

FLOW FRACTION™

Sample Collection System

The FlowFraction™ is used with our Seg-Flow sampling system for on-line fraction collection from up to eight vessels for further off-line analysis of your bioprocess. The FlowFraction system is customizable to accommodate a variety of tube types and sizes, septum piercing, and temperature control. Reagent addition and sample dilution may be performed prior to vial deposit with the optional Seg-Flow Sample Module. The FlowWeb™ software controls and monitors all sample collection functions. Internal flow paths are self cleaning after every sample cycle, ensuring no sample carryover or contamination.



FlowFraction™ Features

- Multi-rack collection system
- Accommodates a wide variety of tube and vial sizes
- Septum piercing capability
- Sample volumes from 250 µl to 50 ml
- Peltier or liquid temperature controlled plate rack options
- Sample dilution and reagent addition option available
- Optional washstation for external needle cleaning

Additional Features: FlowFraction 400



FlowFraction 400 with Liquid Temperature Controlled Plate (up to 2 racks per plate)

The FlowFraction 400 is customizable to accommodate a variety of tube types and sizes. Temperature control options include peltier or external chiller plate. Septum piercing dispensing is standard with this fraction collector.

Liquid Temperature Control Rack Options: 2mL HPLC, 5mL, 15mL, 50mL

Peltier Rack Options: 96 well plate, 2mL HPLC, 5mL, 15mL, 50mL

(custom rack sizes available upon request)



Peltier Plate with Rack (one rack per plate)

FlowFraction 100

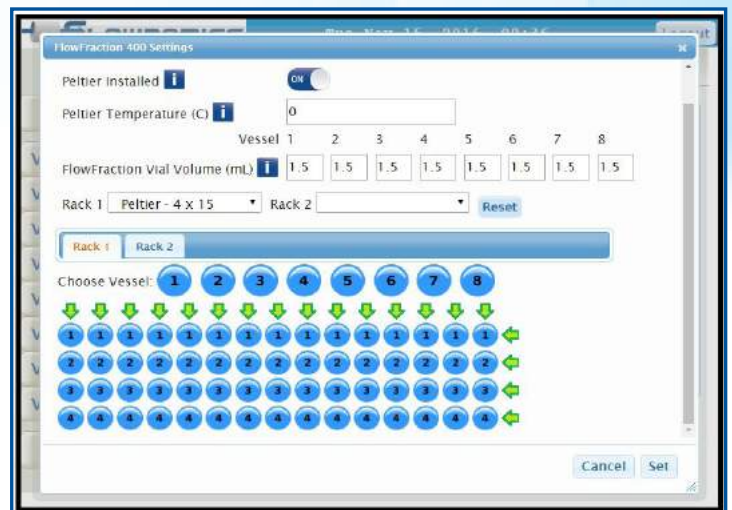
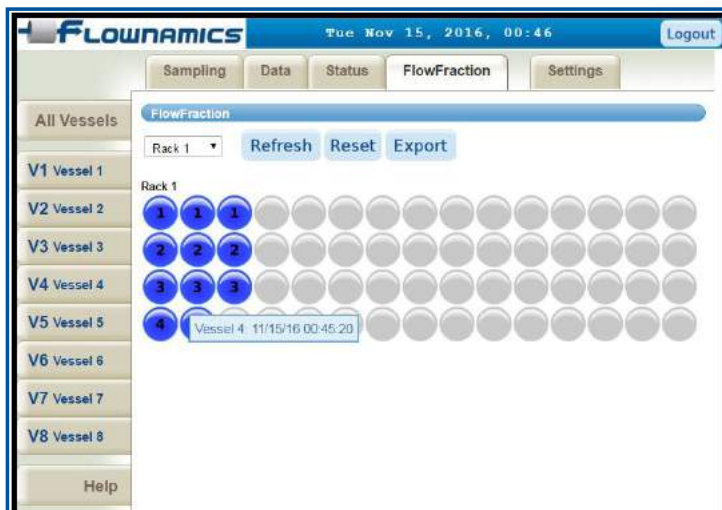


FlowFraction 100

Fraction collector accommodates sample volumes from 250 ul to 5 ml. Only thermostatic cooled rack options available.

