**END TO END PERFORMANCE**

At Peppers, we specialise in the design, manufacture and supply of what are widely regarded as one of the best cable gland products and accessories available. With over 70 years experience we have an excellent reputation for delivering quality products along with the highest possible levels of customer service and flexibility.

We take pride in providing our customers with the confidence and peace of mind that comes with a total cable gland solution. From the design engineers who specify our products, to the fitter who installs them, to the organisations that ultimately utilise them all over the world.

**THE INNOVATORS**

Peppers R&D Engineering Team is continually developing new designs for cutting edge products to benefit our customers:

**VERSATILE AND MULTI-USE SOLUTIONS**

New innovative gland styles such as the A*RCC, A*RCM, A*RCF and LT-C provide added versatility in conduit installations. The CR-S*M, unlike any other gland on the market, known as a “Conduit Stopper Box”, can effectively stop explosions from either direction. Peppers has also integrated its ingenious CROCLOCK® single orientation clamping system and deluge protection concept into various gland designs ensuring more installations are completed without mistakes.

**REDUCED INSTALLATION TIMES AND COSTS**

Peppers’ Barrier Glands featuring Peppers T-1000 compound enable conductors to be terminated within the equipment after just one hour. At four hours, the compound chamber can be inspected and the equipment can be energised. Our innovative barrier chamber provides a cable acceptance that is on average 17% larger than our competitors designs allowing the use of smaller glands which significantly reduces cost.

**GLAND & ENCLOSURE ACCESSORIES**

Peppers offer a full range of approved hazardous area connectivity solutions to complement their extensive range of glands. Popular enclosure accessories include adapters and reducers, stopping plugs, breather drains, right angle adapters and more, all available in multiple thread conversion options such as Metric, NPT and PG just to name a few. Gland accessories specifically made for use with Peppers glands include locknuts, sealing washers, serrated washers, earth tags and shrouds. Whatever you need for your installation, we’ve got you covered.

This calls for an expert approach from initial contact and quotation to ordering and final delivery. We call this “End-To-End Performance” the unique combination of unrivaled product quality, technical support and service delivery which truly sets Peppers apart.

Peppers products can be relied upon 24 hours a day, 7 days a week, 365 days of the year.

**ON-TIME**

Peppers is famously fast when it comes to lead times and turnaround. This is partly due to a determination to protect that reputation - but also due to the structure of the business and smart manufacturing processes. A satellite manufacturing unit and global distribution network gives Peppers full control of the supply chain. Our clever “component manufacturing” process allows us to remain agile and react fast to customer demands.

**KNOWLEDGEABLE AND TRUSTED**

We are proud of our reputation for knowledge and expertise in the industry. When you’re in the business of supplying products into hazardous areas, it’s comforting for customers to know they’re receiving accurate technical information they can rely on. Equally important is trust and integrity. We don’t bend the truth to secure orders. We don’t promise what we cannot deliver.

**COMMITMENT TO QUALITY**

Peppers maintains a quality management system approved to ISO 9001:2015, ISO/IEC 80079-34:2011 Explosive atmospheres - Part 34: Application of quality systems for equipment manufacture and an Environmental System approved to ISO 14001:2004 as well as operating within Occupational Health and Safety Management (OHS) to BS OHS AS 18001.
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<th>Compound</th>
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<th>Conduit Connection</th>
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<th>Ex eb</th>
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Peppers Cable Glands Ltd: www.peppers.co.uk | Email: sales@peppers.co.uk | Tel: +44 (0) 1276 64232
**PRODUCT TYPE CR**

Double Compression Gland for Armoured Cable featuring “CROCLOCK”

**Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta**

### CABLE GLAND SELECTION TABLE

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### PRODUCT DESCRIPTION

“CR” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2, for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. They provide a controlled Ex db & IP displacement seal on the cable inner sheath an environmental seal on the outer sheath and “CROCLOCK”, a unique non reversible multi clamping system for wire, braid and tape armoured cables. The gland maintains IP66 & IP68 to 50 metres and is deluge proof without the use of an additional seal. It is supplied with an IP O- ring seal as standard on metric entry threads. Options are available for use with lead sheath, LSLH cables and extreme temperature applications.

### COMPLIANCE STANDARDS:

- EN 60079-0, EN 60079-7, EN 60079-15, EN 60079-31
- IEC 60079-0, IEC 60079-1, IEC 60079-15, IEC 60079-31 & IEC 60529
- C22.2 (see certificate), CAN/CSA 60079-0/7
- UL3148, UL2225, UL3050 AEx e UL50 BEx / ISA 60079-07 / ISA 60079-31

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### MATERIALS

- Neoprene Seal -35°C to +90°C
- Silicone Seal
- Neoprene/Lead -35°C to +90°C
- Silicone/Lead -35°C to +90°C
- Electroless Nickel
- Nickel Plated
- outdoor sheath and “CROCLOCK”, a unique non reversible multi clamping system for wire, braid and tape armoured cables. The gland maintains IP66 & IP68 to 50 metres and is deluge proof without the use of an additional seal. It is supplied with an IP O- ring seal as standard on metric entry threads. Options are available for use with lead sheath, LSLH cables and extreme temperature applications.

### IP RATING:

- 90H
- 80H
- 75H
- 63S
- 63S
- 50S
- 50H
- 50S
- 40S
- 35S
- 32S
- 25S
- 20S
- 16S
- 16S
- 12S
- 11S
- 11S
- 8S
- 8S
- 6S
- 6S
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- 3S
- 3S
- 2S
- 2S
- 1.5S
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- 1S
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- M1600
- M1600
- M2000
- M2000
- M2500
- M2500
- M3000
- M3000

### Double Compression Gland for Armoured Cable

- “CROCLOCK”
- single orientation clamping
- 1 Neoprene Seal (1) - Silicone Seal (3) - Neoprene/Lead (2) - Silicone/Lead (4)
- B (Brass) - Stainless Steel (5)
- Reduced Bore Seal
- PVC Shroud (C) - PCP Shroud (P) - LSHN Silicone Shroud (3)

### PLATING

- Electroless Nickel

### MATERIALS

- Neoprene Seal -35°C to +90°C
- Silicone Seal
- Neoprene/Lead -35°C to +90°C
- Silicone/Lead -35°C to +90°C
- Electroless Nickel
- Nickel Plated

### OPERATING TEMP:

- Neoprene Seals -35°C to +90°C
- Silicone Seals -60°C to +180°C

### PLATING

- Electroless Nickel

### ACCESSORIES (extra costs)

- Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
- Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer
- Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer

### CABLE ACCEPTANCE DETAILS

- Double Compression Gland for Armoured Cable
- UL514B, UL1203, UL2225, UL3050 AEx e UL50 BEx / ISA 60079-07 / ISA 60079-31

### Electrical References

- EN 60079-0, EN 60079-1, EN 60079-15, EN 60079-31
- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31

### Certification

- ATEX
- IP66 & IP68 (50 metres - 7 Days), Type 4X & DT501991
- IP washers can be supplied for tapered entry threads.

### NOTES

- Gland size does not necessarily equate to the entry thread size.
- The IP-O-ring seal is only available on metric entry threads.
- IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- “CR” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2, for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. They provide a controlled Ex db & IP displacement seal on the cable inner sheath an environmental seal on the outer sheath and “CROCLOCK”, a unique non reversible multi clamping system for wire, braid and tape armoured cables. The gland maintains IP66 & IP68 to 50 metres and is deluge proof without the use of an additional seal. It is supplied with an IP O- ring seal as standard on metric entry threads. Options are available for use with lead sheath, LSLH cables and extreme temperature applications.

### Peppers Cable Glands Limited

Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account. Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.
Assembly instructions must be read prior to installation and adhered to in full.

### CABLE GLAND SELECTION TABLE

**EXAMPLE PART NUMBERING:**

(ALL DIMENSIONS IN mm)

**ACCESSORIES:**

- **PLATING:**
  - Electroless Nickel
  - Aluminium, Brass or Stainless Steel

**MATERIALS:**

- IP RATING:
  - IP66 & IP68 (50 metres - 7 days), Type 4X

**Gland size**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<td>16 M16 x 1.5</td>
<td>2/3/4&quot;</td>
<td>3.5</td>
<td>8.4</td>
<td>13.5</td>
<td>49</td>
<td>10.0</td>
<td>0.90</td>
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<td>2/3/4&quot;</td>
<td>8.0</td>
<td>11.7</td>
<td>11.6</td>
<td>16.0</td>
<td>0.90</td>
<td>0.15-0.35</td>
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<td>2/3/4&quot;</td>
<td>6.7</td>
<td>14.0</td>
<td>15.5</td>
<td>20.0</td>
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<td>13.0</td>
<td>20.0</td>
<td>23.7</td>
<td>18.8</td>
<td>16.0</td>
<td>0.90-1.125</td>
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<td>26.7</td>
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<td>25.0</td>
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<td>1.60-2.00</td>
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<tr>
<td>50 M50 x 1.5</td>
<td>1 1/2&quot; or 2&quot;</td>
<td>31.5</td>
<td>38.2</td>
<td>39.4</td>
<td>46.7</td>
<td>42.4</td>
<td>2.00-2.50</td>
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<td>50 M50 x 1.5</td>
<td>2&quot;</td>
<td>31.5</td>
<td>38.2</td>
<td>45.7</td>
<td>53.2</td>
<td>46.5</td>
<td>2.50-3.00</td>
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<td>2&quot; or 2 1/2&quot;</td>
<td>36.5</td>
<td>44.1</td>
<td>45.7</td>
<td>60.2</td>
<td>56.8</td>
<td>3.00-3.50</td>
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<tr>
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<td>2&quot; or 2 1/2&quot;</td>
<td>42.5</td>
<td>50.1</td>
<td>58.4</td>
<td>65.8</td>
<td>53.8</td>
<td>2.50-3.00</td>
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<td>64.8</td>
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<td>2.50-3.00</td>
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<td>71.8</td>
<td>84.0</td>
<td>70.9</td>
<td>2.50-3.00</td>
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<td>77.0</td>
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<td>78.0</td>
<td>84.0</td>
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<td>3.15</td>
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<tr>
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<td>3&quot; or 3 1/2&quot;</td>
<td>69.0</td>
<td>78.0</td>
<td>79.6</td>
<td>86.0</td>
<td>80.4</td>
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<td>74.0</td>
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<td>84.0</td>
<td>93.4</td>
<td>90.4</td>
<td>3.15</td>
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<td>3 1/4&quot; or 4&quot;</td>
<td>82.0</td>
<td>90.0</td>
<td>92.0</td>
<td>102.4</td>
<td>97.4</td>
<td>3.15</td>
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</tbody>
</table>

**PART NUMBERS:**

- ATEX
- IECEx
- CE Certified

**CERTIFICATION:**

- **IECEx:**
  - Ex di IIC Gb / Ex e IIC Gb / Ex ta IIIC Da
  - Ex d IIC Gb / Ex e IIC Gb / Ex ta IIIC Da

**PRODUCT DESCRIPTION**

- "C" type double compression glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex Rr and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIC. Also certified for Zone 1 and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. They provide a controlled Ex db & IP seal on the cable inner sheath, an environmental seal on the outer sheath and a detachable armour specific clamping system for wire (W), braid/tape (X) armoured cables. The gland has been tested to IP66 and IP68 to 50 metres. The Integral Earth “IE” version allows the gland to be used with HV cables where the fault load is greater than 10.4kA and options are available for use with lead sheath, LSOH cables and extreme temperature applications.

**COMPLIANCE STANDARDS:**

- EN 60079-0, EN 60079-1, EN 60079-15, EN 60079-31
- IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
- C22.2 (see certificate), CAN/CSA-60079-0-1/7
- UL 5144, UL 2223, UL 50E, ANSI/UL 60079-7, ISA 60079-31

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Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.

- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.

- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.
Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account. Please refer to our “Thread Reference Tables” for specific dimensions.

Assembly instructions must be read prior to installation and adhered to in full.

Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.
PRODUCT DESCRIPTION:

"A" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and CEC. Commonly referred to as "stuffing glands", they provide a controlled pull resistant environmental displacement seal on the cable outer sheath, minimising damage to cables that exhibit "cold flow" characteristics. The gland mantains IP66 & IP68 to 50 metres. It is supplied with an IP O-ring seal as standard on metric entry threads, O-rings are available for use with LSZH cables and extreme temperature applications. The "A" type design is intended to accommodate unarmoured and armoured cables where sealing and retention is required only on the outer sheath.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL1548, UL2023, UL2225, UL50E, AN5/UL 60079-0/7, ISA 60079-31

**PRODUCT TYPE A**

**PART NUMBERS:**

- **A**: Type of gland featuring controlled displacement sealing
- **B**: Neoprene Seals (2) - Silicone (3) - Neoprene/Lead (1) - Silicone/Lead (4)
- **E**: Peppers Standard Designation
- **F**: Aluminium (A) / Brass (B) / Stainless Steel (5)
- **L**: Multiple Certification
- **M**: PVC Shroud (C) - PCP Shroud (P) - Silicone LSZH Shroud (3)

** NOTES **

- **Electroless Nickel Plating:** Aluminium, Brass or Stainless Steel
- **Neoprene Seals:** -35ºC to +90ºC
- **IP RATING:** PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)
- **SHROUDS:** Stainless Steel (ACSSW) / Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
- **SERRATED WASHERS:** Stainless Steel (ACSSW) / Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
- **EARTH TAG:** Brass (ACBLN) / St Steel (ACSLN) / Aluminium (ACALN)
- **LOCKNUT:** Brass (ACBLCN) / St Steel (ACSLCN) / Aluminium (ACALCN)

**CABLE ACCEPTANCE DETAILS**

- **Weight:** 1 Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da
- **Class II, Division 1, Groups E, F & G**
- **Class III, Enclosure Type 4X**
- **Class I Zone 1 AEx e IIC Gb**
- **Class I Zone 2 AEx nR IIC Gc**
- **Class I Zone 20 AEx ta IIIC Da**
- **EX-Canada**

**CERTIFICATION:**

- **C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL1548, UL2023, UL2225, UL50E, AN5/UL 60079-0/7, ISA 60079-31**

**PRODUCT DESCRIPTION**

- **Single Compression Gland for Armoured and Unarmoured Cable**
- **Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68**
- **Class I Div 2 : AEx e : AEx ta**

**PRODUCT TYPE A**

**PART NUMBERS:**

- **A**: Type of gland featuring controlled displacement sealing
- **L**: Neoprene Seals (2) - Silicone (3) - Neoprene/Lead (1) - Silicone/Lead (4)
- **E**: Peppers Standard Designation
- **M**: Multiple Certification
- **K**: Brass (A)/Aluminium (B)/Stainless Steel (C)
- **H**: PVC Shroud (C) - PCP Shroud (P) - Silicone LSZH Shroud (3)
- **V**: Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
- **S**: Serrated Washer
- **P**: Including Earth Tag
- **F**: Including Serrated Washer
- **B**: Multiple Certification

**Gland size**

<table>
<thead>
<tr>
<th>Gland size</th>
<th>Entry Thread Size</th>
<th>ISO Thread Length [mm]</th>
<th>Cable Acceptance Details</th>
<th>Nominal Protrusion Length [L]</th>
<th>Dimensions/Weight (Metric Versions)</th>
<th>Shroud Size (Metric)</th>
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<tbody>
<tr>
<td>Nominal</td>
<td>Across Flats (A)</td>
<td>Across Corners</td>
<td>Weight (Kgs)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Min</td>
<td>Max</td>
<td>Across Flats (A)</td>
<td>Across Corners</td>
<td>Weight (Kgs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>M12 x 1.5</td>
<td>3/8&quot;</td>
<td>16</td>
<td>0.9</td>
<td>6.0</td>
<td>33</td>
</tr>
<tr>
<td>16</td>
<td>M16 x 1.5</td>
<td>3/8&quot; or 1/2&quot;</td>
<td>16</td>
<td>0.9</td>
<td>6.0</td>
<td>33</td>
</tr>
<tr>
<td>20</td>
<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>16</td>
<td>9.4</td>
<td>14.0</td>
<td>33</td>
</tr>
<tr>
<td>25</td>
<td>M25 x 1.5</td>
<td>3/4&quot; or 1&quot;</td>
<td>16</td>
<td>13.5</td>
<td>20.0</td>
<td>33</td>
</tr>
<tr>
<td>32</td>
<td>M32 x 1.5</td>
<td>1&quot; or 1 1/4&quot;</td>
<td>16</td>
<td>19.5</td>
<td>26.3</td>
<td>33</td>
</tr>
<tr>
<td>40</td>
<td>M40 x 1.5</td>
<td>1 1/2&quot; or 1 5/8&quot;</td>
<td>16</td>
<td>23.0</td>
<td>32.2</td>
<td>37</td>
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<td>M50 x 1.5</td>
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<td>38.2</td>
<td>37</td>
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<td>63</td>
<td>M63 x 1.5</td>
<td>2 1/2&quot; or 2&quot;</td>
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<td>31.1</td>
<td>44.1</td>
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<td>72.0</td>
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<td>25</td>
<td>74.0</td>
<td>84.0</td>
<td>50</td>
</tr>
</tbody>
</table>

**NOTES**

- **Gland size does not necessarily equate to the entry thread size.**
- **The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for taped entry threads.**
- **Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.**
- **Installation assembly must be read prior to installation and adhered to in full.**
- **Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.**
Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

Dimensions (A) & (B) may differ for glands with non metric entry threads.

### Cable Gland Selection Table

**Optional**

**Examples Part Numbering:**

A2LDSBF/NP/20/M20

### Notes

- **Product Type A*LDS** type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIa, IIb and IIc and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIB and IIC. Also certified for Zone and Division installations for use with Marine Shipboard and Tray Cables under the NEC and IEC. Commonly referred to as “double seal stuffing glands”, they provide two controlled pull resistant environmental displacement seals on the cable outer sheath, minimising damage to cables that exhibit “cold flow” characteristics. The gland maintains IP66 & IP68 to 50 metres. It is supplied with an IP O-ring seal as standard on metric entry threads. Options are available for use with LSOH cables and extreme temperature applications.

