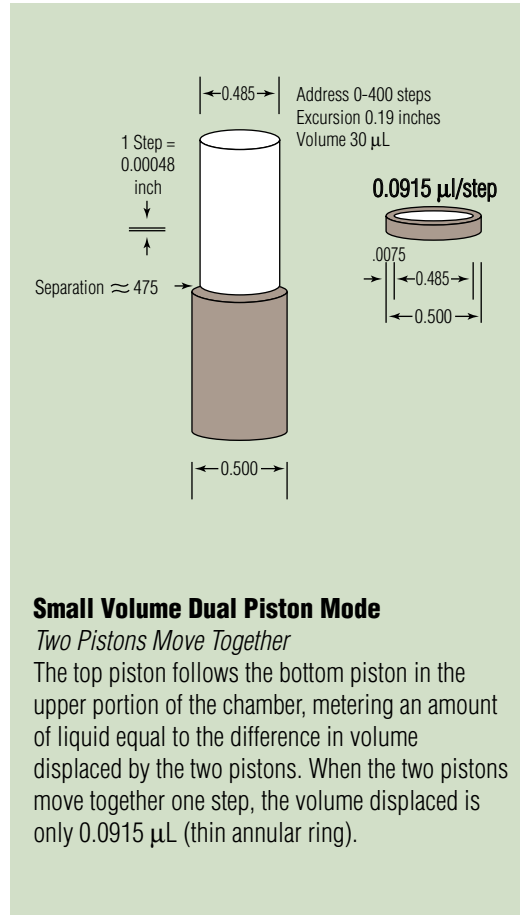


DRD's patented **D**ifferential **R**esolution **D**isplacement gives <1%CV from 1 mL down to 1 μL in this model.

CONCEPT



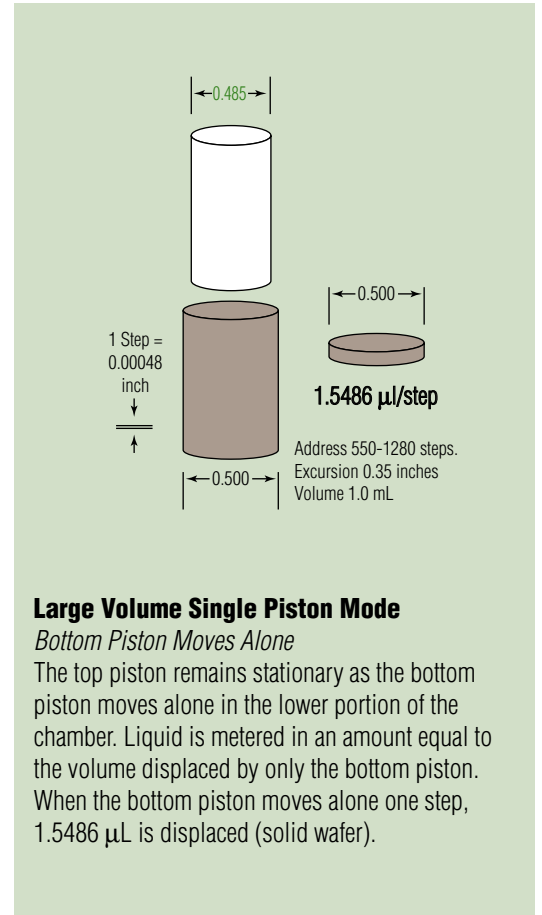
ACTUAL SIZE



Small Volume Dual Piston Mode

Two Pistons Move Together

The top piston follows the bottom piston in the upper portion of the chamber, metering an amount of liquid equal to the difference in volume displaced by the two pistons. When the two pistons move together one step, the volume displaced is only 0.0915 μL (thin annular ring).



Large Volume Single Piston Mode

Bottom Piston Moves Alone

The top piston remains stationary as the bottom piston moves alone in the lower portion of the chamber. Liquid is metered in an amount equal to the volume displaced by only the bottom piston. When the bottom piston moves alone one step, 1.5486 μL is displaced (solid wafer).

PRECISION CV %

DRD CV Control Dip: Upon entering the Dual Piston Mode, the **SD** drops from 0.2 μL to 0.01 μL, enabling the CV to drop and maintain <1% CV down to 1 μL.

