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Sealing Underwater Cable Splices

Two Methods

Raychem Underwater Splice (UWCS)
- Mold in place

Adhesive lined, medium wall tube (MWTM)
- Heat shrinkable adhesive tube
- Mastic filler

Features
- Tested to 86 bar (on specified cables). "Raychem type approval test"
- Available in 110V & 22V.
- Installation kit contained in aluminum carry case. All tools needed to make joint
- Portable
- Full range of spares available.
Method 1 Description

UWCS - What is it?

This system is suitable for the jointing of R SPECIFIED, polyethylene jacked cables which are subject to water immersion and pressure.

The splice consists of molded polyethylene inserts which are encased in a heat recoverable sleeve.

Conductors are joined with in-line ferrules using a hand crimping tool.

The joint is placed in a purpose-made oven. The effect of temperature causes the joint components to melt with the cable jacked, when cool, gives a water and pressure tight joint.

Basic Components

Installation kit contains all tools and equipment required to produce sealed splice.

Splice kit contains heat shrink sleeve, inserts and ferrules.

Hot air gun, timer and purpose made oven with heat sinks.
## Basic Components

1. Prepare cable ends, install ferrules and joint assembly.

2. Place assembled joint into oven. Set temperature and timer.

3. Inspection - After heating, conductors, ferrule and cable ends are clearly visible through molten polyethylene.

4. Cooling - allow joint to cool in forced air.
## Recommended Cables

<table>
<thead>
<tr>
<th>Cable Description</th>
<th>EPD No.</th>
<th>Splice Kit</th>
<th>End Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.8mm dia, 6mm²</td>
<td>26732C</td>
<td>UCWS-1U/6.8</td>
<td>UWCS-END-CAP/6.8</td>
</tr>
<tr>
<td>6.8mm dia, 6mm²</td>
<td>26732C</td>
<td>UCWS-1U/10.9-IU/6.8</td>
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</tr>
<tr>
<td>7.6mm dia, 2 core</td>
<td>21735F</td>
<td>UCWS-2U/7.6</td>
<td>UWCS-END-CAP/7.6</td>
</tr>
<tr>
<td>7.6mm dia, 6mm²</td>
<td>21735F</td>
<td>UCWS-2U/7.6-IC/5.8</td>
<td></td>
</tr>
<tr>
<td>8.3mm dia, 2 core</td>
<td>21291G</td>
<td>UCWS-2S/8.3</td>
<td>UWCS-END-CAP/8.3</td>
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<tr>
<td>8.3mm dia, 3 core</td>
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<td>UCWS-3S/8.3</td>
<td>UWCS-END-CAP/8.3</td>
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<tr>
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<td>21736E</td>
<td>UCWS-4S/8.3</td>
<td>UWCS-END-CAP/8.3</td>
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<td>10.3mm dia</td>
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<td>UWCS-END-CAP/8.3</td>
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<td>10.9mm dia, 25mm²</td>
<td>31451A</td>
<td>UCWS-1U/10.9</td>
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<td>12.7mm dia, 3 core</td>
<td>36892C</td>
<td>UCWS-3U/12.7</td>
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</table>

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Specifications subject to change.

Catalog 7-1773446-2
Revised 10-07

Dimensions are shown for reference purposes only.

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