CMC7 AND CMC8 SERIES
Low Cost Insertion Conductivity Cells

Features
• Competitively priced
• Integral connection cable
• In line mounting

The CMC7 and CMC8 series of insertion conductivity cells are suitable for use in pure water measurement applications where cost and size are important factors. The principle advantage of this type of construction is that the cell constant is not affected by sample volume or the proximity of any pipework. The conductivity cells can be supplied with traceable certification.

The CMC7 conductivity cell is moulded in epoxy resin with three impregnated graphite electrodes and is fitted with 6 metres of connection cable.

The CMC8/001/PT43 conductivity cell is injection moulded in Polypropylene and uses two stainless steel coaxial electrodes and has a cell constant of K=0.0135. The cell is supplied complete with an integral 2 metre or 10 metre connection cable and features built in PT1000 temperature compensation. This cell is suitable for use on low pressure, low temperature pure water applications.
The CMC8/01 and CMC8/10 insertion conductivity cells are injection moulded in Polypropylene with 2 impregnated carbon electrodes and are supplied complete with either a 2 metre or 10 metre integral connection cable.

The CMC8/01 and CMC8/10 conductivity cells are non-temperature compensated cells and can be supplied with a 0.5" BSP tee as the constant is affected by sample volume. The CMC8/01 conductivity cell has a cell constant of $K=0.1$ and 2 protruding electrodes. The CMC8/10 conductivity cell has a cell constant of $K=1.0$, flush electrodes and is suitable for conductivity readings up to 1000 mS/cm.

The cells require no initial or periodic calibration and the only maintenance required is to keep the electrode surfaces clean.
## Specification

### CMC7/10
**Conductivity cell**
- **Maximum operating temperature**: 90°C
- **Maximum operating pressure**: 100psi
- **Wetted materials**: Epoxy Resin & Impregnated Graphite
- **Cable length**: Standard 6 metres
- **Cell constant**: K=1.0
- **Cell constant accuracy**: ±2%
- **Temperature compensation**: PT1000

### CMC7/100
**Conductivity cell**
- **Maximum operating temperature**: 90°C
- **Maximum operating pressure**: 100psi
- **Wetted materials**: Epoxy Resin & Impregnated Graphite
- **Cable length**: Standard 6 metres
- **Cell constant**: K=10.0
- **Cell constant accuracy**: ±2%
- **Temperature compensation**: PT1000

### CMC8/001/PT43
**Conductivity cell**
- **Maximum operating temperature**: 50°C
- **Maximum operating pressure**: 3.3 bar / 50 psi
- **Wetted materials**: Polypropylene, 316 Stainless Steel
- **Cable length**: 2 or 10 metres
- **Cell constant**: K=0.0135
- **Cell constant accuracy**: ±3%
- **Temperature compensation**: PT1000 RTD
- **Body colour**: Black

### CMC8/10
**Conductivity cell**
- **Maximum operating temperature**: 50°C
- **Maximum operating pressure**: 3.3 bar / 50 psi
- **Wetted materials**: Polypropylene, Impregnated Graphite
- **Cell constant**: K=1.0
- **Cable length**: 2 or 10 metres
- **Body colour**: Blue

### CMC8/01
**Conductivity cell**
- **Maximum operating temperature**: 50°C
- **Maximum operating pressure**: 3.3 bar / 50 psi
- **Wetted materials**: Polypropylene, Impregnated Graphite
- **Cell constant**: K=0.1
- **Cable length**: 2 or 10 metres
- **Body colour**: Red
Order Codes

<table>
<thead>
<tr>
<th>Type No</th>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC7/10</td>
<td>1354</td>
<td>K=1.0, 0.75&quot; BSP, no temperature compensation with 6 metres of connection cable.</td>
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<tr>
<td>CMC7/10/PT43</td>
<td>1457</td>
<td>K=1.0, 0.75&quot; BSP, with PT1000 temperature compensation and 6 metres of connection cable</td>
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<tr>
<td>CMC7/100</td>
<td>1360</td>
<td>K=10.0, 0.75&quot; BSP, no temperature compensation with 6 metres of connection cable.</td>
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<tr>
<td>CMC7/100/PT43</td>
<td>1468</td>
<td>K=10.0, 0.75&quot; BSP, with PT1000 temperature compensation and 6 metres of connection cable.</td>
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<tr>
<td>CMC8/001/PT43</td>
<td>1735</td>
<td>K=0.0135, 0.5&quot; BSP with stainless steel electrodes, PT1000 temperature compensation and 2 metres of cable</td>
</tr>
<tr>
<td>CMC8/001/PT43</td>
<td>1765</td>
<td>K=0.0135, 0.5&quot; BSP with stainless steel electrodes, PT1000 temperature compensation and 10 metres of cable</td>
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<tr>
<td>CMC8/01</td>
<td>1428</td>
<td>K=0.1, 0.5 &quot;BSP, no temperature compensation with 2 metres of connection cable.</td>
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<tr>
<td>CMC8/01</td>
<td>1433</td>
<td>K=0.1, 0.5 &quot;BSP, no temperature compensation with 10 metres of connection cable.</td>
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<tr>
<td>CMC8/10</td>
<td>1429</td>
<td>K=1.0, 0.5 &quot;BSP, no temperature compensation with 2 metres of connection cable.</td>
</tr>
<tr>
<td>CMC8/10</td>
<td>1434</td>
<td>K=1.0, 0.5 &quot;BSP, no temperature compensation with 10 metres of connection cable.</td>
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Note: Temperature, pressure & solution composition will influence the life expectancy of the measurement sensor.