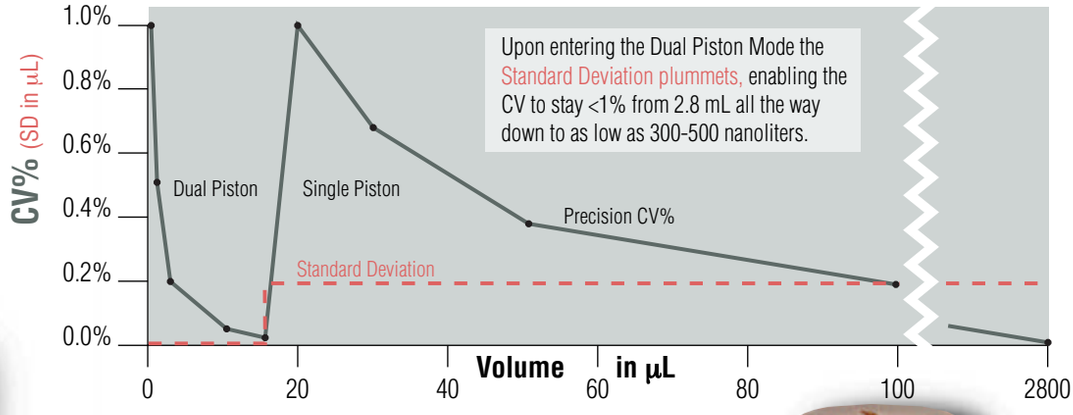
DRD™ PATENTED

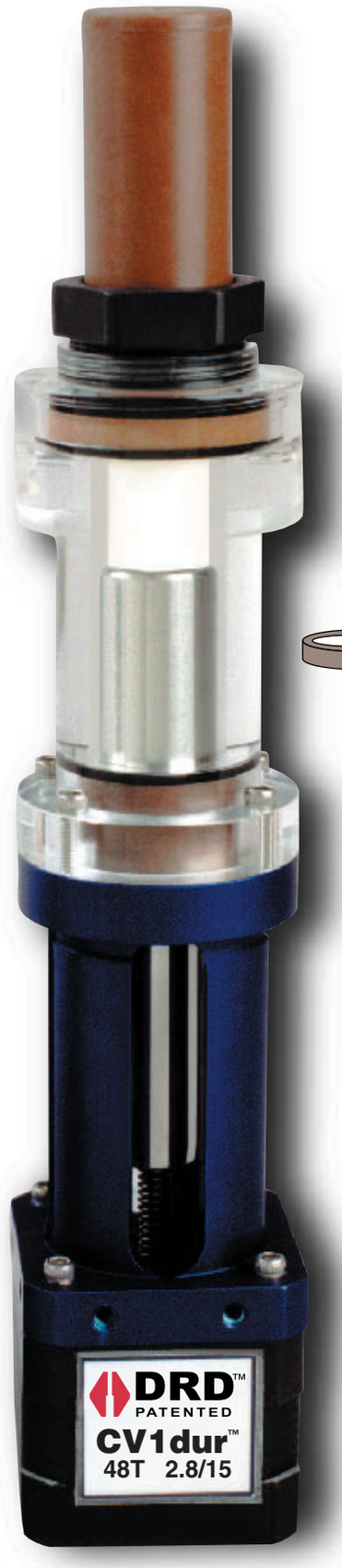
CV1dur™

The New Generation

BROCHURE

DRD's patented **D**ifferential **R**esolution **D**isplacement pistons give extremely fine resolution over a very wide range along with fast flow and large volume. The 3rd generation, trademarked **CV1dur™**, drives the pistons directly and coaxially with the integral lead screw of the latest and best linear actuator motor technology.





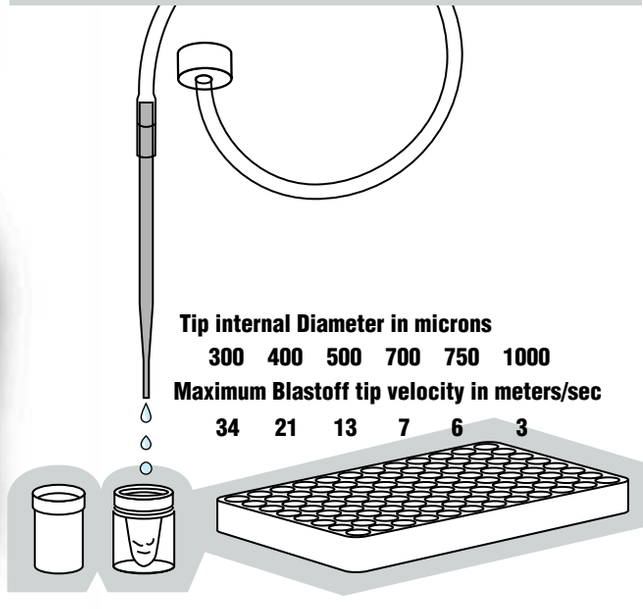
MODEL 48T ACTUAL SIZE
8.9" (22.6 cm) high

DUAL PISTON MODE

When the spring-loaded top piston, which is of slightly smaller diameter than the bottom piston, follows the bottom piston and **the two pistons move together** in the upper part of the chamber, the volume of liquid metered equals the small difference in the volume displaced by the two pistons (thin annular ring). This extremely fine volume resolution gives smooth controlled aspiration and **high precision**, reflected in CVs that hold below 1% to extremely low volumes.

SINGLE PISTON MODE

When the motor-controlled **bottom piston moves alone** in the bottom part of the chamber, the volume of liquid metered equals the volume displaced by only the bottom piston (solid wafer). This **large volume** and **fast flow** capacity gives easy priming, fast or repetitive shear-off delivery, and high tip velocity for non-destructive shearless **Blastoff™** delivery of discrete tiny samples..



Tip internal Diameter in microns

300	400	500	700	750	1000

Maximum Blastoff tip velocity in meters/sec

34	21	13	7	6	3

MODEL 48S ACTUAL SIZE
6.1" (15.5 cm) high

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