### Compliance Standards:

- **EN 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31**
- **IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529**
- **C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL514B, UL1203, UL2225, UL50E ANSI/UL 60079-0/7, ISA 60079-31**

**ATEX** II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

**IECEx**

- Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da X

**CEC - Canada**

- Class I Division 2, Groups A, B, C & D

**NEC - USA**

- Class I, Div 2, Groups E, F & G

**INMETRO - Brazil**

- Class II Division 1, Groups E, F & G

**SAC - China**

- Class II Division 1, Groups E, F & G

**SIRA - India**

- II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / I 1D Ex ta IIC Da X

**CCEC - India**

- Ex db IIC Gc (Zone 1) Ex eb IIC Gc (Zone 2) Ex ta IIC Da X

**ABS**

- Specified ABS Ruler

**LLOYD’S**

- Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da

**RMRS**

- Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da

**ATEX**

- BIR-01ATEX1272X & BIRA-09ATEX1221X

**IECEx**

- IECEx SR 07.006X

**CEC - Canada**

- CSA 136501

**NEC - USA**

- CSA 262730

**SAC - China**

- RU C-GB.BH02.00693-18

**INMETRO - Brazil**

- NBC 13.2012X

**SAC - China**

- NEPSI GY216.139X

**UKRAINE**

- CLI 18.0025 X

**CCCEI - India**

- PESO P3630002 & P3633005

**ABS**

- 14-L469391-1-PDA

- 1000059(E1)

**LLOYD’S**

- 14.02755.315

**RMs**

- 14.02755.315

### Technical Details

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<tr>
<th>Gland Size</th>
<th>Entry Thread Size</th>
<th>Metric Thread Length (B)</th>
<th>Nominal Protrusion Length (Metric)</th>
<th>Dimensions/Weight (Metric Versions)</th>
<th>Weight (Kgs)</th>
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<td>6.0</td>
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<td>3/8” or 1/2”</td>
<td>16</td>
<td>0.9</td>
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<td>M20 x 1.5</td>
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<td>16</td>
<td>4.0</td>
<td>8.4</td>
</tr>
<tr>
<td>20S</td>
<td>M20 x 1.5</td>
<td>1/2” or 3/4”</td>
<td>16</td>
<td>7.2</td>
<td>11.7</td>
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<tr>
<td>20S</td>
<td>M20 x 1.5</td>
<td>1/2” or 3/4”</td>
<td>20</td>
<td>9.4</td>
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<td>M63 x 1.5</td>
<td>2” or 2 1/2”</td>
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<td>M63 x 1.5</td>
<td>2” or 2 1/2”</td>
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<td>39.2</td>
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<td>2 1/2” or 3”</td>
<td>19</td>
<td>52.1</td>
<td>62.0</td>
</tr>
<tr>
<td>75S</td>
<td>M75 x 1.5</td>
<td>2 1/2” or 3”</td>
<td>19</td>
<td>58.0</td>
<td>68.0</td>
</tr>
<tr>
<td>80</td>
<td>M80 x 2.0</td>
<td>3” or 3 1/2”</td>
<td>25</td>
<td>62.2</td>
<td>72.0</td>
</tr>
<tr>
<td>85</td>
<td>M85 x 2.0</td>
<td>3” or 3 1/2”</td>
<td>25</td>
<td>69.0</td>
<td>76.0</td>
</tr>
<tr>
<td>90</td>
<td>M90 x 2.0</td>
<td>3 1/4” or 4”</td>
<td>25</td>
<td>74.0</td>
<td>84.0</td>
</tr>
<tr>
<td>100</td>
<td>M100 x 2.0</td>
<td>3 1/4” or 4”</td>
<td>25</td>
<td>82.0</td>
<td>90.0</td>
</tr>
</tbody>
</table>

**Notes**

- **Gland size does not necessarily equate to the entry thread size.**
- **The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.**
- **Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.**
- **Assembly instructions must be read prior to installation and adhered to in full.**
- **Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.**

Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.

- **When selecting IP Washer & Shroud material for use with glands, please be assured of the accessories temperature range to ensure they are suitable for the intended installation.**
- **Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.**
**Single Compression Gland featuring a Freely Rotating Flexible Metallic Conduit Connector**

**Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68**

**PART NUMBERS:**

<table>
<thead>
<tr>
<th>1</th>
<th>A</th>
<th>2</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Gland featuring controlled displacement sealing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Neoprene Seal (2) - Silicone Seal (3) - Neoprene/Lead (4) - Silicone/Lead (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>Rotating Conduit Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>Metallic Flexible Conduit Connector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Aluminium (A) / Brass (B) / Stainless Steel (S)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Multiple Certification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NP</td>
<td>Nickel Plated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-1</td>
<td>Gland &amp; Connector Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M20 x 1.5</td>
<td>Male Entry Thread</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ACCESSORIES:

- **PLATING:**
  - Electroless Nickel

- **EARTH TAG:**
  - Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)

- **IP RATING:**
  - M20 x 1.5mm Male Entry Thread

- **Gland & Connector Size**
  - Metric
  - NPT

### Cable Acceptance Details

- **Outer Sheath (D)**
- **Typical Conduit Diameter**
- **Nominal Proficiency Length (L)**

### Dimensions/Weight (Metric Versions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>16</td>
<td>146</td>
<td>24</td>
</tr>
<tr>
<td>20</td>
<td>192</td>
<td>32</td>
</tr>
</tbody>
</table>

### Peppers Cable Glands Ltd.

- **Cable Acceptance Details**
  - **Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68**

- **PRODUCT TYPE A*RCC**
  - Type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and Zone 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Commonly referred to as “stuffing glands”, they provide a controlled pull resistant environmental displacement seal on the cable outer sheath, minimizing damage to cables that exhibit “cold flow” characteristics. The gland maintains IP66 & IP68 to 50 metres. It is supplied with an IP O-ring seal on standard metric entry threads. The gland features a freely rotating flexible conduit connection.

### COMPLIANCE STANDARDS:

- **EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31**
- **IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529**

- **METALLIC FLEXIBLE CONDUIT CONNECTOR**
  - Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68

- **CERTIFICATION:**
  - ATEX II 1D Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc X / Ex ta IIIC Da X
  - IECEx II 3 G Ex rR IIC Gc
  - NEPSI GYJ16.1399X
  - METRO - Brazil Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da X
  - CCCe - India Ex d IIC Gb (Zone 1) Ex e IIC Gb (Zone 2) Ex rR IIC Gc (Zone 2)
  - ABS Specific ABS Rules
  - LLOYD’S Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da X
  - RMRS Ex d I/C / Ex e I/C / Ex nR / Ex ta IIIC Da X

### OPTIONS:

- **EXAMPLE PART NUMBERING:**
  - Peppers Cable Glands Ltd.
  - www.peppers.co.uk | Email: sales@peppers.co.uk | Tel: +44 (0) 1276 64232

### NOTES:

- **Gland size does not necessarily equate to the entry thread size.**
- **The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.**
- **Dimensions (A) & (B) may differ for glands with non metric entry threads.**
- **Where this has not been taken into account.**
- **Assembly instructions must be read prior to installation and adhered to in full.**
- **If fit testing is required for specific conduit please contact Peppers.**

### ACCESSORIES:

- **ACCESSORIES:**
  - **PLATING:**
    - Electroless Nickel
  - **EARTH TAG:**
    - Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)
  - **IP RATING:**
    - M20 x 1.5mm Male Entry Thread
  - **Gland & Connector Size**
    - Metric
    - NPT
  - **Cable Acceptance Details**
    - **Outer Sheath (D)**
    - **Typical Conduit Diameter**
    - **Nominal Proficiency Length (L)**
  - **Dimensions/Weight (Metric Versions)**
    - **Length [L]**
    - **Across Flats [A]**
    - **Across Corners**

### COMPLIANCE STANDARDS:

- **EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31**
- **IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529**

### CERTIFICATION:

- **ATEX II 1D Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc X / Ex ta IIIC Da X**
- **IECEx II 3 G Ex rR IIC Gc**
- **NEPSI GYJ16.1399X**
- **INMETRO - Brazil Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da X**
- **CCCe - India Ex d IIC Gb (Zone 1) Ex e IIC Gb (Zone 2) Ex rR IIC Gc (Zone 2)**
- **ABS Specific ABS Rules**
- **LLOYD’S Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da X**
- **RMRS Ex d I/C / Ex e I/C / Ex nR / Ex ta IIIC Da X**

### NOTES:

- **Gland size does not necessarily equate to the entry thread size.**
- **The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.**
- **Dimensions (A) & (B) may differ for glands with non metric entry threads.**
- **Where this has not been taken into account.**
- **Assembly instructions must be read prior to installation and adhered to in full.**
- **If fit testing is required for specific conduit please contact Peppers.**
### Single Compression Gland with a Freely Rotating Male Conduit Connection

**Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta**

<table>
<thead>
<tr>
<th>PART NUMBERS:</th>
<th>A</th>
<th>R</th>
<th>CH</th>
<th>B</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>5</td>
<td>2</td>
<td>S</td>
<td>3</td>
<td>A</td>
</tr>
</tbody>
</table>

#### PRODUCT DESCRIPTION

"A*RCM" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIB and IIC. They provide a controlled pull resistant environmental displacement seal on the cable outer sheath, minimising damage to cables that exhibit "cold flow" characteristics. The gland maintains IP66 & IP68 to 50 metres and is supplied with an IP O-ring seal as standard on metric entry threads. The gland features a freely rotating male thread conduit connection for ease of installation.

#### COMPLIANCE STANDARDS:

- ATEX
- IECEx
- NEC - USA
- SAC - China
- INMETRO - Brazil
- USSR
- CCCe - India
- ABS
- LLOYD'S
- RMRs

**PART NUMBERS:**

- M12 x 1.5
- M16 x 1.5
- M20 x 1.5
- M25 x 1.5
- M32 x 1.5
- M40 x 1.5
- M50 x 1.5
- M63 x 1.5
- M75 x 1.5
- M90 x 2.0
- M100 x 2.0

**Certification No:**

- SIRA: 01ATEX1272X & SIRA: 01ATEX1221X
- IECEx: SIR 07/0008X
- CMC - Indonesia
- NEPSI GY16.1399X
- CIJ: 18.0232 X
- PESO P363002 & P363005
- 14-LD463961-1-PDA
- 10/0056(E1)
- 14.02765.315

**Certificate No:**

- ATEX
- IECEx
- NEC - USA
- SAC - China
- INMETRO - Brazil
- USSR
- CCCe - India
- ABS
- LLOYD'S
- RMRs

**Example Part Numbering:**

- (ALL DIMENSIONS IN mm)

#### Gland Features
- Controlled displacement seal
- Multiple Certification
- Including Earth Tag
- With a Freely Rotating Male Conduit Connection

#### Locknut
- Brass (ACBLN) / Stainless Steel (ACSLN) / Aluminium (ACALN)

#### Earth Tag
- Brass (ACETB) / Stainless Steel (ACSET) / Aluminium (ACATE)

#### IP Washers
- Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)

#### Separated Washers
- Stainless Steel (ACSSW)

#### IP Rating:
- IP66 & IP68 (50 metres - 7 Days), Type 4X

#### Operating Temp:
- Neoprene Seal: -35°C to +90°C
- Silicone Seal: -60°C to +180°C

#### Materials:
- Stainless Steel or Aluminium
- Electroless Nickel

#### Plating:
- Nickel Plated

#### Details:
- Accessory: Serrated Washer
- Accessory: IP Washer
- Accessory: Locknut
- Accessory: IP Rating
- Accessory: Operating Temp
- Accessory: Materials
- Accessory: Plating

**NOTES**

- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP Washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non-metric entry threads. Please refer to the "Throat Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-11 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.

- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry. / order.

---

**Peppers Cable Glands Ltd:**

[www.peppers.co.uk](http://www.peppers.co.uk) | Email: sales@peppers.co.uk | Tel: +44 (0) 1276 64232

---

[Image 20x661 to 269x802]
### Single Compression Gland with a Freely Rotating Female Conduit Connection

**Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta**

#### PART NUMBERS:

<table>
<thead>
<tr>
<th>A</th>
<th>1</th>
<th>R</th>
<th>CF</th>
<th>B</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>5</td>
<td>3</td>
<td>A</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

#### PRODUCT DESCRIPTION

“A*RCF” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. They provide a controlled pull resistant environmental displacement seal on the cable outer sheath, minimising damage to cables that exhibit “cold flow” characteristics. The gland maintains IP66 & IP68 to 50 metres and is supplied with an IP O-ring seal as standard on metric entry threads. The gland features a freely rotating female threaded conduit connection for ease of installation.

#### COMPLIANCE STANDARDS

- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
- IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-71 & IEC 60529
- UL 514B, UL3103, UL2225, UL50E, ANSI/UL60079-0/7-1, ISA 60079-31

#### CERTIFICATION NUMBERS

- ATEX: SIRA 01ATEX1272X & SIRA 09ATEX1221X
- IECEx: Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da
- NEC - USA: Class II Division 1, Groups E, F & G
- Class I, Enclosure Type 4X
- Class I Zone 1 AEx e IIC Gb
- Class II Zone 20 AEx e IIC Gb
- SAC - China: Ex IIC Gb / Ex IIC Gb / Ex IIC Gb
- IECEx: SIR 0.0706XX
- NEC - USA: CSA 262730
- SAC: RU C-GB.BH02.B.00693-18
- INMETRO - Brazil: Ex db IIC Gb / Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIC Da X
- CCCe - India: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- ABS: Specified ABS Rules
- LLOYD’S: Ex IIC Gb / Ex IIC Gb / Ex IIC Gb / Ex IIC Gb
- RMR: Ex IIC / Ex IIC / Ex IIC / Ex IIC / Ex IIC

#### CABLE GLAND SELECTION TABLE

<table>
<thead>
<tr>
<th>Locknut (material dictated by gland entry thread material)</th>
<th>N</th>
<th>Including IP Washer, Nylon (N) - Fibre (V) - PTFE (H)</th>
<th>T</th>
<th>Including Earth Tag</th>
<th>S</th>
<th>Including Serrated Washer</th>
<th>Q</th>
<th>Quantity per kit</th>
<th>NP</th>
<th>Nickel Plated</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Gland Shell Size</td>
<td>M20 x 15mm Male Entry Thread</td>
<td>Brass (ACBLN) - Stainless Steel (ACSLN) - Aluminium (ACALN)</td>
<td>Earth Tag</td>
<td>Brass (ACBET) - Stainless Steel (ACSET) - Aluminium (ACAET)</td>
<td>IP WASHERS</td>
<td>Nylon (ACNSW) - Fibre (ACFSW) - PTFE (ACPSW)</td>
<td>SERRATED WASHERS</td>
<td>Stainless Steel (ACSSW)</td>
<td></td>
</tr>
</tbody>
</table>

#### LOCKNUT DIMENSIONS:

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Ø [mm]</th>
<th>Length [mm]</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>locknut</td>
<td>8.0</td>
<td>21.0</td>
<td>Steel</td>
</tr>
</tbody>
</table>

#### ACCESSORIES:

- PLATING:
  - Brass, Stainless Steel or Aluminium
  - Electroless Nickel

- IP RATING:
  - IP66 & IP68 (50 metres - 7 Days), Type 4X

- OPERATING TEMP:
  - Neoprene Seals: -35°C to +90°C
  - Silicone Seals: -60°C to +180°C
  - Neoprene Seals: -50°C to +150°C

- MATERIALS:
  - Brass, Stainless Steel or Aluminium

- PLATING:
  - Electroless Nickel

- **NOTES**
  - Gland size does not necessarily equate to the entry thread size.
  - The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for taper threaded entries.
  - Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.
  - Assembly instructions must be read prior to installation and adhered to in full.
  - Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-71 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.

- When selecting IP Washer material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.
**PRODUCT TYPE A*LCM**

1. **Gland featuring controlled displacement sealing**
2. **Neoprene Seal (2) - Silicone Seal (3) - Neoprene/Lead (1) - Silicone/Lead (4)**
3. **Peppers Standard Designation**
4. **Male Conduit Connection Thread**
5. **Brass (B) / Stainless Steel (S) / Aluminium (A)**
6. **Multiple Certification**
7. **Certificate (OSN0P7)**
   - 1/2"NPT Male Conduit Connection Thread
8. **Locknut (material dictated by gland entry thread material)**
9. **Including IP Washer, Nylon [N] - Fibre [V] - PTFE [H]**
10. **Including Earth Tag**
11. **Including Serrated Washer**
12. **Quantity per kit**
13. **20**
14. **Gland shell size**
15. **M20 x 1.5mm Male Entry Thread**

---

**NOTES**

- **Dimensions (A) & (B) may differ for glands with non metric entry threads.** Please refer to our “Thread Reference Tables” for specific dimensions.
- **Assembly instructions must be read prior to installation and adhered to in full.**
- **Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available accessories temperature range to ensure they are suitable for the intended installation.**
- **When selecting IP Washer material for use with glands, please be aware of the accessories temperatures range to ensure they are suitable for the intended installation.**
- **Where approval in additional to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.**

---

**CERTIFICATION:**

- **ATEX:** SIRA/1ATEX1272X & SIRA/0ATEX1221X
- **IECEx:** IECEx SR 07.006X
- **CEC - Canada:** CSA 1356011
- **NEC - USA:** CSA2627370
- **EAC:** RU C-GO.R02.E08.0063-18
- **INMETRO - Brazil:** NCC.13.2012.X
- **SAC - China:** NEPSI QY16.169X0
- **UKRAINE:** CII 18.0325 X
- **CCSA - India:** PESO P8630005 & P8653005
- **ABS:** 14-LD400361-1-PDA
- **LLOYDS:** 10/0056(E1)
- **RMRs:** 14.02755.315

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**PRODUCT DESCRIPTION**

“A*LCM” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups II A, II B and II C. Also certified for Zone and Division installations for use with Marine Shipboard and Cable Ties under the NEC and CEC. They provide a controlled pull resistant environmental displacement seal on the cable outer sheath, minimising damage to cables that exhibit “cold flow” characteristics. The gland maintains IP66 & IP68 to 50 metres. It is supplied with an IP O-ring seal as standard on metric entry threads. The gland features a male conduit connection thread as standard.

**COMPATIBILITY STANDARDS:**

- **EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529
- **IP66 & IP68 to 50 metres. It is supplied with an IP O-ring seal as standard on metric entry threads. The gland features a male conduit connection thread as standard.**
Assembly instructions must be read prior to installation and adhered to in full.

The IP O-ring seal is only available on metric entry threads. IP washers can be supplied. Dimensions (A) & (B) may differ for glands with non-metric entry threads. Gland size does not necessarily equate to the entry thread size. Where approval in addition to ATEX, IECEx and CSA is required, this

PRODUCT DESCRIPTION:
Single Compression Gland Designed for Armoured and Unarmoured Flat Cable

**Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta**

### PART NUMBERS:

A
B
B
F
S

### PRODUCT DESCRIPTION

“A8” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIIA, IIIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The A8 version is designed to accommodate unarmoured and armoured cables where sealing and retention is required only on the outer sheath.

### COMPLIANCE STANDARDS:

- **ATEX:** II 1D Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
- **IECEx:** Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
- **NEC - USA:** Class II Division 1, Groups E, F & G
- **INMETRO - Brazil:** Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
- **SAE - China:** Ex db IIC Gb / Ex eb IIC Gb
- **UKRAINE:** Ex db IIC Gb / Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
- **CCeI:** Ex db IIC Gb (Zone 1) / Ex eb IIC Gb (Zone 2) / Ex nR IIC Gc (Zone 2)
- **ABS:** Specific ABS Rules
- **LLOYDS:** Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
- **RMRS:** Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da

### ACCESSORIES:

- SERRATED WASHERS
- IP WASHERS
- EARTH TAG
- LOCKNUT
- PLATING:

### PLATING:

- Electroless Nickel

**NOTE:**

- Size 25mm is only currently ATEX, IECEx, INMETRO, EAC and Ukraine certified.
- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

### EXAMPLE AND MODIFICATIONS:

- **CABLE GLAND SELECTION TABLE**

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**Peppers Cable Glands Limited** will not be held responsible for clients' installations where this has not been taken into account.

**When selecting IP Washer material for gland kits, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.**

**Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.**
**PRODUCT DESCRIPTION**

“A8RC” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIB and IIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The “A8RC” version is designed to accommodate unarmoured and armoured cables where sealing and retention is required on the outer sheath. The gland features a rotating flexible metallic conduit connector.

