# **Installation Manual for Compound Barrier PX2K Cable Gland**

Compound Barrier PX2K Series of Flameproof and Increased Safety Cable Glands for Armour & Braided Cables for Double Compression

# Please read all instructions carefully before beginning the installation

CABTEK Compound Barrier PX2K type Cable Glands are for Indoor and Outdoor use in the appropriate Hazardous Areas with Armoured/Braided Cable. The seal on the outer jacket and give environmental protection to IP66/67. These glands are suitable for normal industrial environmental of temperature, humidity and

Cable Glands are made of Brass CW614N/SS316L & assembled with VMQ Silicone Rubber and Nylon Substrate.

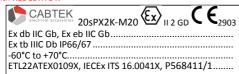
Material Compatibility under chemical corrosion or attack by aggressive substance must be considered before installation.

Cable Gland confirm to following Standards for Group II, Category - 2 for Zone 1, 2 for ambient temperature range -60°C to +70°C.

EN IEC 60079-0:2018 Standards Applied: EN/IEC 60079-1:2014 EN/IEC 60079-31:2014/2013

## Ex marking on PX2K type Cable Glands:

## If sealed with **REDELTITE R**



## **Installation Guide:**

- 1. Installation must be carried out by a competent electrician, skilled in cable gland installation
- 2. Installation should not be carried out under live conditions.
- 3. Once installed do not dismantle except for occasional inspection. If necessary, dismantle by reverting the installation instruction. The gland is not serviceable and spare parts are not supplied separately.
- 4. Parts of glands are not interchangeable with any other design. If manufacturer's parts are mixed, certification will be invalidated.
- 5. The female thread in the enclosure must comply with relevant standard and do not damage threads on assemblies.
- 6. The glands should only be used with substantially round and compact cables with correct tools
- 7. Installation should only be performed by a competent person using the correct torque tools. Spanners should be used for tightening. Read all instructions before beginning installation

For cable gland technical details like Cable Gland Size, Cable diameter, thread and torque details given as below. Cable Gland Selection Table For DV3

	Cable Gland Selection Table For PXZK																
*Cable	Standard Entry Thread "T"				Entry Thread "T" Option		Thread Length	Cable Dia. "A"	Cable Bedding	Overall Cable Dia. "B"		Armoured Wire Dia	Strip /Braid Size	Length	Seal Nut		
Gland															Across Flat	Across Corner	Torque (Nm)
Size	Metric	NPT/BSP	ET	PG	Metric	NPT/BSP	"D"	Max	Dia "C"	Min	Max	For W type	For X type	"F"	A/F	A/C	(,
20s16	M20x1.5	1/2"	3/4"	PG11	M25x1.5	3/4"	15.00	8.60	8.60	6.10	13.10	0.90 - 0.90	0.30 - 1.0	70.00	24.00	26.20	25
20s	M20x1.5	1/2"	3/4"	PG13.5	M25x1.5	3/4"	15.00	11.70	11.70	9.50	15.90	0.90 - 1.25	0.30 - 1.0	70.00	24.00	26.20	25
20	M20x1.5	1/2"	3/4"	PG16	M25x1.5	3/4"	15.00	12.60	12.90	12.50	20.90	0.90 - 1.25	0.40 - 1.0	74.00	30.00	33.00	25
25s	M25x1.5	3/4"	1"	PG21	M32x1.5	1"	15.00	17.50	17.90	14.00	22.00	1.25 - 1.60	0.40 - 1.2	85.00	36.00	39.20	30
25	M25x1.5	3/4"	1"	PG21	M32x1.5	1"	15.00	17.50	17.90	19.90	26.20	1.25 - 1.60	0.40 - 1.2	85.00	36.00	39.20	30
32	M32x1.5	1"	1.1/4"	PG29	M40x1.5	1.1/4"	15.00	23.60	23.90	23.70	33.90	1.60 - 2.00	0.40 - 1.2	88.00	46.00	50.60	35
40	M40x1.5	1.1/4"	1.1/2"	PG36	M50x1.5	1.1/2"	15.00	30.00	30.30	27.90	40.40	1.60 - 2.00	0.40 - 1.6	89.00	55.00	60.00	45
50s	M50x1.5	1.1/2"	2"	PG36	M63x1.5	2"	15.00	36.60	36.90	35.20	46.70	2.00 - 2.50	0.40 - 1.6	91.00	60.00	65.00	60
50	M50x1.5	2"	2"	PG42	M63x1.5	2.1/2"	15.00	41.00	41.30	40.40	53.00	2.00 - 2.50	0.60 - 1.6	95.00	70.00	75.00	65
63s	M63x1.5	2*	2.1/2"	PG48	M75x1.5	2.1/2"	15.00	47.90	48.40	45.60	59.40	2.00 - 2.50	0.60 - 1.6	95.00	75.00	80.00	65
63	M63x1.5	2.1/2"	2.1/2"		M75x1.5	3"	15.00	53.70	54.00	54.60	65.80	2.00 - 2.50	0.60 - 1.6	97.00	80.00	85.00	75
75s	M75x1.5	2.1/2"	3"	-	M90x1.5	3"	15.00	59.90	60.20	59.00	72.00	2.00 - 2.50	0.60 - 1.6	106.00	90.00	95.00	80
75	M75x1.5	3*	3"	-	M90x1.5	3.1/2"	15.00	64.20	64.20	66.70	78.40	2.50 - 3.00	0.60 - 1.6	108.00	100.00	110.00	80

