



- 1 SGJ sleeve
- 2 Shaft
- 3 PTFE protective sleeve
- 4 Thermistor

1 Thermoprobe 6.9011.020/6.9011.040

1.1 General

Immediately after receiving the electrode, check to make sure that it works properly. Electrodes that do not work properly must be sent back for warranty processing within two months (starting from the day of delivery). If the defect is proven to be due to a material or manufacturing defect, the electrode will be replaced at no charge. The customer is responsible for shipping costs.

Thermoprobes are used together with 859 Titrotherm titration systems. The Thermoprobe is a thermometric sensor. It has a short response time and high resolution. This makes it possible to measure with high precision the smallest temperature changes that occur during a titration. Unlike potentiometric sensors, Thermoprobes do not have to be calibrated.

These precision sensors must be handled accordingly with appropriate care. Make sure that the following instructions are complied with:

1.2 Selecting the sensor in accordance with the application

Selecting the right sensor based on the application and chemicals in use is very important:

a) 6.9011.020: aqueous/nonaqueous without HF

This sensor can be used in either aqueous or nonaqueous solutions.



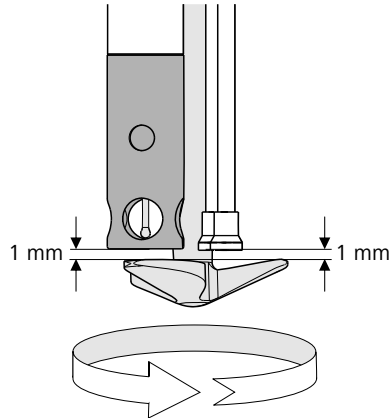
CAUTION

The 6.9011.020 sensor may not under any circumstances be used in acidic solutions containing fluoride!

b) 6.9011.040: containing HF / aqueous

This sensor can also be used in acidic solutions containing fluoride. The shaft (2) and thermistor (4) on the sensor have an HF-resistant coating. It is not resistant to organic solvents.

1.3 Positioning the sensor



Positioning the Thermoprobe

The sensor should be installed as shown in the figure. A high stirring rate is very important. Make sure that there is a sufficient amount of sample in the vessel so that the sensor is immersed at least 1 cm deep in the solution even when the solution is stirred at high speed (vortex!).

1.4 Disconnecting the sensor

To disconnect the sensor, the outer plug sleeve on the plug must first be pulled back.

Never use the cable to pull out the sensor!

1.5 Cleaning the sensor



CAUTION

Never treat the sensor in an ultrasonic bath since this may damage the sensor.



CAUTION

The thermistor (4) is very sensitive and can be damaged significantly by simply touching it with your finger or other objects (such as a toothbrush).

The Thermoprobe can be cleaned by rinsing it or briefly immersing it in water or another solvent (such as H_2SO_4 for BaSO_4 precipitates). While cleaning, ensure that the entire PTFE protective sleeve (3) is immersed. The Thermoprobe is intended to be rinsed after every sample series and should not be left in the solution too long once the titration has finished.

The outside of the shaft, including the PTFE protective sleeve (2, 3), can be carefully cleaned with a cloth. Never mechanically clean the inside of the PTFE protective sleeve, because this would damage the thermistor.



CAUTION

The PTFE protective sleeve (3) of the sensor should not be removed, because this could damage the thermistor.

1.6 Storing the sensor

The sensor must be stored dry (in the storage vessel if possible).