**COMPLIANCE STANDARDS:**

- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
- IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529

**CERTIFICATION:**

- ATEX
- IECEx
- EAC
- INMETRO
- SAC - China
- UKRAINE
- CcE - India
- LLOYD’S

**PART NUMBERS:**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Gland designed for use with Unarmoured Cables</td>
<td><strong>B</strong></td>
<td>Silicone Seal for Flat Cable</td>
<td><strong>C</strong></td>
</tr>
<tr>
<td><strong>D</strong></td>
<td>Brass (B) / Stainless Steel (S)</td>
<td><strong>F</strong></td>
<td>Multiple Certification</td>
<td></td>
</tr>
</tbody>
</table>

**IP RATING:**

- **IP66**
- **IP68**

**LENGTH:**

- 50 metres - 7 Days

**OPERATING TEMP:**

- Silicone Seals -60°C to +80°C

**PLATING:**

- Electroless Nickel

**SPECIFICATION:**

<table>
<thead>
<tr>
<th>Gland Size</th>
<th>Entry Thread Size</th>
<th>ISO Thread Tolerance [B]</th>
<th>Dimensions/Weight (Metric)</th>
<th>Cable Outer Sheath (D)</th>
<th>Typical Conduit Dia</th>
<th>Nominal Protrusion Length [L]</th>
<th>Dimensions/Weight (Metric)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>20S-1</strong></td>
<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>16</td>
<td>6.3</td>
<td>11.2</td>
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<tr>
<td><strong>20S-2</strong></td>
<td>M20 x 1.5</td>
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<tr>
<td><strong>20S-3</strong></td>
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<td>2.0</td>
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<td>2.0</td>
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<tr>
<td><strong>20-3</strong></td>
<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>16</td>
<td>10.3</td>
<td>13.5</td>
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<td>2.0</td>
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<tr>
<td><strong>20R-1</strong></td>
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<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>16</td>
<td>8.1</td>
<td>13.5</td>
<td>5.8</td>
<td>2.0</td>
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<td><strong>25S-1</strong></td>
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<td>16</td>
<td>10.6</td>
<td>16.2</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>25S-2</strong></td>
<td>M25 x 1.5</td>
<td>3/4&quot; or 1&quot;</td>
<td>16</td>
<td>10.6</td>
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<td>2.0</td>
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<tr>
<td><strong>25S-3</strong></td>
<td>M25 x 1.5</td>
<td>3/4&quot; or 1&quot;</td>
<td>16</td>
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<td>4.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**NOTES:**

- **Size 25mm is only currently ATEX, IECEx, INMETRO, SAC and Ukraine certified.**
- **Gland size does not necessarily equate to the entry thread size.**
- **Dimensions (A) & (B) may differ for glands with non metric entry threads.**
- **Please refer to our “Thread Reference Tables” for specific dimensions.**
- **Assembly instructions must be read prior to installation and adhered to in full.**
- **Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.**
- **Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.**
- **When selecting IP Washer material for use with glands, please be aware of the accessibility temperature range to ensure they are suitable for the intended installation.**
- **It is the installer’s responsibility to ensure that the conduit is secured correctly.**
- **If fit testing is required for specific conduit please contact Peppers.”**
- **Where approval in addition to ATEX and IECEx is required, this must be clearly requested at time of enquiry / order.**
**PRODUCT TYPE A8CM**

Single Compression Gland Designed for use with Armoured and Unarmoured Flat Cable and featuring a Male Conduit Connection

**Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta**

**PART NUMBERS:**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>M</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gland designed for use with Unarmoured Cables</td>
<td>Silicone Seal for Flat Cables</td>
<td>Male Conduit Connection Thread</td>
<td>Brass (B) / Stainless Steel (S)</td>
<td>Multiple Certification</td>
<td>M20 x 1.5 Male Conduit Connection Thread</td>
</tr>
<tr>
<td><strong>OPTIONS</strong></td>
<td><strong>NOTES</strong></td>
<td><strong>CERTIFICATION No:</strong></td>
<td><strong>CERTIFICATION No:</strong></td>
<td><strong>LOCKNUT</strong></td>
<td><strong>EARTH TAG</strong></td>
</tr>
<tr>
<td><strong>Options</strong></td>
<td><strong>Materials:</strong></td>
<td><strong>Operating Temp.:</strong></td>
<td><strong>Plating:</strong></td>
<td><strong>Brass</strong> (ACBLN) / Stainless Steel (ACSSLN)</td>
<td><strong>Brass</strong> (ACBET) / Stainless Steel (ACSET)</td>
</tr>
<tr>
<td><strong>IP RATING:</strong></td>
<td><strong>IP WASHERS</strong></td>
<td><strong>SILICONE SEAL</strong></td>
<td><strong>SERRATED WASHERS</strong></td>
<td><strong>N</strong></td>
<td><strong>Including IP Washer, Nylon (N) - Fibre (F) - PFTE (H)</strong></td>
</tr>
<tr>
<td><strong>Certification:</strong></td>
<td><strong>CLASS I DIV 2</strong></td>
<td><strong>Gland Shell Size:</strong></td>
<td><strong>Min</strong></td>
<td><strong>Male Conduit Connection Thread</strong></td>
<td><strong>Including Earth Tag</strong></td>
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<tr>
<td><strong>NP</strong></td>
<td><strong>Nickel Plated</strong></td>
<td><strong>20</strong></td>
<td><strong>4.0</strong></td>
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<td></td>
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<tr>
<td><strong>20</strong></td>
<td>M20 x 1.5 Male Entry Thread</td>
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</tbody>
</table>

**CABLE GLAND SELECTION TABLE**

- **PRODUCT DESCRIPTION**
  - "A8CM" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Developed for flat cables, they provide controlled Ex db, IP sealing and have been tested to IP66 and IP68 to 50 metres. The "A8CM" version is designed to accommodate unarmoured and armoured cables where sealing and retention is required only on the outer sheath and additionally provides a male thread for the connection of conduit.

**COMPLIANCE STANDARDS:**

**EN 60079-0, EN 60079-1, EN 60079-15, EN 60079-31**

**IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, & IEC 60079-31**

**UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-0/7 & ISA 60079-31**

- **CERTIFICATION:**
  - ATEX II 1D 2G Ex db IIC Gb / II 1D 2 Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
  - IECEx Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da
  - NEC - USA Class II Division 1, Groups E, F & G
  - InMETRO - Brazil Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
  - SAC - China Ex d IIC Gb / Ex e IIC Gb
  - UKRAINE II 2G Ex db IIC Gb / II 2 Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da
  - CCC - India Ex d IIC Gb (Zone 1) Ex e IIC Gb (Zone 2) Ex nR IIC Gc (Zone 2)
  - ABS Specific ABS Rules
  - LLOYD'S Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
  - RMRS Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIC Da

**PART NUMBERS:**

- **ATEX**
  - II 1D 2G Ex db IIC Gb / II 1D 2 Ex eb IIC Gb / II 3G Ex nR IIC Gc
  - II 3G Ex nR IIC Gc

- **IECEx**
  - Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da

- **NEC - USA**
  - Class II Division 1, Groups E, F & G

- **InMETRO - Brazil**
  - Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da

- **SAC - China**
  - Ex d IIC Gb / Ex e IIC Gb

- **UKRAINE**
  - II 2G Ex db IIC Gb / II 2 Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Da

- **ABS**
  - Specific ABS Rules

- **LLOYD’S**
  - Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIC Da

- **RMRS**
  - Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIC Da

**CABLE ENTRY THREAD SIZE OPTIONS**

- **Metric**
  - 205 M20 x 1.5 1/2" or 3/4" 16 M20 x 1.5 1/2" or 3/4" 6.3 11.7 4.0 7.0 31 30.0 33.0 0.132
  - 20R M20 x 1.5 1/2" or 3/4" 16 M20 x 1.5 1/2" or 3/4" 8.1 13.5 5.8 6.2 32 30.0 33.0 0.133
  - 20 M20 x 1.5 1/2" or 3/4" 16 M20 x 1.5 1/2" or 3/4" 10.3 13.5 5.6 9.0 31 30.0 33.0 0.132
  - **25** M25 x 1.5 3/4" or 1" 16 M25 x 1.5 3/4" or 1" 10.7 16.2 4.0 7.0 31 37.6 41.4 0.280

**NOTES:**

- **25mm is only currently ATEX, IECEx, INMETRO, EAC and Ukraine certified.**
- **Gland size does not necessarily equate to the entry thread size.**
- **Dimensions (A) & (B) may differ for glands with non metric entry threads.**
- **Gland size does not necessarily equate to the entry thread size.**
- **Sizes will not have a full form thread for the entire length.**
- **All dimensions in mm.**
- **Please refer to our ‘Thread Reference Tables’ for specific dimensions.**
- **When selecting IP Washer material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.**
- **Multiple Certification**
  - Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.
**PRODUCT TYPE A8CF**

**PRODUCT DESCRIPTION**

“A8CF” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Developed for flat cables, they provide controlled Ex db, IP sealing and have been tested to IP66 and IP68 to 50 metres. The “A8CF” version is designed to accommodate unarmoured and armoured cables where sealing and retention is required only on the outer sheath and additionally provides a male thread for the connection of conduit.

**COMPLIANCE STANDARDS:**

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 62069-1 & IEC 60529

UL 5218, UL 514B, UL1203, UL1225, UL50E, ANSI/UL 60079-0 & ISA 60079-31

**PART NUMBERS:**

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<tr>
<th>A</th>
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<th>CF</th>
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</thead>
<tbody>
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<td></td>
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</table>

**CERTIFICATION:**

ATEX II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da / Ex d IIC Gb (Zone 1) Ex e IIC Gb (Zone 2) Ex nR IIC Gc (Zone 2)

IECEx Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da

NEC - USA

Class I Division 1, Groups E, F, & G

(except size 25) Class I Zone 1 AEx e IIC Gb

Class II Zone 20 AEx t IIC Da

Class III, Enclosure Type 4X

EAC 1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIC Da X

INMETRO - Brazil Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da

SAF - China Ex d IIC Gb / Ex eb IIC Gb

UKRAINE II 2G Ex db IIC Gb / II 2G Ex eb IIC Gb / II 3G Ex nR IIC Gc / II 1D Ex ta IIC Da

CCoE - India Ex d IIC Gb (Zone 1) Ex e IIC Gb (Zone 2) Ex nR IIC Gc (Zone 2)

ABS Specified ABS Rules

LLOYD’S Ex d IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da

RMRMS Ex d IIC / Ex eIIC / Ex nR IIC / Ex ta IIC

**OPTIONS:**

- **Gland designed for use with Unarmoured Cables**
- Silicone Seal for Flat Cables
- Female Conduit Connection Thread
- Brass (B) / Stainless Steel (S)
- Multiple Certification
- M20 x 1.5 Female Conduit Connection Thread
- Including IP Washer, Nylon (N) - Fibre (V) - PTFE (H)
- Metric
- Across PESO P365300/2 & P365300/6
- 1/2” or 3/4”
- 14-LD463991-1-PDA
- 33.0
- Including Serrated Washer
- Brass or Stainless Steel
- M25 x 1.5 Female Conduit Connection Thread
- Min/Max 30.0
- Nominal 0.194
- Spares M20 x 1.5 Female Conduit Connection Thread
- Min/Max 30.0
- Nominal 0.175
- Spares M20 x 1.5 Female Conduit Connection Thread
- Min/Max 30.0
- Nominal 0.174
- Spares M20 x 1.5 Female Conduit Connection Thread
- Min/Max 30.0
- Nominal 0.174

**NOTES:**

- Size 25mm is only currently ATEX, IECEx, INMETRO, EAC and Ukraine certified.
- Gland size does not necessarily equate to the entry thread size.
- When selecting IP Washer material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.

**ACCESSORIES:**

- **Earth Tag**
- **Locknut**
- **Option 1**
- **Option 2**
- **Option 3**
- **Option 4**

**CERTIFICATION No:**

- ATEX
- SIRA 01ATEX1271X & SIRA 08ATEX1221X
- IECEx IECEx SIR 05.0020X
- NEC - USA CSA 2627370
- EAC RUC-BG.H02.B.00983-18
- INMETRO - Brazil NCC 13.2187 X
- SAC - China NEPSI GYJ16.1398X
- UKRAINE Cll 18.0211 X
- CCoE - India PESO PM630020 & PM63006
- ABS 14-D463961-1-PDA
- LLOYD’S 1000056(E1)
- RMRMS 14.02755.315

Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

Assembly instructions must be read prior to installation and adhered to in full.

Dimensions (A) & (B) may differ for glands with non metric entry threads.

Gland size does not necessarily equate to the entry thread size.

When selecting IP Washer material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.

Please refer to our “Thread Reference Tables” for specific dimensions.
### Single Compression Gland Designed for use with Armoured Flat Cable

**Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 2 : AEx e : AEx ta**

#### PART NUMBERS:

<table>
<thead>
<tr>
<th>D</th>
<th>B</th>
<th>X</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>D8XBF/NP/20/050NPT</td>
<td></td>
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#### PRODUCT DESCRIPTION

“D8X” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups II(A, IIB and IIC). Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The “D8X” version is designed to accommodate armoured cables, sealing on the inner sheath and also incorporates a detachable armour specific clamping system.

#### COMPLIANCE STANDARDS:

- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31, IEC 60529 UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-7, IEC 60079-31

#### ACCESSORIES:

- **OPTIONS**
  - **LOCKNUT**: Brass (ACBLN) / Stainless Steel (ACSLN)
  - **EARTH TAG**: Brass (ACBET) / Stainless Steel (ACSET)
  - **LOCKING WASHERS**: Nickel Plated (ACNP)
  - **SERRATED WASHERS**: Electroless Nickel (ACPSW)

#### CERTIFICATION:

- **ATEX**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
- **IECEx**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- **NEC - USA**: Class II Division 1, Groups E, F & G
- **INMETRO - Brazil**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- **SAC - China**: Ex db IIC Gb / Ex eb IIC Gb
- **IEC**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- **CCe - India**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da

#### PART NUMBERS:

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<tr>
<th>D</th>
<th>B</th>
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<tbody>
<tr>
<td>20</td>
<td>D8XBF/NP/20/050NPT</td>
<td></td>
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</tbody>
</table>

#### NOTES:

- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

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**PRODUCT DESCRIPTION**

“D8X” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups II(A, IIB and IIC). Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The “D8X” version is designed to accommodate armoured cables, sealing on the inner sheath and also incorporates a detachable armour specific clamping system.

**COMPLIANCE STANDARDS:**

- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31, IEC 60529
- UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-7, IEC 60079-31

**ACCESSORIES:**

- **OPTIONS**
  - **LOCKNUT**: Brass (ACBLN) / Stainless Steel (ACSLN)
  - **EARTH TAG**: Brass (ACBET) / Stainless Steel (ACSET)
  - **LOCKING WASHERS**: Nickel Plated (ACNP)
  - **SERRATED WASHERS**: Electroless Nickel (ACPSW)

**CERTIFICATION:**

- **ATEX**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
- **IECEx**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- **NEC - USA**: Class II Division 1, Groups E, F & G
- **INMETRO - Brazil**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- **SAC - China**: Ex db IIC Gb / Ex eb IIC Gb
- **IEC**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- **CCe - India**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da

**PART NUMBERS:**

<table>
<thead>
<tr>
<th>D</th>
<th>B</th>
<th>X</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>D8XBF/NP/20/050NPT</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**NOTES:**

- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

---

**PRODUCT DESCRIPTION**

“D8X” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups II(A, IIB and IIC). Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The “D8X” version is designed to accommodate armoured cables, sealing on the inner sheath and also incorporates a detachable armour specific clamping system.

**COMPLIANCE STANDARDS:**

- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31, IEC 60529
- UL514B, UL1203, UL2225, UL50E, ANSI/UL 60079-7, IEC 60079-31

**ACCESSORIES:**

- **OPTIONS**
  - **LOCKNUT**: Brass (ACBLN) / Stainless Steel (ACSLN)
  - **EARTH TAG**: Brass (ACBET) / Stainless Steel (ACSET)
  - **LOCKING WASHERS**: Nickel Plated (ACNP)
  - **SERRATED WASHERS**: Electroless Nickel (ACPSW)

**CERTIFICATION:**

- **ATEX**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
- **IECEx**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- **NEC - USA**: Class II Division 1, Groups E, F & G
- **INMETRO - Brazil**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- **SAC - China**: Ex db IIC Gb / Ex eb IIC Gb
- **IEC**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da
- **CCe - India**: Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da

**PART NUMBERS:**

<table>
<thead>
<tr>
<th>D</th>
<th>B</th>
<th>X</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
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<td>D8XBF/NP/20/050NPT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.
## Double Compression Gland Designed for use with Armoured Flat Cable

**PART NUMBERS:**

<table>
<thead>
<tr>
<th>Size</th>
<th>Metric</th>
<th>Entry Thread Size</th>
<th>Metric Thread Length (B)</th>
<th>Cable Inner Sheath [C]</th>
<th>Cable Outer Sheath [D]</th>
<th>Armour Acceptance Range</th>
<th>Nominal Protrusion Length [L]</th>
<th>Dimensions/Weight (Metric Versions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20S</td>
<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>Min Max Min Max Min Max</td>
<td>Min Max Min Max</td>
<td>10.0-0.30</td>
<td>6.5</td>
<td>30.0</td>
<td>33.0</td>
</tr>
<tr>
<td>20R</td>
<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>Min Max Min Max Min Max</td>
<td>Min Max Min Max</td>
<td>10.0-0.30</td>
<td>6.4</td>
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</tr>
<tr>
<td>20</td>
<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>Min Max Min Max Min Max</td>
<td>Min Max Min Max</td>
<td>10.0-0.30</td>
<td>6.3</td>
<td>30.0</td>
<td>33.0</td>
</tr>
</tbody>
</table>

### NOTES:

- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

### Peppers Cable Glands Limited

Peppers Cable Glands Limited may not be held responsible for clients’ installations where this has not been taken into account. When selecting IP Washer material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation. Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.
**PART NUMBERS:**

<table>
<thead>
<tr>
<th>E</th>
<th>B</th>
<th>X</th>
<th>CM</th>
<th>B</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
</table>

**PRODUCT TYPE E8XCM**

Double Compression Gland Designed for use with Armoured Flat Cable featuring a Male Conduit Connection

**Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68**

**PRODUCT DESCRIPTION**

"E8XCM" type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The "E8XCM" version is designed to accommodate armoured cables, sealing on the inner and outer sheaths and also incorporates a detachable armour specific clamping system. The gland features a male conduit connection thread as standard.

