



CTech™ FlowVPX® System with Cary 60: Best Practices

Recommended Steps for Maintenance, Cleaning, & Proper Use

Best Practices



System Maintenance Checklist

	Per Run	Weekly	Monthly	Annually
Quick Check Test	✓			
Clean Flow Cell	✓			
Restart Cary Spectrophotometer	✓	✓		
Clean Delivery Fiber		✓		
Coupler Check			✓	
Run System Suitability Test			✓	
Repligen Preventive Maintenance Service				✓

System Maintenance Guidelines

Quick Check Test

Perform with a clean Flow Cell and Fibrette® Optical Component.

VIPER Passing Criteria: 70.00% relative transmission at 500 nm.

Quick Check can be performed in the Quick Kinetics app by clicking the icon (right) in the top navigation bar.



System Suitability Test

Run provided CHEM013 standard, ConfiRM® slope reference material, or the current UV standard (e.g., BSA). It is recommended to perform a Quick Check prior to System Suitability tests to ensure adequate transmission.

Clean fused silica vessels after each use. Rinse with water followed by cleaning agent (IPA, methanol, or ethanol). Rinse with water again, then air dry or spray with compressed air.

Optical Pathway Components (only if cleaning)

Clean the optical path of the system to ensure optimal light transmission.

- Use a lint-free wipe and compressed air to clean the Delivery Fiber tip.
- Use a lint-free wipe with isopropyl alcohol to gently clean the Flow Cell window and detector module.
- Wipe in a single direction 3 to 5 times.
- Follow with a dry wipe as needed.

Flow Cell Storage

Short Term: If storing Flow Cell in-line for up to 2 weeks, store with 0.1 M NaOH in the flow path.

Long Term: Store dry. Flush the Flow Cell with NaOH and then DI or WFI water before letting dry. If the Flow Cell is unloaded, use the plastic protective cylinder included in shipping package to store the Flow Cell.

Flow Cell Cleaning

Flush with 0.1 – 0.5 M NaOH followed by deionized (DI) or WFI water.

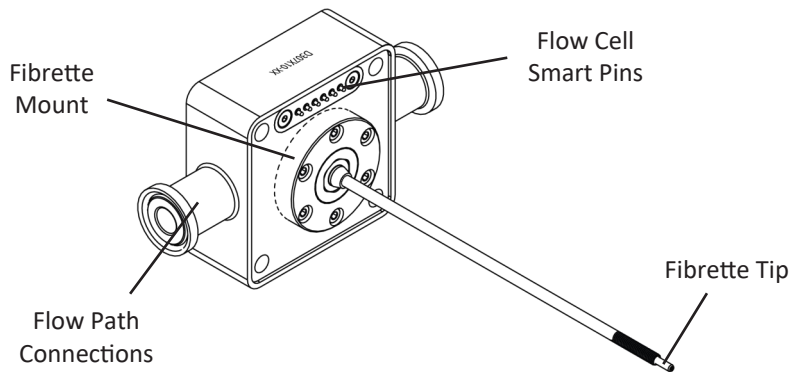
For additional resources, check out the Repligen Knowledge Base: repligen.com/support/knowledge-base



Running a System Suitability Test for the CTech FlowVPX System



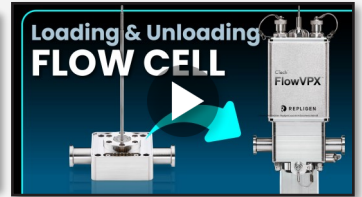
Cleaning & Maintenance for the CTech FlowVPX System



Flow Cell components and parts



General Troubleshooting for the CTech FlowVPX System



Loading and Unloading the Flow Cell for the CTech FlowVPX System

Flow Cell Troubleshooting Tips

Flow Cell Not Detected

Clean the Smart Pins using a lint-free wipe and IPA. Ensure the pins can be gently pushed down and spring back when released. Use a new, clean spot on the lint-free wipe with IPA and wipe the contact pads on the FlowVPX System.

Flow Cell Zeroing Unsuccessful

On first failure, try again. On second failure, contact Repligen's Analytics Support.

Transmission Test Failed

- Clean the end of the Delivery Fiber and the Flow Fibrette using a lint-free wipe and compressed air.
- Clean the Flow Cell window and the Detector Module window using a lint-free wipe and IPA.
- For Stainless Steel Flow Cells only, flush the Flow Cell with 0.1 M NaOH followed by DI or WFI water.
- If the Transmission Test still fails, contact Repligen's Analytics Support.

Flow Cell Specifications

Part Number	Type	Size	Max Flow Rate	Hold-up Volume	Max Pressure	Operating Temperature
OC2002	Stainless Steel	3 mm	1.5 LPM	0.9 mL	5.5 bar (80 psi)	1°C – 49°C
OC2001	Stainless Steel	10 mm	20 LPM	9.0 mL	5.5 bar (80 psi)	1°C – 49°C
OC2004	Stainless Steel	22 mm	160 LPM	47 mL	5.5 bar (80 psi)	1°C – 49°C
OC2017	Stainless Steel	1.5 in	225 LPM	144 mL	6.2 bar (90 psi)	0°C – 48°C
OC2012	Stainless Steel	2 in	250 LPM	266 mL	6.2 bar (90 psi)	0°C – 48°C
OC2008(-XR)	Single Use	3 mm	1.5 LPM	2.9 mL	4.1 bar (60 psi)	4°C – 40°C
OC2009(-XR)	Single Use	10 mm	20 LPM	24.6 mL	4.1 bar (60 psi)	1°C – 40°C
OC2010(-XR)	Single Use	22 mm	160 LPM	~130.7 mL	4.1 bar (60 psi)	1°C – 40°C