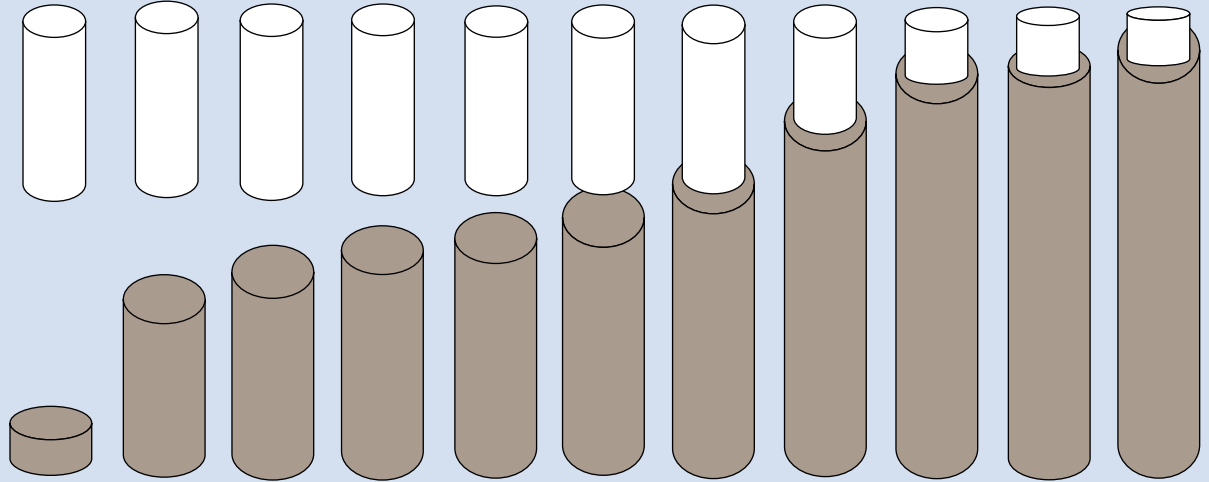


SPECIFICATIONS

ACTUAL PISTON HEIGHT & POSITION



% full stroke	100%	10%	4%	1.8%	1.00%	0.71%	0.54%	0.36%	0.10%	0.04%	0.02%
Volume in µL	2,800	280	100	50	28	20	15	10	2.8	1	0.5
Piston mode	Single	Single	Single	Single	Single	Single	Dual	Dual	Dual	Dual	Dual
SD in µL	0.20	0.20	0.20	0.20	0.20	0.20	0.005	0.005	0.005	0.005	0.005
CV %	0.01%	0.07%	0.20%	0.40%	0.71%	1.00%	0.03%	0.05%	0.18%	0.50%	1%
Resolution µL/step	1.5486	1.5486	1.5486	1.5486	1.5486	1.5486	0.0124	0.0124	0.0124	0.0124	0.0124
Travel in steps	1808	181	65	32	18	13	1210	806	226	81	40
inches	0.8679	0.0868	0.0310	0.0155	0.0087	0.0062	0.5806	0.3871	0.1084	0.0387	0.0194
mm	22.04	2.20	0.79	0.39	0.22	0.16	14.75	9.83	2.75	0.98	0.49
max. flow µL/sec	2700	2700	2700	2700	2700	2700	22	22	22	22	22

Resolution Multiplier: (CV Controller) in Dual Mode is 125. Resolution becomes 125 times smaller when entering Dual mode. (SD multiplier effect shown is only 40X smaller because the 5-place balance used could not distinguish lowest volumes.)

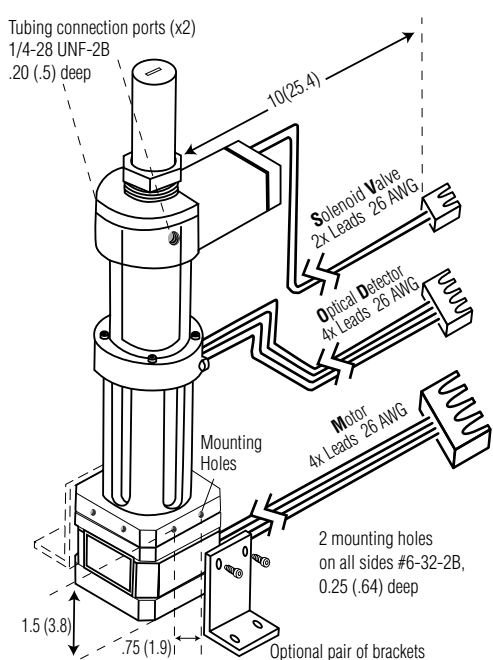
1% CV limits: 1% CV is obtained down to 0.5 µL in the Dual and 20 µL in the Single piston mode.

Accuracy: 99.5% at all volumes (compensated for backlash and evaporation at low volumes)

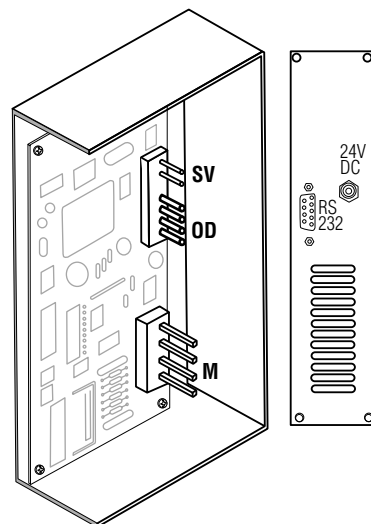
Volume range: Dual piston range up to 15 µL. Single piston range up to 2.8 mL.

Maximum speed: 1,750 steps/second.

Seal replacement: Typically 1 million cycles.

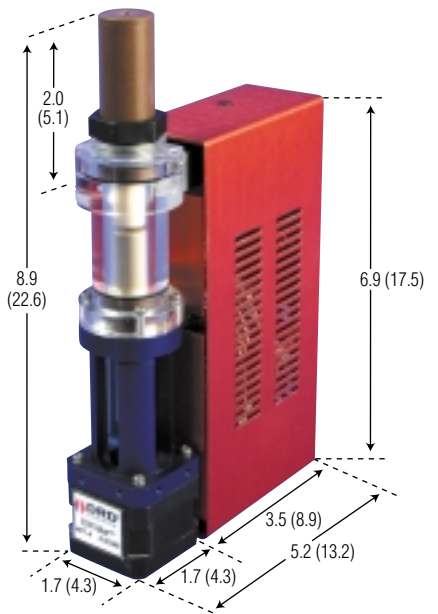


BARE BONES PUMP
(with optional valve) with 10" wire leash



CONTROL POD

RS-232 Serial, Baud rate 57,6000 12-38
Volts @ 2.0 Amps, 50-60 Hz, 110-240
VAC with DC power supply.



COMPLETE PUMP
with electronic Control Pod attached