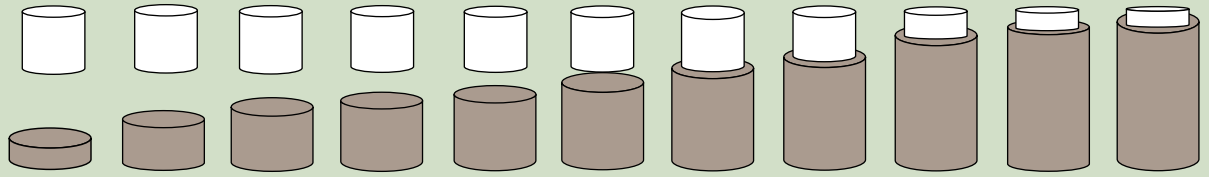


**SPECIFICATIONS**

**ACTUAL PISTON HEIGHT & POSITION**



<b>% full stroke</b>	100%	50%	20%	10%	6%	3.5%	3%	1%	0.5%	0.2%	0.1%
<b>Volume in μL</b>	1,000	500	200	100	60	35	30	10	5	2	<b>1</b>
<b>Piston mode</b>	Single	Single	Single	Single	Single	Single	Dual	Dual	Dual	Dual	Dual
<b>SD in μL</b>	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.01	0.01	0.01	0.01
<b>CV %</b>	0.02%	0.04%	0.10%	0.20%	0.33%	0.57%	0.03%	0.10%	0.20%	0.50%	<b>1%</b>
<b>Resolution μL/step</b>	1.5486	1.5486	1.5486	1.5486	1.5486	1.5486	0.0915	0.0915	0.0915	0.0915	0.0915
<b>Travel in steps</b>	646	323	129	65	39	23	328	109	55	22	11
<b>inches</b>	0.3100	0.1550	0.0620	0.0310	0.0186	0.0108	0.1574	0.0525	0.0262	0.0105	0.0052
<b>mm</b>	7.87	3.94	1.57	0.79	0.47	0.28	4.00	1.33	0.67	0.27	0.13
<b>max. flow μL/sec</b>	2700	2700	2700	2700	2700	2700	160	160	160	160	160

**Resolution Multiplier:** (CV Controller) in Dual Mode is 17. Resolution becomes 17 times smaller when entering Dual mode.

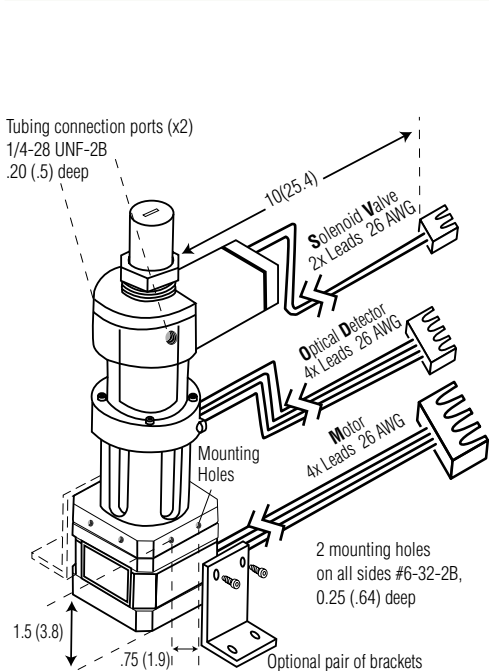
**1% CV limits:** 1% CV is obtained down to 1 μL in the Dual and 20 μL in the Single piston mode

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

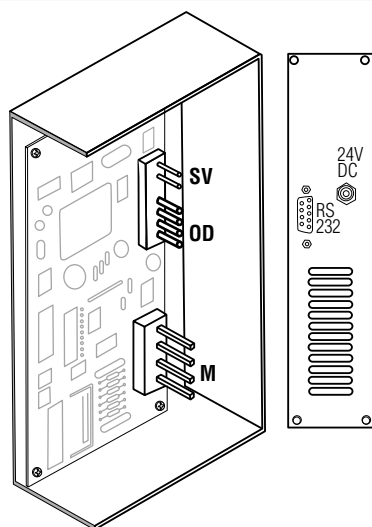
**Volume range:** Dual piston range up to 30 μL. Single piston range up to 1.0 mL.

**Maximum speed:** 1,750 steps/second

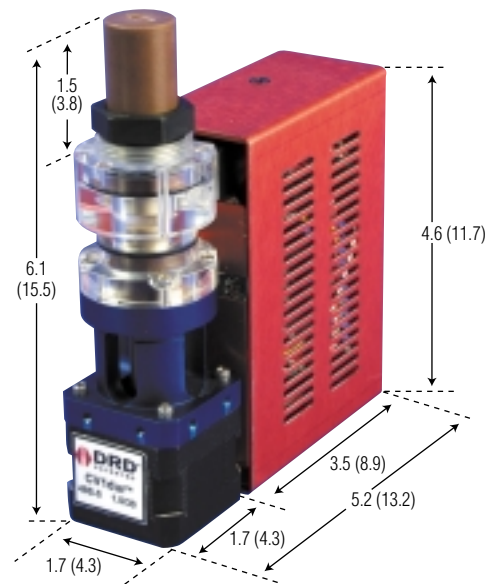
**Seal replacement:** Typically 1 million cycles.



**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