CMC15, CMC24 and CMC25
Conductivity Cells for Pure Water Applications

Features

- High quality robust industrial sensors
- IP66 quick release connector simplifies installation and maintenance
- 0.5” BSP or triclamp process connection
- FDA approved wetted materials

Conductivity is an extremely sensitive measurement of the levels of dissolved materials in water. The CMC15, CMC24 & CMC25 cells in conjunction with an analyser are able to detect levels as low as 1 ppb concentration.

The construction of the cells ensures that they are ideally suited for industrial measurement of pure and ultra pure water while particular attention in the design has been made to eliminate traps where contaminated water may collect. The use of specially treated high-grade Stainless Steel electrodes ensures that the cells do not require initial periodic calibration. Cable connection is made via an IP66 plug that simplifies installation and maintenance.

Temperature effects on the measurement of pure water are large and non-linear. The LTH range of cells incorporate a precision PT1000 temperature element whose position in the cells is critical to the overall measurement accuracy. A 0.5°C temperature difference between the element and the solution could introduce an error in excess of 5%.
The CMC15/001/PT43 conductivity cell has a 0.5” BSP process connection and a cell constant of K=0.01.

The CMC24 conductivity cell is available with a triclamp process connection and a cell constant of K=0.01 or 0.1.

The CMC25/001/PT43 conductivity cell has a triclamp process connection and a cell constant of K=0.01. This cell has a high temperature and pressure specification to allow for steam sterilisation at up to 135°C.

The cells can be supplied with traceable certification and are manufactured from FDA approved materials making them ideal for pharmaceutical applications.

CMC15
CMC24 Installation

NOTE: CELL MUST BE COMPLETELY IMMERSED, NO AIR POCKETS.
ENSURE CELL IS SITED SUITABLY FOR AIR PURGING.
CMC25

WETTED PARTS
316 ST/STL
PEEK
SILICONE SEALS

Cable Assemblies
Cable Assemblies for use with HCT63 Series Transmitters

Specification

CMC15/001/PT43 conductivity cells

Cell constant: 
K=0.01

Cell constant accuracy: 
±2%

Process connection:  
0.5" BSP male thread

Wetted materials: 
316L stainless steel, PEEK, silicone seals

Maximum operating temperature:  
135°C

Maximum operating pressure:  
10 bar/150 PSI

Temperature compensation:  
PT1000

CMC24 conductivity cells

Cell constant:  
K=0.01, 0.1

Cell constant accuracy:  
±2%

Process connection:  
1.5", 2", 2.5", 3" Triclamp

Wetted materials:  
316L stainless steel, PEEK, silicone seals

Maximum operating temperature:  
100°C

Maximum operating pressure:  
10 bar/150 PSI

Temperature compensation:  
PT1000

CMC25/001/PT43 conductivity cells

Cell constant:  
K=0.01

Cell constant accuracy:  
±2%

Process connection:  
1.5", 2", 2.5", 3" Triclamp

Wetted materials:  
316L stainless steel, PEEK, silicone seals

Maximum operating temperature:  
135°C

Maximum operating pressure:  
10 bar/150 PSI

Temperature compensation:  
PT1000
**Order Codes**

<table>
<thead>
<tr>
<th>Type No</th>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC15/001/PT43</td>
<td>1459</td>
<td>K=0.01, 0.5&quot; BSP process connection. Terminated with a C16P connector.</td>
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<tr>
<td>CMC24/001/PT43</td>
<td>1463</td>
<td>K=0.01, 2&quot; triclamp process connection, 70mm insertion. Terminated with a C16P connector.</td>
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<tr>
<td>CMC24/001/PT43</td>
<td>1476</td>
<td>K=0.01, 1.5&quot; triclamp process connection, 70mm insertion. Terminated with a C16P connector.</td>
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<tr>
<td>CMC24/01/PT43</td>
<td>1470</td>
<td>K=0.1, 2&quot; triclamp process connection, 70mm insertion. Terminated with a C16P connector.</td>
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<tr>
<td>CMC24/01/PT43</td>
<td>1495</td>
<td>K=0.1, 1.5&quot; triclamp process connection, 70mm insertion. Terminated with a C16P connector.</td>
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<tr>
<td>CMC25/001/PT43</td>
<td>1465</td>
<td>K=0.01, 1.5&quot; triclamp process connection. Terminated with a C16P connector. Able to be steam sterilised.</td>
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<tr>
<td>CMC25/001/PT43</td>
<td>1493</td>
<td>K=0.01, 2&quot; triclamp process connection. Terminated with a C16P connector. Able to be steam sterilised.</td>
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<tr>
<td>CMC25/001/PT43</td>
<td>1492</td>
<td>K=0.01, 3&quot; triclamp process connection. Terminated with a C16P connector. Able to be steam sterilised.</td>
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<tr>
<td>54D/C16</td>
<td>138/131</td>
<td>5 metre type 54D connection cable, fitted with C16P connector.</td>
</tr>
<tr>
<td>54D/C16</td>
<td>138/322</td>
<td>10 metre type 54D connection cable, fitted with C16P connector.</td>
</tr>
<tr>
<td>54D/C16</td>
<td>138/323</td>
<td>15 metre type 54D connection cable, fitted with C16P connector.</td>
</tr>
<tr>
<td>54D/C16</td>
<td>138/327</td>
<td>20 metre type 54D connection cable, fitted with C16P connector.</td>
</tr>
<tr>
<td>54D/C16</td>
<td>138/326</td>
<td>30 metre type 54D connection cable, fitted with C16P connector.</td>
</tr>
<tr>
<td>54D/C16</td>
<td>138/181</td>
<td>5 metre type 54D connection cable, fitted with right angle C16P connector.</td>
</tr>
<tr>
<td>54D/C16</td>
<td>138/132</td>
<td>Additional 54D connection cable to be added to 138/131 &amp; 138/181.</td>
</tr>
<tr>
<td>54D/C16</td>
<td>138/330</td>
<td>5 metre conductivity cell connection cable for use with wall mounting HCT63 conductivity transmitter.</td>
</tr>
<tr>
<td>54D/C16</td>
<td>138/331</td>
<td>10 metre conductivity cell connection cable for use with wall mounting HCT63 conductivity transmitter.</td>
</tr>
</tbody>
</table>

Note: Temperature, pressure & solution composition will influence the life expectancy of the measurement sensor.