

# FC 203B/FC 204 Fraction Collectors



## Time, Drop or Peak Collection to Suit Virtually Any LC Application

- Collect fractions by time, drop or peak to suit all your LC applications
- Choose the compact FC 203B for small-capacity collection or the FC 204 for large volumes and capacities
- Accept a wide variety of collection vessels, including microplates, microvials and tubes
- In peak mode, collectors monitor a detector signal and identify peaks using either an adaptive-slope algorithm or a specified millivolt threshold
- Up to 10 programmable time windows can be added for collecting only what you want, while discarding the column's void volume, peaks of no interest and equilibration volumes
- Operate as stand-alone instruments with an easy-to-use keypad, or can be controlled through your PC via UniPoint™ System Software
- 3-way diverter valve prevents contamination of collected fractions (standard on the FC 204, optional on the FC 203B)
- Contact closure inputs are available to remotely start/advance or stop—compatible with most HPLC systems
- Multicolumn adapters for collecting up to 18 separate channels
- Compact size fits in most fume hoods

# Technical Specifications

<b>3-way Valves</b>	FC 203B/204: 3-port, PTFE, 67 $\mu$ L internal volume, 3.5 $\mu$ L dead volume from common port to the normally closed port, up to 20 mL/min with standard- or large-bore needle FC 204: 3-port, PTFE, 114 $\mu$ L internal volume, 6 $\mu$ L dead volume from common port to the normally closed port, up to 20 mL/min with standard- or large-bore needle
<b>Communication Interface</b>	GSIOC; Inputs for start/advance and end/home; output for control of peripheral devices
<b>Data Acquisition</b>	An input channel for analog-to-digital conversion; digital data is transmitted on the GSIOC
<b>Detector Input</b>	$\pm$ 100 mV full scale
<b>Drop Counting</b>	Up to 9,999 drops per fraction Maximum rate: 20 drops/sec
<b>Event Marker</b>	100 ms pulse
<b>Front Panel</b>	Five command, HELP, YES, NO and 0–9 numeric hard keys; four soft keys
<b>Display Panel</b>	Two-line, 24-character display on backlit LCD
<b>Manufacturing Standards</b>	Meets applicable Safety and EMC certification standards; UL and CE certified
<b>Maximum Collection Volume/Tube</b>	FC 203B: 20 mL (28 x 60 mm) scintillation vials with optional Code 24 rack FC 204: 32 mL (18 x 180 mm) tubes or 25 mL (18 x 150 mm) tubes
<b>Maximum Fractions</b>	FC 203B: 128 12 x 75 mm tubes with optional Code 14 rack FC 204: Up to 768 when configured with eight 96-well, 2-mL Whatman/Polyfiltronics microplates on a Code 17 rack
<b>Multiple-Column Collection</b>	Simultaneous collection from up to 8 (FC 203B) or up to 18 (FC 204) columns with installation of optional multiple column adaptor(s)
<b>Multiple-Cycle Operation</b>	Repetitive collection of each sample into same set of tubes or collection of each sample into different set of tubes 3-port, PTFE, 114 mL internal volume, 6 $\mu$ L dead volume from the common port to the normally closed port, up to 200 mL/min with large-bore needle
<b>Number of Racks</b>	FC 203B: Holds one rack FC 204: Holds one Code 16 or Code 16D rack, one Code 17 rack or up to four Code 20-Series racks (all racks must be the same code)
<b>Operating Modes</b>	Drop, Manual, Peak + Drop, Peak + Time, Time
<b>Peak Detection</b>	Adaptive-slope algorithm that applies user-specified parameters to accommodate drifting baselines, negative and asymmetrical peaks, or absolute threshold level that collects all peaks above specified mV value Peak parameters: peak height or level, in mV; peak width at half-height, in minutes Minimum peak height for fractionation: 0.1 mV full scale Detector-collector delay: 0.01 minute increments
<b>Power Requirements</b>	Frequency: 50–60 Hz Voltage: 100–120 or 220–240V; mains voltage fluctuations not to exceed $\pm$ 10% of the nominal voltage Current rating: 0.5A for 100–120V, or 0.25A for 220–240V
<b>Programmable Time Units</b>	From 0.01 to 99.99 minutes per tube with a 0.01 minute limit of resolution
<b>Software</b>	Via Gilson UniPoint System Software
<b>Time-Based Programming</b>	Up to 10 collection windows and 10 drain steps in any mode
<b>Tube Change Time</b>	100–250 ms (FC 203B) or 100–720 ms (FC 204) center to center, depending on rack type
<b>Zero Power Memory</b>	Maintains memory for a minimum of five years from date of shipment
<b>Dimensions (w x d x h)</b>	FC 203B: 32.4 x 29.2 x 26.7 cm (12.8 x 11.5 x 10.5 in.) FC 204: 47.9 x 46.4 x 33 cm (18.9 x 18.3 x 13 in.)
<b>Weight</b>	FC 203B: 5 kg (11 lbs.) FC 204: 10.9 kg (24 lbs.)

For applications or additional information, contact your local Gilson Technical Sales Representative or visit [www.gilson.com](http://www.gilson.com).