

## Vortex Flowmeter with Remote Indication

What is a Vortex Flowmeter with Remote Indication?



***Scientific Devices***  
**(Bombay) Pvt. Ltd.**

**Navi Mumbai, Maharashtra Mar 19, 2023 ([Issuewire.com](http://www.Issuewire.com))** - What is a Vortex Flowmeter with Remote Indication?

Scientific Devices Bombay Pvt Ltd is an ISO 9001:2015, 14001:2015, CE Certified and DNV Type approved Company for Ships, High Speed & Light Craft engaged in Designing, Manufacturing and Supply of Industrial Equipment's since past 30 years used for Chemical Process, Petrochemicals, Power generation, Oil & Gas, Pharmaceutical Companies, Ship building and Cement Industries etc. A

vortex flowmeter with remote indication is a type of flowmeter that measures the flow rate of gases or liquids in a pipe. It uses the principle of the von Kármán vortex street, which is the periodic shedding of vortices downstream of an obstacle in a fluid flow. The vortex flowmeter consists of a bluff body or sensor element mounted in the flow stream, which creates the vortex street as the fluid flows past it. The frequency of the vortices is proportional to the flow rate, and this frequency is detected by a sensor and used to calculate the flow rate.

A vortex flowmeter with remote indication is equipped with a remote display or transmitter that sends the flow rate measurement to a remote location, such as a control room or a control panel. This allows the operator to monitor the flow rate remotely without physically accessing the flowmeter. The remote indication is useful when the flowmeter is difficult to reach or requires continuous monitoring.

Vortex flowmeters are widely used in various industries, including oil and gas, chemical processing, water treatment, and power generation. They are known for their high accuracy, wide rangeability, and low-pressure drop, making them a suitable choice for many flow measurement applications.

What are the main advantages and disadvantages of Vortex flowmeters with remote indication?

There are several advantages and disadvantages of vortex flowmeters with remote indication:

Advantages :

- High accuracy : Vortex flowmeters are known for their high accuracy, typically within +/- 1% of the measured flow rate.
- Wide rangeability : Vortex flowmeters can measure a wide range of flow rates, making them suitable for various applications.
- Low-pressure drop : Vortex flowmeters have a low-pressure drop, which means that they do not significantly obstruct the fluid flow. This can be beneficial in situations where pressure drop is a concern.
- No moving parts : Vortex flowmeters have no moving parts, which makes them durable and maintenance-free.
- Remote indication : The ability to remotely monitor the flow rate is a major advantage of vortex flowmeters with remote indication. It allows the operator to monitor the flow remotely without physically accessing the flowmeter.

Disadvantages :

- Sensitive to flow disturbances: Vortex flowmeters can be sensitive to flow disturbances, such as swirl or turbulence, which can affect the accuracy of the measurement.
- Limited flow conditions : Vortex flowmeters are not suitable for all flow conditions, as they are typically designed for clean, non-viscous fluids flowing at a constant velocity.
- Limited pipe sizes : Vortex flowmeters are typically available in smaller pipe sizes, which may not be suitable for larger applications.
- Higher cost : Vortex flowmeters are generally more expensive than other flowmeters, such as orifice plates or venturi tubes.

What are the major industries that use vortex flowmeters with a remote indication?

Vortex flowmeters with remote indication are widely used in a variety of industries, including:

- Oil and gas : Vortex flowmeters are commonly used in the oil and gas industry to measure the flow of crude oil, natural gas, and other hydrocarbons.
- Chemical processing : Vortex flowmeters are used in chemical processing plants to measure the flow of various chemicals and process fluids.
- Water treatment : Vortex flowmeters are used in water treatment plants to measure the flow of water and other fluids used in the treatment process.
- Power generation : Vortex flowmeters are used in power generation plants to measure the flow of steam, water, and other fluids used in the generation process.
- Food and beverage : Vortex flowmeters are used in the food and beverage industry to measure the flow of various liquids, such as milk, beer, and juice.
- Other industries that use vortex flowmeters with remote indication include pharmaceuticals, paper and pulp, and HVAC (heating, ventilation, and air conditioning).

## Conclusion

[Vortex flowmeters with remote indication](#) are a type of flowmeter that measures the flow rate of gases or liquids in a pipe using the principle of the von Kármán vortex street. They are known for their high accuracy, wide rangeability, and low-pressure drop, making them a suitable choice for many flow measurement applications. Vortex flowmeters with remote indication are equipped with a remote display or transmitter that sends the flow rate measurement to a remote location, allowing the operator to monitor the flow rate remotely without physically accessing the flowmeter. Vortex flowmeters with remote indication are used in various industries, including oil and gas, chemical processing, water treatment, and power generation. However, they have some limitations, including sensitivity to flow disturbances, limited flow conditions, and pipe sizes, and they are generally more expensive than some other types of flowmeters.



## