CMP Products - Terminating Cables is Our Business

For almost 60 years, CMP Products has continued to have an international reputation for quality and reliability across the industry and is regarded as a world leader in the field of Industrial and Explosive Atmosphere Cable Gland, Connector and Accessory design and manufacture. With a presence on every continent, CMP Products is able to deliver high quality, safe products, regardless of location.

CMP design and produce Cable Glands with Ex d/Ex e Zone 1, Zone 2, Zone 21 and Zone 22 approvals for use in Gas Group IIC environments under CENELEC and IEC area classification rules. Additionally Cable Connectors for NEC and CEC classified Explosive Atmosphere locations, are available for Class I, II and III, Divisions 1 and 2, where Gas Groups A, B, C, D and Dust Groups E, F and G are present.

International Approvals are held including ATEX, IECEx, INMETRO, CSA, UL, NEPSI, CIDET, CCOE/PESO as well as Russian Trade Union certificates. In addition Marine Classification Society Approvals from Lloyd’s, DNV and ABS are also held.

Cables Glands are available in Nickel Plated Brass, Brass, Stainless Steel and Aluminium.

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Triton CDS - The World’s Safest Cable Gland

CMP Triton CDS Type T3CDS Triple Certified Flameproof (Type ‘d’), Increased Safety (Type ‘e’) & Restricted Breathing (Type ‘nR’) indoor & outdoor Cable Gland for use in Zone 1, Zone 2, Zone 21 & Zone 22 Explosive Atmospheres.

- For use with all types of Armoured cable.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Provides a Flameproof seal on the cable inner bedding.
- Environmental seal on cable outer sheath to IP68 & NEMA 4X.
- EMC Tested.
- Provides mechanical cable retention & electrical continuity via armour wire termination.
- Reversible armour cone & AnyWay universal clamping ring arrangement allows the cable to be easily disconnected from the equipment.
- Deluge protected as standard.
- Operating temperature -60 to +130°C or -20 to +200°C.
- Fully sequential, three step make off procedure.
- Quick and easy assembly process, with face to face installation every time.
- “Right First Time” Installation concept, helps to reduce “down time” during plant construction whilst instilling peace of mind in the user.
- The risk of damage to the cable inner sheath is eliminated, regardless of the cable construction, even though the CDS sealing system is fully tightened every time.
- Uniform hexagon profile.

Unique Compensating Displacement Seal (CDS) system, compatible with all types of cable. At the critical cable sealing point the CDS system protects the cable inner sheath from any excess force, which is transferred to and absorbed by the internal compensator incorporated in the CDS system.

This allows the Cable Gland to be tightened face to face every time regardless of cable diameter.

Available Options
- T3CDSBP - Lead Sheathed
- T3CDSX / W - Armour Specific
- TE1FU - Compact Stainless Steel
- T3CDSHT - High Temperature
E Series - Double Seal Tri-Star for Armoured Cables

CMP E Type Tri-Star Triple Certified Flameproof (Type ‘d’), Increased Safety (Type ‘e’) & Restricted Breathing (Type ‘nR’) indoor & outdoor Cable Gland for use in Zone 1, Zone 2, Zone 21 & Zone 22 Explosive Atmospheres with all types of armoured cable.

- For use with all types of Armoured cable.
- Available in Nickel Plated Brass, Brass & Aluminium.
- Provides a Flameproof seal on the cable inner bedding
- Environmental seal on the cable outer sheath to IP68 & NEMA 4X (IP67 as standard IP67, IP68 on request).
- EMC Tested.
- Provides mechanical cable retention & electrical continuity via armour wire termination.
- Armour cone & AnyWay universal clamping ring arrangement allows the cable to be easily disconnected from the equipment.
- E2** for lead sheathed cable.

Available Options
- E1FU / E2FU - Universal for all Armours
- E1FX / E2FX - Braid Armour Specific
- E1FW / E2FW - SWA Specific
- E***/M - Mining Group I
- E***D - Deluge Protected

A2F - Single Seal Tri-Star for Unarmoured Cables

CMP Type A2F Tri-star Triple Certified Flameproof (Type ‘d’), Increased Safety (Type ‘e’) & Restricted Breathing (Type ‘nR’) indoor & outdoor Cable Gland for use in Zone 1, Zone 2, Zone 21 & Zone 22 Explosive Atmospheres with unarmoured & braided cable.

- For use with all types of Unarmoured cable.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Provides a Flameproof seal on the cable bedding.
- Environmental seal on the cable outer sheath to IP68 & NEMA 4X.
- Provides cable retention.
- Operating temperature -60 to +130°C or -20 to +200°C.
RapidEx - Barrier Glands Made Easy

The effective sealing of instrument & electrical cables should not be underestimated.

Traditional barrier type Cable Glands employing a clay based sealing compound, have been used in the industry for many years to provide effective explosion protection. However, a certain degree of risk is associated with this traditional installation process & this risk increases with the number of cable cores. Multi-core cables require the highest degree of competence & a long installation time to ensure a void free, safe installation. Not to recognize this will lead to rework, or failure of the seal.

RapidEx is a Liquid Pour, Fast Curing, Liquid Resin Barrier Seal that installs in seconds & cures in minutes. Its unique formula begins with a low viscosity liquid that flows into the cable interstices completely surrounding the cable conductors, & in the process displacing the air from the Cable Gland’s sealing chamber ensuring the “perfect seal”.

- The viscosity increases & completely cures in less than 40 minutes (at 20°C).
- Reduces risk.
- Delivers unprecedented reliability.
- Minimises installation time.
- Clean & easy to use.
- Thermal endurance / age tested to IEC 60079-1:2007, CSA-C 22.2 & UL 2225.

RapidEx is certified for use in Explosive Atmospheres with Global Certification including approval under IEC, NEC & CEC installation codes.

For the perfect seal every time choose RapidEx - Barrier Glands Made Easy

REX Series - RapidEx Barrier Cable Glands

CMP Type PX***REX Tri-star Triple Certified Flameproof (Type ‘d’), Increased Safety (Type ‘e’) & Restricted Breathing (Type ‘nR’) Cable Gland for use in Zone 1, Zone 2, Zone 21 & Zone 22 Explosive Atmospheres with all types of armoured & unarmoured cable providing a RapidEx barrier seal around the cable conductors & an environmental seal on the cable outer sheath.

- For use with all types of cable.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Provides a Flameproof RapidEx seal on the cable bedding.
- Environmental seal on the cable outer sheath to IP68 & NEMA 4X.
- Provides mechanical cable retention.
- Operating temperature -60 to +85°C.
- Deluge Protected.

Available Options
- PX2KREX - Universal for all Armours
- PX2KWREX - SWA Specific
- PX2XXREX - Braid Armour Specific
- PXSS2KREX - Unarmoured
- PXRCREX - Conduit Connection
- PX2KREX/M - Mining Group 1
SS2K - Double Seal Tri-Star for Unarmoured Cables

CMP Type SS2K Tri-Star Triple Certified Flameproof (Type ‘d’), Increased Safety (Type ‘e’) & Restricted Breathing (Type ‘nR’) indoor & outdoor Cable Gland for use in Zone 1, Zone 2, Zone 21 & Zone 22 Explosive Atmospheres with unarmoured cables.

- For use with all types of Unarmoured cable.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Provides a Flameproof seal on the cable bedding.
- Environmental seal on the cable outer sheath to IP68 & NEMA 4X.
- Provides excellent cable retention.
- Operating temperature -60 to +130°C or -20 to +200°C.

Available Options
- SS2KPB - Lead Sheathed
- SS2KTA - Tape Armour
- SS2KHT - High Temperature

CXe / CWe - Single Seal Ex e for Armoured Cables

The CMP CXe / CWe Cable Gland is suitable for use with Increased Safety (Type ‘e’) equipment.

- For use with all types of Armoured cable (CWe for SWA cable & CXe for all other armour types)
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Environmental seal on the cable outer sheath to IP68 & NEMA 4X (IP66 as standard IP67, IP68 on request).
- EMC Tested.
- Provides mechanical cable retention & electrical continuity via armour wire termination.
- Operating temperature -60 to +130°C or -20 to +200°C.

Available Options
- C2K - Universal for all Armours with Deluge Protection
- C2KHT - High Temperature
A2FRC / A2FFC - Tri-Star with Conduit Connection

CMP Type A2FFC / A2FRC Tri-Star Triple Certified Flameproof (Type “d”), Increased Safety (Type “e”) & Restricted Breathing (Type “nR”) indoor & outdoor flexible / rigid conduit connection cable gland for use in Zones 1, 2, 21 & 22, Explosive Atmospheres with unarmoured cable housed in metallic conduit systems.

- For use with all types of Unarmoured cable housed in conduit.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- A2FFC for flexible conduit, A2FRC for rigid conduits or flexible conduits with corresponding fitting.
- Provides a Flameproof seal on the cable bedding
- Environmental seal on the cable outer sheath to IP66.
- Provides cable retention.
- Operating temperature -60 to +130°C.

A2F-FF - Tri-Star for Flat Form Cables

CMP Type A2F-FF Triple Certified Flameproof (Type ‘d’), Increased Safety (Type ‘e’) and Restricted Breathing (Type ‘nR’) indoor and outdoor Cable Gland for use in Zone 1, Zone 2, Zone 21 and Zone 22 Explosive Atmospheres with flat form unarmoured and braided cable.

- For use with all types of Unarmoured & Braided flat form cable.
- Ideal for Heat Trace cables.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Provides a Flameproof seal on the cable bedding.
- Environmental seal on the cable outer sheath to IP68.
- Provides cable retention.
- Operating temperature -60 to +130°C or -20 to +200°C.
Industrial / General Purpose Cable Glands

**BW**
- For use with SWA cables.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Provides mechanical cable retention & electrical continuity via armour wire termination.
- BWL available with longer body to protect the armour wires from impact.
- EMC Tested.

**A2**
- For use with all types of Unarmoured cables.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Environmental seal on the cable outer sheath to IP68 & NEMA 4X.
- Provides cable retention.

**CW / CX**
- For use with all types of Armoured cable (CW for SWA cable & CX for all other armour types).
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Environmental seal on the cable outer sheath to IP66.
- EMC Tested.
- Provides mechanical cable retention & electrical continuity via armour wire termination.

**SS2KGP**
- For use with all types of Unarmoured cables.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- Double seal.
- Environmental seal on the cable outer sheath to IP68 & NEMA 4X.
- Provides cable retention.

**E - TYPE**
- For use with all types of Armoured cable.
- Available in Nickel Plated Brass, Brass, & Aluminium.
- Double seal.
- Environmental seal on the cable outer sheath to IP66.
- EMC Tested.
- Provides mechanical cable retention & electrical continuity via armour wire termination.
Cable & Conduit Accessories

The CMP range of Thread Conversion Adaptors & Reducers are designed to provide flexibility & versatility in the execution of construction works when there is a conflict between the type or size of the Cable Gland thread & the cable entry hole in the equipment.

These Thread Conversion Adaptors & Reducers are available with Male to Female connection threads & can be supplied with thread conversion between the forward & rear threads to either an increased or reduced size or a different thread type, e.g. Metric to NPT, or NPT or Metric.

• General Purpose versions available.
• Available in Nickel Plated Brass, Brass, Stainless Steel, Aluminium & Nylon (Ex e only).
• Entry thread seals available for IP68.
• Insulated Adaptors for areas where electromagnetic 'noise' & circulating eddy currents 'stray' particularly relevant in power plants.
• The CMP Type 787 Right Angled Adaptor is designed to protect cables when installed in confined spaces where the cable may otherwise be subject to excessive bending stress.

Available Options
• 737 - In-line Adaptors & Reducers
• 787 - 90° Adaptors
• 777 - Insulated Adaptors
• 797 - Male to Male / Female to Female

CMP Stopper Plugs are designed to provide a permanent or temporary means of blanking unused cable entry holes in Flameproof & Increased Safety enclosures, enabling the equipment to be safely deployed in the Explosive Atmosphere.

CMP Type 767 Stopper Plugs are available in Brass, Aluminium, Stainless Steel or Nylon (Ex e), & can be supplied in a variety of thread forms & sizes.

• General Purpose versions available.
• Available in Nickel Plated Brass, Brass, Stainless Steel, Aluminium & Nylon (Ex e only).
• Entry thread seals available for IP68.
• Tamperproof versions available.

