

**TECHNICAL DATA**

|                        |                                     |
|------------------------|-------------------------------------|
| CABLE GLAND TYPE       | : CW, CX                            |
| INGRESS PROTECTION     | : IP66                              |
| DESIGN STANDARDS       | : BS 6121:1989, IEC 62444, EN 62444 |
| PROCESS CONTROL SYSTEM | : BS EN ISO 9001                    |

**INSTALLATION INSTRUCTIONS**

Installation should only be performed by a competent person using the correct tools. Read all instructions before beginning installation.

**ACCESSORIES**

The following accessories are available from CMP Products, as optional extras, to assist with fixing, sealing and earthing :-  
Locknut, Earth Tag, Serrated Washer, Entry Thread (I.P.) Sealing Washer, Shroud

| Number of turns to tighten | Outer Seal Tightening Guide |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
|                            | GLAND SIZE                  |      |      |      |      |      |      |      |      |      |      |      |      |
|                            | 20S16                       | 20S  | 20   | 25S  | 25   | 32   | 40   | 50S  | 50   | 63S  | 63   | 75S  | 75   |
|                            | CABLE DIAMETER              |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.5                        | 13.2                        | 15.9 | 20.9 | 22.0 | 26.2 | 33.9 |      |      |      |      |      |      |      |
| 1                          | 12.5                        | 15.3 | 20.0 | 21.2 | 25.4 | 32.9 | 40.4 | 46.7 | 52.8 | 59.2 | 65.9 | 72.1 | 78.5 |
| 1.5                        | 11.9                        | 14.7 | 19.0 | 20.4 | 24.6 | 31.9 | 39.0 | 45.4 | 51.4 | 57.7 | 64.6 | 70.6 | 77.2 |
| 2                          | 11.2                        | 14.2 | 18.1 | 19.6 | 23.8 | 30.8 | 37.6 | 44.1 | 50.0 | 56.2 | 63.4 | 69.2 | 75.9 |
| 2.5                        | 10.5                        | 13.6 | 17.2 | 18.8 | 23.0 | 29.8 | 36.2 | 42.9 | 48.7 | 54.7 | 62.1 | 67.7 | 74.6 |
| 3                          | 9.8                         | 13.0 | 16.2 | 18.0 | 22.2 | 28.8 | 34.8 | 41.6 | 47.3 | 53.2 | 60.9 | 66.3 | 73.3 |
| 3.5                        | 9.2                         | 12.4 | 15.3 | 17.2 | 21.4 | 27.8 | 33.5 | 40.3 | 45.9 | 51.6 | 59.6 | 64.8 | 71.9 |
| 4                          | 8.5                         | 11.8 | 14.4 | 16.4 | 20.6 | 26.8 | 32.1 | 39.0 | 44.5 | 50.1 | 58.4 | 63.4 | 70.6 |
| 4.5                        | 7.8                         | 11.2 | 13.4 | 15.6 | 19.8 | 25.7 | 30.7 | 37.8 | 43.2 | 48.6 | 57.1 | 61.9 | 69.3 |
| 5                          | 7.1                         | 10.7 | 12.5 | 14.8 | 19.0 | 24.7 | 29.3 | 36.5 | 41.8 | 47.1 | 55.9 | 60.5 | 68.0 |
| 5.5                        | 6.5                         | 10.1 | 12.0 | 14.0 | 18.2 | 23.7 | 27.9 | 35.2 | 40.4 | 45.6 | 54.6 | 59.0 | 66.7 |
| 6                          | 5.8                         | 9.5  |      |      |      |      |      |      |      |      |      |      |      |

