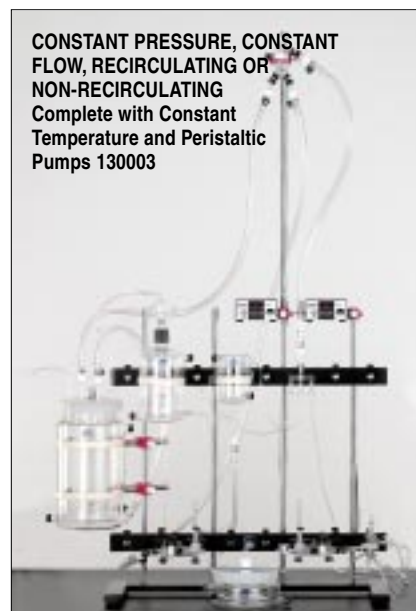


Radnoti Liver Perfusion System



CONSTANT PRESSURE, CONSTANT FLOW, RECIRCULATING OR NON-RECIRCULATING Complete with Constant Temperature and Peristaltic Pumps 130003

In Situ/In Vitro

The isolated perfused liver is a reliable standard for studies in pharmacology. The donor animal in most of these studies has been the rat but recent interest has centered around the use of the mouse model. Radnoti provides chambers suited for both mice and rats, for both the in situ studies, where the liver is cannulated in the animal and the in vitro studies, where the liver is removed from the donor. The

Radnoti system can be used in constant pressure or constant flow, recirculating or non-recirculating experimental protocols.

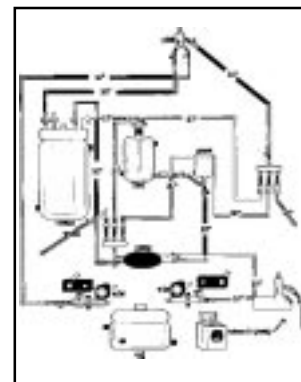
The in situ liver chamber is a flat bottomed, water-jacketed curved glass bed upon which the donor is placed. Access ports are provided for endotracheal tubes, catheters, and cannulae. The chamber is covered and has a port in the lid that permits a fiber optic cable to be positioned over the liver.

The Radnoti in vitro liver chamber is water-jacketed and circular with a polypropylene lid assembly. The chamber is flat bottomed with a side mounted drain. Three ports permit the introduction of two cannulae for organ perfusion and one for the removal of bile samples. Flexible inlet and outlet lines are attached to luer hubbed, paired stainless steel cannulae that are provided for mounting the liver. The lid of the chamber has a central threaded mount for the attachment of a fiber optic cable, used for optical measurements of endogenous nucleotides or various fluorescent indicators.

With the exception of the liver chambers, the primary support components of the system are mounted on a sturdy, adjustable four bar stand. These components consist of a membrane oxygenator, reservoirs, cannula line holders, perfusate, gas and water lines, bubble traps and manifolds for water, gas and perfusate control. Perfusate lines are water jacketed to maintain perfusate temperature. Special, compact water jacketed inlet and outlet cannula line holders are each configured to hold up to three optional electrodes (for example, an oxygen, pH and ion selective electrode), a septum covered sampling port and an access port for attachment to a pressure transducer. Individual or differential pressure transducers are available for this system. Perfusate is gassed via a membrane oxygenator for solutions containing proteins or blood, with two water-jacketed supply reservoirs provided. A double-headed peristaltic pump is provided for recirculation of solutions and to maintain a constant pressure head or flow. Recirculation is accomplished through a bubble trap to reduce endothelial damage caused by large gas bubbles. Perfusion solutions can be rapidly changed via manual valves. A heavy duty recirculating, constant temperature bath provides temperature control.

Optional Components:

- Inline automated or manual flow meter (used for flow measurements in constant pressure experiments)
- Fraction collector, used for effluent sampling
- Automated control valves, used for exchanging solutions
- Syringe pump, used for drug additions and titrations
- Oxygenation, pH and ion selective electrodes with amplifiers
- Radiometric tissue fluorometer



Specifications

Overall System Dimensions, H x W 127 x 71.1 cm (50 x 28 in)
Total Weight Approx. 59 kg (130 lbs)

Catalog No.	Product
CGS 8971.73	Complete Liver Perfusion System, 115 VAC, 60 Hz
CGS 8972.73	Complete Liver Perfusion System, 230 VAC, 50 Hz
CGS 8973.73	Oxygenating Bubbler with 2-Inlets
CGS 8974.73	Membrane Oxygenator
CGS 8975.73	Liver Perfusion Reservoir with J 100ML
CGS 8976.73	Liver Perfusion Chamber with Opt Port/Lid
CGS 8977.73	Compliance Chamber with QD Ports
CGS 8978.73	Inflow Manifold/Triple Electrode and Septa
CGS 8979.73	Outflow Manifold/Triple Electrode and Septa
CGS 8980.73	Stand for Liver Perfusion System
CGS 8981.73	Hardware Kit for Liver System
CGS 8982.73	Water-Jacketed Reservoir, 5 L
CGS 8983.73	Bubble Trap (Compli Chamber)
—	Pressure Transducer and Amp/Dome/Cable, 2 each
—	Bath/Heater Circulating Pump 115 VAC, 60 Hz
—	Peristaltic Pump Drive 115 VAC, 60 Hz