

FL 6500/8500 Water Jacketed Single Cell Holder Installation Instructions

This instruction sheet describes the installation of this accessory which is used with the FL 6500/8500 Fluorescence Spectrometer.

NOTE: *Read these instructions before you install this accessory.*

Contacting PerkinElmer

Supplies, replacement parts, and accessories can be ordered directly from PerkinElmer, using the part numbers.

See our website:

<http://perkinelmer.com>

PerkinElmer's catalog service offers a full selection of high-quality supplies.

To place an order for supplies and many replacement parts, request a free catalog, or ask for information:

If you are located within the U.S., call toll free 1-800-762-4002, 8 a.m. to 8 p.m. EST. Your order will be shipped promptly, usually within 24 hours.

If you are located outside of the U.S., call your local PerkinElmer sales or service office.

Features

- Controls the temperature by circulation of liquid
- Suitable size for the standard cells
- Excellent durability



Figure 1 FL 6500/8500 Water Jacketed Single Cell Holder [P/N:N4201011]



PerkinElmer, 710 Bridgeport Avenue,
Shelton, CT 06484-4794, U.S.A

Produced in the USA.

Dimensions and Specifications

Physical Characteristic	Specification
Outline Dimensions (mm)	130 x 267 x 93 (WDH)
Inner Dimension (mm)	13 x 13.6 x 19.5 (WDH)
Weight (Kg)	0.86

Environmental Conditions for Operation

Specification	Comment
RT ~ 100°C	Controls the temperature using Circulator

Configuration of the Water Jacketed Single Cell Holder

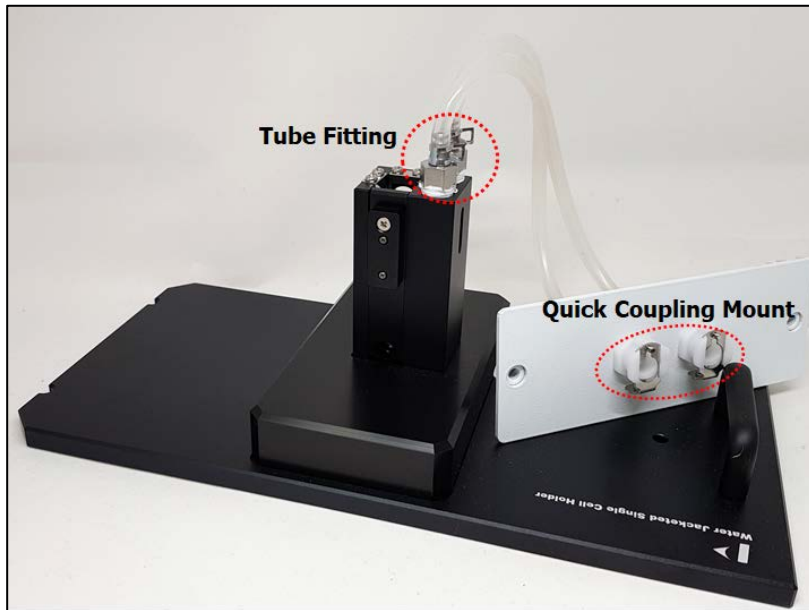


Figure 2 Water Jacketed Single Cell Holder Configuration



Figure 3 Male connector of quick coupling (2 ea)

Installation

1. Prepare the FL 6500/8500 Fluorescence Spectrometer to install this accessory.
2. Connect the power cord and the communication cable.
3. Loosen the accessory fixing bolt to take apart the existing cell holder.

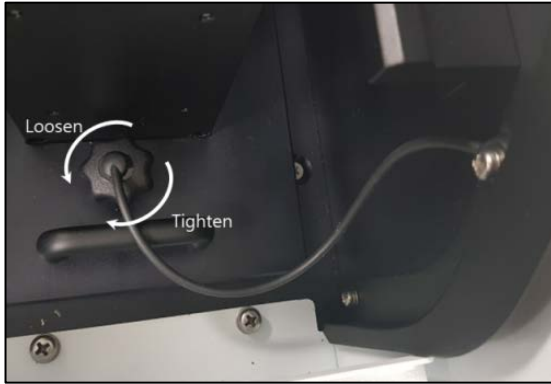


Figure 4 Loosening the Accessory Fixing Bolt

4. Pull out the cell holder by hand.

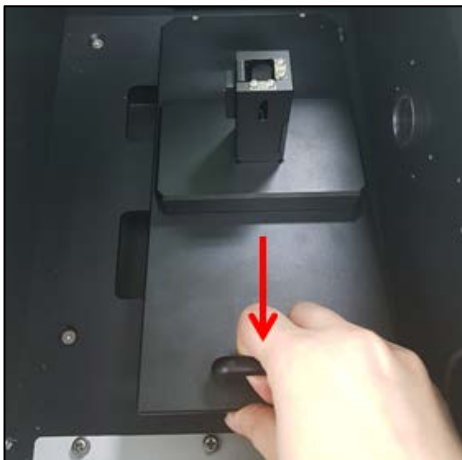


Figure 5 Pulling out the Cell Holder

5. Remove the existing front cover plate.



Figure 6 Front Cover Plate

6. After checking the pogo pin position of the sample compartment, attach the Water Jacketed Single Cell Holder to the pogo pin.