**COMPLIANCE STANDARDS:**

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529

**CERTIFICATION No:**

<table>
<thead>
<tr>
<th>ATEX</th>
<th>IECEx</th>
<th>EAC</th>
<th>INMETRO - Brazil</th>
<th>SAC - China</th>
<th>UKRAINE</th>
<th>CCsE - India</th>
<th>LLOYD’S</th>
</tr>
</thead>
<tbody>
<tr>
<td>II 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da</td>
<td>Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da</td>
<td>1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIC Da X</td>
<td>Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da</td>
<td>Ex d IIC Gb / Ex e IIC Gb</td>
<td>Ex d IIC Gb / Ex e IIC Gb</td>
<td>Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIC Da</td>
<td>Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIC Da</td>
</tr>
<tr>
<td>II 3G Ex nR IIC Gc</td>
<td>E 8XCM B F 050NPT/NP/20/M20</td>
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**OPTIONS**

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<tr>
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<th>N</th>
<th>S</th>
<th>T</th>
<th>I</th>
<th>NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locknut (material dictated by gland entry thread material)</td>
<td>Including IP Washer, Nylon (N) - Fibre (V) - PTFE (H)</td>
<td>Including Serrated Washer</td>
<td>Earth Tag</td>
<td>Quantity per kit</td>
<td>Nickel Plated</td>
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</table>

**CERTIFICATION No:**

<table>
<thead>
<tr>
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<th>IECEx</th>
<th>EAC</th>
<th>INMETRO - Brazil</th>
<th>SAC - China</th>
<th>UKRAINE</th>
<th>CCsE - India</th>
<th>LLOYD’S</th>
</tr>
</thead>
<tbody>
<tr>
<td>I 1D 2G Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da</td>
<td>Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da</td>
<td>1Ex d IIC Gb X / 1Ex e IIC Gb X / 2Ex nR IIC Gc X / Ex ta IIC Da X</td>
<td>Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIC Da</td>
<td>Ex d IIC Gb / Ex e IIC Gb</td>
<td>Ex d IIC Gb / Ex e IIC Gb</td>
<td>Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIC Da</td>
<td>Ex d IIC Gb / Ex e IIC Gb / Ex nR IIC Gc / Ex ta IIC Da</td>
</tr>
<tr>
<td>II 3G Ex nR IIC Gc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MATERIALS**

- Brass or Stainless Steel
- Silicone Seals -60°C to +180°C
- Operating Temp: IP66 & IP68 (50 metres - 7 Days)
- IP RATING: IP66 & IP68 (50 metres - 7 Days)

**PLATING:**

- Electroless Nickel
- Nickel Plated
- Stainless Steel (ACSSW)
- Brass (ACBET)
- Stainless Steel (ACSLN)
- Brass (ACBLN)
- Stainless Steel (ACSET)

**PLATING:**

- Brass (ACBSW)
- Stainless Steel (ACSSW)
- PTFE (ACPFSW)
- Nylon (ACNFSW)
- Fibre (ACFSW)

**NOTES**

- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non-metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.
- When selecting IP Washer Material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX & IECEx is required, this must be clearly requested at time of enquiry / order.
### Double Compression Gland Designed for use with Armoured Flat Cable featuring a Female Conduit Connection

**Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68**

#### PART NUMBERS:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Gland designed for use with Armoured Cables</td>
</tr>
<tr>
<td>B</td>
<td>Silicone Seal for flat cables</td>
</tr>
<tr>
<td>X</td>
<td>Detachable Clamping for Braid Armour</td>
</tr>
<tr>
<td>CF</td>
<td>Female Conduit Connection Thread</td>
</tr>
<tr>
<td>B</td>
<td>Brass (B) / Stainless Steel (S)</td>
</tr>
<tr>
<td>F</td>
<td>Multiple Certification</td>
</tr>
</tbody>
</table>

#### CABLE GLAND SELECTION TABLE

**PRODUCT TYPE E8XCF**

- **Width**: 1/2" or 3/4" 
- **Length**: 20S or 20R 
- **Material**: Brass or Stainless Steel 

**ACCESSORIES:**

- **IP WASHERS**
  - Nylon (ACNDSW) / Fibre (ACFSW) / PTFE (ACPSW) 
- **SEPARATED WASHERS**
  - Stainless Steel (ACSSW)

**IP RATING:** IP66 & IP68 (50 metres - 7 Days)

**OPERATING TEMP:** Silicone Seals -60°C to +180°C

**MATERIALS:**

- **PLATING:** Electroless Nickel

**CERTIFICATION:**

- **ATEX**
- **IECEx**
- **EAC**
- **ATEX**
- **LLOYD’S**

**NOTE:**

- Double compression glands with female conduit connection thread have been designed to accommodate armoured cables, sealing on the inner and outer sheaths and also incorporates a detachable armour specific clamping system. The gland features a female conduit connection thread as standard.

**PRODUCT DESCRIPTION**

- “E8XCF” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Developed for flat cables, they provide controlled Ex db sealing and have been tested to IP66 and IP68 to 50 metres. The “E8XCF” version is designed to accommodate armoured cables, sealing on the inner and outer sheaths and also incorporates a detachable armour specific clamping system. The gland features a female conduit connection thread as standard.

**COMPLIANCE STANDARDS:**

- **IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31 & IEC 60529**

**TABLE:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20S</td>
<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>6.3</td>
<td>11.7</td>
<td>7.0</td>
<td>11.7</td>
<td>4.5</td>
<td>7.0</td>
<td>0.10-0.30</td>
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<tr>
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<td></td>
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<td>81</td>
<td>30.0</td>
<td>33.0</td>
<td>273</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20R</td>
<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>8.1</td>
<td>13.5</td>
<td>5.8</td>
<td>6.2</td>
<td>8.3</td>
<td>8.3</td>
<td>0.10-0.30</td>
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<td>33.0</td>
<td>274</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non-metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the Flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.
- Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.
- When selecting IP Washer material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- Where approval in addition to ATEX & IECEx is required, this must be clearly requested at time of enquiry / order.
## Cable Gland Selection Table (All Dimensions in mm)

<table>
<thead>
<tr>
<th>Gland Size</th>
<th>Entry Thread Size</th>
<th>Nominal Protrusion (L)</th>
<th>Cable Sealing Range</th>
<th>ISO Thread Length Standard (E)</th>
<th>Part Number</th>
<th>Dimensions/Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Min</td>
<td>Max</td>
<td>Blue</td>
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<td>4.0</td>
<td>6.5</td>
<td>8.0</td>
<td>PF7422000E</td>
</tr>
<tr>
<td>16</td>
<td>M16 x 1.5</td>
<td>28.0</td>
<td>5.0</td>
<td>8.0</td>
<td>10.0</td>
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<td>M16 x 1.5</td>
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<td>5.0</td>
<td>10.0</td>
<td>10.0</td>
<td>PF7422600E</td>
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<td>20</td>
<td>M20 x 1.5</td>
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<td>48.0</td>
<td>12.0</td>
<td>PF7426300E</td>
</tr>
</tbody>
</table>

### Product Description

“PF” type glands, certified Increased Safety Ex eb are suitable for use in Zone 1, Zone 2, Zone 21, Zone 22 and in Gas Group IIC. They are manufactured from polyamide and provide a controlled pull resistant displacement seal on the cable outer sheath providing both Ex eb & IP protection. The gland has been tested to IP66 & IP68 to 50 metres and is fully compliant with the Increased Safety standard with no reduced impact restriction. Available in black or blue, in a range of thread forms complete with an IP flat washer on metric entry threads.

### Compliance Standards

- EN 60079-0, EN 60079-7, EN 60079-31
- IEC 60079-0, IEC 60079-7, IEC 60079-31 & IEC 60529

### Certification

- ATEX II 2GD Ex e IIC / Ex tb IIC
- IECEx Ex eb IIC / Ex tb IIIC
- EAC Ex e II
- CEC - Canada CAN/CSA-C22.2
- NEC - USA ANSI/UL514B
- VDE DIN EN 60062 / VDE 0819
- LLOYD'S Endorse System (Part 1B)
- INMETRO Ex e II

### Notes

- Assembly instructions must be read prior to installation and adhered to in full.
- If used in a threaded entry, NPT versions may protrude more than “L” length due to engagement of threads.
- Industrial Non-Ex versions are not supplied with IP thread sealing washer.
- Industrial Non-Ex versions are available in Black or Grey.
The gland is supplied with the correct amount of the two-part compound, which is Peppers T-1000 Sealing Compound.

Assembly instructions must be read prior to installation and adhered to in full. Gland size does not necessarily equate to the entry thread size. Dimensions (A) & (B) may differ for glands with non-metric entry threads. Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry/ order.

Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account. When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.

The gland is supplied with the correct amount of the two-part compound, grooves and instructions to allow one complete assembly. Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry/ order.

**CERTIFICATION**

- ATEX
  - I M2 II 1D Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex na Ia Da X
  - II 3D Ex eb IIIa Gc / II 1D Ex ta IIIC Gc
  - II 3G Ex nR IIC Gc / II 1D Ex ta IIIC Gc
- IECEx
  - Class I Division 2, Groups A, B, C & D
  - Class II Division 1, Groups E, F & G
  - Class III, Enclosure Type 4X
- NEC - USA
  - Class I Division 2, Groups A, B, C & D
  - Class II Division 1, Groups E, F & G
- CEE - Canada
  - Class I Division 2, Groups A & C
  - Class II Division 1, Groups E & F
- CCc & CEc - India
  - Class I Division 2, Groups A & C
  - Class II Division 1, Groups E, F & G
- EN 60079-0, EN 60079-1, EN 60079-15, EN 60079-37
  - IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-8-1 & IEC 60529

**COMPLIANCE STANDARDS:**

- ATEX: I M2 II 1D Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex na Ia Da X
- IECEx: Class I Division 2, Groups A, B, C & D
- NEC - USA: Class I Division 2, Groups A, B, C & D
- CEE - Canada: Class I Division 2, Groups A & C
- CCc & CEc - India: Class I Division 2, Groups A & C
- EN 60079-0, EN 60079-1, EN 60079-15, EN 60079-37
- IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-8-1 & IEC 60529

**PRODUCT DESCRIPTION**

- “CR-C” type glands are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nr & Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC, and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Occasionally referred to as “potting glands”, they provide a compound barrier Ex db & IP seal on the cable inner core, eliminating damage to cables that exhibit “cold flow” characteristics and an environmental seal on the outer sheath. The unique features include: “CROCKLOCK®”, the non-reversible multi-clamping system for wire, braid and tape armoured cables and Peppers T-1000, the sealing compound that enables a quick and easy installation. The innovative barrier chamber provides a cable acceptance that allows for a full inspection of the compound fill. The gland maintains IP66 & IP68 to 100 metres and is deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads and options are available for use with lead sheath cables.

**PART NUMBERS:**

- CR-C: Gland featuring “CROCKLOCK®”, single orientation clamping, Peppers T-1000 Compound (Barrier) Inner Seal & Silicone LSZH Elastomeric Outer Seal
- B: Brass (B) / Stainless Steel (S)
- R: Reduced Bore Outer Seal
- C: PVC Shroud (C) - PCD Shroud (P) - Silicone LSZH Shroud (3)
- K/K/H: Locknut, Earth Tag & Nylon (K), Fibre (V) / PTFE (H) / IP Washer
- S: Including Sewn Washer
- 1: Quantity per kit
- MP: Nickel Plated
- Gland shell size
- M20: 2 x 15 Male Entry Thread

**EXAMPLE PART NUMBERING:**

- CR-C: [EXAMPLE PART NUMBERING] (ALL DIMENSIONS IN mm)
  - Peppers T-1000 Sealing Compound
  - COMPOUND: Electroless Nickel
  - MATERIALS: Operating Temp: -60°C to +135°C
  - IP66 & IP68 (100 metres - 7 Days), Type 4X & DTS01:1991

**CABLE ACCEPTANCE DETAILS:**

- PART NUMBERS: (Kgs) Min Max
  - CR-C: 10/00056 (E1)
  - SAC - China: NCC 13.2188 X
  - EAC: RU C-CM0020.00083-18
  - SAC - China: Nepal GV2714.101X
  - UKRAINE: CLE 19.0022 X
  - CCCe - India: PE90063004 & PE900630010
  - ABS: 14-LD69091-A-1PDA
  - LR000569E1: 14.0275.315

**CURING TIME:**

- @ 21°C Conductor termination can be affected after 1 hour. Compound chamber can be fully inspected after 4 hours and the equipment then energised.

**KNOTS:**

- Available for use with lead sheath cables.
Peppers T-1000 Compound (Barrier) Gland designed for use with unarmoured cable

- Brass (B) / Stainless Steel (S)
- PVC Shroud (C) - PEP Shroud (P) - Silicone LSOH Shroud (3)
- Locknut, (Nylon) (K), Fibre (V) or PTFE (H) IP Washer
- Including Earth Tag
- Including Serviced Washer
- Quantity per kit
- Nickel Plated

20 Gland shell size
M20 M20 x 1.5 Male Entry Thread

LOCKNUT
- Brass (ACBLN) / Stainless Steel (ACSLN)

EARTH TAG
- Brass (ACBT ) / Stainless Steel (ACSET)

IP WASHERS
- Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)

SERRATED WASHERS
- Stainless Steel (ACSSW)

SHROUDS
- PVC (ACSPVC) / PEP (ACPSPC) / Silicone LSOH (ACSSL)

IP RATING:
- NPT
- Male Entry Thread

OPERATING TEMP:
- -60°C to +135°C

MATERIALS:
- Brass or Stainless Steel

PLATING:
- Electroless Nickel

COMPOND:
- Peppers T-1000 Sealing Compound

Gland size
- Entry Thread Size
- Metric Thread Length
- Nominal Cross Sectional Area (Kgs)
- Dimensions/Weight (Metric)
- Shroud Size (Metric)

<table>
<thead>
<tr>
<th>Gland size</th>
<th>Entry Thread Size</th>
<th>Metric Thread Length</th>
<th>Nominal Cross Sectional Area (Kgs)</th>
<th>Dimensions/Weight (Metric)</th>
<th>Shroud Size (Metric)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>M20 x 1.5</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>16</td>
<td>35</td>
<td>10.4</td>
</tr>
<tr>
<td>32</td>
<td>M22 x 1.5</td>
<td>1&quot; or 1 1/4&quot;</td>
<td>16</td>
<td>80</td>
<td>20.0</td>
</tr>
<tr>
<td>40</td>
<td>M24 x 1.5</td>
<td>1 1/2&quot; or 1 1/2&quot;</td>
<td>16</td>
<td>130</td>
<td>32.2</td>
</tr>
<tr>
<td>50</td>
<td>M30 x 1.5</td>
<td>2&quot;</td>
<td>16</td>
<td>400</td>
<td>39.4</td>
</tr>
<tr>
<td>63</td>
<td>M36 x 2&quot;</td>
<td>3&quot;</td>
<td>19</td>
<td>425</td>
<td>50.0</td>
</tr>
<tr>
<td>75</td>
<td>M35 x 3&quot;</td>
<td>3 1/2&quot; or 3 1/2&quot;</td>
<td>25</td>
<td>425</td>
<td>60.8</td>
</tr>
<tr>
<td>80</td>
<td>M40 x 2.0</td>
<td>3&quot; or 3 1/2&quot;</td>
<td>25</td>
<td>425</td>
<td>64.4</td>
</tr>
<tr>
<td>95</td>
<td>M50 x 2.0</td>
<td>3 1/2&quot; or 4&quot;</td>
<td>25</td>
<td>425</td>
<td>68.8</td>
</tr>
<tr>
<td>100</td>
<td>M60 x 2.0</td>
<td>3 1/2&quot; or 4&quot;</td>
<td>25</td>
<td>425</td>
<td>85.0</td>
</tr>
</tbody>
</table>

- The gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

**NOTES**

- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

**PRODUCT DESCRIPTION**

“CR-X” type glands, approved for use with any shape cable, are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nf and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIB and IIC. Occasionally referred to as “potting glands”, they provide a compound barrier Ex db & IP seal on the cable inner cores (or flying leads), eliminating damage to cables that exhibit “cold flow” characteristics. The unique features include Peppers T-1000, the sealing compound that enables a quick and easy installation and an innovative barrier chamber that allows for a full inspection of the compact fit. The gland maintains IP66 & IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP-O-ring seal as standard on metric entry threads.

**COMPLIANCE STANDARDS:**

- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, IEC 60079-1, IEC 60079-31
- IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60529
- CSA/UL6101, CSA/UL2225
- EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31

**CERTIFICATION:**

- IACEx
- IECEx
- CE: Canada
- NEC: USA
- CEC: Canada
- ATEX
- IECEx
- CEC: Canada
- SAC: China
- ABS: Canada
- RMRS: Canada
- INMETRO: Brazil
- INDIA: CCE
- IECEx
- CEC: Canada
- ATEX
- IECEx
- CE: Canada
- SAC: China
- INMETRO: Brazil
- CEE: India
- ABS: Canada
- LLOYDS: Canada
- CERTIFICATION Tool:

**CURING TIME:**

- Under 2°C Conductor termination can be effected after 1 hour. Compound chamber can be fully inspected after 4 hours and the equipment then energised.

Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.

- When selecting Shroud and IP Washer material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.
### PRODUCT TYPE CR-U

**COMPATIBILITY**
- CR-U glands are compatible with flameproof Ex db, increased safety Ex eb, and restricted breathing Ex nR. They are suitable for use in Group I, Mining, Zone 1 and Zone 2 for Gas Groups IIA, IIB, and IIC and additionally for use in Zones 20, 21, and 22 for Dust Groups IIIA, IIB, and IIC. Occasionally referred to as “potting glands”, they provide a compound barrier Ex db & IP seal on the cable inner cores, eliminating damage to cables that exhibit “cold flow” characteristics and an additional environmental seal on the outer sheath. The unique features include Peppers T-1000, the sealing compound that enables a quick and easy installation and an innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66 & IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP 0-ring seal as standard on metric entry threads.

**COMPLIANCE STANDARDS:**
- CSA 60692-1, IEEE 903-1990, ANAB.
- NEC - USA, CEC - Canada, ATEX, IECEx, LLOYD’S, ABS, RMRS

**CERTIFICATION:**
- CR-U glands are certified Flameproof Ex db, Increased Safety Ex eb, and Restricted Breathing Ex nR. Occasionally referred to as “potting glands”, they provide a compound barrier Ex db & IP seal on the cable inner cores, eliminating damage to cables that exhibit “cold flow” characteristics and an additional environmental seal on the outer sheath. The unique features include Peppers T-1000, the sealing compound that enables a quick and easy installation and an innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66 & IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP 0-ring seal as standard on metric entry threads.

