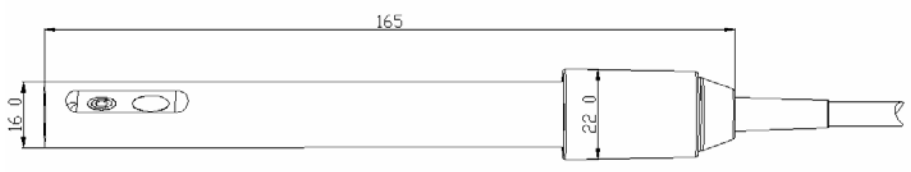
Suntex 8-243 Conductivity Cell Operation Manual

1. Overview

The probe has adopted 4-electrode conductivity measuring technique. Comparing with 2-electrode, 4-electrode has overcome congenital deficiency for high conductivity and cab to use for omni-bearing and omni-range measurement. The probe is compliant with IP67 so it ca be used under bad environment conditions.

2. Specifications

Electrode material	Graphite
Body material	Epoxy resin
Measurement principle	4-electrode measurement
Measuring range	10μS/cm～500mS/cm
Standard cell constant	≒0.475
Pressure	3×10^5Pa(3bar)
Measurement insertion length	＞35mm
Storage temperature	-20…70℃
Storage method	Dry
Outer diameter	ψ16 mm，length 165mm
Cable length	1.2m
Weight	106g
Drawing	



3. Maintenance

The adhered substances will affect the measuring values and measuring rate, so please pay attention for maintenance. Upon cleaning, please use soft brushes or Q-tips to clean the probe graphite

Contamination from:	**Clean method**
Fat/ Oil	Clean with warm water which contains light washing-up cleaner
Lime sediments	Immerse in 2~5% HCl for 5 minutes

4. Trouble shooting

Error symptom	**Probable reason**	**Remedy**
Measurement error	Electrode contaminated	Clean the electrode
	Incorrect Cell constant settings	Correct the cell constant of the meter.
	Incorrect Temp. compensation settings	Correct the temperature compensation of the meter.
	Electrode damaged	Check/ correct the cell constant
	Bubbles around electrode	Stir/ eliminate bubbles
Unstable measurement value	Bubbles around electrode	Stir/ eliminate bubbles
Resistivity measurement is over range, or conductivity measurement is zero.	Electrode plug is not correctly installed.	Check/ reinstall the plug
	Electrode damaged	Replace electrode
Temperature measurement error	The sensor was not immersed deep enough in the sample solution.	Immerse the electrode at least 35mm in the solution.
	Compare with standard temperature	Using standardized temp. sensor to calibrate the meter.
Incorrect temperature display	Electrode plug is not correctly installed.	Check the electrode plug and reinstall it to the correct position.
	Temp. sensor damaged	Replace electrode