

ORIFICE FLANGES are widely used in conjunction with orifice meters for measuring the rate of flow of liquids and gases. They are basically the same as standard welding neck, slip-on and screwed flanges except for the provision of radial, tapped holes in the flange ring for meter connections and additional bolts to act as jack screws to facilitate separating the flanges for inspection or replacement of the orifice plate. In choosing the type of orifice flange, the considerations affecting the choice of welding neck, slip-on and screwed standard flanges apply with equal force. They are made in pressure classes 300 through 2500 lb.; in carbon steel, stainless steel and alloy materials; and raised face or ring joint.

Welding neck and slip-on Orifice Flanges in class 300 only are conform to ANSI B16.36. Other types and pressure classes are available and sizes larger than 24" will conform to MSS SP-44. Unions are furnished with gaskets, carbon steel jack screws, pipe plugs for the tapped openings, and bolting per ANSI B16.5.

Tolerances and ratings follow ANSI B16.5 except for the following:

1. Tolerance for the tap-hole-to-face dimensions
 - ± 0.02 " for flanges < 4 " nominal size
 - ± 0.03 " for flanges ≥ 4 " nominal size
2. Tolerance for welding neck flange bores
 - $\pm 0.5\%$ of nominal size

