

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 1ppb 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%.

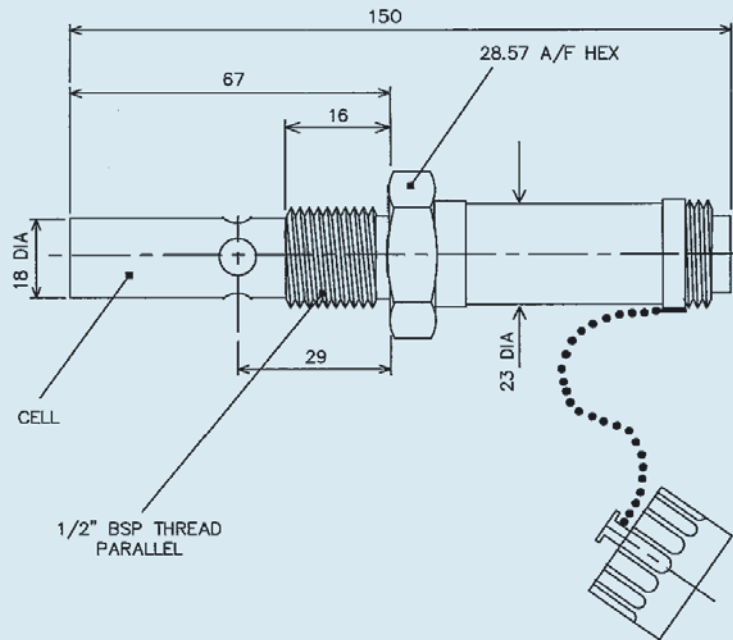
The CMC15/001/PT43 conductivity cell has a 0.5" BSP process connection and a cell constant of $K=0.01$.

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.

