

PUMP MODELS

The 48S models meter 1.0 mL and the 48T models meter 2.8 mL because of different piston heights, but the bottom pistons in all models are the same generous 0.5" (12.7mm) in diameter, giving the Single Piston mode in all pumps the same vigorous flow rate capability for clean priming, purging and delivery. The top pistons differ in diameter, giving the Dual Piston mode different extremely fine resolutions.

MODEL NAME	48 Short (Mighty Mite) Models		48 Tall Models		
	48S 1/30	48S 1/56	48T 2.8/240	48T 2.8/50	48T 2.8/15
Max Volume in Single Mode in μL	1,000	1,000	2,800	2,800	2,800
Max Volume in Dual mode in μL	30	56	240	50	15
CV% precision at 100% of max vol	0.02%	0.02%	0.007%	0.007%	0.007%
at 10% of max vol	0.20%	0.20%	0.07%	0.07%	0.07%
at 1% of max vol	0.10%	0.20%	0.07%	0.04%	0.71%
at 0.1% of max vol	1.0%	2.0%	0.70%	0.40%	0.20%
Minimum 1% CV volume in μL	1	2	2	1	0.5
μL/step resolution in Single Mode	1.5486	1.5486	1.5486	1.5486	1.5486
μL/step resolution in Dual Mode	0.0915	0.1686	0.1686	0.0369	0.0124
Resolution Multiplier (CV Controller) *	17	9	9	42	125
Excursion Power in mm/μL**	0.13	0.07	0.07	0.33	0.98
Maximum Flow rate μL/sec	2700	2700	2700	2700	2700

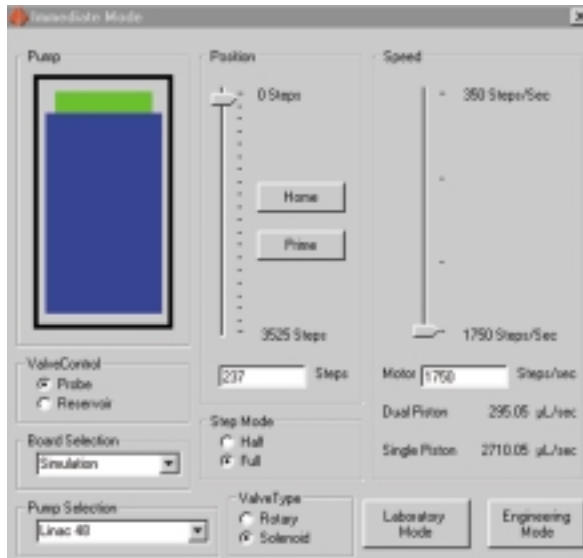
The seals are rugged compression seals and typically last over a million cycles.

*Resolution Multiplier is μ L/step in the single mode divided by that in the dual mode. Shows how many times finer the Dual piston resolution is than the Single.

**Excursion Power in mm/ μ L reflects the distance the pump has available to it to move small volumes, the abundance of which (compared with other pumps) reflects DRD pump P&A robustness and longevity (aka DRD Robust Reserve™).



Available as Bare Bones OEM pump modules, or as a Complete Pump or Bench Top Diluter (shown above) with electronic pod and Simple Step™ SSCB control board and RS 232 interface.



Vivid interactive Visual Basic graphics runs the pump via a PC with Immediate, Laboratory and Engineering modes. The pump can also be controlled via the SSCB directly or by your software of choice.

SEE INDIVIDUAL MODEL DATA SHEETS FOR DETAILS