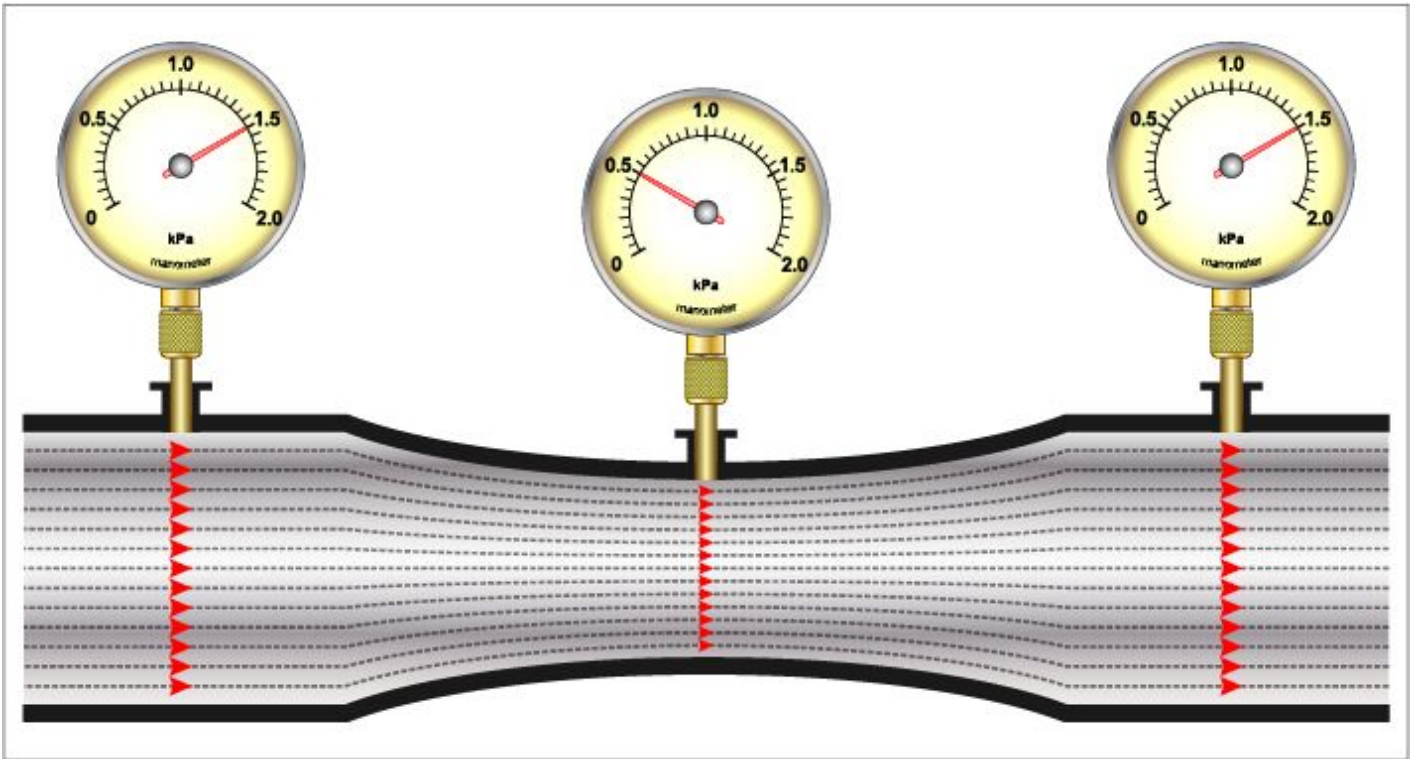


# METHANE FROM FLARING TOOLKIT



## Flow: Venturi Flow Meter

How do I measure flow? > Flow: Venturi Flow Meter

A Venturi Meter is a device in which pressure energy is converted into kinetic energy and it is used for measuring the rate of flow of fluids through pipes.

### How it Works

A Venturi flow meter contains a throat ( $d$ ) which is smaller in diameter to the pipe ( $D$ ), into which it fits.

When the fluid flows through it, the resultant pressure at ' $d$ ' is lower than the upstream pressure of ' $D$ '. These pressures at ' $d$ ' and ' $D$ ' can be measured using pressure tapings and the difference in pressure can be used to calculate the flowrate of fluid in the pipe.

IMAGE TO FOLLOW

Advantages



Well proven, simple, and robust metering principle



No moving parts

#### Limitations



Presents some restriction to flow in the flare system



Venturi flow meter could be an option with stable high flow, but due to cost and limited turndown, it's not a likely to be chosen as backup or primary measurement for a flare system



High cost



Not suited for low flow velocities



Limited turndown ratio, typically 4:1

Go Deeper

• [PrimaryFlowSignal.com](http://PrimaryFlowSignal.com)

Case study

No case study available at this time.

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## How do I measure flow?



[Flow: Ultrasonic & Sonar Clamp-on Flow Meters](#)



Vortex Flow Meter



Flow: Coriolis Flow Meter



Flow: Ultrasonic Flow Meter



L2F Optical Flow Meter