Available Options
• 747 - Recessed Head
• 757 - Hexagon Head
• 767 - Dome Head
Cable & Conduit Accessories

CMP Cable Glands & Accessories

UNIONS

CMP Metallic Unions are designed to allow connection of rigid & flexible conduit, or terminated Cable Glands, to any fixed equipment. Unions provide a running connection by means of an integral coupling arrangement that eliminates the need to rotate the conduit, or cable, or equipment to achieve a correct termination.

- Entry thread seals available for IP68.
- Available in Nickel Plated Brass, Brass, Stainless Steel & Aluminium.
- In-line, 45° & 90° versions available.
- Ease of installation makes the process of removing the conduit or other terminated cable entry device from the equipment a simple, fast & effective.
- RapidEx barrier versions available.
- Epoxy compound versions also available.
- Compact design ideal for tight installations.

Available Options
- 780 - In-line
- PX780REX - In-line RapidEx Barrier
- 784 - 45°
- PX784REX - 45° RapidEx Barrier
- 789 - 90°
- PX789REX - 90° RapidEx Barrier

The CMP Type 781 Breather / Drain Plug’s are designed for Flameproof Ex d and Increased Safety Ex e apparatus that is susceptible to condensation or prone to moisture collection or ingress during normal operation. The Type 781’s are designed to act as both a drainage device, when mounted in a bottom entry of the equipment, and also to enable the inside air to breathe with the external environment under normal ambient and atmospheric conditions, whilst excluding further dust and moisture from penetrating the enclosure.

- The 781D must be installed into a threaded entry hole.
- Available in Nickel Plated Brass, Brass, Stainless Steel, Aluminium & Nylon (Ex e only).
- IP66.
- Filter prevents any dirt or other foreign bodies from entering the enclosure.
- Breathing capabilities help to combat the build-up of moisture & potential condensation in the apparatus.
- Draining features enable release of any water that has penetrated the apparatus whilst maintaining the applicable form of protection.

BREATHER / DRAINS

Available Options
- 781E - Ex e Increased Safety
- 781D - Ex d Flameproof
How to Order

Please contact CMP for all ordering queries

**UNARMOURED GLANDS - A2F SHOWN AS EXAMPLE**

<table>
<thead>
<tr>
<th>Cable Gland Size</th>
<th>Available Entry Threads ‘C’</th>
<th>Overall Cable Diameter ‘A’</th>
<th>Across Flats “D”</th>
<th>Across Cams “D”</th>
<th>Protrusion Length “F”</th>
<th>Combined Ordering Reference (“Brass Metric”)</th>
<th>Cable Gland Weight (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20/16 A2F</td>
<td>1/4”</td>
<td>0.5”</td>
<td>0.3”</td>
<td>0.12</td>
<td>0.07</td>
<td>Brass 1-1/4” NPT</td>
<td>0.070</td>
</tr>
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<td>Brass 1-1/2” NPT</td>
<td>0.074</td>
</tr>
<tr>
<td>20/16 A2F</td>
<td>3/4”</td>
<td>0.5”</td>
<td>0.3”</td>
<td>0.12</td>
<td>0.07</td>
<td>Brass 1” NPT</td>
<td>0.076</td>
</tr>
<tr>
<td>20/16 A2F</td>
<td>1”</td>
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<td>Brass 1-1/4” NPT</td>
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</tr>
<tr>
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<td>0.084</td>
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<td>0.07</td>
<td>Brass 1” NPT</td>
<td>0.086</td>
</tr>
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**ARMOURED GLANDS - T3CDS SHOWN AS EXAMPLE**

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<th>Overall Cable Diameter ‘A’</th>
<th>Across Flats “D”</th>
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**Notes:**
- For material options please add the following suffix to the Combined Ordering Reference: Brass “4”, Copper Free Aluminum “5”.
- 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, 3 1/2” = 39 (Brass requires prefix “0”).
- Examples: 32T3CDS1RA534 = Nickel Plated Brass 1-1/4” NPT, 32T3CDS1RA535 = Brass 1-1/2” NPT, 25T3CDS1RA432 = Stainless Steel 3/4” NPT, 20T3CDS1RA5 = Nickel Plated Brass 20mm.