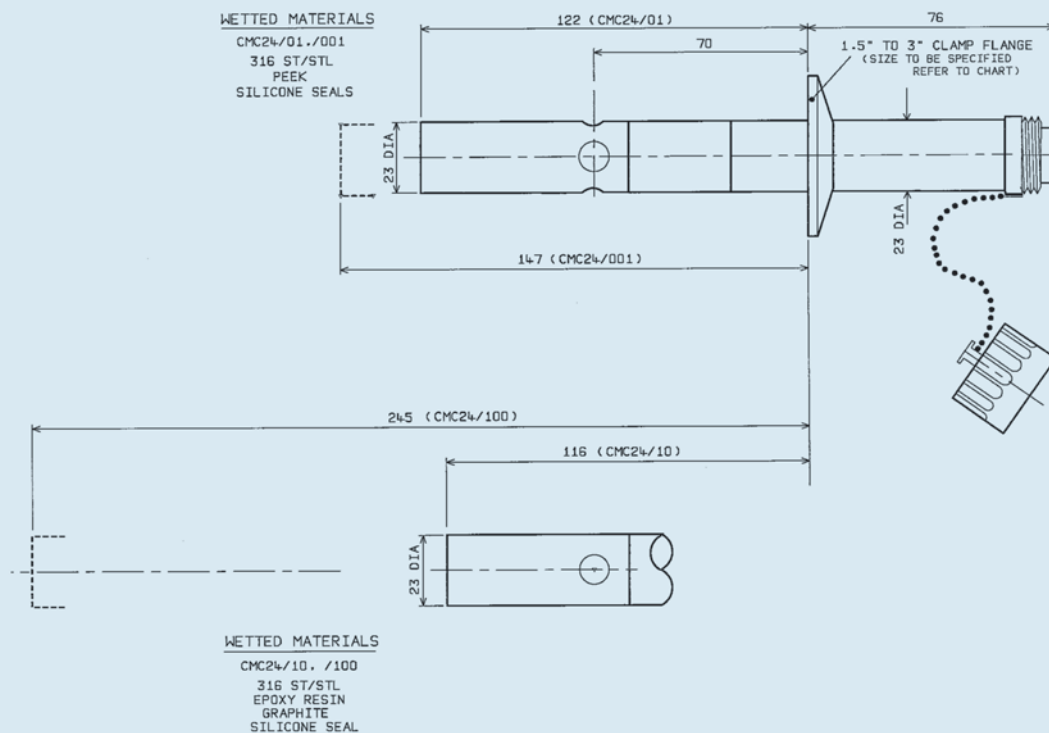
CMC15



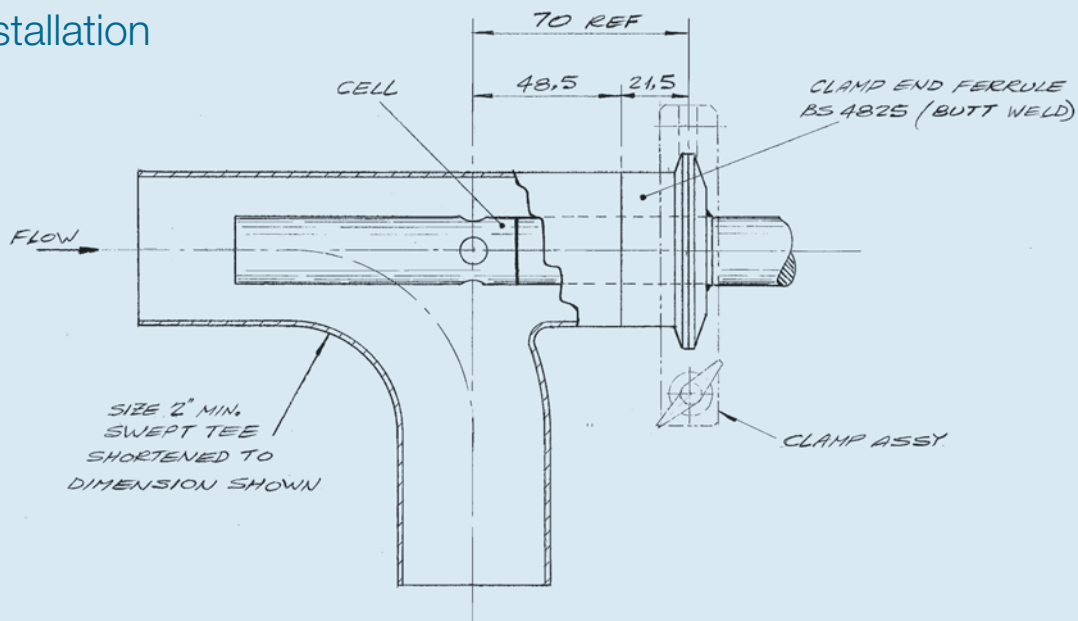
WETTED PARTS.