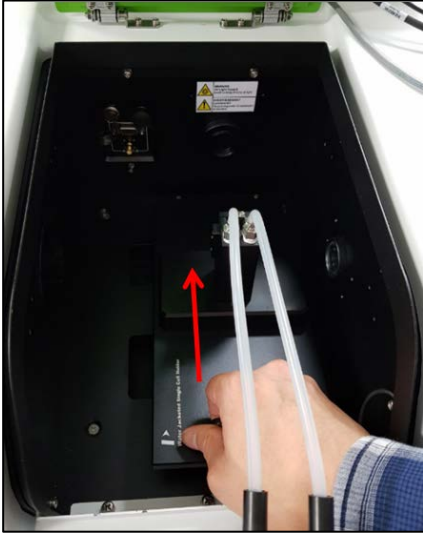


Figure 7 Inserting the Water Jacketed Single Cell Holder

7. Fix the front cover plate attached to the Water Jacketed Single Cell Holder and tighten the bolts.



Figure 8 Fixing the Front Cover Plate

8. Tighten the accessory fixing bolt.

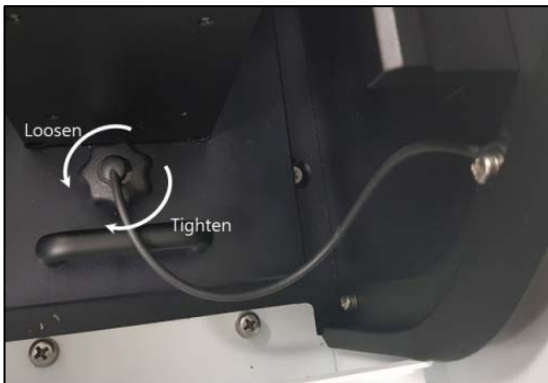


Figure 9 Tightening the Accessory Fixing Bolt

- Assemble the tube with male connector of quick coupling.

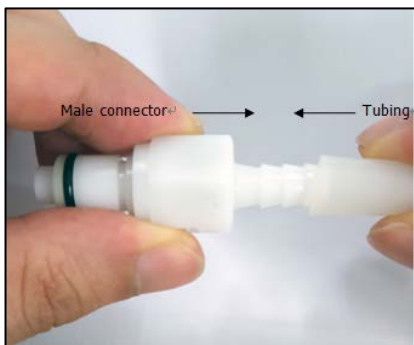


Figure 10 Assembling the Tube with the Male Connector

NOTE: The tube size is recommended 3 mm-ID and 6 mm-OD silicon tube which has thermal resistance at least 100°C.

- Connect the male connector with the tube to the quick coupling mount of the front plate.



Figure 11 Connecting the male connector to the quick coupling

- Turn on the power switch of the instrument.

Measurement

- Double click on the **Spectrum FL** software and select the measurement mode.
- Check the recognition of Accessory.



- Set up the measurement parameters.

NOTE: For more detail of method, refer to *Spectrum FL Software Users Guide*.

- Click **Save** to save the method after setting up the parameters.
- Put the sample into the sample holder.
- Close the lid and select the **Run** icon.

7. Input the sample name and select **OK**.
8. Confirm the spectrum and results. Save or print the data.

Troubleshooting

When liquid leakage occurs

1. When liquid is leaking among the fittings.
 - Using wrench, turn the fitting counter-clockwise to detach from the Water Jacketed Single Cell Holder.
 - Remove the Teflon which is wound around the fitting. Wind a length of new Teflon tape around the fitting.
 - Turn the fitting clockwise to attach to the Water Jacketed Single Cell Holder.
2. When liquid is leaking between the quick coupling mount (or fitting) and the tube.
 - Replace the tube.
 - The replaced tube should be able to withstand a temperature at least 10°C higher than the experimental temperature.
3. When liquid is leaking between the quick coupling mount and the Water Jacketed Single Cell Holder or unknown spot.
 - Contact your PerkinElmer Service representative to replace the Water Jacketed Single Cell Holder.

When constant temperature is not maintained

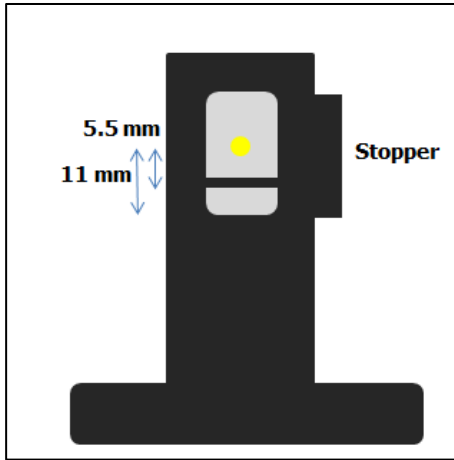
1. Check if the circulator is working normally.
 - Check if the temperature is maintained normally in the circulator.
 - Check if liquid is transferred normally to the Water Jacketed Single Cell Holder through the tube.
2. Check the tube connection.
 - Check if the tube is connected tightly.

When the tube frequently becomes detached

1. Replace the tube.
 - You should replace the tube as it is aged.
 - The replaced tube should be able to withstand a temperature at least 10°C higher than the experimental temperature.
2. Fix with Teflon tape.
 - Firmly fix the tube by winding Teflon tape around the connection.

When the beam passes through the bottom of the sample

NOTE: The beam height when the stopper is present is 5.5 mm, and the beam height when the stopper is removed is 11 mm.



1. Remove the stopper fixing bolt and pull the stopper forward.



