### Use of Instructions

brocess or surroundings.

	VI/ Caution.
	~~~
	the risk of injury or death.
attention to	An instruction that draws
	. Marning.

the risk of damage to the product,

An instruction that draws attention to

information or technical details Further reference for more detailed Information.

Clarification of an instruction or

additional information.

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damaged equipment could, under certain operational conditions, result in degraded associated with equipment or property damage, it must be understood that operation of Although Warning hazards are related to personal injury, and Caution hazards are

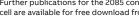
Information in this manual is intended only to assist our customers in the efficient operation with all Warning and Caution notices. process system performance leading to personal injury or death. Therefore, comply fully

Communications Department. contents are not to be reproduced in tull or part without prior approval of the Marketing of our equipment. Use of this manual for any other purpose is specifically prohibited and its

### Health and Safety

- To ensure that our products are safe and without risk to health, the following points
- :beton ed teum
- bloceeding. 1. The relevant sections of these instructions must be read carefully before
- 2. Warning labels on containers and packages must be observed.
- suitably trained personnel and in accordance with the information given. 3. Installation, operation, maintenance and servicing must only be carried out by
- occurring when operating in conditions of high pressure and/or temperature. 4. Normal satety precautions must be taken to avoid the possibility of an accident
- and powders kept dry. Normal safe handling procedures must be used. 5. Chemicals must be stored away from heat, protected from temperature extremes
- 6. When disposing of chemicals ensure that no two chemicals are mixed.

address on the back cover, together with servicing and spares intormation. relevant hazard data sheets (where applicable) may be obtained from the Company ραιειλ ααλιce couceluiud rue nee or rue ednibueur gescupea in ruis maunai or any



or by scanning this code:

Search for or click on

Data Sheet 2085

DS/CONCEL-EN

Conductivity cells

For more information

# Further publications for the 2085 conductivity

# cell are available for free download from:

## www.abb.com/measurement





ABB MEASUREMENT & ANALYTICS | INSTALLATION GUIDE | IM/2085 REV. D

## Model 2085

Withdrawable stainless steel conductivity cell

## Measurement made easy



Model 2085 withdrawable stainless steel conductivity cell

09.2018 M/2085 Rev. D

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Copies of operating and maintenance records relating to the alleged faulty unit.

In the event of a failure under warranty, the following documentation must be

clean, dry environment, in accordance with the Company's published specification.

Prior to installation, the equipment reterred to in this manual must be stored in a

Contact one of the following offices for details of your nearest Service and Repair Centre.

We provide a comprehensive after sales service via our Worldwide Service Organization.

1. A listing evidencing process operation and alarm logs at time of failure.

Periodic checks must be made on the equipment's condition.

provided as substantiation:

Client Warranty

E154 E88 611 (0) 1+ :XE1

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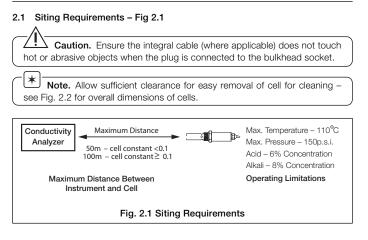
### 1 PREPARATION

### 1.1 Checking the Code Number - Table 1.1

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

Table 1.1 Checking the Conductivity Cell Code Number

### 2 MECHANICAL INSTALLATION

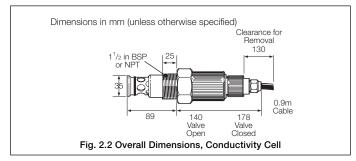


### 2.2 Cleaning the Conductivity Cell

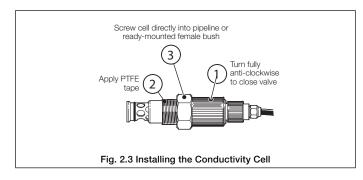
Before installing the conductivity cell, clean the electrodes as follows:

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

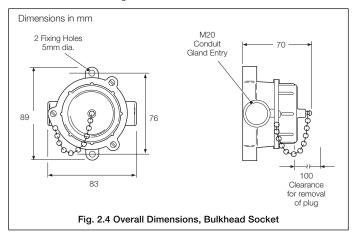


### 2.4 Installing the Conductivity Cell - Fig 2.3



### 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.



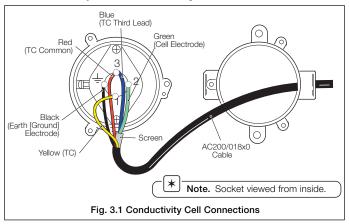
### **3 ELECTRICAL CONNECTIONS**

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. AC200/018x to connect the bulkhead socket to the analyzer.

### 3.1.1 Conductivity Cell Connections - Fig. 3.1



### 3.1.2 Analyzer Connections

Refer to the analyzer's User Guide for details of connecting cable AC200/018x 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
Red	TC Common
Yellow	TC
Green	Cell Electrode
Blue	Earth (Ground) Electrode

Table 3.1 Cell Cable Core Colors and Cell Functions