

Thermo Scientific Orion Conductivity Calibration Kit

The conductivity calibration kit contains six resistors that simulate standard conductance values on a meter. The resistors may be used to verify proper meter function by comparing the meter reading to the conductance of the resistor.

Note: The conductivity calibration kit verifies proper meter function only. After the meter function is verified, the conductivity cell must be calibrated. Calibrate the cell constant of the conductivity cell according to the meter and cell user guides.

Resistor Specifications

Each resistor is labeled alphabetically. The actual resistance and conductance values are printed on each resistor. The nominal resistance and conductance values are listed on the label of the calibration kit box for reference.

Resistor	Nominal Resistance Value	Nominal Conductance Value	Temperature Range
A	1000 K Ω \pm 0.1%	1 μ S	0 to 50 °C
B	100 K Ω \pm 0.1%	10 μ S	0 to 50 °C
C	10 K Ω \pm 0.1%	100 μ S	0 to 50 °C
D	1 K Ω \pm 0.1%	1000 μ S	0 to 50 °C
E	100 Ω \pm 0.1%	10 mS	0 to 50 °C
F	10 Ω \pm 0.1%	100 mS	0 to 50 °C

Verification of Meter Accuracy

Remove the conductivity cell and temperature probe from the meter. Perform a manual calibration on the meter and set the cell constant to 1.000 cm⁻¹. Set the temperature value to 25.0 °C and turn the temperature compensation off. Refer to the appropriate meter user guide for directions on cell constant and temperature adjustment.

Attach a resistor to the meter by aligning the tabs on the resistor and meter. Push the resistor in until firmly in place. If the alignment is incorrect, the resistor and/or meter input can be damaged. When the meter indicates a stable conductivity value, compare the displayed value to the actual conductance of the resistor. The displayed conductivity value for each resistor should fall within the accuracy specification of the meter plus \pm 0.5% of the actual resistor conductance. Since the resistor kits are made to test the accuracy of the meter, it is important that each displayed resistor value falls within the meter accuracy specification.

If the displayed reading is not in the correct range, contact Technical Support. Within the United States call 1.800.225.1480 and outside the United States call 978.232.6000 or fax 978.232.6031. In Europe, the Middle East and Africa, contact your local authorized dealer.

Ordering Information

Cat. No. 1010001 contains resistors with 8 pin MiniDIN connectors that are compatible with the 3-Star conductivity meter, 4-Star pH/conductivity meter, 5-Star pH/DO/conductivity meter and 5-Star pH/ISE/DO/conductivity meter.

Cat. No. 011220 contains resistors with 8 pin DIN connectors that are compatible with the 105A+, 115A+, 125A+, 145A+ and 150A+ meters.

Cat. No. 011221 contains resistors with 8 pin waterproof DIN connectors that are compatible with the 130A, 131S, 135A, 136S, 162A, 550A and 555A meters.

Cat. No.	Description
1010001	Conductivity calibration resistor kit for Star Series conductivity meters, 8 pin MiniDIN connection
011220	Conductivity calibration resistor kit for 105A+, 115A+, 125A+, 145A+ and 150A+ meters, 8 pin DIN connection
011221	Conductivity calibration resistor kit for 130A, 131S, 135A, 136S, 162A, 550A and 555A meters, 8 pin waterproof DIN connection
011008	100 μ S/cm conductivity/TDS standard, 5 x 60 mL bottles
01100910	147 μ S/cm conductivity standard, 10 pouches
011007	1413 μ S/cm conductivity/TDS standard, 5 x 60 mL bottles
01100710	1413 μ S/cm conductivity/TDS standard, 10 pouches
011006	12.9 mS/cm conductivity/TDS standard, 5 x 60 mL bottles
01100610	12.9 mS/cm conductivity/TDS standard, 10 pouches
011005	111 mS/cm conductivity standard, 5 x 60 mL bottles
01100510	111 mS/cm conductivity standard, 10 pouches
990106	0.1 M KCl conductivity standard, 475 mL bottle

Environmental Instruments Water Analysis Instruments

166 Cummings Center
Beverly, MA 01915 USA

254783-001 Rev.A 0807

Toll Free: 1-800-225-1480
Tel: 1-978-232-6000
Dom. Fax: 1-978-232-6015
Int'l Fax: 978-232-6031
email: info.water@thermofisher.com
www.thermo.com/water

© 2007 Thermo Fisher Scientific Inc.
All rights reserved.

