

Venturi Tube

Differential pressure type flow sensing device is named after an Italian physicist Giovanni Battista Venturi. Venturi Tubes are low-pressure-drop metering devices designed with a tapered inlet that creates a drop in pressure with a constricted middle section and restores pressure through a tapered outlet. This element provides low susceptibility to erosion, high-pressure recovery and installation at any angle with virtually maintenance-free operation.

The name of this product is derived from the Venturi effect which states that, the fluid pressure is reduced when the fluid passes through the constricted section of pipe. Venturi tubes gives accurate measurement of non-viscous fluids in clean as-well-as dirty fluids, manufactured strictly in accordance with ISO-5167, BS-1042 etc. Venturi can be used for a wide variety of gaseous applications. Since divergent cone is provided at outlet of Venturi, the pressure recovery is very good. Typically the convergent angle is fixed to 21° , Divergent angle can vary between 7° - 15° without any effect on the pressure loss and discharge coefficient. For larger pipe multiple tappings in the form of piezometric ring tappings are provided.

ADVANTAGES

- Can be used on dirty fluids
- Lower susceptibility to erosion
- Low permanent pressure loss
- Extended product life with no moving parts
- Vertical or horizontal Installation
- They can handle large flow volumes at low pressure drops.
- Lowest Pressure loss in the family of Primary Flow elements.
- They can be mounted in large diameter pipes via flanged, welded or threaded-end fittings.
- Venturi tubes involve no projections into the fluid and no sharp corners. Also there are no rapid changes in contour