**CABLE ACCEPTANCE DETAILS:**
- Cable outer sheath seal: PVC Shroud (C) - PCP Shroud (P) - Silicone LSOH Shroud (3)

**PART NUMBERS:**
- **CR-U**
- **B**
- **C**
- **R**
- **U**

---

### Cable Acceptance Details

<table>
<thead>
<tr>
<th>Gland size</th>
<th>Entry Thread Size</th>
<th>Metric Thread Size</th>
<th>Metric Thread Length (B)</th>
<th>Max Number of cores</th>
<th>Max Ø Over Cores</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>M20 x 15</td>
<td>1/2” or 3/4”</td>
<td>16</td>
<td>15</td>
<td>10.4</td>
<td>3.4</td>
<td>8.4</td>
</tr>
<tr>
<td>20S</td>
<td>M20 x 15</td>
<td>1/2” or 3/4”</td>
<td>16</td>
<td>35</td>
<td>10.4</td>
<td>4.8</td>
<td>11.7</td>
</tr>
<tr>
<td>20</td>
<td>M20 x 15</td>
<td>1/2” or 3/4”</td>
<td>16</td>
<td>40</td>
<td>12.5</td>
<td>9.5</td>
<td>14.0</td>
</tr>
<tr>
<td>25</td>
<td>M25 x 15</td>
<td>3/4” or T</td>
<td>16</td>
<td>60</td>
<td>17.8</td>
<td>11.7</td>
<td>20.0</td>
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<tr>
<td>32</td>
<td>M32 x 15</td>
<td>1” or 1 1/4”</td>
<td>16</td>
<td>80</td>
<td>23.5</td>
<td>18.1</td>
<td>26.3</td>
</tr>
<tr>
<td>40</td>
<td>M40 x 15</td>
<td>1 1/4” or 1 1/2”</td>
<td>16</td>
<td>130</td>
<td>22.6</td>
<td>22.6</td>
<td>32.2</td>
</tr>
<tr>
<td>50S</td>
<td>M50 x 15</td>
<td>1 1/2” or 2”</td>
<td>16</td>
<td>200</td>
<td>34.2</td>
<td>28.2</td>
<td>38.2</td>
</tr>
<tr>
<td>50</td>
<td>M50 x 15</td>
<td>2” or 2 1/2”</td>
<td>16</td>
<td>400</td>
<td>39.3</td>
<td>39.3</td>
<td>50.1</td>
</tr>
<tr>
<td>63</td>
<td>M63 x 15</td>
<td>2 1/2” or 3”</td>
<td>16</td>
<td>425</td>
<td>50.0</td>
<td>46.7</td>
<td>56.0</td>
</tr>
<tr>
<td>75S</td>
<td>M75 x 15</td>
<td>2 1/2” or 3”</td>
<td>16</td>
<td>425</td>
<td>55.4</td>
<td>52.2</td>
<td>62.0</td>
</tr>
<tr>
<td>75</td>
<td>M75 x 15</td>
<td>3” or 3 1/2”</td>
<td>16</td>
<td>425</td>
<td>60.8</td>
<td>58.0</td>
<td>68.0</td>
</tr>
<tr>
<td>80</td>
<td>M80 x 20</td>
<td>3” or 3 1/2”</td>
<td>16</td>
<td>425</td>
<td>64.4</td>
<td>61.9</td>
<td>72.0</td>
</tr>
<tr>
<td>85</td>
<td>M85 x 20</td>
<td>3” or 3 1/2”</td>
<td>16</td>
<td>425</td>
<td>69.8</td>
<td>69.1</td>
<td>78.0</td>
</tr>
<tr>
<td>90</td>
<td>M90 x 20</td>
<td>3 1/2” or 4”</td>
<td>16</td>
<td>425</td>
<td>75.1</td>
<td>74.1</td>
<td>84.0</td>
</tr>
<tr>
<td>100</td>
<td>M100 x 20</td>
<td>3 1/2” or 4”</td>
<td>16</td>
<td>425</td>
<td>80.5</td>
<td>81.8</td>
<td>90.0</td>
</tr>
</tbody>
</table>

**DIMENSIONS/WEIGHT (METRIC):**
- Across Flats (A) | Across Cores (C) | Weight (Kg)
- 16 | 20 | 25 | 32 | 40 | 50 | 63 | 75 | 80 | 85 | 90 | 100

---

### ACCESSORIES:
- **COMPONENT:**
  - Peppers T-1000 Sealing Compound

---

### SHROUDS:
- PVC (ACSPVC), PCP (ACPCPR), Silicone LSOH (ACCSSO)

---

### MATERIALS:
- Brass or Stainless Steel

---

### TEFLON WASHERS:
- Electrolex Nickel

---

### OPTIONS:
- Electroless Nickel

---

### PLATING:
- Brass (ACBLN) / Stainless Steel (ACSLN)

---

### EART TAG:
- Brass (ACBET) / Stainless Steel (ACSET)

---

### LOCKNUT:
- Brass (CR-U) / Stainless Steel (CR-S)

---

### COMPOUND:
- Peppers T-1000 Sealing Compound

---

### OUTER SEAL:
- Silicone LSOH

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**NOTES:**
- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) or (B) may differ for glands with non metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-0 and other equivalent standards. They usually incorporate a thread run out according to the available flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards.
- Please refer to our “Thread Reference Tables” for specific dimensions.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.
PRODUCT TYPE CR-S*M

Single Compression Barrier Gland featuring Peppers T-1000 Compound and Male Conduit Connection Thread

Ex db : Ex eb : Ex nr : Ex ta : IP66 : IP68 : Class I Div 2

PART NUMBERS:

<table>
<thead>
<tr>
<th>C</th>
<th>R</th>
<th>S</th>
<th>B</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PRODUCT DESCRIPTION

"CR-S*M" type glands, used in any orientation, are certified Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nr and Dust Protected Ex ta. They are suitable for use in Group I Mining, Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIA, IIB and IIC. Commonly referred to as a "Conduit Stopper Box", they are suitable for use with conductors carried in conduit or as a line bushing for terminating flying leads. They provide a compound barrier Ex db & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics. The unique features include Peppers T-1000, the sealing compound that enables a quick and easy installation and an innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66 & IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot. It is supplied with an IP O-ring seal as standard on metric entry threads. The gland is supplied with a male conduit connection thread.

COMPLIANCE STANDARDS:

- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
- IEC 60079-0, IEC 60079-7, IEC 60079-15, IEC 60079-17, IEC 60529
- C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL50
- C22.2 (see certificate), CAN/CSA 60079-0/1/7, UL50
- ATEX
- INMETRO - Brazil
- SAC - China
- UKRAINE
- CCE - India
- KCS - Korea
- ABS
- Lloyd's
- RMR'S

www.peppers.co.uk  |  Email: sales@peppers.co.uk  |  Tel: +44 (0) 1276 64232

CABLE GLAND SELECTION TABLE

EXAMPLE PART NUMBERING:

<table>
<thead>
<tr>
<th>ACCESSORIES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCKNUT: Brass (ACB/LN) / Stainless Steel (ACSLN)</td>
</tr>
<tr>
<td>EARTh TAG: Brass (ACBET) / Stainless Steel (ACSET)</td>
</tr>
<tr>
<td>IP WASHERS: Nylon (ACNSW) / Fibre (ACFSW) / PFTE (ACPSW)</td>
</tr>
<tr>
<td>SERRATED WASHERS: Stainless Steel (ACSSW)</td>
</tr>
</tbody>
</table>

IP RATING:

- IP66 & IP68 (100 metres - 7 Days), Type 4X & DTS01:1991

OPERATING TEMP:

- -60°C to +30°C

MATERIALS:

- Brass or Stainless Steel
- Stainless Steel (ACSSW) / Brass (B) / Stainless Steel (S)
- Electroless Nickel

PLATING:

- Brass (ACB/LN) / Stainless Steel (ACSLN)
- Stainless Steel (ACSSW) / Brass (B) / Stainless Steel (S)
- Electroless Nickel

COMPONENT:

- Peppers T-1000 Sealing Compound

---

CR-S

- Gland with Compound (Barrier) Seal

B

- Brass (B) / Stainless Steel (S)

M

- Male Back End Configuration

N

- Locknut (material dictated by gland entry thread material)

T

- Including Earth Tag

S

- Including Serrated Washer

1

- Quantity per kit

---

CR-S

- Gland with Compound (Barrier) Seal

M

- Male Back End Configuration

---

OPTIONS:

- Compound:
- Operating Temp:
- IP Rating:

---

SPECIFICATIONS:

- Connectors
- Gland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for non-metric entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Poppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-17 and other equivalent international standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

---

PRODUCT SELECTION CHART:

- Single Compression Barrier Gland featuring Peppers T-1000 Compound and Male Conduit Connection Thread

Ex db : Ex eb : Ex nr : Ex ta : IP66 : IP68 : Class I Div 2

PART NUMBERS:

<table>
<thead>
<tr>
<th>C</th>
<th>R</th>
<th>S</th>
<th>B</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

CERTIFICATION:

- Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- When selecting IP Washer material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
- The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.
CABLE GLAND SELECTION TABLE

EXAMPLE PART NUMBERING:

PART NUMBERS:  CR | DS | SF | IP | M

PRODUCT TYPE CR-S/F

Gland with Compound (Barrier) Seal

<table>
<thead>
<tr>
<th>Diameter</th>
<th>M20</th>
<th>M25</th>
<th>M32</th>
<th>M40</th>
<th>M50</th>
<th>M75</th>
<th>M80</th>
<th>M85</th>
<th>M90</th>
<th>M100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter (mm)</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Male Entry Thread</td>
<td>M20 x 1.5</td>
<td>M25 x 1.5</td>
<td>M32 x 1.5</td>
<td>M40 x 1.5</td>
<td>M50 x 1.5</td>
<td>M75 x 1.5</td>
<td>M80 x 2.0</td>
<td>M85 x 2.0</td>
<td>M90 x 2.0</td>
<td>M100 x 2.0</td>
</tr>
<tr>
<td>Male Entry Thread (inch)</td>
<td>⅜</td>
<td>⅜</td>
<td>⅛</td>
<td>⅜</td>
<td>⅜</td>
<td>⅛</td>
<td>⅛</td>
<td>⅛</td>
<td>⅜</td>
<td>⅜</td>
</tr>
<tr>
<td>Female Entry Threads</td>
<td>M20 x 1.5</td>
<td>M25 x 1.5</td>
<td>M32 x 1.5</td>
<td>M40 x 1.5</td>
<td>M50 x 1.5</td>
<td>M75 x 1.5</td>
<td>M80 x 2.0</td>
<td>M85 x 2.0</td>
<td>M90 x 2.0</td>
<td>M100 x 2.0</td>
</tr>
<tr>
<td>Female Entry Threads (inch)</td>
<td>⅜</td>
<td>⅜</td>
<td>⅛</td>
<td>⅜</td>
<td>⅛</td>
<td>⅛</td>
<td>⅛</td>
<td>⅛</td>
<td>⅜</td>
<td>⅜</td>
</tr>
<tr>
<td>Gland Seal Range - Cable Sheath &amp; Cores</td>
<td>Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal Pressure [N]</td>
<td>30.0</td>
<td>33.0</td>
<td>57.0</td>
<td>57.0</td>
<td>63.0</td>
<td>57.0</td>
<td>67.0</td>
<td>67.0</td>
<td>68.0</td>
<td>68.0</td>
</tr>
<tr>
<td>Dimensions/Weight (Metric)</td>
<td>30.0</td>
<td>33.0</td>
<td>57.0</td>
<td>57.0</td>
<td>63.0</td>
<td>57.0</td>
<td>67.0</td>
<td>67.0</td>
<td>68.0</td>
<td>68.0</td>
</tr>
<tr>
<td>Dimensions/Weight (Kgs)</td>
<td>3.0</td>
<td>3.0</td>
<td>5.0</td>
<td>5.0</td>
<td>6.0</td>
<td>5.0</td>
<td>6.0</td>
<td>6.0</td>
<td>7.0</td>
<td>7.0</td>
</tr>
</tbody>
</table>

CURING TIME: @ 22°C Conductor termination can be affected after hour Compound sealing can be fully inspected after 4 hours and the equipment then energised.

CERTIFICATION:

Notes:

- Cland size does not necessarily equate to the entry thread size.
- The IP O-ring seal is only available on metric entry threads. IP washers can be supplied for tapered entry threads.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Pumps supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread roll out according to the available machining techniques and will not have a full form thread for the entire length.

Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.

When selecting IP Washer material for use with glands, please be sure to use the correct temperature range to ensure they are suitable for the intended installation.

The gland is supplied with the correct amount of the two-part compound, gloves and instructions to allow one complete termination.

Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of order / inquiry.

Peppers Cable Glands Ltd: www.peppers.co.uk | Email: sales@peppers.co.uk | Tel: +44 (0) 1276 642324
**DOUBLE COMPRESSION BARRIER GLAND FEATURING A LIQUID TIGHT CONNECTOR FOR FLEXIBLE METALLIC CONDUIT AND THE PEPPERS T-1000 COMPOUND**

**PART NUMBERS:**

L | T | C | B | S
---|---|---|---|---

**PRODUCT DESCRIPTION**

"LT-C" type glands are certified Flameproof Ex db, Increased Safety Ex eb and Dust Protected Ex ta. They are suitable for use in Zone 1 and 2 for Gas Groups IIA, IIB and IIC and additionally for use in Zones 20, 21 and 22 for Dust Groups IIIA, IIIB and IIC. Occasionally referred to as "poting glands", they provide a compound barrier Ex db & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics. The gland maintains IP66 & IP68 to 100 metres. The gland incorporates a connection for liquid tight flexible conduit and features the Peppers T-1000 sealing compound that enables a quick and easy installation.

**COMPLIANCE STANDARDS:**

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31 & IEC 60529

**CERTIFICATION:**

ATEX: I M2 II 1D Ex db I Mb / Ex eb I Mb / Ex eb IC Gb / Ex ta IIC Da

IECEx: Ex db I Mb / Ex eb I Mb / Ex eb IC Gb / Ex ta IIC Da

EAC: PE 1 Ex d I Mb / Ex eb I Mb / Ex eb IC Gb / Ex ta IIC Da

INMETRO - Brazil: Ex db I Mb / Ex eb I Mb / Ex eb IC Gb / Ex ta IIC Da

SAF - China: Ex db IC Gb / Ex eb IC Gb

UKRAINE: Ex db IC Gb (Zone 1) / Ex eb IC Gb (Zone 2)

LLOYD'S: Ex d I Mb / Ex d IC Gb / Ex e I Mb / Ex e IC Gb / Ex ta IIC Da

**CERTIFICATION:**

VEST: I M2 Ex db I Mb / II 2G Ex db IIC Gb / II 2G Ex eb I Mb / II 2G Ex eb IC Gb

-peerless: SIRA-T 14/106X

RU C-GB.BH.02.B.00693-18

IECEx: SIR 01.06X

Gland featuring Peppers T-1000 Compounds and connection for liquid tight flexible metallic conduit

**OPTIONS**

- Brass (B) / Stainless Steel (S)
- Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)

**NOTES**

- Gland size does not necessarily equate to the entry thread size.
- All brass entry threads are Nickel Plated as standard.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.
- The gland is supplied with the correct amount of the two-part compound, clearly requested at time of enquiry / order.
- Where approval in addition to ATEX and IECEx is required, this must be clearly requested at time of enquiry / order.

**PRODUCT DESCRIPTION**

**OPTIONS**

- Brass (B) / Stainless Steel (S)
- Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)

**NOTES**

- Gland size does not necessarily equate to the entry thread size.
- All brass entry threads are Nickel Plated as standard.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.
- The gland is supplied with the correct amount of the two-part compound, clearly requested at time of enquiry / order.
- Where approval in addition to ATEX and IECEx is required, this must be clearly requested at time of enquiry / order.
### Double Seal Barrier Gland Designed for use with Armoured Cables Featuring Peppers CROCLOCK® & T-1000 Compound

#### CLASSIFICATION:
- Class I Div 1: Gas Groups ABCD
- Class I Div 2: Gas Groups A, B, C & D
- Class II Div 1: Groups A, B, C & D
- Class II Div 2: Groups A, B, C & D
- Class III Div 1: Groups E, F & G
- Class I Zone 1 Ex e IIC Gb / Ex ta IIIC Da
- Class I Zone 21 Ex e IIC Gb / Ex ta IIIC Da
- Class III Enclosure Type 4X
- Class I Division 1, Groups A, B, C & D
- Class II Division 2, Groups A, B, C & D
- Class III, Enclosure Type 4X
- Class I Zone 1 AEx d IIC Gb / AEx e IIC Gb
- Class II Zone 21 AEx d IIC Gb
- Class III Enclosure Type 4X
- ATEX
  - I H 2: 10G Ex db I Mb / Ex e IIC Gb / Ex d I Mb / Ex ib IIC Gb / Ex ta IIIC Da / II 3G Ex nR IIC Gc
  - IECEx
  - Ex d I Mb / Ex e IIB Gb / Ex db I Mb / Ex IB IIC Gb / Ex ta IIIC Da
- EAC
- INMETRO - Brazil
- SAC - China
- NSA 06ATEX4124X
- IECEx
- SAC - China
- NSA 06ATEX1066X
- CE
- CCC - China
- CCEE - China
- CEE - Canada
- LLOYD'S
- ABS
- LR
- MRS

### PRODUCT DESCRIPTION
- "UL-C" type glands, certified Explosion Proof Class I Div 1, Gas Groups ABCD, Flameproof Ex db, Increased Safety Ex eb. Restricted Breathing Ex nr & Dust protected Ex ta are suitable for use in Zone 1, Zone 2, Zone 20, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB, IIC and Dust Groups IIIA, IIIB, IIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex db & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics and an environmental seal on the outer sheath. The gland is suitable for use with all certified Marine Shipboard Cable and Tray Cable whilst being UL listed for Marine Shipboard Armored, Jacketed or Non-Jacketed cable. The unique features include "CROCLOCK®, the non reversible multi-clamping system for wire, braid and tape armoured cables and Peppers T-1000, the sealing compound that enables a quick and easy installation. The gland is ATEX approved and rated Type 4X, maintains IP66, IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot.

### COMPLIANCE STANDARDS:
- UL548, UL22403, UL2225, UL508, ANSUL/UL 60079-1/7, ISA 60079-31
- CSA 2.2.2 No.25/10/94/194.2/74, CAN/CSA C22.2 No.60079-0/00:1.1
- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
- IEC 60079-0, IEC 60079-7, IEC 60079-15, IEC 60529
- UL514B, UL14203, UL2225, UL508, ANSUL/UL 60079-1/7, ISA 60079-31
- CSA 2.2.2 No.25/10/94/194.2/74, CAN/CSA C22.2 No.60079-0/00:1.1
- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
- IEC 60079-0, IEC 60079-7, IEC 60079-15, IEC 60529

### Certifications
- **UL**
  - CEC - Canada
  - NAC - USA
  - ATEX
  - EAC
  - INMETRO - Brazil
  - SAC - China
  - NSA 06ATEX4124X
  - NSA 06ATEX1066X
  - CE

### Materials
- **Barrier Inner Seal** & Silicone Elastomeric Outer Seal with Nickel Plated Entry Thread
- Brass (ACBET) / Stainless Steel (ACSET)
- Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
- Stainless Steel (ACSSW)
- PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSIO)

### Dimensions

<table>
<thead>
<tr>
<th>Thread Size</th>
<th>Metric</th>
<th>NPT</th>
<th>Material</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>M20 x 1.5</td>
<td>2&quot;</td>
<td>0.630</td>
<td>0.783 or 0.795</td>
<td>0.409</td>
<td>0.461</td>
</tr>
<tr>
<td>M20 x 1.5</td>
<td>2&quot;</td>
<td>0.630</td>
<td>0.783 or 0.795</td>
<td>0.409</td>
<td>0.461</td>
</tr>
<tr>
<td>M20 x 1.5</td>
<td>2&quot;</td>
<td>0.630</td>
<td>0.783 or 0.795</td>
<td>0.409</td>
<td>0.461</td>
</tr>
<tr>
<td>M22 x 1.75</td>
<td>2½&quot;</td>
<td>0.748</td>
<td>1.571</td>
<td>0.490</td>
<td>0.604</td>
</tr>
<tr>
<td>M27 x 1.5</td>
<td>3½&quot;</td>
<td>0.748</td>
<td>1.634</td>
<td>0.490</td>
<td>0.604</td>
</tr>
<tr>
<td>M32 x 1.5</td>
<td>1¼&quot;</td>
<td>0.925</td>
<td>1.610</td>
<td>0.850</td>
<td>1.008</td>
</tr>
<tr>
<td>M35 x 1.5</td>
<td>1½&quot;</td>
<td>1.134</td>
<td>2.000</td>
<td>1.050</td>
<td>1.256</td>
</tr>
<tr>
<td>M40 x 1.5</td>
<td>1½&quot;</td>
<td>1.351</td>
<td>2.270</td>
<td>1.180</td>
<td>1.380</td>
</tr>
<tr>
<td>M40 x 1.5</td>
<td>1½&quot;</td>
<td>1.351</td>
<td>2.270</td>
<td>1.180</td>
<td>1.380</td>
</tr>
<tr>
<td>M50 x 1.5</td>
<td>2½&quot;</td>
<td>1.575</td>
<td>2.910</td>
<td>1.370</td>
<td>1.590</td>
</tr>
<tr>
<td>M63 x 1.5</td>
<td>2½&quot;</td>
<td>1.764</td>
<td>3.244</td>
<td>1.575</td>
<td>1.795</td>
</tr>
<tr>
<td>M63 x 1.5</td>
<td>2½&quot;</td>
<td>1.764</td>
<td>3.244</td>
<td>1.575</td>
<td>1.795</td>
</tr>
<tr>
<td>M75 x 1.5</td>
<td>3½&quot;</td>
<td>2.394</td>
<td>4.294</td>
<td>2.779</td>
<td>3.908</td>
</tr>
<tr>
<td>M75 x 1.5</td>
<td>3½&quot;</td>
<td>2.394</td>
<td>4.294</td>
<td>2.779</td>
<td>3.908</td>
</tr>
</tbody>
</table>

**Thread**
- NPT (National Pipe Thread) / Metric (METRIC) thread run out according to the available standards. They usually incorporate a thread run out according to the available standards. Please refer to our "Thread Reference Tables" for specific dimensions.