| Cable Gland Size                                                                                                                                                                        | Available Entry Threads (Alternate Metric Thread Lengths Available) |                        | Cable Bedding Diameter | Overall Cable Diameter |       | CW Armour Range |      | CX Armour Range |     | Across Flats | Across Corners  | Protrusion Length | Combined Ordering Reference (*Brass Metric) |           |    |     | Shroud | Cable Gland Weight (Kgs) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------------|------------------------|------------------------|-------|-----------------|------|-----------------|-----|--------------|-----------------|-------------------|---------------------------------------------|-----------|----|-----|--------|--------------------------|
|                                                                                                                                                                                         | Metric                                                              | Thread Length (Metric) |                        | Max                    | Min   | Max             | Min  | Max             | Max | Max          | Ordering Suffix |                   |                                             |           |    |     |        |                          |
|                                                                                                                                                                                         |                                                                     |                        |                        |                        |       |                 |      |                 |     |              | Size            |                   | Type (CW)                                   | Type (CX) |    |     |        |                          |
| 20S16                                                                                                                                                                                   | M20                                                                 | 10.0                   | 8.7                    | 6.1                    | 13.1  | 0.8             | 1.25 | 0.3             | 1.0 | 24.0         | 26.4            | 48.0              | 20S16                                       | CW        | CX | 1RA | PVC04  | 0.100                    |
| 20S                                                                                                                                                                                     | M20                                                                 | 10.0                   | 11.7                   | 9.5                    | 15.9  | 0.8             | 1.25 | 0.3             | 1.0 | 24.0         | 26.4            | 48.0              | 20S                                         | CW        | CX | 1RA | PVC04  | 0.140                    |
| 20                                                                                                                                                                                      | M20                                                                 | 10.0                   | 14.0                   | 12.5                   | 20.9  | 0.8             | 1.25 | 0.4             | 1.0 | 30.5         | 33.6            | 48.0              | 20                                          | CW        | CX | 1RA | PVC06  | 0.180                    |
| 25S                                                                                                                                                                                     | M25                                                                 | 10.0                   | 20.0                   | 14.0                   | 22.0  | 1.25            | 1.6  | 0.4             | 1.2 | 37.5         | 41.3            | 56.0              | 25S                                         | CW        | CX | 1RA | PVC09  | 0.257                    |
| 25                                                                                                                                                                                      | M25                                                                 | 10.0                   | 20.0                   | 18.2                   | 26.2  | 1.25            | 1.6  | 0.4             | 1.2 | 37.5         | 41.3            | 56.0              | 25                                          | CW        | CX | 1RA | PVC09  | 0.257                    |
| 32                                                                                                                                                                                      | M32                                                                 | 10.0                   | 26.0                   | 23.7                   | 33.9  | 1.6             | 2.0  | 0.4             | 1.2 | 46.0         | 50.6            | 54.0              | 32                                          | CW        | CX | 1RA | PVC11  | 0.376                    |
| 40                                                                                                                                                                                      | M40                                                                 | 15.0                   | 32.2                   | 27.9                   | 40.4  | 1.6             | 2.0  | 0.4             | 1.6 | 55.0         | 60.5            | 58.0              | 40                                          | CW        | CX | 1RA | PVC15  | 0.630                    |
| 50S                                                                                                                                                                                     | M50                                                                 | 15.0                   | 38.2                   | 35.2                   | 46.7  | 2.0             | 2.5  | 0.4             | 1.6 | 60.0         | 66.0            | 61.0              | 50S                                         | CW        | CX | 1RA | PVC18  | 0.757                    |
| 50                                                                                                                                                                                      | M50                                                                 | 15.0                   | 44.1                   | 40.4                   | 53.0  | 2.0             | 2.5  | 0.6             | 1.6 | 70.1         | 77.1            | 60.0              | 50                                          | CW        | CX | 1RA | PVC21  | 0.862                    |
| 63S                                                                                                                                                                                     | M63                                                                 | 15.0                   | 50.0                   | 45.6                   | 59.4  | 2.0             | 2.5  | 0.6             | 1.6 | 75.0         | 82.5            | 74.0              | 63S                                         | CW        | CX | 1RA | PVC23  | 1.390                    |
| 63                                                                                                                                                                                      | M63                                                                 | 15.0                   | 56.0                   | 54.6                   | 65.8  | 2.0             | 2.5  | 0.6             | 1.6 | 80.0         | 88.0            | 71.0              | 63                                          | CW        | CX | 1RA | PVC25  | 1.360                    |
| 75S                                                                                                                                                                                     | M75                                                                 | 15.0                   | 62.0                   | 59.0                   | 72.0  | 2.0             | 2.5  | 0.6             | 1.6 | 90.0         | 99.0            | 86.0              | 75S                                         | CW        | CX | 1RA | PVC28  | 2.307                    |
| 75                                                                                                                                                                                      | M75                                                                 | 15.0                   | 64.2                   | 66.7                   | 78.4  | 2.5             | 3.0  | 0.6             | 1.6 | 100.0        | 110.0           | 82.0              | 75                                          | CW        | CX | 1RA | PVC30  | 2.909                    |
| 90                                                                                                                                                                                      | M90                                                                 | 24.0                   | 78.6                   | 76.2                   | 90.3  | 3.15            | 4.0  | 0.8             | 1.6 | 114.3        | 125.7           | 95.0              | 90                                          | CW        | CX | 1RA | PVC32  | 3.858                    |
| 100                                                                                                                                                                                     | M100                                                                | 24.0                   | 91.0                   | 86.1                   | 101.4 | 3.15            | 4.0  | 0.8             | 1.6 | 123.0        | 135.3           | 95.0              | 100                                         | CW        | CX | 1RA | LSF33  | 4.958                    |
| 115                                                                                                                                                                                     | M115                                                                | 24.0                   | 98.0                   | 101.5                  | 110.2 | 3.15            | 4.0  | 0.8             | 1.6 | 133.4        | 146.7           | 107.5             | 115                                         | CW        | CX | 1RA | LSF34  | 5.058                    |
| 130                                                                                                                                                                                     | M130                                                                | 24.0                   | 115.0                  | 110.2                  | 123.2 | 3.15            | 4.0  | 0.8             | 1.6 | 152.4        | 167.6           | 110.0             | 130                                         | CW        | CX | 1RA | LSF35  | 6.158                    |
| *For material options add the following suffix to the Ordering Reference; Brass (no suffix required); Nickel Plated Brass 'S'; 316 Grade Stainless Steel '4'; Copper Free Aluminium '1' |                                                                     |                        |                        |                        |       |                 |      |                 |     |              |                 |                   |                                             |           |    |     |        |                          |
| Examples: 20CW1RA5 = Nickel Plated Brass M20, 50CW1RA = Brass 50mm, 25CW1RA4 = Stainless Steel 25mm                                                                                     |                                                                     |                        |                        |                        |       |                 |      |                 |     |              |                 |                   |                                             |           |    |     |        |                          |
| Dimensions are displayed in millimetres unless otherwise stated                                                                                                                         |                                                                     |                        |                        |                        |       |                 |      |                 |     |              |                 |                   |                                             |           |    |     |        |                          |

