

Product Specifications

Part ID: OC2001

CTech™ FlowVPX™ 10 mm Flow Cell

Overview

Engineered for rigorous bioprocessing environments, the CTech™ FlowVPX™ 10 mm Flow Cell was developed to provide an in-line measurement solution compatible with the FlowVPX variable pathlength system. This unlocks the power of Slope Spectroscopy® measurement methods for highly regulated drug manufacturing processes.

The FlowVPX 10 mm Flow Cell utilizes a modular mating surface to fit onto the FlowVPX Detector Module and FlowVPX Head. It was designed with a precision EPDM diaphragm seal, which forms a sterile barrier around the integral Flow Fibrette® and ensures a contained process-measurement area. Additionally, Flow Cells are equipped with smart cell technology, which directly communicate with the FlowVPX Head and provide valuable information for traceability.

The entire design, with special attention given to each process-contact component, has been specified for compliance with applicable industry standards (e.g., ASME Bioprocessing Equipment Standard, USP Class IV). The robust unibody construction with ½-inch (12.7 mm) standard size tri-clamp connections and ⅜-inch (9.4 mm) flow path allows for easy integration into most laboratory, pilot, process development, and production environments.

For more information about the FlowVPX 10 mm Flow Cell or the FlowVPX variable pathlength solution, contact a Repligen Analytics Representative.



Features | Advantages | Benefits

Unibody Construction: No threaded or welded pipe constructions. Flow Fibrette® is integrated into assembly.

Precision Engineered Fiber Optic Seal: Forms barrier of process fluid to maintain integral flow path during optical measurements. Tested to withstand 500,000 cycles at max pressure.

½-inch Standard Tri-Clamp Connections: With a 9.4 mm (⅜-in) inner diameter flow channel.

Integrated Memory: Feature option to allow electronic reading of Flow Cell size and serial number on FlowVPX Head.

Flow Cell Specifications

Dimensions: 120 mm x 70 mm x 200 mm (4.72 in x 2.76 in x 7.89 in)

Weight: 1.04 kg (2.3 lb)

Maximum Pathlength: 5 mm (0.196 in)

Process Contact Materials:	EPDM Seals	Medical Grade Epoxy
	316L Stainless Steel	UV Grade Fused Silica
Non-Process Contact Materials:	316/316L Stainless Steel	PPSU
	Stainless Steel Fiber Optic Connector	Medical Grade Epoxy
	PEEK	Gold Plated Electrical Contacts

Maximum Rated Internal Pressure: 5.5 bar (80 psi)

Maximum Operating Temperature: 49°C (120°F)

Minimum Operating Temperature: 1°C (33°F)

Autoclave Maximum Temperature: 121°C (250°F)

Maximum Hold-Up Volume: 9 mL

Thermal Cycling: Rated for three cycles from maximum autoclave temperature to minimum operating temperature.

Further Details

Storage Conditions: 5°C–23°C (40°F–72°F), 8%–75% RH. Store in original packaging away from ozone-producing devices.

Shelf Life: Two years from assembled date when kept in proper storage conditions.

Hardware Compatibility: FlowVPX instrument

Software Requirement: ViPER v1.0.80 or newer

More information: Final application suitability of all materials and ratings are the sole responsibility of the user. Specified pressure and temperature ratings may be subject to limitations. See the *CTech FlowVPX System Introduction and Installation Guide* DOC0211 or contact a Repligen Analytics Representative for more information. Visit our website: <https://ctech.repligen.com/>

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