**Options**
- Locknut, Earth Tag & Nylon, Fibre, PTFE, IP Washer

**Environmental Seal**
- Silicone LSOH

**Certification**
- UL
  - CE
  - ATEX
  - EAC
  - INMETRO - Brazil
  - SAC - China
Single Seal Barrier Gland Designed for use with Unarmoured Cable featuring Peppers T-1000 Compound

**PRODUCT DESCRIPTION**

“UL-X” type glands, certified Explosion Proof Class I Div 2, Gas Groups A,B,C,D, Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nr & Dust Protected Ex ta. They are expected to be used in Zone 1, Zone 2, Zone 2D, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB, IIC and Dust Groups IIIA, IIIB, IIIC. Occasionally referred to as “potting glands”, they provide a compound barrier Ex db & IP seal on the cable inner cores, eliminating damage to cables that exhibit “cold flow” characteristics. The gland is suitable for use with all certified Marine Shipboard Cable and Tray Cable whilst being UL listed for Marine Shipboard Unjacketed, Jacketed or Non-Jacketed cable. A unique feature includes, Peppers T-1000, the sealing compound that enables a quick and easy installation. The gland is AEx d, AEx e, AExx ta approved and rated Type 4X, maintains IP66, IP68 to 100 metres and is deluged proof without the use of an additional seal or deluge boot.

**COMPLIANCE STANDARDS:**

UL548, UL2003, UL2225, UL50E, ANSI/UL 60079-0/7, IEC 60079-31, C22.2 No. 0/25/50/94/144/92/74/EC CAN/CSA C22.2 No.0/7/1-7/5/31 EN 60079-0, EN 60079-7, EN 60079-15, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-3 & IEC 60529

**CURING TIME:**

(2)TC° Conductor termination can be affected after 17 hours. The equipment can be energized after 4 hours.

---

**PRODUCT TYPE UL-X**

<table>
<thead>
<tr>
<th>Gland Size</th>
<th>Entry Thread Size</th>
<th>Metric</th>
<th>NPT</th>
<th>Matric Thread Length (B)</th>
<th>NPT Thread Length (B)</th>
<th>Cable Acceptance Details</th>
<th>Nominal Pinion Length (L)</th>
<th>Dimensions/Weight (NPT Entry Thread Versions)</th>
<th>Shroud Size (Metric)</th>
</tr>
</thead>
<tbody>
<tr>
<td>205</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>0.630</td>
<td>0.783 or 0.795</td>
<td>4</td>
<td>0.409</td>
<td>0.461</td>
<td>4</td>
<td>1,000</td>
<td>1,102</td>
</tr>
<tr>
<td>205</td>
<td>1/2&quot; or 3/4&quot;</td>
<td>0.630</td>
<td>0.783 or 0.795</td>
<td>40</td>
<td>0.486</td>
<td>0.551</td>
<td>4</td>
<td>1,180</td>
<td>1,299</td>
</tr>
<tr>
<td>25</td>
<td>3/4&quot; or 1&quot;</td>
<td>0.630</td>
<td>0.795 or 0.985</td>
<td>60</td>
<td>0.701</td>
<td>0.787</td>
<td>47</td>
<td>1,480</td>
<td>1,630</td>
</tr>
<tr>
<td>32</td>
<td>1&quot; or 1 1/4&quot;</td>
<td>0.630</td>
<td>0.985 or 1.008</td>
<td>80</td>
<td>0.925</td>
<td>1.035</td>
<td>58</td>
<td>1,810</td>
<td>1,992</td>
</tr>
<tr>
<td>40</td>
<td>1 1/4&quot; or 1 1/2&quot;</td>
<td>0.630</td>
<td>1.008 or 1.024</td>
<td>130</td>
<td>1,134</td>
<td>1.268</td>
<td>58</td>
<td>2,170</td>
<td>2,382</td>
</tr>
<tr>
<td>50</td>
<td>2&quot;</td>
<td>0.630</td>
<td>1.059</td>
<td>400</td>
<td>1,550</td>
<td>1,756</td>
<td>65</td>
<td>2,560</td>
<td>2,851</td>
</tr>
<tr>
<td>63</td>
<td>2 1/4&quot;</td>
<td>0.748</td>
<td>1.571</td>
<td>425</td>
<td>1,926</td>
<td>2,205</td>
<td>66</td>
<td>3,150</td>
<td>3,465</td>
</tr>
<tr>
<td>75</td>
<td>3&quot;</td>
<td>0.748</td>
<td>1.813</td>
<td>425</td>
<td>2,384</td>
<td>2,677</td>
<td>67</td>
<td>3,890</td>
<td>4,280</td>
</tr>
</tbody>
</table>

- **Gland size does not necessarily equate to the entry thread size.**
- **UL approval/applications have a reduced core quantity. Consult product installation instructions for specific core data.**
- **Dimensions (A) & (B) may differ for glands with non metric entry threads.** Please refer to our “Thread Reference Tables” for specific dimensions.
- **Assembly instructions must be read prior to installation and adhered to in full.**
- **Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.**

Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.

When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.

The gland is supplied with the correct amount of the two-part compound, gaskets and instructions to allow one complete termination.

All brass entry threads are Nickel Plated as standard.

Where approval in addition to UL, CSA, ATEX, and IECEx is required, this must be clearly requested at time of enquiry / order.
## PRODUCT DESCRIPTION

"UL-U" type glands, certified Explosion Proof Class I Div 2, Gas Groups ABCD, Flameproof Ex db, Increased Safety Ex eb, Restricted Breathing Ex nR & Dust Protected Ex ta. They are suitable for use in Zone 1, Zone 2, Zone 20, Zone 21, Zone 21, Zone 22, Group I Mining, Gas Groups IIA, IIB, IID and Dust Groups IIA, IIB, IIC. Occasionally referred to as "potting glands", they provide a compound barrier Ex db & IP seal on the cable inner cores, eliminating damage to cables that exhibit "cold flow" characteristics and an environmental seal on the outer sheath. The gland is suitable for use with all certified Marine Shipboard Cable and Tray Cable whilst being UL listed for Marine Shipboard Unarmoured, Jacketed or Non. Jacketed cable. A unique feature includes, Peppers T-1000, the sealing compound that enables a quick and easy installation. The gland is AEx & Exe, AEx, ta & approved and rated Type 4X, maintains IP66, IP68 to 100 metres and is deluge proof without the use of an additional seal or deluge boot.

### COMPLIANCE STANDARDS:
- **UL514B, UL2035, UL2225, UL50E, ANSI/UL 60079-0/1-7, IEC 60079-21**
- **C22.2 No.025/20514.2/741.2/746/09G/CSA C22.2 60079-04/12**
- **EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-13, EN 60079-15, IEC 60079-09, IEC 60079-7, IEC 60079-13, IEC 60079-15, IEC 60529**

### CABLE GLAND SELECTION TABLE

<table>
<thead>
<tr>
<th>Gland Size</th>
<th>Entry Thread Size</th>
<th>ISO Thread Length (B)</th>
<th>NPT Thread Length (B)</th>
<th>Cable Inner Sheath (C)</th>
<th>Cable Outer Sheath (D)</th>
<th>Max Over Cones (K)</th>
<th>Max Over Flats (J)</th>
<th>Nominal Pulling Length (L)</th>
<th>Dimensions/Weight (NPT Entry Thread Version)</th>
<th>Shroud Size (Metric)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>M20 x 1.5</td>
<td>0.630</td>
<td>0.783 - 0.795</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Across Flats (A)</td>
<td>0.985 - 1.008</td>
</tr>
<tr>
<td>20</td>
<td>M20 x 1.5</td>
<td>0.630</td>
<td>0.783 - 0.795</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Across Cones (C)</td>
<td>0.535</td>
</tr>
<tr>
<td>25</td>
<td>M20 x 1.5</td>
<td>0.630</td>
<td>0.795 - 0.885</td>
<td>60</td>
<td>16</td>
<td>0.701</td>
<td>0.461</td>
<td>0.787</td>
<td>2.953</td>
<td>1.480</td>
</tr>
<tr>
<td>32</td>
<td>M20 x 1.5</td>
<td>0.630</td>
<td>0.985 - 1.008</td>
<td>80</td>
<td>30</td>
<td>0.925</td>
<td>0.713</td>
<td>0.855</td>
<td>3.425</td>
<td>1.810</td>
</tr>
<tr>
<td>40</td>
<td>M40 x 1.5</td>
<td>0.830</td>
<td>1.008 - 1.024</td>
<td>150</td>
<td>60</td>
<td>1.154</td>
<td>0.890</td>
<td>1.268</td>
<td>3.543</td>
<td>2.170</td>
</tr>
<tr>
<td>50</td>
<td>M50 x 1.5</td>
<td>0.830</td>
<td>1.059</td>
<td>200</td>
<td>5</td>
<td>1.546</td>
<td>1.100</td>
<td>1.504</td>
<td>3.937</td>
<td>2.560</td>
</tr>
<tr>
<td>63</td>
<td>M63 x 1.5</td>
<td>0.748</td>
<td>1.571</td>
<td>400</td>
<td>4</td>
<td>1.766</td>
<td>1.547</td>
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<td>75</td>
<td>M75 x 1.5</td>
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<td>1.839</td>
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<td>2.283</td>
<td>2.677</td>
<td>3.937</td>
<td>4.280</td>
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</table>

**NOTES:**
- Gland size does not necessarily equate to the entry thread size.
- UL approval/applications have a reduced core quantity. Consult product installation instructions for specific core data.
- Dimensions (A) & (B) may differ for glands with non metric entry threads. Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to fully.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

**CERTIFICATION:**
- UL E248996
- CEC - Canada CSA 70004803
- NEC - USA CSA 70004704
- ATEX SIRA 09ATEX1059 & SIRA 09ATEX1248
- IECEx IECEx SR 09.0033X
- EAC IECEx SR 09.0033X
- INMETRO-Brazil NCC 13.1650 X
- SAC - China NEPSI GY161403X
- UKRAINE CL1 0324 X
- CCE - India PESO P3050003 & P30500010
- ABS 1412450451-A1-POA
- LLOYDS 11000055(E1)
- RMRS 14.0275.315
### Product Description

"A" type glands are commonly referred to as "stuffing glands". They provide a controlled, pull resistant environmental displacement seal on the cable outer sheath, minimising damage to cables that exhibit "cold flow" characteristics. The gland maintains IP66 & IP68 to 50 metres. Options are available for use with LSOH cables and extreme temperature applications.

### Compliance Standards

- IEC 62444
- EN 62444
- BS 6121

### Certification

ABS Specified ABS Rules

**Certificate No.**

ABS 14-LD46599-1-PDA

### Optional Accessories

- **Locknut**
  - Brass (ACBLN) / St Steel (ACSSLN) / Aluminium (ACALN)
- **Earth Tag**
  - Brass (ACBET) / St Steel (ACSET) / Aluminium (ACALET)
- **IP Washers**
  - Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)
- **Serrated Washers**
  - Stainless Steel (ACASSW)
- **Shrouds**
  - PVC (ACSPVC) / PCP (ACSPCP) / Silicone LSOH (ACSSL)

### Operating Temp.

Neoprene Seals -35°C to +90°C

Silicone Seals -60°C to +180°C

### Materials

- Aluminium, Brass, Stainless Steel

### Plating

- Electroless Nickel

---

#### Cable Gland Selection Table

<table>
<thead>
<tr>
<th>PRODUCT TYPE A</th>
<th>PART NUMBERS:</th>
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<tr>
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<td>A</td>
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<tr>
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<td>1</td>
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</table>

#### Example Part Numbering:

A2LB/NP/20/M20

### Options

- Including Earth Tag
- Including Serrated Washer
- Quantity per kit

### Notes

- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non-metric entry threads.
- Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

---

**Example Part Numbering:**

A2LB/NP/20/M20

**Options:**

- Including Earth Tag
- Including Serrated Washer
- Quantity per kit

**Notes:**

- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non-metric entry threads.
- Please refer to our "Thread Reference Tables" for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.
**CABLE GLAND SELECTION TABLE**

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<td>0.45-1.00</td>
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<td>107.8</td>
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**NOTES**
- For gland size 20 the silicone inner seal has a minimum diameter of 9.3 mm and NOT 6.7 mm.
- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non-metric entry threads. Please refer to our “Thread Reference Tables” for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
**PRODUCT DESCRIPTION**

“C” type single compression glands provide a controlled IP and environmental seal on the outer sheath and a detachable armour specific clamping system for wire (W), braid/tape (T) armoured cables. The gland has been tested to IP66 and options are available for use with LSOH cables and extreme temperature applications.

**COMPLIANCE STANDARDS:**
- IEC 62444
- EN 62444
- BS 6121

**CERTIFICATION:**
- ABS Specified ABS Rules

**CERTIFICATE NO.:**
- ABS W-LD463991-1-PDA

---

### PART NUMBERS:

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<tbody>
<tr>
<td>3</td>
<td>S</td>
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### OPTIONS:

- **MATERIALS:**
  - Neoprene Seals (1)
  - Silicone Seals (3)
  - PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO)

- **OPERATING TEMP:**
  - Neoprene Seals: -25°C to +90°C
  - Silicone Seals: -60°C to +180°C

- **PLATING:**
  - Electroless Nickel

- **CERTIFICATE:**
  - ABS Specified ABS Rules

---

### PRODUCT TYPE C

**C** Gland featuring armour specific clamping

<table>
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<tr>
<th>SWA (W) / SWB or STA (X)</th>
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<th>Reduced Bore Seal</th>
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<td>PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (S)</td>
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<tr>
<th>Locknut, Earth Tag &amp; Nylon (K), Fibre (V) or PTFE (H) IP Washer</th>
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<table>
<thead>
<tr>
<th>Including Serrated Washer</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Quantity per kit</th>
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<table>
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<th>Nickel Plated</th>
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<table>
<thead>
<tr>
<th>Gland shell size</th>
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| 20 |
| 1/2" NPT Male Entry Thread |

---

### NOTICES

- Gland size does not necessarily equate to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non metric entry threads.
- Please refer to our “Thread Reference Tables” for specific dimensions.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length.

---

<table>
<thead>
<tr>
<th>PART NUMBERS:</th>
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</table>

**NOTE:**

Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.

When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
**PRODUCT DESCRIPTION**

"C" type single compression glands provide a controlled IP and environmental seal on the outer sheath and a detachable armour specific clamping system for wires (W), braid/tape (X) armoured cables. The gland has been tested to IP66 and options are available for use with LSOH cables and extreme temperature applications.

**COMPLIANCE STANDARDS:**

- IEC 62444
- EN 62444
- BS 6121

**CERTIFICATION:**

ABS Specified ABS Rules

**CERTIFICATE NO.:**

ABS 14-12463991-1-PDA

---

**NOTES**

- Gland size does not necessarily equal to the entry thread size.
- Dimensions (A) & (B) may differ for glands with non-metric entry threads.
- Assembly instructions must be read prior to installation and adhered to in full.
- Peppers supply products with parallel entry threads that conform to the "Thread Reference Tables" for specific dimensions.
- Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.
- When selecting IP Washer & Shroud material for use with glands, please be aware of the accessories temperature range to ensure they are suitable for the intended installation.
Metallic Adaptors and Reducers

**Ex dB : Ex eb : Ex nR : Ex ta : IP66 : IP68 Class I Div 1 : AEx d : AEx e : AEx tb**

**PART NUMBERS:**

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<th>B</th>
<th>F</th>
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<td></td>
<td>3</td>
<td>S</td>
<td>A</td>
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**PRODUCT DESCRIPTION**

"AR" Series Certified Adaptors & Reducers provide a method of matching electrical thread forms on Ex equipment whilst maintaining Ex dB, Ex eb, Ex ta and Ex nR methods of explosion protection. Approved for use in mining (except Aluminium) and surface installations, they maintain IP66 & IP68 for IEC type applications and Class I Division 1 and NEMA 4X for CEC / NEC type applications. All external metric threads are fitted with a nitrile O-ring as standard.

**COMPLIANCE STANDARDS:**

- EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31, IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & 60529
- C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, UL 50E
- ATEX / IECEx versions are supplied as standard.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- For Ex d applications female threads must comply with clause 5.3 of IEC 60079-1.
- Assembly instructions must be read prior to installation and adhered to in full.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.

