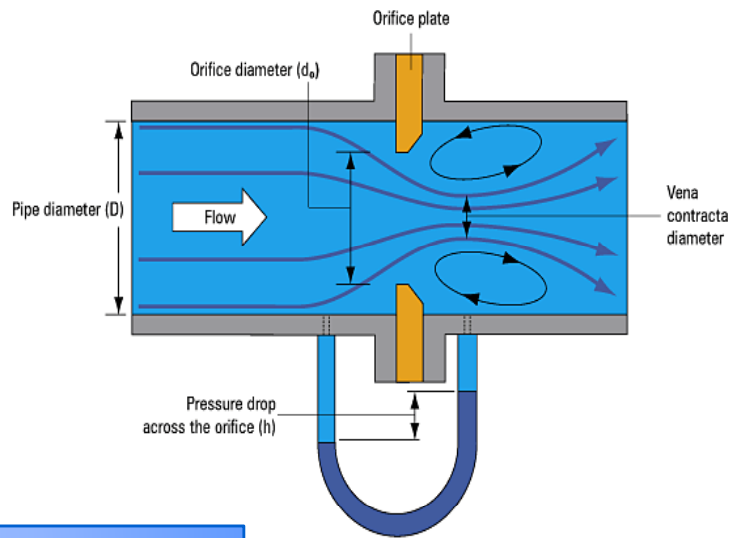


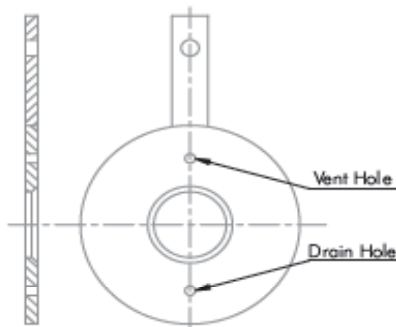
ORIFICE PLATES

Orifice Plate: Orifice plate is the heart of the orifice meter. It restricts the flow and develops the differential pressure which is proportional to the square of the flow rate. The flow measuring accuracy depends upon the quality of Orifice Plate, its installation and maintenance. Orifice plates cover a variety of applications of fluid and operating conditions.



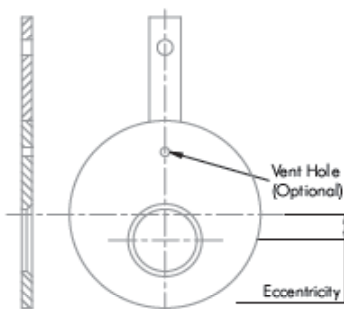
Types Of Orifice Plates

➤ Square Edged Concentric



An orifice plate with straight-through edges for the hole through which fluid flows; used to measure fluid flow in fluid conduits by means of differential pressure drop across the orifice.

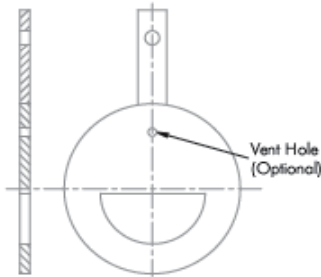
➤ Eccentric Edged



For liquids containing solid particles that are likely to sediment or for vapours likely to deposit water condensate, this orifice plate is used with its eccentric bore bottom flush with the bottom of the piping inside surface so that the sedimentation of such inclusions are avoided. Like wise for gases or vapours, it may be installed with its eccentric bore top flush with ID of the piping to avoid stay of gas or vapours in its vicinity.

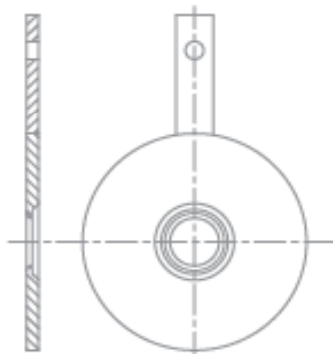


➤ Segmental



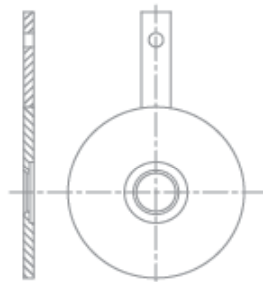
Segmental orifice plates are useful where there are substantial entrained water or air and also if there are suspension in the fluid. This avoids builds up at the front of the orifice plate. The orifice hole is placed at the bottom for gas service and top for liquids.

➤ Quadrant Edge



The inlet edge of the bore of this orifice plate is rounded to a quarter circle. This Orifice plate is usually used for viscous fluids and Reynolds number between 2000 to 10000

➤ Conical Entrance



These Conical Orifice plates are used for low Reynolds number ranging between 80 to 2000 and give more constant or predictable discharge coefficient. At lower Reynolds Number, the discharge coefficient of square edged orifice plate may change by as more as 30%. These are used for more viscous services.

