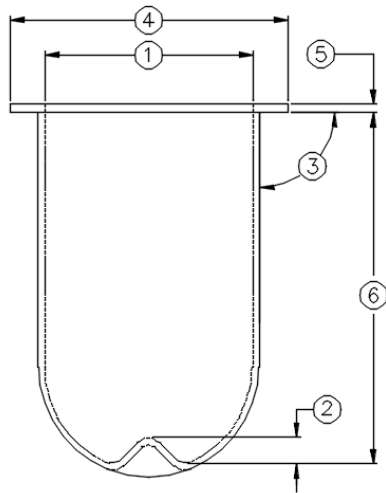


UltraCenter™ Precision Apex vessels *ASTM9PK Dissolution Vessels*

Provides Ultimate Dimensional Accuracy



	Feature	Tolerance
1	Inside Dia.	+/- .20mm
2	APEX Height	+/- .20mm
3	Rim Perpendicularity	+/- .30°
4	Rim Diameter	+/- .20mm
5	Rim Thickness	+/- .20mm
6	Depth	+/- .20mm

UltraCenter Apex Vessels provide ultimate control of Dissolution variables (CV) and assist with instrument Calibration in accordance with ASTM E2503-13E01

UltraCenter™ Apex Dissolution Vessels are produced using a unique process which results in extremely close dimensional tolerances. Using our patent pending manufacturing techniques, *UltraCenter™ Apex* Vessels are essentially identical to one another. The cone is extremely precise. Due to this precision, the results are extremely consistent from one vessel to the next. QLA is able to achieve this precise geometry through the use of a precision mandrel in the forming of the vessels. All Apex features are precisely centered on the bottom of the vessel. The sides of the cone are uniform all around.

The Apex feature is designed to prevent cone formation at the base of the vessel. An undesirable poorly stirred cone shaped region can develop under the paddle during USP Apparatus 2 dissolution tests. Apex vessels have a cone shape molded into the bottom of the vessel that improves the hydrodynamics around the dosage form and leads to more reproducible dissolution rates. The Apex effectively displaces the unstirred cone, forcing the material tested into the region of appropriate hydrodynamics, where all surfaces of the dosage are constantly and uniformly exposed to the moving medium.