

## Model 720 Compact Peristaltic Pumps



- Continuous infusion
- Battery back-up (30 hrs)
- Compact pump (2.5 x 2.25 x 4 in)
- Minimal electromagnetic radiation
- Now 3 models to choose from: low, mid, and high

### Low EMI

The Pump's analog circuitry has been designed to minimize electromagnetic radiation. This Pump is frequently used to maintain constant levels in tissue perfusion chambers even in the presence of sensitive intra-cellular recordings.

### OEM

The pump mechanism is also available for OEM applications. Please call Harvard Apparatus for more details.

The Model 720 Compact Peristaltic pump is a stand-alone pump series with flow rates of 0.02 to 15 ml/hr (Low Flow), 0.2 to 180 ml/hr (Mid-Flow) and 2 to 1800 ml/hr (High Flow). It is an ideal pump for applications which require limited size or weight, low EMI interference, the versatility of single and dual tubes sets (see table below) and/or external analog control.

### Flow Rates

The Model 720 pump line has been expanded to include three models with differing flow rates. The standard version delivers rates from 0.2 to 180 ml/hr, the low flow models are of 0.02 to 15 ml/hr while the high flow models deliver flow rates of 2 to 1800 ml/hr.

The flow rates are adjusted by two control dials (coarse and fine) at the back of the pump. A convenient momentary purge button is provided which runs the pump at full speed while depressed.

### Battery Backup

An internal 9V lithium battery (supplied) will run the pump for up to 30 hours, protecting your experiments in the event of a power failure. The battery also makes it easy to move an operating pump during an experiment. Due to its power requirements, the high flow version is not available with battery backup.

### Analog Control

The pump is typically powered by a 1.25 V internal reference voltage. An external reference voltage can be used to regulate flow rate and direction (pump direction can only be reversed by analog control). Under external control the speed dials serve as voltage attenuators to limit the external voltage to  $\pm 1.25$  volts.

### Specifications

Flow Rate:	Low	Mid	High
Minimum (0.015 inch tube)	0.02 ml/hr	0.2 ml/hr	2 ml/hr
Maximum (0.093 inch tube)	15 ml/hr	180 ml/hr	1800 ml/hr
Repeatability	$\pm 3\%$		
Flow Control Range	20:1		

### Catalog No.

### Product

CGS 8306.63	Model 720 Compact Peristaltic Pump, Low Flow, with 120 VAC Wall-Mounted Adapter
CGS 8307.63	Model 720 Compact Peristaltic Pump, Low Flow, with 220 VAC Wall-Mounted Adapter
CGS 8308.63	Model 720 Compact Peristaltic Pump, Mid Flow with 120 VAC Wall-Mounted Adapter
CGS 8309.63	Model 720 Compact Peristaltic Pump, Mid Flow with 220 VAC Wall-Mounted Adapter
CGS 8310.63	Model 720 Compact Peristaltic Pump, High Flow, with 120 VAC Wall-Mounted Adapter
CGS 8311.63	Model 720 Compact Peristaltic Pump, High Flow, with 220 VAC Wall-Mounted Adapter
CGS 8312.63	Replacement 9V Lithium Battery for Low and Mid Flow Pumps
CGS 8313.63	Replacement Power Adapter, 120 VAC
CGS 8314.63	Replacement Power Adapter, 220 VAC
CGS 8315.63	Rod Mounting Clamp for all pumps
CGS 8316.63	Kapton Strip Replacement Kit, 20 Strips

### Tube Sets for Compact Peristaltic Pumps, pkg. of 5 \*

Catalog No.	Channels	Connectors	Flow Rates	Typical Applications
CGS 8317.63	1	Female Luer/22 ga hypodermic tubing	0.2 to 7 ml/hr	IV infusion (laboratory animals only), 22 ga swivels
CGS 8318.63	1	Female Luer/20 ga hypodermic tubing	0.6 to 16 ml/hr	IV infusion (laboratory animals only), 20 ga swivels
CGS 8319.63	1	0.062 in ID barbs (fits 1/16 in ID Tygon®)	0.8 to 25 ml/hr	General laboratory applications
CGS 8320.63	1	0.062 in ID barbs (fits 1/16 in ID Tygon®)	5 to 180 ml/hr	General laboratory applications
CGS 8321.63	2	0.062 in ID barbs (fits 1/16 in ID Tygon®)	3 to 80 ml/hr	Dual laboratory applications
CGS 8322.63	2 (unbalanced)	0.062 in ID barbs (fits 1/16 in ID Tygon®)	3 to 80 ml/hr	Maintaining constant levels in tissue perfusion chambers