

Lambda 465 Water Jacketed Single Cell Holder Installation Instructions

This instruction sheet describes the installation of this accessory which is used with the Lambda 465 Spectrophotometer.

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 1-800-762-4000, 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 Lambda 465 Water Jacketed Single Cell Holder [P/N: N4104002]

Dimensions and Specifications

Physical Characteristic		Specification	Comment
Outline	Height (mm)	81.5	
	Width (mm)	70	
	Depth (mm)	150	
Inner	Height (mm)	27.5	Suitable for the Standard Cell
	Width (mm)	12.5	
	Depth (mm)	12.5	
Weight (kg)		0.44	

Description

Connectable Cells

Description
Precision cell, 10 mm light path, Quartz, 3500 μl , ea
Flow-through cell, 10 mm light path, Quartz, 450 μl , ea
Flow-through cell, 10 mm light path, Quartz, 720 μl , ea
Sub-Micro cell, 10 mm light path, Quartz, with Stopper, 160 μl , ea
Ultra-Micro cell, 10 mm light path, Quartz, 40 μl , ea
Other cells are available upon request if what you want is not listed.

Environmental Conditions for Operation

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

Configuration of the Water Jacketed Single Cell Holder

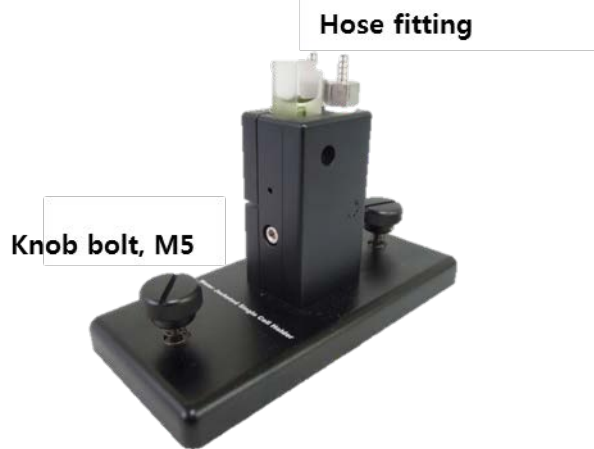
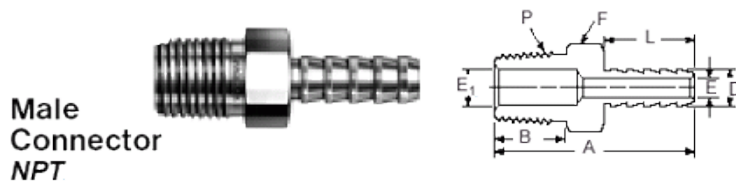


Figure 2 Lambda 465 Water Jacketed Single Cell Holder

Hose fitting × 2



Hose fitting Dimensions (inches)

A	B	D	E	E ₁	F	L
1.08	0.38	0.15	0.08	0.19	7/16	0.40

Note: The recommended tube size and material are 3 mm-ID and 6 mm-OD silicon tube which has thermal resistance at higher than 100°C.

Figure 3 Hose fitting × 2 (Model No.: [Swagelok] SS-2-HC-1-2 Element: 316 Stainless Steel)

Installation

1. Disassemble the existing cell holder.

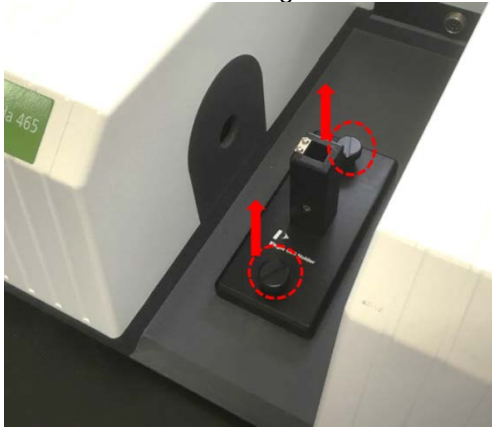


Figure 4 Location of the two knob bolts

2. Fix the hose to the hose fitting.



Figure 5 Fixing the hose to the hose fitting

3. Install the Water Jacketed Single Cell Holder by fastening the knob bolts.

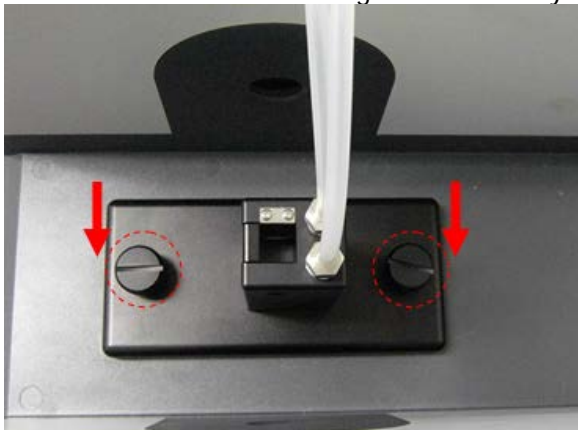


Figure 6 Installing the Water Jacketed Single Cell Holder by fastening the knob bolts

4. Connect the communication cable and the power cord, and then turn on the power of the Lambda 465.

Troubleshooting

When liquid leakage occurs

1. When liquid is leaking between the hose fitting and the Water Jacketed Single Cell Holder.
 - Turn the hose fitting counter-clockwise to detach from the Water Jacketed Single Cell Holder.
 - Remove the Teflon which is wound around the hose fitting. Wind around a new length of Teflon tape.
 - Turn the hose fitting clockwise to attach to the Water Jacketed Single Cell Holder.
2. When liquid is leaking between the hose 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.
 - Firmly fix the tube by winding Teflon tape around the connection.
3. When liquid is leaking from the Water Jacketed Single Cell Holder.
 - Contact PerkinElmer since the Water Jacketed Single Cell Holder needs to be replaced.

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 if it is old.
 - 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.

