

Valve Lift

Valve lift is the distance between the top of the valve plate and the bottom of the valve guard when the valve plate is seated against the valve seat. Valve lift effects lift area, and adjusted equivalent area. Higher lift valves are more efficient (larger equivalent flow areas), but are not as durable as lower lift valves due to the higher impact forces (more time for acceleration of the valve plate).

The maximum valve lift for metallic valve plates is 0.063 inches. The maximum valve lift for non-metallic valve plates (PEEK, Nylon, MT) is 0.112 inches. Non-metallic valve plates are lighter weight, and therefore do not generate as much impact force at higher lift as metallic valve plates.

Figure: Valve Cross Section

