

Harvard PHD 2000 Advanced Syringe Pumps



High Pressure Syringe Pumps

Every version of the PHD 2000 Pump is now available with a stronger motor that can provide more force. These pumps are ideal when working with viscous fluid or when driving multiple syringes. The standard force PHD 2000 series syringe pump delivers an average nominal force of 50 lbs. while the high power version delivers 66 lbs.

Remotely Controlled Syringe Pump

Use the 'Do Not Disturb™' remote pump in hazardous environments where the researcher is safer when distanced from the material being pumped. This pump has a 30 foot cable that allows the pumping mechanism to be located remotely from the control box.

Push/Pull Syringe Pump

The third new member to the PHD 2000 family is the Push/Pull PHD 2000. This pump can simultaneously infuse and withdraw the exact amount. Use this when you do not want the volume infused to alter pressure.

It is available in both infuse/withdraw and programmable models. The right side syringe holder is the standard 2-syringe rack found on all PHD 2000 syringe pumps. This standard holder will accept all the PHD 2000 multi-syringe racks.

Specifications

Type	Microprocessor driven syringe pump
Accuracy	±1%
Reproducibility	±0.1%
Syringes Size:	
Minimum	0.5 µl
Maximum	140 ml
Flow Rate:	
Minimum	0.0001 µl/hr
Maximum	220.82 ml/min

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PHD 2000 Syringe Pumps						
Syringe Pump Versions	Infusion Only		Infuse/Withdraw		Programmable	
	Standard Force	High Force	Standard Force	High Force	Standard Force	High Force
Standard Syringe Pumps						
Standard 2-Syringe	CGS 8001.63	CGS 8002.63	CGS 8003.63	CGS8004.63	CGS8005.63	CGS8006.63
6/10 Multi-Rack	CGS8007.63	CGS8008.63	CGS8009.63	CGS8010.63	CGS8011.63	CGS8012.63
4 x 140 Multi-Rack	CGS8013.63	CGS8014.63	CGS8015.63	CGS8016.63	CGS8017.63	CGS8018.63
Microliter Rack	CGS8019.63	CGS8020.20	CGS8021.63	CGS8022.63	CGS8023.63	CGS8024.63
Remote Syringe Pumps						
Standard 2 Syringe	CGS8025.63	CGS8026.63	CGS8027.63	CGS8028.63	CGS8029.63	CGS8030.63
6/10 Multi-Rack	CGS8031.63	CGS8032.63	CGS8033.63	CGS8034.63	CGS8035.63C	CGS8036.63
4 x 140 Multi-Rack	CGS8037.63	GCS8038.63	CGS8039.63	CGS8040.63	CGS8041.63	CGS8042.63
4 x Microliter Rack	CGS8043.63	CGS8044.63	CGS8045.63	CGS8046.63	CGS8047.63	CGS8048.63
Push/Pull Syringe Pumps						
Standard	—	—	CGS8051.63	CGS8052.63	CGS8053.63	CGS8054.63
Remote	—	—	CGS8057.63	CGS8058.63	CGS8059.63	CGS8060.63

Harvard PHD 2000 Pump Series	
Catalog No.	Syringe Rack Kits and Upgrades
Syringe Rack Kits¹	
CGS8061.20	PHD 2000 6/10 Multi-Rack Upgrade Kit
CGS8062.20	PHD 2000 4 x 140 Multi-Rack Upgrade Kit
	PHD 2000 Microliter Rack Upgrade Kit
	PHD 2000 Anti-Siphon Kit (for Infusion Only Pump)
Upgrades²	
	PHD 2000 Infusion to Infuse/Withdraw
	PHD 2000 Infuse/Withdraw to Programmable
	PHD 2000 Infusion Only to Programmable

Continuous Flow Tubing Segment

This continuous flow tubing segment is used with the PHD 2000 Push/Pull Syringe Pump. It makes continuous flow possible.

Specifications

Tubing	0.031 inch ID Platinum cured silicone tubing
Tubing Length	3 x 112 inch sections
Max. Pressure	15 p.s.i.
Valve Materials	Polycarbonate, silicone

Catalog No.	Product
CGS8068.63	Continuous Flow Tubing Segment

Catalog No.	Product
CGS8069.63	Remote Extension Cable, 1.5 m (5 ft)
CGS8070.63	Remote Extension Cable, 9.1 m (30 ft)