







## PRODUCT DESCRIPTION

"EC\*-C" 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 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 Dusts Groups IIIA, IIIB and IIC and additionally for use in Zones 20, 21 and 22 for Dusts Groups IIIA, IIIB and 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 and an environmental seal on the outer sheath. The unique features include, Peppers multiarmour clamping system for wire, braid and tape armoured cables and Peppers T1000 or T2000 compound that enables a quick and easy installation. An innovative barrier chamber that allows for a full inspection of the compound fill. The gland maintains IP66, IP68 to 100 metres and IP 69. 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 and options are available for use with lead sheath cables.

## 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 | UKEX         | I M2 II 1D 2G $$ Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da  |  |  |  |  |  |  |  |  |
|---------------|--------------|---|--|--|--|--|--|--|--|--|
|               |              | II 3G Ex nR IIC Gc  |  |  |  |  |  |  |  |  |
|               | ATEX         | I M2 II 1D 2G $$ Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da  |  |  |  |  |  |  |  |  |
| CER           |              | II 3G Ex nR IIC Gc  |  |  |  |  |  |  |  |  |
|               | IECEx        | Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da    |  |  |  |  |  |  |  |  |
|               | CCC - China  | Ex d I Mb / Ex d IIC Gb / Ex e I Mb / Ex e IIC Gb / Ex nR IIC Gc / Ex tD A20            |  |  |  |  |  |  |  |  |
|               | CCoE - India | Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da $$ |  |  |  |  |  |  |  |  |
|               | ABS          | Specified ABS Rule  |  |  |  |  |  |  |  |  |
|               | LLOYD'S      | Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da    |  |  |  |  |  |  |  |  |
|               |              |   |  |  |  |  |  |  |  |  |

| CERTIFICATION NO. | UKEX         | CML 21UKEX1036X & CML 21UKEX4037  |  |  |  |  |  |  |  |  |  |
|-------------------|--------------|-----------------------------------|--|--|--|--|--|--|--|--|--|
|                   | ATEX         | CML 19ATEX1113X & CML 19ATEX4114X |  |  |  |  |  |  |  |  |  |
|                   | IECEx        | IECEx CML 19.0035X                |  |  |  |  |  |  |  |  |  |
|                   | CCC - China  | 2021312313000446                  |  |  |  |  |  |  |  |  |  |
|                   | CCoE - India | PESO P494321/17 & P494321/20      |  |  |  |  |  |  |  |  |  |
|                   | ABS          | 20-LD1944057-PDA                  |  |  |  |  |  |  |  |  |  |
|                   | LLOYD'S      | LR2124442TA                       |  |  |  |  |  |  |  |  |  |

## **Eclipse** featuring the New T2000 Compound

- Hand operated No Mixing VMS Cartridge
- Fast setting compound. Conductor termination can be effected from 60 minutes @ 23°C
- Featuring Peppers unique "no ferrule" technology allowing it to be fully retractable and inspectable.
- Robust Compound for extreme conditions.
- Deluge proof without the requirements of additional seals or boots.
- Built in interface seal with metric threads.

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Eclipse style barrier gland for use with Peppers T1000 or T2000

## Peppers T1000 (1) - Peppers T2000 (2) Gland featuring Peppers multi-armour clamping system, Compound (Barrier) Inner Seal & Silicone Elastomeric Outer Seal 2 For use with Lead Sheath Cables Brass (B) / Stainless Steel (S) c PVC Shroud (C) - PCP Shroud (P) - LSOH Silicone Shroud (3) Locknut, Earth Tag & Nylon (K), Fibre (V) or PTFE (H) IP Washer s Including Serrated Washer Quantity per kit NP Nickel Plated Gland shell size M20 x 1.5 Male Entry Thread Brass (ACBLN) / Stainless Steel (ACSLN)