NOTE: \*CMP SOLO LSF Halogen Free Shrouds also available for the full range on request. + Alternative armour clamping range available for non-standard armour sizes.  
Marine Approvals including Lloyds & ABS are also available from CMP Products.

CW = SWA, AWA  
CX = Braid, Tape, etc armour



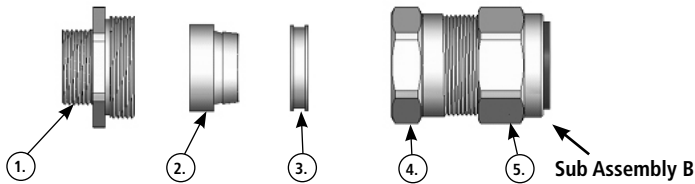
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# INSTALLATION INSTRUCTIONS FOR CMP CABLE GLAND TYPES CW & CX

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

- 1. Entry Component
- 2. Detachable Armour Cone
- 3. AnyWay Clamping Ring
- 4. Body
- 5. Outer Seal Nut



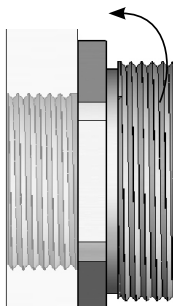
## PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE BEGINNING THE INSTALLATION

1. Separate components (1), (2) and (3) from Sub-Assembly B. If required, fit a shroud over the cable outer sheath. Prepare the cable by removing the cable outer sheath and the braid/armour to suit the geometry of the equipment. Remove a further 18mm (max) of outer sheath to expose the armour. If applicable remove any tapes or wrappings to expose the inner sheath.

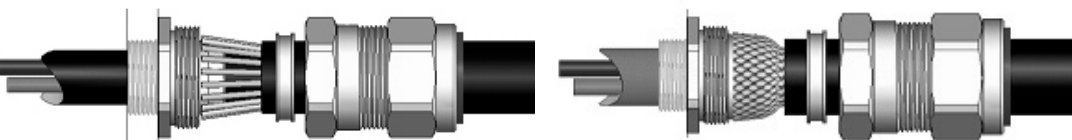
NOTE: On maximum size cables the clamping ring may only pass over the armour.



2. Secure the Entry Component (1) into the equipment as indicated.



3. Locate the Detachable Armour Cone (2) into the Entry Component. Pass the cable through the entry item and evenly space the braid/armour around the cone.

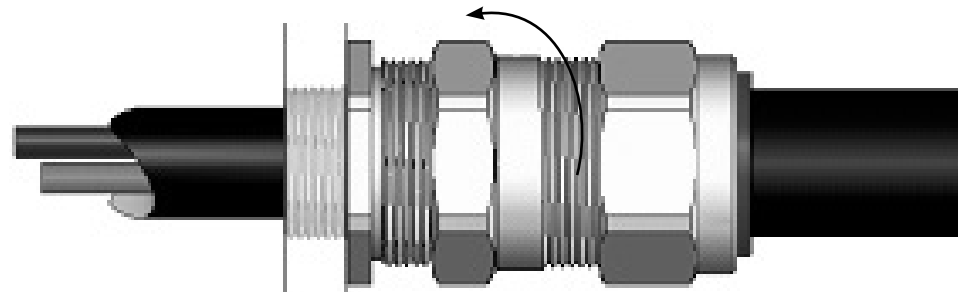


SWA

BRAID

4. While continuing to push the cable forward to maintain contact between the braid armour and the Cone (2), tighten the Body (4) by hand until the AnyWay Clamping Ring (3) is felt to have engaged the braid/armour.

Hold the Entry Component (1) with a spanner and tighten the Body (4) using a spanner until all available threads are used, the body and entry item are metal to metal and cannot be tightened further.



5. Only using finger pressure, tighten the outer seal nut assembly (5) until light resistance to tightening is met.

Then either use the outer seal tightening guide tape or table on the rear of the page to determine how much further to tighten the seal using a spanner (using the outer seal tightening guide is recommended).

Wrap the outer seal tightening guide tape around the cable to show the amount of spanner turns needed (as shown here). Make sure the correct side of the outer seal tightening guide tape is used depending on the cable gland size.