**NOTES**

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)
- Male and Female Thread References and Size information can be found on page 40 of this product catalogue. Male and female threads are manufactured in accordance with:
  - Tables 1 and 2 provide a list of standard metric and non metric threads and the corresponding IEC/EN 60079-1 and 60079-7 standards.
  - Male and female threads are manufactured in accordance with: ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)
  - ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
  - NPT and NPS threads are in accordance to ANSI B1.20.1
  - PG threads to DIN40430
  - ET threads to Imperial Conduit BS31
  - ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
  - ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

**OPERATING TEMPERATURE:**

- O-ring - None -100°C to +200°C
- O-ring - Nitrile -30°C to +100°C
- O-ring - Silicone -60°C to +200°C

**MATERIALS:**

- Brass, Stainless Steel or Aluminium

**PLATING:**

- Electroless Nickel

**CERTIFICATION:**

- **ATEX**
  - 1M2 II 1D 2D Ex d I Mb / Ex d IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIC Da
  - II 3G Ex nR IC Gc
- **IECEx**
  - Ex d I Mb / Ex d IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIC Da
- **CEC - Canada**
  - Class I Zone 1 Ex d I Ex / Ex e I / Class II Zone 21 Ex tb I IEC
- **NEC - USA**
  - Class I Zone 1 AEx d IC Gb / AEx e IC Gb / Class II Zone 21 AEx tb I IEC
- **SAC - China**
  - Ex d IC Gb / Ex e IC Gb
- **CCoE - India**
  - Ex d IC Gb / Ex e IC Gb
- **ABS**
  - Specified ABS Rules
- **Lloyd's**
  - Ex d I Mb / Ex d IC Gb / Ex e I Mb / Ex e IC Gb / Ex tw IIC Gb
  - II 3G Ex nR IC Gc
- **CoEx - Brazil**
  - Ex d I Mb / Ex d IC Gb / Ex e I Mb / II 2GD Ex d IC Gb / Ex e IC Gb / Ex tw IIC Gb
  - II 3G Ex nR IC Gc
- **INMETRO - Brazil**
  - Ex d I Mb / Ex d IC Gb / Ex e I Mb / Ex e IC Gb / Ex tw IIC Gb / Ex tw IIC Db
  - II 3G Ex nR IC Gc
- **NCC - Ukraine**
  - Ex d I Mb / Ex d IC Gb / Ex e I Mb / Ex e IC Gb / Ex tw IIC Gb / Ex tw IIC Db / Ex mR IC Gc
  - II 3G Ex nR IC Gc
- **RMRS**
  - Ex d I Mb / Ex d IC Gb / Ex e I Mb / Ex e IC Gb / Ex tw IIC Gb / Ex tw IIC Db
  - II 3G Ex nR IC Gc

**ACCESSORIES:**

- Serrated Washer
- Locknut
- Earth Tag
- IP Washers
- Stainless Steel (ACS5W)

**PLATING:**

- Electroless Nickel

**MATERIALS:**

- Brass, Stainless Steel or Aluminium

**OPERATING TEMPERATURE:**

- O-ring - Nitrile -30°C to +100°C
- O-ring - Silicone -60°C to +200°C

**INFORMATION:**

- ATEX / IECEx versions are supplied as standard.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- For Ex d applications female threads must comply with clause 5.3 of IEC 60079-1.
- Assembly instructions must be read prior to installation and adhered to in full.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.
**PRODUCT DESCRIPTION**

“ARMM & ARFF” Series Certified Adaptors provide a method of matching electrical thread forms on Ex equipment whilst maintaining Ex db, Ex eb and Ex nR methods of explosion protection. Approved for use in mining (except Aluminium) and surface installations, they maintain IP66 & IP68 for IEC type applications and Class I Division 1 and NEMA 4X for CEC type applications. All external metric threads are fitted with a nitrile O-ring as standard.

**COMPLIANCE STANDARDS:**

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-23, EN 60079-25
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & 60529
C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, UL 50E

**PART NUMBERS:**

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<th>MM</th>
<th>O</th>
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</tbody>
</table>

ARMM or ARFF ARMM = Male x Male - ARFF = Female x Female

**MATERIALS:**

Brass, Stainless Steel or Aluminium

**PLATING:**

Electroless Nickel

**CERTIFICATION:**

ATEX
IECEx
CEC - Canada
NEC - USA
EAC
INMETRO - Brazil
SAC - China
UKRAINE
CCoE - India
ABS
LLOYD’S
RMRS

**NOTES:**

- Male and Female Thread References and Size information can be found on page 40 of this product catalogue. 
  - Adapter and Reducer size information is available on pages 41 + 42 of our product catalogue. Male and female threads are manufactured in accordance with:
    - ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
    - NPT and NPS threads are in accordance to ANSI B1.20.1
    - PG threads to DIN403430
    - ET threads to Imperial Conduit B331
    - ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
    - ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

- For Ex db applications female threads must comply with clause 5.3 of IEC 60079-1.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.
- Puffers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Puffers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

---

**PRODUCT TYPE ARMM & ARFF**

Male or Female Entry Thread

**OPERATING TEMPERATURE:**

- O-ring - None: -100°C to +400°C
- O-ring - Nitrile: -30°C to +100°C
- O-ring - Silicone: -60°C to +200°C

**MATERIALS:**

Brass, Stainless Steel or Aluminium

**PLATING:**

Electroless Nickel

**CERTIFICATION:**

ATEX
IECEx
CEC - Canada
NEC - USA
EAC
INMETRO - Brazil
SAC - China
UKRAINE
CCoE - India
ABS
LLOYD’S
RMRS

**NOTES:**

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex db applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- Ex d / Ex e / Ex tb threads are manufactured with a nitrile O-ring as standard.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.

---

**PRODUCT TYPE ARMM & ARFF**

Male or Female Entry Thread

**OPERATING TEMPERATURE:**

- O-ring - None: -100°C to +400°C
- O-ring - Nitrile: -30°C to +100°C
- O-ring - Silicone: -60°C to +200°C

**MATERIALS:**

Brass, Stainless Steel or Aluminium

**PLATING:**

Electroless Nickel

**CERTIFICATION:**

ATEX
IECEx
CEC - Canada
NEC - USA
EAC
INMETRO - Brazil
SAC - China
UKRAINE
CCoE - India
ABS
LLOYD’S
RMRS

**NOTES:**

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex db applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- Ex d / Ex e / Ex tb threads are manufactured with a nitrile O-ring as standard.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.

---

**PRODUCT TYPE ARMM & ARFF**

Male or Female Entry Thread

**OPERATING TEMPERATURE:**

- O-ring - None: -100°C to +400°C
- O-ring - Nitrile: -30°C to +100°C
- O-ring - Silicone: -60°C to +200°C

**MATERIALS:**

Brass, Stainless Steel or Aluminium

**PLATING:**

Electroless Nickel

**CERTIFICATION:**

ATEX
IECEx
CEC - Canada
NEC - USA
EAC
INMETRO - Brazil
SAC - China
UKRAINE
CCoE - India
ABS
LLOYD’S
RMRS

**NOTES:**

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex db applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- Ex d / Ex e / Ex tb threads are manufactured with a nitrile O-ring as standard.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.
Male threads are manufactured in accordance with:

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

**SPMH & SPHH DIMENSIONAL DATA**

<table>
<thead>
<tr>
<th>ISOMETRIC Thread</th>
<th>A/F</th>
<th>Overall Length</th>
<th>Weight (Kgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12</td>
<td>19.0</td>
<td>20.5</td>
<td>0.024</td>
</tr>
<tr>
<td>M16</td>
<td>23.4</td>
<td>20.5</td>
<td>0.052</td>
</tr>
<tr>
<td>M20</td>
<td>37.0</td>
<td>21.0</td>
<td>0.049</td>
</tr>
<tr>
<td>M25</td>
<td>31.8</td>
<td>21.0</td>
<td>0.076</td>
</tr>
<tr>
<td>M32</td>
<td>37.0</td>
<td>21.0</td>
<td>0.135</td>
</tr>
<tr>
<td>M40</td>
<td>42.7</td>
<td>21.5</td>
<td>0.218</td>
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<tr>
<td>M50</td>
<td>57.2</td>
<td>21.5</td>
<td>0.333</td>
</tr>
<tr>
<td>M80</td>
<td>90.0</td>
<td>22.0</td>
<td>0.777</td>
</tr>
<tr>
<td>M85</td>
<td>106.4</td>
<td>28.0</td>
<td>1.326</td>
</tr>
<tr>
<td>M90</td>
<td>114.3</td>
<td>28.0</td>
<td>2.180</td>
</tr>
</tbody>
</table>

Head Diameter = Minimum 5.5mm larger than the major thread diameter.

**Sp HM & SP HH INFORMATION TABLE**

<table>
<thead>
<tr>
<th>PART NUMBERS:</th>
<th>SP</th>
<th>MH</th>
<th>O</th>
<th>B</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>

**PRODUCT DESCRIPTION**

“SPMH & SPHH” Series Certified Metallic Stopping (Blanking) Plugs provide a method of sealing unused entries in Ex equipment. They maintain Ex db, Ex eb, Ex ta and Ex nr methods of protection and IEC66, IP66 for IEC type applications. They are Class I Division I, Class II Division I, Class II and Class 1 Zone 1 approved for for NEC and CEC type applications whilst also maintain Type 4X rating.

**COMPLIANCE STANDARDS:**

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31, IEC 60529

**ATEX / IECEx versions are supplied as standard.**

**CERTIFICATION:**

- RMRS 10/00056(E1)
- ABS
- CCMC - India
- NCC 13.2189 X
- SAC - China
- CE - China
- CSA C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, IEC 60529

**C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, IEC 60529**
Male threads are manufactured in accordance with:

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

### Metallic Stopping Plugs

**PART NUMBERS:**

<table>
<thead>
<tr>
<th>SP</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th><strong>MATERIALS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Electroless Nickel</td>
</tr>
</tbody>
</table>

**CERTIFICATION:**

**IP RATING:** IP66 & NEMA 4X

**OPERATING TEMPERATURE:** O-ring - None -100°C to +400°C

**NOTES:**

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex d applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex d applications parallel entry threads must be installed with a suitable entry thread seal.
- ATEX / IECEx versions are supplied as standard.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.

**PRODUCT DESCRIPTION**

“SP” Series Certified Metallic Stopping (Blanking) Plugs provide a method of sealing unused entries in Ex equipment. They maintain Ex db, Ex eb and Ex ta methods of protection and IP66 for IEC type applications. They are Class I Division I, Class II Division I, Class II and Class I Zone 1 approved for NEC and CEC type applications whilst also maintain Type 4X rating.

**COMPLIANCE STANDARDS:**

<table>
<thead>
<tr>
<th><strong>ATEX</strong></th>
<th><strong>IECEx</strong></th>
<th><strong>CEC - Canada</strong></th>
<th><strong>NEC - USA</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>I M2 II 1D 2G Ex db I Mb / Ex eb I IC Gb / Ex eb I Mb / Ex eb I IC Gb / Ex ta I IIC Da</td>
<td>Ex db I Mb / Ex eb I IC Gb / Ex eb I Mb / Ex eb I IC Gb / Ex ta I IIC Da</td>
<td>Class I Zone 1 Ex i IC Gb / Ex i IC Gb / Class II Zone 21 Ex tb I IIC</td>
<td>Class I Zone 1 Ex i IC Gb / Ex i IC Gb / Class II Zone 21 Ex tb I IIC</td>
</tr>
</tbody>
</table>

**CERTIFICATION No:**

- ATEX: CML 19ATEX106X
- IECEx: IECEx CML 19.0022X
- CEC: CSA231046
- NEC: CSA231046
- EAC: RUI C-GB.BH02.B.00693/18
- INMETRO - Brazil: NCC 13.2189 X
- SAC - China: NEPSI GYJ16.1406X
- UKRAINE: CLJ 16.0320 X
- CCC - India: PESO P365300/7
- ABS: 14LD1183401-PDA
- LLOYD'S: 1000096(E1)
- RMRS: 14.0765.315

**PRODUCT DESCRIPTION**

- Male thread
- Female thread
- Male thread with IECEx and ATEX certification
- Female thread with IECEx and ATEX certification

**Certification Details:**

<table>
<thead>
<tr>
<th><strong>SP</strong></th>
<th><strong>A</strong></th>
<th><strong>B</strong></th>
<th><strong>C</strong></th>
<th><strong>D</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>STopping</td>
<td>Type A External Fixing (A) - Type B Internal Fixing (B)</td>
<td>No O-ring</td>
<td>Brass (B) - Stainless Steel (S) - Aluminium (A)</td>
<td>Ex d &amp; Ex e certification including Marine Approvals</td>
</tr>
</tbody>
</table>

**PART NUMBERS:**

- **SP A 0 B D**

**STOPPING PLUG INFORMATION TABLE**

<table>
<thead>
<tr>
<th><strong>ISO Metric Thread</strong></th>
<th><strong>Hex Socket A/F</strong></th>
<th><strong>Overall Length</strong></th>
<th><strong>Weight (Kgs)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>M2</td>
<td>6.0</td>
<td>17.0</td>
<td>0.011</td>
</tr>
<tr>
<td>M6</td>
<td>8.0</td>
<td>17.0</td>
<td>0.025</td>
</tr>
<tr>
<td>M10</td>
<td>10.0</td>
<td>17.0</td>
<td>0.035</td>
</tr>
<tr>
<td>M12</td>
<td>12.0</td>
<td>17.0</td>
<td>0.060</td>
</tr>
<tr>
<td>M14</td>
<td>14.0</td>
<td>17.0</td>
<td>0.105</td>
</tr>
<tr>
<td>M16</td>
<td>17.0</td>
<td>17.0</td>
<td>0.170</td>
</tr>
<tr>
<td>M18</td>
<td>19.0</td>
<td>17.0</td>
<td>0.265</td>
</tr>
<tr>
<td>M20</td>
<td>22.0</td>
<td>17.0</td>
<td>0.450</td>
</tr>
<tr>
<td>M25</td>
<td>25.0</td>
<td>17.0</td>
<td>0.750</td>
</tr>
<tr>
<td>M32</td>
<td>32.0</td>
<td>17.0</td>
<td>0.880</td>
</tr>
<tr>
<td>M40</td>
<td>40.0</td>
<td>17.0</td>
<td>0.940</td>
</tr>
<tr>
<td>M50</td>
<td>50.0</td>
<td>17.0</td>
<td>1.030</td>
</tr>
</tbody>
</table>

**Weight (Kgs):**

- 0.011
- 0.025
- 0.035
- 0.060
- 0.105
- 0.170
- 0.265
- 0.450
- 0.750
- 0.880
- 0.940
- 1.030

**Overall Length:**

- 1/4"
- 3/8"
- 1/2"
- 3/4"
- 1"
- 1 1/2"
- 1 3/4"
- 2"
- 2 1/2"
- 3"
- 3 1/2"
- 4"

**Weight (Kgs):**

- 0.009
- 0.030
- 0.030
- 0.050
- 0.10
- 0.180
- 0.250
- 0.430
- 0.930
- 1.490
- 2.060
- 2.760

**NOTES:**

- Male Thread
- Nickel Plated

**PART NUMBERS:**

- **SP A 0 B D**

**STOPPING PLUG INFORMATION TABLE**

<table>
<thead>
<tr>
<th><strong>ISO Metric Thread</strong></th>
<th><strong>Hex Socket A/F</strong></th>
<th><strong>Overall Length</strong></th>
<th><strong>Weight (Kgs)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>M2</td>
<td>6.0</td>
<td>17.0</td>
<td>0.011</td>
</tr>
<tr>
<td>M6</td>
<td>8.0</td>
<td>17.0</td>
<td>0.025</td>
</tr>
<tr>
<td>M10</td>
<td>10.0</td>
<td>17.0</td>
<td>0.035</td>
</tr>
<tr>
<td>M12</td>
<td>12.0</td>
<td>17.0</td>
<td>0.060</td>
</tr>
<tr>
<td>M14</td>
<td>14.0</td>
<td>17.0</td>
<td>0.105</td>
</tr>
<tr>
<td>M16</td>
<td>17.0</td>
<td>17.0</td>
<td>0.170</td>
</tr>
<tr>
<td>M18</td>
<td>19.0</td>
<td>17.0</td>
<td>0.265</td>
</tr>
<tr>
<td>M20</td>
<td>22.0</td>
<td>17.0</td>
<td>0.450</td>
</tr>
<tr>
<td>M25</td>
<td>25.0</td>
<td>17.0</td>
<td>0.750</td>
</tr>
<tr>
<td>M32</td>
<td>32.0</td>
<td>17.0</td>
<td>0.880</td>
</tr>
<tr>
<td>M40</td>
<td>40.0</td>
<td>17.0</td>
<td>0.940</td>
</tr>
<tr>
<td>M50</td>
<td>50.0</td>
<td>17.0</td>
<td>1.030</td>
</tr>
</tbody>
</table>

**Weight (Kgs):**

- 0.011
- 0.025
- 0.035
- 0.060
- 0.105
- 0.170
- 0.265
- 0.450
- 0.750
- 0.880
- 0.940
- 1.030

**Overall Length:**

- 1/4"
- 3/8"
- 1/2"
- 3/4"
- 1"
- 1 1/2"
- 1 3/4"
- 2"
- 2 1/2"
- 3"
- 3 1/2"
- 4"
PRODUCT DESCRIPTION

“ACDP” Series Breather Drains allow the inside of the equipment to breathe with the outside atmosphere and provide a method of effectively draining any moisture from within the equipment. ACDP series Breather Drains maintain Ex eb method of protection and IP66 for IEC type applications. A Castellated Locknut and O-ring is supplied with every Breather Drain.

COMPLIANCE STANDARDS:
EN 60079-0, EN 60079-7, EN 60079-31
IEC 60079-0, IEC 60079-7, IEC 60079-31 & 60529
C22.2 (see certificate), UL514B, ANSI/UL 60079-0, ISA 60079-31, UL 50E

CERTIFICATION:
ATEX
I M2 II 2GD Ex eb I Mb / Ex eb IIC Gb / Ex ta IIC Da
IECEx
Ex eb I Mb / Ex eb IIC Gb / Ex ta IIC Da
CEC - Canada
Class I Zone 1 Ex e IIC / Class II Zone 21 Ex tb IIIC
NEC - USA
Class I Zone 1 AEx e IIC Gb / Class II Zone 21 AEx tb IIIC Db
EAC
PII Ex e I Mb X / IEx e IIC Gb X / Ex ta IIC Da X
INMETRO - Brazil
Ex eb I Mb / Ex eb IIC Gb / Ex ta IIC Da
SAC - China
Ex e IIC Gb
UKRAINE
I M2 Ex eb I Mb / I 2G Ex eb IIC Gb / II 1D Ex ta IIC Da
CCoE - India
Ex e IIC Gc
ABS
Specified ABS Rules
LLOYD’S
Ex e I Mb / Ex e IIC Gb / Ex tb IIC Db
RMRS
Ex e IC / Ex e I / Ex tb IIC

IP RATING:
IP66 & NEMA 4X

OPERATING TEMPERATURE:
O-ring - None -100°C to +400°C
O-ring - Nitrile -30°C to +100°C
O-ring - Silicone -60°C to +200°C

MATERIALS:
Brass, Stainless Steel or Aluminium

PLATING:
Electroless Nickel

FLOW RATE:
0.25 Litres per Hour

NOTES
• Assembly instructions must be read prior to installation and adhered to in full
• The ACDP flow rate was obtained from testing in an empty enclosure filled with water. The enclosure had no heat or pressure producing equipment inside. Flow rates in the field may vary depending on operational parameters and surrounding environmental conditions.
• To maintain the specified IP rating, clearance holes must be in accordance with EN 62444 and the entry device should be suitably secured.
• The standard O-ring material is nitrile. Other options are available upon request.
• All Breather Drains are supplied with Castellated Locknut as standard.
• Aluminium versions are not suitable for Group I Mining application.
• Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.

