1 PREPARATION

1.1 Checking the Code Number – Table 1.1

Basic Type No.	Mounting & Version	Cell Constant (K)	Process Connection Type	Temperature Compensation
Code Characters				
1,2	3,4,5	6	7	8
20 Electrolytic conductivity measuring cells	**85/** Withdrawable (stainless steel)	**3** 0.05 **4** 1.0	**0** Use with valve 2089	**0** None **5** Pt100 resistance thermometer

Table 1.1 Checking the Conductivity Cell Code Number

2 MECHANICAL INSTALLATION

2.1 Siting Requirements – Fig 2.1

Caution. Ensure the integral cable (where applicable) does not touch hot or abrasive objects when the plug is connected to the bulkhead socket.

Note. Allow sufficient clearance for easy removal of cell for cleaning – see Fig. 2.2 for overall dimensions of cells.

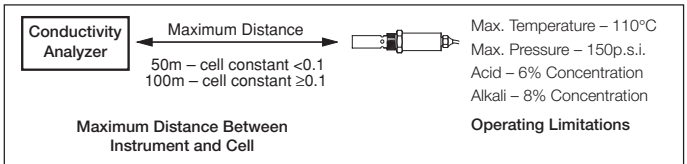

Fig. 2.1 Siting Requirements

2.2 Cleaning the Conductivity Cell

Before installing the conductivity cell, clean the electrodes as follows:

Thoroughly clean the electrode bore with a nylon-bristle brush (supplied) and a warm detergent solution. For more tenacious deposits a 2% hydrochloric acid solution may be used. After cleaning, thoroughly rinse the cell with distilled water and view the bore against a bright light to ensure that the interior surfaces are evenly wetted, i.e. free from grease deposits. Avoid wetting the electrical connection terminals.

2.3 Overall Dimensions, Conductivity Cell – Fig. 2.2

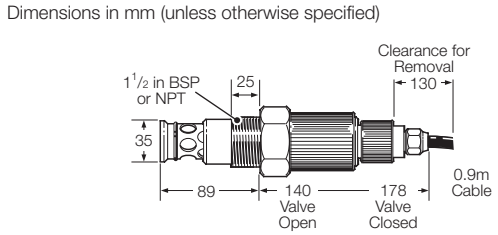

Fig. 2.2 Overall Dimensions, Conductivity Cell

2.4 Installing the Conductivity Cell – Fig 2.3

Caution. After cleaning and installing the conductivity cell, ensure it remains filled with liquid and is not allowed to dry out and ensure that the electrode bore remains fully immersed at minimum fluid levels.

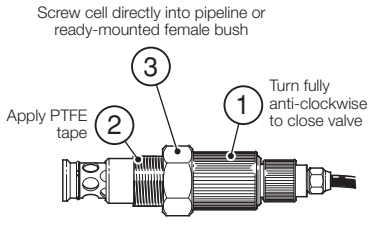

Fig. 2.3 Installing the Conductivity Cell

2.5 Installing the Bulkhead Socket – Fig. 2.4

Mount the socket at a convenient location close to the cell. Refer to Fig. 2.4 for overall dimensions and fixing details.

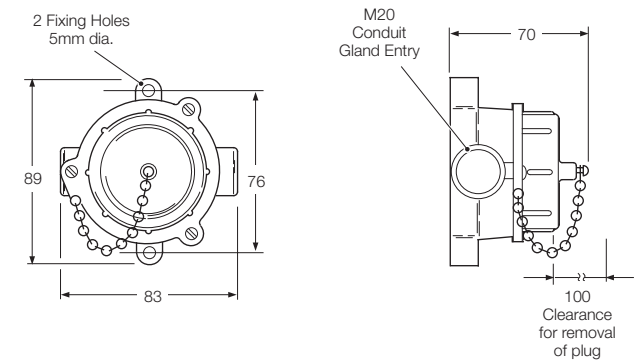

Fig. 2.4 Overall Dimensions, Bulkhead Socket

3 ELECTRICAL CONNECTIONS

Warning. Before making any connections, ensure that the power supply, any high voltage-operated control circuits and high common mode voltages are switched off

3.1 Conductivity Cell to Analyzer Connections

Information. Use cable part no. J/0233/820 to connect the bulkhead socket to the analyzer.

3.1.1 Conductivity Cell Connections – Fig. 3.1

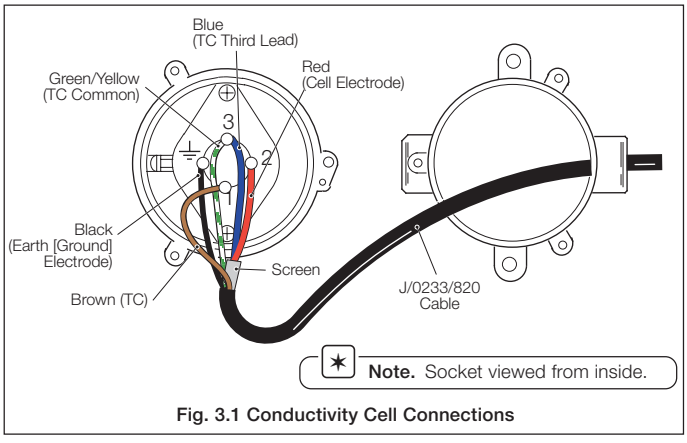

Fig. 3.1 Conductivity Cell Connections

3.1.2 Analyzer Connections

Refer to the analyzer's User Guide for details of connecting cable J/0233/820 to the analyzer.

3.2 Direct Cell-to-Analyzer Connection

If required, the bulkhead socket can be removed from the Model 2025 Conductivity Cell and the cell connected directly to the analyzer. Table 3.1 lists the cell cable core colors and associated cell functions – refer to the analyzer's User Guide for connection details.

Cell Cable Core Color	Cell Function
Green	TC Common
Yellow	TC
Red	Cell Electrode
Blue	Earth (Ground) Electrode

Table 3.1 Cell Cable Core Colors and Cell Functions