FlowFraction Monitoring & Control

- Sample collection controlled by FlowWeb software
- Every event monitored and recorded
- Easy system tracking and monitoring



FlowFraction™ 400 Fraction Collector

Technical Specifications

Electrical	
External Power supply	100 - 120 VAC / 220 - 240 VAC, 1.07 A max (47 - 63 Hz)
System Requirement	24 VDC, 3.3 A max
Regulatory Compliance	CE, RoHS
System Control	
Software	FlowWeb™ web-based software controlled by SegFlow® internal processor 21 CFR, Part 11 compliant
Input and Output connectors	
COM 1	DB-9 RS-232 serial connection to SegFlow® internal PC
COM 2	DB-9 RS-232 serial connection to peltier-cooled rack(s)
Z-Drive	15-pin power and signal connection for Z-drive. 24V max output.
Physical	
Dimensions	Width: 36.6 cm (14.4 in) Height: 45.7 cm (18.0 in) Depth: 53.7 cm (21.2 in)
Weight (without rack or peltier cooler)	21.0 kg (45.0 lb)
Environmental	
Ambient temperature	Operation: 5 to 40°C (41 to 104°F) Storage: 0 to 55°C (32 to 131°F)
Relative humidity	Operation: 20 to 80% non-condensing (up to 31°C, decreasing linearly to 50% at 40°C) Storage: 0 to 95% non-condensing
Method of disposal	Electronic waste (infectious waste when used with life science applications)
Sample Processing	
Septum Piercing Capable	Yes. Request septum piercing sample probe when ordering.
Sample Size	0.25 – 15.0 ml (user defined)
Sample Dilution/Reagent Addition	Yes. Requires Sample Module option.
Wetted Materials	C-Flex® tubing, Stainless Steel
Chiller Plate Operating Parameters	
Temperature	0 to 70°C (32 to 158°F)
Recommended Pressure	5 – 15 psi (0.34 – 1.0 bar)
Maximum Pressure	25 psi (1.7 bar)
Recommended Flow Rate	1.0 – 4.0 lpm (0.26 – 1.1 gpm)
Maximum Flow Rate	8 lpm (2.1 gpm)
Vial Rack Capacity	2 vial racks maximum

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Chiller Plate Physical Characteristics	
Reservoir Capacity	41 ml (2.5 cubic in.)
Inlet/Outlet Connection Size	3/8 inch NPT (9.5 mm)
Inlet/Outlet Connection Type	Barb fitting
Accessory Options	Recirculating chiller (contact Flownamics for pricing)
Peltier Cooler	
Physical Dimensions	Width: 26.4 cm (10.4 in) Height: 7.8 cm (3.1 in) Depth: 10.5 cm (4.1 in)
Temperature Range	4 to 40°C (39.2 to 104°F), pre-set at 4°C, request temperature setting when ordering
Average Cooling Rate	25°C to 4°C within 25 minutes (water at 10 ml volume)
Electrical/Communication	RS-232 serial communication to COM 2 connector
Vial Rack Capacity	1 vial rack
Vial/Tube Rack Characteristics*	
HPLC Vial Rack	12 x 32 mm, 2 ml vial, 60 vials/rack
Culture Tube Rack	12 x 75 mm, 5 ml tube, 60 tubes/rack
Conical Centrifuge Tube Rack	17 x 120 mm, 15 ml tube, 36 tubes/rack
Options	Custom vial sized racks available (contact Flownamics for availability and pricing)
*Standard vial racks can be used with or without the peltier cooler or chiller plate.	
Vial/Tube Rack Physical Dimensions	
HPLC Vial Rack	Width: 26.0 cm (10.2 in) Height: 12.1 cm (4.8 in) Depth: 7.9 cm (3.1 in)
Culture Tube Rack	Width: 26.0 cm (10.2 in) Height: 10.6 cm (4.2 in) Depth: 7.9 cm (3.1 in)
Conical Centrifuge Tube Rack	Width: 26.0 cm (10.2 in) Height: 9.1 cm (3.6 in) Depth: 7.9 cm (3.1 in)