| EARTH TAG        | Brass (ACBET) / Stainless Steel (ACSET)              |  |  |  |  |  |  |
|------------------|--|--|--|--|--|--|--|
| IP WASHERS       | Nylon (ACNSW) / Fibre (ACFSW) / PTFE (ACPSW)         |  |  |  |  |  |  |
| SERRATED WASHERS | Stainless Steel (ACSSW)                              |  |  |  |  |  |  |
| SHROUDS          | PVC (ACSPVC) / PCP (ACSPCP) / LSOH Silicone (ACSSIO) |  |  |  |  |  |  |
|                  |  |  |  |  |  |  |  |
| IP RATING:       | IP66 & IP68 (100 metres - 7 days) & IP69             |  |  |  |  |  |  |
| OPERATING TEMP:  | T1000: -60°C to +135°C                               |  |  |  |  |  |  |
|                  | T2000: -60°C to +120°C                               |  |  |  |  |  |  |
| MATERIALS:       | Brass or Stainless Steel                             |  |  |  |  |  |  |
| PLATING:         | Electroless Nickel                                   |  |  |  |  |  |  |
| COMPOUND:        | Peppers T-1000 Compound / Peppers T-2000 Compound    |  |  |  |  |  |  |
| OUTERSEAL:       | Silicone LSOH  |  |  |  |  |  |  |