## INSTALLATION INSTRUCTIONS FOR CABLE GLAND TYPES PX2K.

The PX2K resin type cable gland is supplied as a Universal Kit with Universal armour Ring suitable for Strip Armour, Tape Armour and Braided Cables, Wire Armour (SWA) cables

Separate the gland components by removing the body (6) and seal nut (7) assembly. Pass the body and outer seal nut assembly (6), (7), and the Universal ring (5) over the cable, pass the seal nut (7) first

7. It is not necessary to separate components of the cable gland any further than illustrated below



Fit the gland into the equipment and fully tighten the entry item. Thread seal will engage when fully tightened.

Determine the conductor length required to suite the equipment and prepare the cable accordingly 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 "A". 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



Gland Size	Cable Strip "A"	Cable Bedding "B"			
20s16, 20s, 20	12mm	35			
25s, 25, 32, 40	15mm	40			
50s,50,63s,63	18mm	42			
75s, 75	20mm	50			

10. Fit the entry item to the equipment. Insert the armour ring(5) into the cable and pass the cable through them until the braid or armour contacts the clamping cone(4) & Pass Resin Stop washer (2) into the cable & 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.

8. Any modification which differs from the condition as delivered is not permitted.

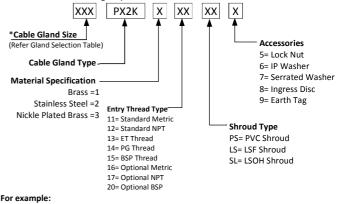
9. Accessories are available from CABTEK, as optional extras, to assist with fixing, sealing and earthing, Locknut, Earth Tag, Serrated Washer, Entry Thread seal (IP), Shroud.

## Special Condition of Safe Use of Cable Glands:

- 1. Cable Glands are only suitable for fixed installations
- 2. Cable must be effectively clamped from pulling and twisting.
- 3. Cable Glands shall not be used in enclosure where the temperatures at the point of entry /mounting are outside the range of ambient temperatures as detailed in general description.
- The glands should only be used with substantially round cables and tightened to the rated torque with torque wrenches.
- Install in accordance with requirements of EN60079-14.
- 6. The cable glands are provided with a sealing ring with an axial sealing height of at least 5 mm. With reference to the clearance groove, the end-user should ensure that at least five complete turns of the connector thread are made. In order to guarantee a screw depth of 8 mm, the enclosure should have a wall thickness of min. 10mm; if <10 mm, then if necessary, use a washer when cable entries are attached to the pressure-resistant enclosure.
- In the case of NPT connecting threads, the end-user must ensure that the necessary IP protection is guaranteed; this can be done using a suitable thread sealing agent.
- Installation should not be carried out under live conditions.

### **CABLE GLAND ORDERING DETAILS:**

**Product Code for Ordering Purpose** 



20sPX2K 3 11 PS 6 = PX2K-20s-M20 Nickle Plated Cable Gland with PVC Shroud & IP Washer 20sPX2K 3 11 PS569 = PX2K-20s-M20 Nickle Plated Cable Gland Kit\*

(\*Kit includes PVC Shroud, Lock Nut, IP washer & Earth Tag)

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Remove any bedding around the cable cores. If the cable cores have screens, these should be unrayeleand then twisted together to form a single core. Electrical tape must be wrapped around the tips of the cable cores. This is to ensure the cable cores are together and to cover any sharp edges that could potentially tear the Cementing Material Stop Cap during installation.



- Insert the armour-clamping cone (4) into the entry item (1) and pass the cable through them and the Resin Stop washer (2) 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.
- Fit the thread shield over the entry threads to protect them prior to installing the resin. 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.

e: Given Resin material in kit must to be used as per given temperature hour curing time and you can no use other resin other than in kit



Temp. Curing Time
50° F -10° C 9:40 Hours
59° F -15° C 9:00 Hours
68° F -20° C 8:25 Hours
77° F -25° C 8:00 Hours
86° F -30° C 7:45 Hours

Pass the compound tube (3) over the conductors until the end is fully located with the armour-clamping cone (4). Pack more resin into place until the compound tube (3) is fully filled



Re-install the cable assembly into the entry item (1) making sure that the compound is not disturbed and fully tighten the body (6) onto the entry item (1). Only using finger pressure, tighten the outer seal nut assembly (8) until light resistance to tightening is met.



Position Cable correctly. Then tighten the outer seal nut by hand into the entry item until heavy resistance is felt or seal grip the outer sheath of cable. Then tighten the seal nut with torque wrench. For correct torque see Gland selection table

Please study carefully these instructions before installation. These glands should not be used in any application other than those mentioned here, unless CABTEK states in writing that the product is suitable for such application. CABTEK will not take any responsibility for any damage, injury or other consequential loss caused where the glands are not installed or used according to installation instructions. This leaflet is not intended to advice on the selection of cable glands. Installation must be carried out by a competent electrician, skilled in cable gland installation. Installation should not be carried out under live conditions. Customer Care:

For any more information regarding please send your query to us by mail or telephone number Tel.: + 91-76006 16887, 94277 71205

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