

## The Theory of a Variable Area Flow Meter

There are many different types of flow meters that are available and that are out there today, and so it is incredibly important to recognize the particular flow meter that you want and need, and then to learn about it so that you are fully aware of all the functions and capabilities of that particular flow meter.

The variable area flow meter is one of the many flow meters that are available, and the variable flow meter is a device which can be used efficiently in many different types of situations, and so if you are interested and/or needing to learn more about the variable area flow meter, then read on to find out what it is all about and the given theories behind it.

What is the Variable Area Flow Meter?

A variable area flow meter which is also often referred to as a rotameter, measures flow rate of a liquid or gas by relating that of linear displacement of an internal float or otherwise sharp-edged orifice plate to that of a corresponding flow rate. Variable area monitors either allow flow through that of a peripheral orifice which is formed between a tapered wall and a float as is done in the traditional rotameter.

Furthermore, the non-linear increase in orifice area compensates for that of a non-linear increase in the pressure differential characteristic in the fixed orifice monitors; flow rate is actually read on variable-area meters and works by aligning the position of the piston involved to a calibrated scale that is adjacent to the particular piston.

Annular and Peripheral Orifices

This is a matter which is extremely important to take into consideration in regards to this situation, as the most significant difference between that of the traditional rotameter and the lake's flow meter for instance is in the design of the actual fluid path in which the measured fluid is forced to take.

Additional Information

In order to be able to satisfy that of both system and media requirements, these variable area flow meters are available in numerous materials of construction, and this includes that of: plastic, aluminum, brass, stainless steel, glass, and cast iron, for instance - there are many more options as well.

In case you did not know, lake monitors have the ability to sense and then electronically output the position of the piston inside this monitor, and the basic purpose of doing this is so that flow rate can be provided properly and as accurately as possible.

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About the Author

For more information on variable area flow meters visit <http://www.FlowMeterBasics.com/> or <http://FlowMeterBasics.blogspot.com/>