| Gland<br>size | Entry Thread Size |                  | Metric                  | Cable Acceptance Details |                   |                            |                                |                     |      |                |      | A A                     | B             |               | Dime                     |                        |                   |                 |                   |
|---------------|-------------------|------------------|-------------------------|--------------------------|-------------------|----------------------------|--------------------------------|---------------------|------|----------------|------|-------------------------|---------------|---------------|--------------------------|------------------------|-------------------|-----------------|-------------------|
|               |                   |                  |                         | Internal Cable Details   |                   |                            |                                | Outer Sheath<br>[D] |      | Reduced<br>[D] |      | Armour Acceptance Range |               | Nominal       | (Metric)                 |                        |                   | Shroud          |                   |
|               | Metric            | NPT              | Thread<br>Length<br>[B] |                          | mber of<br>es [C] | Max Ø<br>Over<br>Cores [C] | Min Inner<br>Sheath<br>[T2000] | Max Inner<br>Sheath | Min  | Max            | Min  | Max                     | Orientation 1 | Orientation 2 | Protrusion<br>Length [L] | Across<br>Flats<br>[A] | Across<br>Corners | Weight<br>(Kgs) | Size*<br>(Metric) |
| 168           | M16 x 1.5         | 3/8"             | 16                      | 12                       | 12                | 8.9                        | 4.0                            | 10.0                | 8.4  | 13.5           | 6.7  | 10.3                    | 0.80-1.25     | 0.20-0.80     | 66                       | 25.4                   | 28.0              | 0.143           | EL24              |
| 16            | M20 x 1.5         | 1/2" or 3/4"     | 16                      | 15                       | 15                | 10.4                       | 4.0                            | 11.7                | 8.4  | 13.5           | 6.7  | 10.3                    | 0.80-1.25     | 0.20-0.80     | 66                       | 25.4                   | 28.0              | 0.147           | EL24**            |
| 20S           | M20 x 1.5         | 1/2" or 3/4"     | 16                      | 35                       | 15                | 10.4                       | 4.0                            | 11.7                | 11.5 | 16.0           | 9.4  | 12.5                    | 0.80-1.25     | 0.20-0.80     | 66                       | 25.4                   | 28.0              | 0.147           | EL24**            |
| 20            | M20 x 1.5         | 1/2" or 3/4"     | 16                      | 40                       | 20                | 12.5                       | 4.0                            | 14.0                | 15.5 | 21.1           | 12.0 | 17.6                    | 0.80-1.25     | 0.20-0.80     | 69                       | 30.0                   | 33.0              | 0.219           | EL30              |
| 25            | M25 x 1.5         | 3/4" or 1"       | 16                      | 60                       | 30                | 16.5                       | 8.0                            | 18.5                | 20.3 | 27.4           | 16.8 | 23.9                    | 1.25-1.60     | 0.20-0.80     | 74                       | 37.6                   | 41.4              | 0.322           | EL38              |
| 32            | M32 x 1.5         | 1" or 1 1/4"     | 16                      | 80                       | 50                | 23.5                       | 14.0                           | 26.3                | 26.7 | 34.0           | 23.2 | 30.5                    | 1.60-2.00     | 0.30-1.20     | 87                       | 46.0                   | 50.6              | 0.578           | EL46              |
| 40            | M40 x 1.5         | 1 1/4" or 1 1/2" | 16                      | 130                      | 65                | 28.8                       | 16.0                           | 32.2                | 33.0 | 40.6           | 28.6 | 36.2                    | 1.60-2.00     | 0.30-1.20     | 90                       | 55.0                   | 60.5              | 0.832           | EL55              |
| 50S           | M50 x 1.5         | 1 ½" or 2"       | 16                      | 200                      | 100               | 34.2                       | 20.0                           | 38.2                | 39.4 | 46.7           | 34.8 | 42.4                    | 2.00-2.50     | 0.30-1.60     | 97                       | 65.0                   | 71.5              | 1.103           | EL65              |
| 50            | M50 x 1.5         | 2"               | 16                      | 400                      | 100               | 39.4                       | 20.0                           | 44.1                | 45.7 | 53.2           | 41.1 | 48.5                    | 2.00-2.50     | 0.30-1.60     | 98                       | 65.0                   | 71.5              | 1.000           | EL65              |
| 63S           | M63 x 1.5         | 2" or 2 ½"       | 19                      | 400                      | 130               | 44.8                       | 30.0                           | 50.1                | 52.1 | 59.5           | 47.5 | 54.8                    | 2.00-2.50     | 0.30-1.60     | 97                       | 80.0                   | 88.0              | 1.613           | EL80              |
| 63            | M63 x 1.5         | 2 1/2"           | 19                      | 425                      | 130               | 50.0                       | 30.0                           | 56.0                | 58.4 | 65.8           | 53.8 | 61.2                    | 2.00-2.50     | 0.30-1.60     | 97                       | 80.0                   | 88.0              | 1.475           | EL80              |
| 75S**         | M75 x 1.5         | 2 ½" or 3"       | 19                      | 425                      | -                 | 55.4                       | -                              | 62.0                | 64.8 | 72.2           | 60.2 | 68.0                    | 2.00-2.50     | 0.50-1.60     | 101                      | 90.0                   | 99.0              | 1.764           | EL90              |
| 75**          | M75 x 1.5         | 3"               | 19                      | 425                      | -                 | 60.8                       | -                              | 68.0                | 71.1 | 78.0           | 66.5 | 73.4                    | 2.00-2.50     | 0.50-1.60     | 101                      | 90.0                   | 99.0              | 1.682           | EL90              |
| 80**          | M80 x 2.0         | 3" or 3 ½"       | 25                      | 425                      | -                 | 64.4                       | -                              | 72.0                | 77.0 | 84.0           | 71.9 | 79.4                    | 3.15-4.00     | 0.50-1.60     | 127                      | 104.7                  | 115.2             | 3.452           | EL104             |
| 85**          | M85 x 2.0         | 3" or 3 ½"       | 25                      | 425                      | -                 | 69.8                       | -                              | 78.0                | 79.6 | 90.0           | 75.0 | 85.4                    | 3.15-4.00     | 0.50-1.60     | 127                      | 104.7                  | 115.2             | 2.936           | EL104             |
| 90**          | M90 x 2.0         | 3 ½" or 4"       | 25                      | 425                      | -                 | 75.1                       | -                              | 84.0                | 88.0 | 96.0           | 82.0 | 91.4                    | 3.15-4.00     | 0.50-1.60     | 126                      | 114.3                  | 125.7             | 3.722           | EL114             |
| 100**         | M100 x 2.0        | 3 ½" or 4"       | 25                      | 425                      | -                 | 80.5                       | -                              | 90.0                | 92.0 | 102.0          | 87.4 | 97.4                    | 3.15-4.00     | 0.50-1.60     | 128                      | 114.3                  | 125.7             | 3.097           | EL114             |

- 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 supplies cable glands with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to general machining techniques and parts 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 compound, gloves and instructions to allow
- one complete termination
- Where approval in addition to UKEX, ATEX and IECEx is required, this must be clearly requested at time of enquiry / order.
- \* Size 75S and above only available with T1000 Compound.
- \*\* For gland sizes 16 and 20S when used with 3/4" NPT entry thread an L30 shroud would be required