316 ST/STL
PEEK
SILICONE SEALS

CMC24

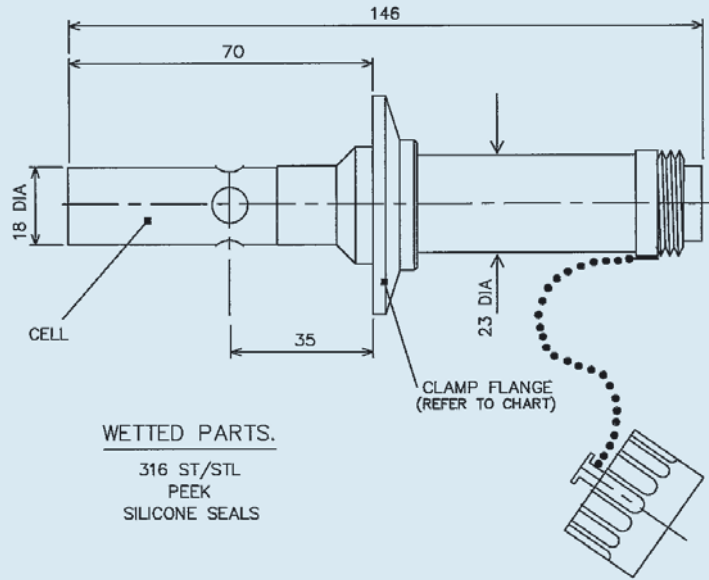


CMC24 Installation

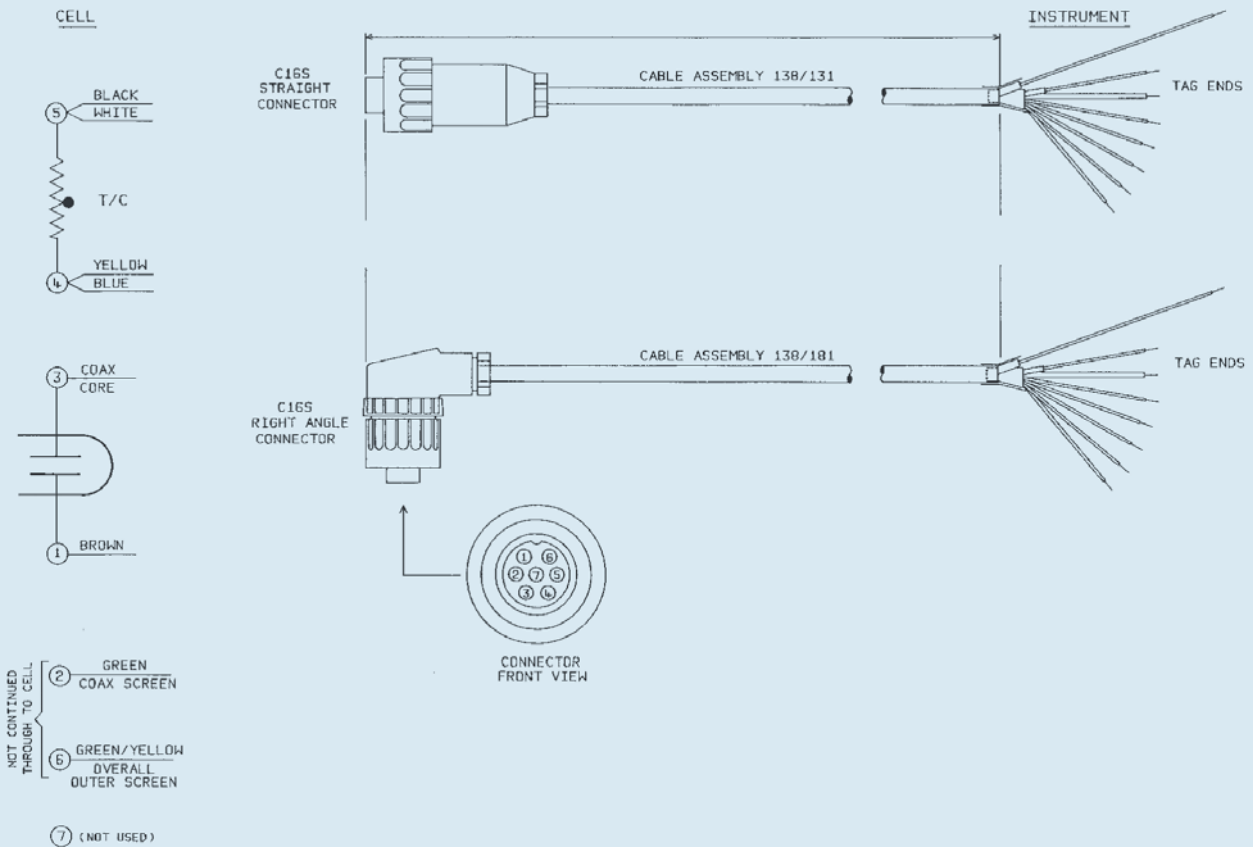


NOTE:- CELL MUST BE COMPLETELY IMMERSSED, NO AIR POCKETS. ENSURE CELL IS SITED SUITABLY FOR AIR PURGING.

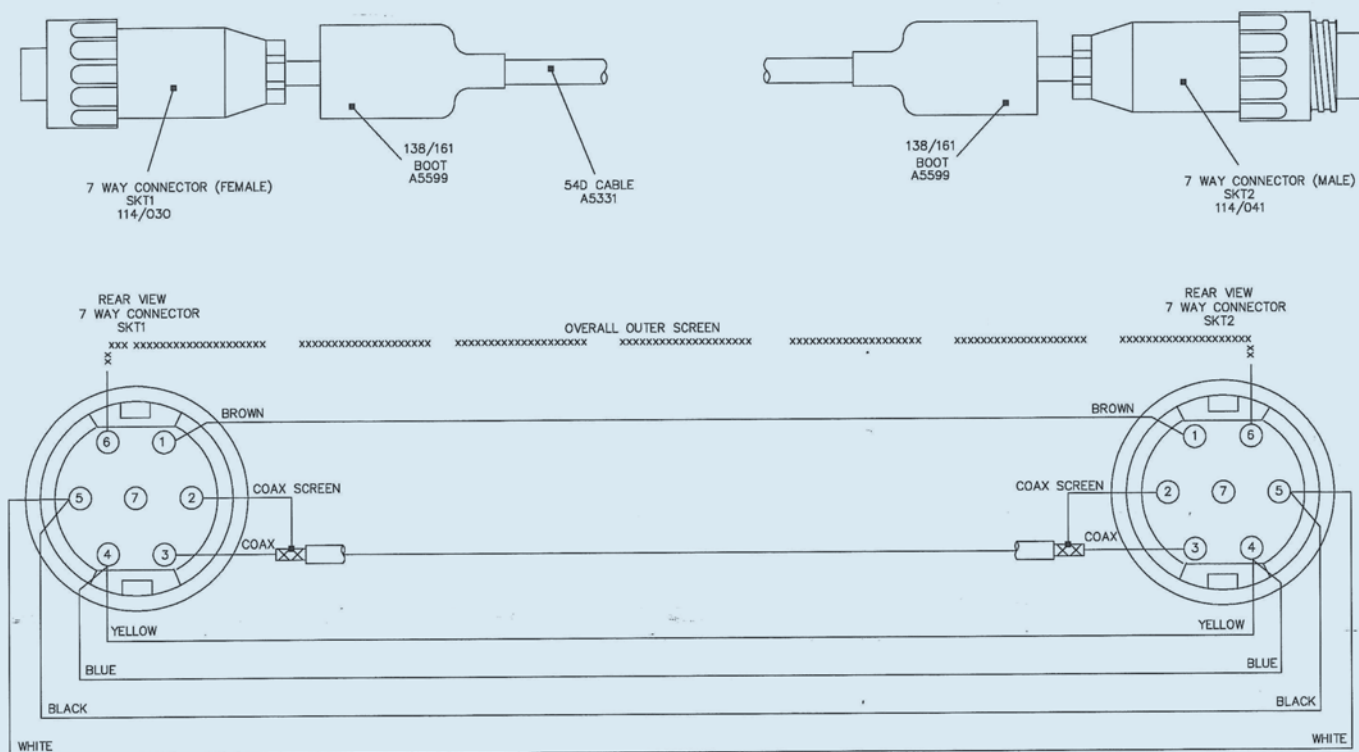
CMC25



Cable Assemblies



Cable Assemblies for use with HCT63 Series Transmitters



NOTES.

1. OVERALL OUTER SCREEN AND COAX SCREENS MUST NOT CONTACT OTHER LEADS OR EACH OTHER

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

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

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



These products comply with current European Directives