

NEW PHD 2000 HVP (High Volume and Pressure)



Stainless Steel Syringes

Only Harvard's stainless steel syringes can be used with this pump.

Flow Rates for PHD 2000 HVP (High Volume and Pressure)
The Rates listed are for a single syringe

| Syringe Size | Minimum | Maximum |
|--------------|----------------|------------|
| 20 ml | 1.5 μ l/hr | 20 ml/min |
| 50 ml | 3.4 μ l/hr | 46 ml/min |
| 100 ml | 5.0 μ l/hr | 68 ml/min |
| 200 ml | 8.2 μ l/hr | 112 ml/min |

- High capacity — up to 800 ml with four 200 ml syringes
- Ultra high pressure — provides over 400 lbs of pumping force
- $\pm 1\%$ precision
- $\pm 0.1\%$ reproducibility
- Programmable — advanced capabilities with programming from the keypad
- Built to last — rugged construction for a lifetime of service
- Accepts only Harvard's stainless steel syringes

High Capacity

This NEW PHD 2000 HVP Syringe Pump provides the highest capacity output of all of Harvard's microprocessor syringe pumps. This pump can hold up to four syringes from 20 to 200 ml. By combining the output from four 200 ml syringes, this pump is able to infuse up to 800 ml of fluid without refilling.

Ultra High Pressure

This NEW PHD 2000 HVP Syringe Pump over 400 pounds of force against the syringe plungers, higher than any other pump we manufacture. For applications with viscous fluids or requiring high pressure, this is the pump to handle the job.

Versatility

This Programmable PHD 2000 HVP syringe pump provides advanced capabilities directly from the keypad. No external computer is required. The pump can store up to four programs of 10 sequences each. Programs are stored in non-volatile memory. No other pump can provide this level of control and flexibility with the accuracy of the PHD 2000 syringe pump series. Like all of Harvard Apparatus' other pumps, this new high capacity pump is easy to use.

Built-to-Last

This pump uses high quality, industrial grade components that will deliver years of smooth operation.

To Accommodate Almost Every Workbench

This pump is provided with a standard 5 foot cable that connects the control box to the pumping mechanism box. If additional distance is required between the controller and pump, a 30 foot remote extension cable is offered as an accessory.

| Catalog No. | Product |
|-------------|---|
| CGS 8071.63 | High Capacity/Ultra High Pressure PHD 2000 |
| CGS 8072.63 | Remote Extension Cable, 1.5 m (5 ft) |
| CGS 8073.63 | Remote Extension Cable, 9.1 m (30 ft) |
| CGS 8074.63 | PHD 2000 RS-232 Adapter, 9-pin to standard phone jack |
| CGS 8075.63 | SS Syringe, 200 ml, with 1/16 inch Swagelok® |
| CGS 8076.63 | SS Syringe, 200 ml, with 1/8 inch SWAGELOK® |
| CGS 8077.63 | SS Syringe, 200 ml, with 1/4 inch SWAGELOK® |
| CGS 8078.63 | SS Syringe, 200 ml, with Luer Lock |