

1865-FluidTester

Liquid Cell

User and Service Manual

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1865-FLUID im/October 2013

◆ PRECISION INSTRUMENTS FOR TEST AND MEASUREMENT ◆



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We warrant that this product is free from defects in material and workmanship and, when properly used, will perform in accordance with applicable IET specifications. If within one year after original shipment, it is found not to meet this standard, it will be repaired or, at the option of IET, replaced at no charge when returned to IET. Changes in this product not approved by IET or application of voltages or currents greater than those allowed by the specifications shall void this warranty. IET shall not be liable for any indirect, special, or consequential damages, even if notice has been given to the possibility of such damages.

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WARNING



OBSERVE ALL SAFETY RULES
WHEN WORKING WITH HIGH VOLTAGES OR LINE VOLTAGES.

**Dangerous voltages may be present inside this instrument. Do not open the case
Refer servicing to qualified personnel**

HIGH VOLTAGES MAY BE PRESENT AT THE TERMINALS OF THIS INSTRUMENT

WHENEVER HAZARDOUS VOLTAGES (> 45 V) ARE USED, TAKE ALL MEASURES TO
AVOID ACCIDENTAL CONTACT WITH ANY LIVE COMPONENTS.

USE MAXIMUM INSULATION AND MINIMIZE THE USE OF BARE
CONDUCTORS WHEN USING THIS INSTRUMENT.

Use extreme caution when working with bare conductors or bus bars.

WHEN WORKING WITH HIGH VOLTAGES, POST WARNING SIGNS AND
KEEP UNREQUIRED PERSONNEL SAFELY AWAY.



CAUTION



DO NOT APPLY ANY VOLTAGES OR CURRENTS TO THE TERMINALS OF THIS
INSTRUMENT IN EXCESS OF THE MAXIMUM LIMITS INDICATED ON
THE FRONT PANEL OR THE OPERATING GUIDE LABEL.

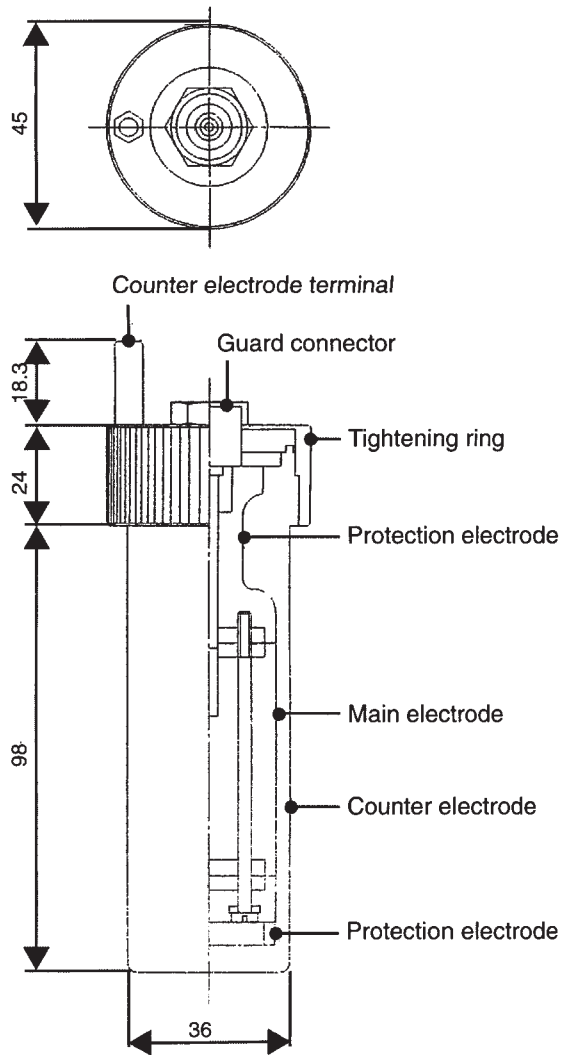
MEASUREMENT PROCEDURE

MEASUREMENT PREPARATIONS

1. Confirm that the electrode is washed and cleaned.
2. Confirm that a value larger than the insulation resistance of a measured sample is indicated with the insulation resistance measured using an empty electrode. If the measured resistance value is $10^{13} \Omega$, it is necessary that the resistance value measured using an empty electrode be more than $10^{14} \Omega$. If a measured sample insulation resistance is unknown, clean the device so that the insulation resistance meter used indicates the maximum value of infinity.

MEASUREMENT

1. Remove the device tightening ring, then pour a measured sample in the electrode twice or three times for device washing with the measured sample liquid.
2. Pour an approximate 25 cc sample into the device then firmly tighten ring.
3. Connect the device to the megohmmeter with the center conductor to (+) terminal, guard on cell to guard terminal, and counter electrode to (-) terminal on the megohmmeter using the supplied cables and adapter.
4. Cell should be placed on insulator during testing and should not be touched during testing.
5. Sample volume resistivity becomes as follows: Volume resistivity = Measured insulation resistance from meter * Cell Constant ($\Omega \cdot \text{cm}$)
6. Cell Constant is 492 cm



(Unit: mm)