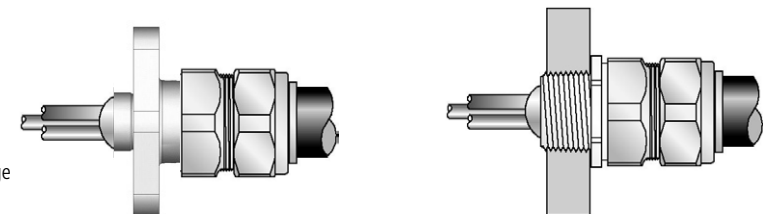


7. Re-install the cable assembly into the entry item making sure that the compound is not disturbed and fully tighten the body (6) onto the entry item (2).

Only using finger pressure, tighten the outer seal nut assembly (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 recommended).

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.



Optional flange adaptor