

## Pump '22' Basic Multiple Syringe Pump



### Specifications

<b>Type</b>	Microprocessor multiple syringe, infusion or infusion/withdrawal
<b>Accuracy</b>	±1%
<b>Reproducibility</b>	±0.1%
<b>Syringes Size:</b>	
<b>Minimum</b>	0.5 µl
<b>Maximum</b>	140 ml
<b>Flow Rate:</b>	
<b>Minimum</b>	0.002 µl/hr
<b>Maximum</b>	55.1 ml/min

- Legendary reliability
- Versatile
- Easy to use
- Nonvolatile memory
- Sturdy construction
- Computer control

The Harvard '22' syringe pump is the pump that set the industry standard! It is the world's most popular syringe pump. Harvard Apparatus' long-standing tradition of providing durable and reliable pumps is the foundation upon which this revolutionary microprocessor control was built.

Since the introduction of the first pump '22' many features and innovations have been added to the pump to offer a complete line of pumps for multiple syringe applications. Versions of the pump '22' for 4 microliter syringes, a 10 syringe rack and a syringe rack for 1 to 4, 140 ml syringes are available. An anti-siphon model is also available for infusion applications where the line pressure is lower than the syringe pressure. The anti-siphon bracket securely retains the syringe plunger to prevent unintended loss of fluid from the syringe.

This pump features an LED display and numerical keypad for easy entry of syringe diameter data and flow rates. Flow rate units can be set in µl/hr, µl/min, ml/hr and ml/min. An optical encoder monitors lead screw rotation to accurately maintain any flow rate. The run LED flashes when syringe plunger movement stops unexpectedly.

Catalog No.	Product
CGS 8085.63	Pump '22' Infusion Only With Standard Syringe Holder
CGS 8086.63	Pump '22' Infusion Only With Anti-Siphon <sup>1</sup> Standard Syringe Holder
CGS 8087.63	Pump '22' Infusion Only With 6/10 Multi-syringe Rack
CGS 8088.63	Pump '22' Infusion Only With 4 x 140 Multi-syringe Rack
CGS 8089.63	Pump '22' Infusion/Withdraw With Standard Syringe Holder
CGS 8090.63	Pump '22' Infusion/Withdraw With 6/10 Multi-syringe Rack
CGS 8091.63	Pump '22' Infusion/Withdraw With 4 x 140 Multi-syringe Rack
CGS 8092.63	Pump '22' Infusion/Withdraw With Microliter Syringe Holder <sup>2</sup>