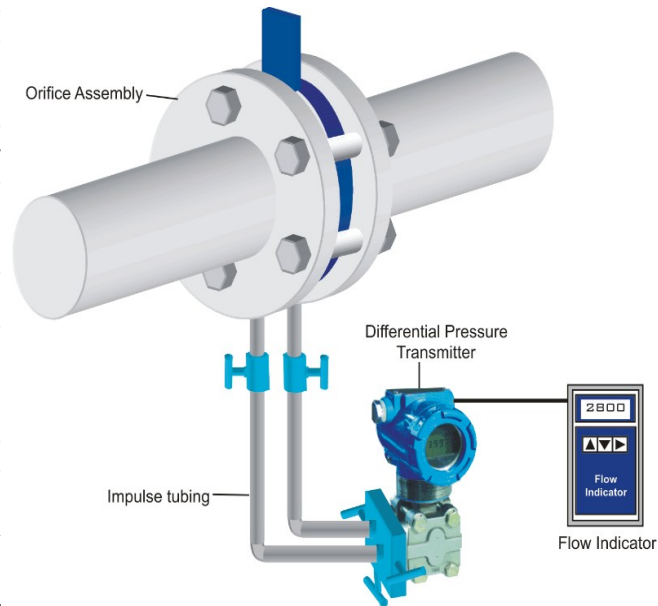


## Description

Orifice flow meter offers an excellent mode to measure flow of major fluids. It uses the Bernoulli's principle which states relationship between pressure and velocity of the fluid. When the velocity increases, the pressure decreases and vice versa. An orifice plate is a thin plate with a hole in the middle. It is placed in a pipe in which fluid flows. As fluid flows through the pipe, it has a certain velocity and a certain pressure. When fluid reaches orifice plate having a hole in the middle, the fluid is forced to converge & go through the small hole, the point of maximum convergence actually occurs shortly downstream of the orifice, at the so-called vena contracta point. As it does so, the velocity and the pressure changes. Beyond the vena contracta, the fluid expands and the velocity and pressure change once again. By measuring the difference in fluid pressure between the normal pipe section and at the vena contracta, the volumetric and mass flow rates can be obtained from Bernoulli's equation.

The flow meter consists of a SS Orifice plate assembled in CS weld neck flange assembly, differential pressure transmitter, flow indicator etc. Orifice plate is designed as per the size of fluid pipeline & flow rate. Orifice flange assembly is welded on the fluid pipeline. Up & down stream sides of orifice plate is connected through impulse tubing to a Differential pressure transmitter (DPT), which senses the differential pressure across the orifice during fluid flow. DPT accurately converts this differential pressure into analog signal output which is fed into a panel mounted flow integrator / indicator. Flow indicator cum totalizer unit thus converts this flow signals from DPT into flow rate & displays the same on its LED display. The inbuilt totalizer of flow indicator also totalizes the total amount of fluid flow passing through the flow meter during a specified duration. Design of flow meter orifice is based on flow parameters of fluid like min. / max. / normal flow rate, pressure & temperature, type of fluid, pipe size etc. Versions are also available with Pressure & temperature compensation unit.

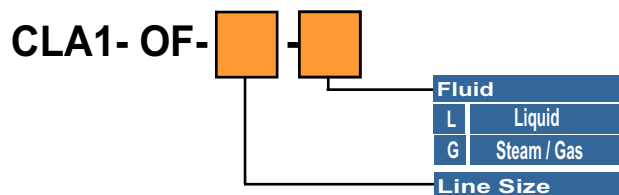


Application: Boiler feed water, Steam, Compressed air, Gas, Oil, Diesel, Oil etc.

## Technical Specification

MODEL	CLA1-OF
Orifice	SS orifice plate with CS weld neck flange assembly
Orifice mounting	Welded on pipe line
Valves	CS / SS
Transmitter	Differential pressure transmitter
Output of DPT	4- 20 mA
Process Temperature	-25 ~ 500 C <sup>o</sup>
Pressure	15 kg / cm <sup>2</sup>
Indicator	Flow rate / totalizer - panel mounted
Optional	IBR approval

## Model Selection



Contact us for other models & specifications not listed here. Due to product enhancement, technical specification may vary.

# Cirrus

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