PART NUMBERS:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S</td>
<td>3</td>
</tr>
</tbody>
</table>

ACDP
Breather Drain c/w Castellated Locknut

| No IP O-ring (0) - Nitrile (1) - Silicone (3) |
| Brass (B) - Stainless Steel (S) - Aluminium (A) |
| Ex e certification including Marine Approvals |
| Nickel Plated |

M20
Male Entry Thread

| Entry Thread Length 10mm or 15mm |

| IP RATING: |
| 6P66 & NEMA 4X |

| OPERATING TEMPERATURE: |
| O-ring - None -100°C to +400°C |
| O-ring - Nitrile -30°C to +100°C |
| O-ring - Silicone -60°C to +200°C |

| MATERIALS: |
| Brass, Stainless Steel or Aluminium |

| PLATING: |
| Electroless Nickel |

| FLOW RATE: |
| 0.25 Litres per Hour |

<table>
<thead>
<tr>
<th>Thread Size</th>
<th>A/F</th>
<th>A/C (A)</th>
<th>Length (B)</th>
<th>Length (L)</th>
<th>Weight (Kgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 x 1.5</td>
<td>13.0</td>
<td>20.9</td>
<td>10 or 15</td>
<td>12.0</td>
<td>0.032</td>
</tr>
<tr>
<td>M16 x 1.5</td>
<td>24.0</td>
<td>26.4</td>
<td>10 or 15</td>
<td>12.0</td>
<td>0.052</td>
</tr>
<tr>
<td>M20 x 1.5</td>
<td>25.0</td>
<td>29.7</td>
<td>10 or 15</td>
<td>12.0</td>
<td>0.065</td>
</tr>
<tr>
<td>M25 x 1.5</td>
<td>31.8</td>
<td>34.9</td>
<td>10 or 15</td>
<td>12.0</td>
<td>0.097</td>
</tr>
<tr>
<td>M32 x 1.5</td>
<td>33.6</td>
<td>41.3</td>
<td>10 or 15</td>
<td>12.0</td>
<td>0.107</td>
</tr>
<tr>
<td>1/2” NPT</td>
<td>28.6</td>
<td>31.4</td>
<td>15</td>
<td>12.0</td>
<td>0.075</td>
</tr>
<tr>
<td>3/4” NPT</td>
<td>33.0</td>
<td>36.3</td>
<td>15</td>
<td>12.0</td>
<td>0.107</td>
</tr>
</tbody>
</table>
PRODUCT DESCRIPTION

“ARMR” & “ARFR” Series Dual Certified Right Angled Adaptors are designed to protect cables when installed in confined spaces where the cable may otherwise be subject to excessive bending and/or stress. The series is available with Male/Female or Female/Female connection threads. They are approved for Ex db, Ex eb, Ex ta and Ex nR methods of explosion protection whilst maintaining IP66, IP68 for IEC type applications and Class I Division 1, and NEMA 4X for NEC/CEC type applications. All external parallel threads are fitted with a nitrile O-ring as standard.

COMPLIANCE STANDARDS:
EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & 60529
C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, UL 50E

CERTIFICATION:
ATEX
I M2 II TD Ex d I Mb / Ex e I Mb / Ex nR IIC Gc
II 3G Ex nR IC Gc

IECEx
Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIC Da
Class I Zone 1 Ex d IC / Ex e IC / Class II Zone 21 Ex tb IIC
Class I Division 1, Groups A, B, C & D
Class II, Enclosure Type 4X

CEC - Canada
Class I Zone 1 AEx d IC Gb / AEx e IC Gb / Class II Zone 21 AEx tb IIC Db
Class I Division 1, Groups A, B, C & D
Class II, Enclosure Type 4X

NEC - USA
Class I Zone 1 AEx d IC Gb / AEx e IC Gb / Class II Zone 21 AEx tb IIC Db
Class I Division 1, Groups A, B, C & D
Class II, Enclosure Type 4X

EAC
Ex d I Mb U / Ex d IIC Gb U / Ex e I Mb U / Ex e IIC Gb U / Ex nR II Gc U / Ex ta IIC Da

INMETRO - Brazil
Ex d I Mb / Ex d IC Gb / Ex e I Mb / Ex e IC Gb / Ex ta IIC Da

SAC - China
Ex d IC Gb / Ex e IC Gb

Ukraine
I M2 Ex db I Mb / Ex eb I Mb / II 2GD Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIC Da

CCoE - India
Ex d IC Gb / Ex e IC Gc

ABS
Specified ABS Rules

Lloyd’s
Ex d IC Gb / Ex e IC Gb

RMRS
Ex d IC / Ex e IC / Ex d IC / Ex e IC / Ex d IIC / Ex e IIC

IP RATING:
IP66 & IP68 (100 metres for 7 days) & NEMA 4X

OPERATING TEMPERATURE:
O-ring - None -30°C to +400°C
O-ring - Nitrile -30°C to +100°C
O-ring - Silicone -60°C to +200°C

MATERIALS:
Brass, Stainless Steel or Aluminium

PLATING:
Electroless Nickel

EXAMPLE PART NUMBERING:
ARMR1BF/NP/M20/M20

EXPERIMENTAL OR SPECIFIED PRODUCTS:
ARMR & ARFR Metallic 90 Degree / Right Angle Adaptors

NOTES:
• Differing threads and thread forms are available upon request.
• 90 Degree Adaptors are approved and available up to size M100.
• Aluminium versions are not suitable for Group I Mining application.
• When used in an Ex nR application ARMR & ARFR adaptors must be fitted with an appropriate seal.

Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. They usually incorporate a thread run out according to the available machining techniques and will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients’ installations where this has not been taken into account.
A COMPLETE RANGE OF LOCKNUTS, EARTHTAGS, IP WASHERS, SERRATED WASHERS AND SHROUDS

LOCKNUTS
Locknuts are recommended for securing external entry threads into equipment. They are available in various materials such as brass, plated brass, stainless steel, aluminium and nylon.

<table>
<thead>
<tr>
<th>Material</th>
<th>Order Code Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brass</td>
<td>ACBLN/M20</td>
</tr>
<tr>
<td>Brass Nickel Plated</td>
<td>ACBLN/NP/M20</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>ACLA/M20</td>
</tr>
<tr>
<td>Aluminium</td>
<td>ACALN/M20</td>
</tr>
<tr>
<td>Nylon</td>
<td>ACNLN/M20</td>
</tr>
</tbody>
</table>

Note: Dimensions shown are only applicable to metallic locknuts and are subject to change without notice.

Note: Peppers Earth tags are compliant with the Category B requirements of EN 50262: 1999. Only available in stainless steel.

Earth tags are recommended for providing an earth bond connection for an entry component into the equipment. Earth tags are available in brass, nickel plated brass, stainless steel and aluminium as an earth enhancing device on painted enclosures. They are also used as a device to prevent the cable gland or other cable entry device from loosening. It can also be used as an earth enhancing device on painted enclosures. They are available in variations such as brass, plated brass, stainless steel and aluminium.

<table>
<thead>
<tr>
<th>Material</th>
<th>Order Code Example</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Brass Nickel Plated</td>
<td>ACBE/NP/M20</td>
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<tr>
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<tr>
<td>Aluminium</td>
<td>ACASE/M20</td>
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</table>

Note: Peppers Earth tags are compliant with the Category B requirements of EN 50262: 1999. Only available in stainless steel.

IP WASHERS
In order to maintain the integrity of an enclosure greater than IP54, washers are recommended to be installed at the gland entry interface. It can also be used as an earth enhancing device on painted enclosures. They are available in various materials such as brass, plated brass, stainless steel and aluminium.

<table>
<thead>
<tr>
<th>Material</th>
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</thead>
<tbody>
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<td>Aluminium</td>
<td>ACFLN/M20</td>
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</table>

Note: Materials available are stainless steel, aluminium and nylon.

SERRATED WASHERS
Serrated or “shake proof” washers act as an anti-vibration device to prevent the cable gland or other cable entry device and locknut arrangement from loosening. It can also be used as an earth enhancing device on painted enclosures. They are only available in stainless steel.

<table>
<thead>
<tr>
<th>Material</th>
<th>Order Code Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless Steel</td>
<td>ACSSW/M20</td>
</tr>
</tbody>
</table>

All dimensions in mm - Weights are based on metric versions.

O-RINGS
Please note: IP flat washers and o-rings cannot be used in conjunction with one another. O-rings procured from other sources and fitted to Peppers glands will invalidate the IP certification.

<table>
<thead>
<tr>
<th>Peppers Item Reference</th>
<th>Seal Material</th>
<th>Code</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRN</td>
<td>Nitrile</td>
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<td>-30°C to + 100 °C</td>
</tr>
<tr>
<td>ORS</td>
<td>Silicone</td>
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<td>-60°C to + 200 °C</td>
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</tbody>
</table>

SHROUDS
Shrouds manufacture a range of shrouds in various materials to complement our complete range of glands. Materials available are Polyvinylchloride (PVC), Polyurethane (PUR) & Low Smoke Halogen Free Silicone (LSOH). Please note that the shrouds are manufactured to fit our glands and will not necessarily fit other manufacturer’s products. The shroud sizes are detailed on each of the product pages. Please note where glands have a larger than standard entry thread the standard shroud will not fit over the gland hexagon body section.

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**Thread Reference Tables**

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<th>Thread Type</th>
<th>Thread</th>
<th>Peppers Reference</th>
<th>Pitch</th>
<th>TPI</th>
<th>Major Dia</th>
<th>Thread Length</th>
<th>Max Clearance Hole Dia</th>
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<th>Thread</th>
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<th>Pitch</th>
<th>TPI</th>
<th>Major Dia</th>
<th>Thread Length</th>
<th>Max Clearance Hole Dia</th>
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</thead>
<tbody>
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<table>
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<th>Thread</th>
<th>Peppers Reference</th>
<th>Pitch</th>
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<th>Major Dia</th>
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</tr>
</tbody>
</table>

**Note:** Glands are available with Metric or NPT threads as standard. All other thread forms are manufactured to order.
AR SERIES METALLIC ADAPTORS & REDUCERS - SIZE REFERENCE

<table>
<thead>
<tr>
<th>METRIC SIZE</th>
<th>METRIC FEMALE SIZES</th>
<th>NPT FEMALE SIZES</th>
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</tbody>
</table>

Adaptors and reducers with NPT male threads are designed to be used in threaded entries. If required with a sealing washer for use in clearance holes with a locknut these items can be manufactured from a larger hexagon size to provide a suitable sealing face.
### MALE SIZE METRIC

<table>
<thead>
<tr>
<th>PG7</th>
<th>PG9</th>
<th>PG11</th>
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### ADAPTORS

**Metric x Metric / Metric x PG / PG x Metric / PG x PG**

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**Nominal Protrusion Length**

- Metric x PG: 22.5
- Metric x NPT: 22.5
- PG x Metric: 22.5
- PG x PG: 22.5

**Metric x NPT / NPT x NPT / PG x PG**

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<td>176.0</td>
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**Nominal Protrusion Length**

- Metric x NPT: 26.0
- NPT x NPT: 26.0
- PG x PG: 26.0

* Stated nominal protrusion lengths do not take into account if any form of IP seal (o-ring / washer) is used in conjunction with the entry thread.

** Due to the nature of tapered threads the nominal protrusion length may be further away from the enclosure wall than the stated figure.

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Peppers Cable Glands Ltd: www.peppers.co.uk  |  Email: sales@peppers.co.uk  |  Tel: +44 (0) 1276 64232
INGRESS PROTECTION
It is essential when selecting cable glands and / or accessories to ensure that the products will maintain the IP rating of the equipment and the integrity of the installation. All Peppers’ products have been tested in accordance with the requirements of IEC 60529 and as such the pressure applied during the IPX8 testing is a static pressure.

Please note that clearance holes must be drilled in accordance with EN 50262 Table 1 and any gland without an integral O-ring must have a suitable IP washer fitted in order to maintain greater than IP54. If in doubt about the installation please contact Peppers for installation guidance.

INTEGRAL EARTH GLANDS

Cable Glands with an integral earth connection are recommended for use with high voltage systems. The earth connection on these glands has been successfully tested in accordance with the 43kA short-circuit test specified in BS 6121, Part 5, 1992.

Ex Standards do not cover the requirements of cable glands for HV cable. BS6121 Part 5 Section 4.6.2 for non integral earth connections suggests that if the short circuit for 1 second is more than 10.4 kA we then revert to section 4.6.3 “Integral Earth Connection” where the short circuit rating for 1 second is between 26 & 43kA.

BI-METALLIC CORROSION
Bi-metallic Corrosion (or Galvanic Corrosion) is the process by which metals, when in contact with each other, oxidize or corrode. In order for Bi-metallic Corrosion to occur there are three conditions that must exist or the process of corrosion will not begin:

• There must be two electrochemically dissimilar metals present but not necessarily in direct contact with each other.
• There must be an electrically conductive path between the two metals.
• There must be an electrolyte to allow the metal ions to conduct along the provided path from the more anodic metal to the more cathodic metal.

If any one of these three conditions does not exist, bi-metallic corrosion will not occur.

TEMPERATURE CLASSIFICATION
The equipment must be selected so that its maximum surface temperature will not reach the ignition temperature of any gas or vapour that may be present.

Generally, T-class is based on fault conditions or, at the very least, worst case normal operating conditions. When selecting equipment, the T-class must be below the auto-ignition temperature of the gas. As glands do not generate heat they are classified as passive and not subject to a T rating.

THREAD STANDARD/GAUGING
• ISO M IEC 60423, 6g fit - M16 to M75 1.5mm pitch, M80 to M130 2.0mm pitch
• NPT ANSI/ASME B1.20.1, 1983, Gauging to Clause 8
• NPSM ANSI/ASME B1.20.1, 1983, Gauging to Clause 9
• BSPT BS21, 1985 (ISO 7/1), Standard Threads Only (Clause 5.4), Gauging to Clause 5a, System A
• BSPP BS EN ISO 228-1:2003, Class A Full Form External Threads
• PG DIN 40430, 1971

INSTALLATION
Installation of cable glands intended for use in an explosive atmosphere should only be carried out by competent personnel, skilled in the installation of cable glands and in accordance with the appropriate national or international standards and/or codes of practice. Cable Glands should not be installed whilst circuits are live and should only be installed in accordance with the provided assembly instructions. Cable Gland components are not interchangeable with other manufacturers and any modification to the cable gland will invalidate the certification.

MATERIAL SPECIFICATION
Peppers use a standard range of materials and finishes that are in accordance with the following specification:-
• Brass to EN12164, EN12165 & EN12168 Grade CW614N
• Stainless Steel to EN 10088-3 Grade 316L
• Aluminium to BS EN 573-3 Grade AW6082 T6.
• Electroless Nickel Plating in accordance with BS EN ISO 4527

EMC
Terminations suitable for EMC protection can be made using armoured cables with our armour clamping glands. Following tests, Peppers has been informed by ERA Technology Ltd that our glands do not significantly reduce the ability of an enclosure to which they are attached to withstand electromagnetic interference. We conclude that the effectiveness of a cable entry in EMC terms will generally be limited by the cable, including the cable armour or screen. Braid screens are not necessarily the most effective means of EMC protection. Tape armours can give the best results. Since a Peppers cable gland makes a 360° clamp on cable armour, it will not inhibit the EMC protection of the cable entry.

The cable gland standard BS EN 50262 states that cable glands are EMC neutral. This is taken to mean that cable glands are neither affected by electro-magnetic radiation nor will cause any electro-magnetic interference in other equipment.

PEPPERS T-1000 COMPOUND
PEPPERS T-1000 COMPOUND is a hand-mixable, UL-approved, epoxy putty sealing compound that mixes easily in minutes and cures in one hour to provide water, dust and vapour-tight seals for cable fittings and electrical connectors. PEPPERS T-1000 COMPOUND is in a handy concentric putty stick form with the curing agent encapsulated in the contrasting colour base material. Its dough-like consistency eliminates drips and runs for a “no mess” application with no tools required for use. PEPPERS T-1000 COMPOUND cures to a hard rigid material that is resistant to hydrocarbons, ketones, esters and alcohols with excellent adhesion to most substrates including metals and ceramics.

PEPPERS T-1000 COMPOUND complies with the Underwriters Laboratories requirements for sealing compounds, Class I, Groups A, B, C and D; Class II, Groups E, F and G, in cable sealing fittings or lead seals for use in hazardous locations, UL File E334661. The product complies with Class I requirements following exposure to acetone, ammonium hydroxide, ethyl acetate, acetic acid, ASTM Reference Fuel C, benzene, hexane, furfural, 2-nitropropane, methanol, methyl ethyl ketone, ethylene dichloride and diethyleneether. For additional health and safety information please consult the available Material Safety Data Sheet.
SO HOW DO YOU CONNECT TWO Ex d - FLAMEPROOF ENCLOSURES?

Most installations do not call for enclosures to be connected together but what do you do if you need to connect two (or more) Ex d enclosures within a Zone 1 hazardous area?

Traditional practice has been to use compound barrier glands mounted at the entry of both enclosures with a length of cable or conduit. In the event of an ignition or explosion inside one of the enclosures this practice prevents the transmission of the explosion to the other enclosure. Whilst this will maintain the integrity of the installation it carries significant cost implications.

Peppers can now provide a substantially more cost effective solution for this type of installation. Peppers CR-S*M range of barrier glands can now be installed directly between two Ex d enclosures. Tested in accordance with IEC / EN 60079-1 the gland is capable of maintaining the integrity of the installation having passed pressure and sealing tests from both directions to simulate the event of an explosion in either enclosure. Supplied with two male threads, the gland allows conductors to pass through the compound ensuring that a flameproof seal is maintained for each enclosure.

In the event of an explosion within the enclosure the CR-S*M gland will prevent any transmission to the second enclosure or the surrounding atmosphere.

HEALTH & SAFETY
When used and installed as recommended within the assembly instructions provided, Peppers Cable Glands Ltd products will not cause any danger or hazard to the health or safety of persons, animals or property. The products should be installed by suitably trained / skilled personnel and in full accordance with the relevant legislative regulations (including the UK’s wiring regulations) and the accepted rules for the industry concerned.

WARNING
Peppers’ cable glands should not be used within any application other than those specified for each product, unless Peppers Cable Glands Ltd issue a statement in writing that the product is suitable for the specified application. For further information on each product, we refer you to the specific Assembly Instructions and General Arrangement drawings, which are available on request. Using the links on our web site, catalogue pages and instructions may be downloaded. Peppers Cable Glands Ltd take no responsibility for any damage, injury or other consequential loss caused where the glands are not installed or used according to our Instructions.

HAZARDOUS AREA INSTALLATION
When selecting equipment for use in hazardous areas the appropriate national or international standards or codes of practice must be considered.

GENERAL SUITABILITY FOR THE INSTALLATION ENVIRONMENT
Peppers’ cable glands are designed for normal industrial environments with regard to temperature, humidity and vibration. Construction materials include steel, brass, aluminium alloys, neoprene, nitrile and silicone rubbers. To minimize galvanic corrosion, the metallic gland components are made from similar materials. Material compatibility under chemical corrosion or attack by aggressive substances must be considered before installation.

SPARE PARTS
The nature of the product is such that spare parts are not applicable. If part of a gland needs to be replaced for any reason, the user should refer back to the manufacturer and seek advice. No special tools are required for the commissioning and servicing of our products.

DIMENSIONAL DATA
The dimensions shown within this catalogue may vary due to material availability.

CE CONFORMITY
Copies of Peppers CE declarations regarding LVD, EMC and ATEX directives are available upon request. BS EN 50262 classification with regard to mechanical and electrical properties of cable glands is available upon request.

ROHS / WEEE DIRECTIVES
Peppers Cable Glands Ltd can confirm that its full product range either complies or is outside the scope of these directives. Further documentation is available upon request.

DISCLAIMER
Whilst every care has been taken in the compilation of this catalogue, and every attempt made to present up-to-date and accurate information, we cannot guarantee that inaccuracies will not occur. Peppers Cable Glands Ltd will not be held responsible for any loss, damage or inconvenience caused as a result of any inaccuracy or errors. If you discover any information in our pages which you believe to be inaccurate or inappropriate, please notify us by e-mailing sales@peppers.co.uk.

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Full terms and conditions of sale are available upon request.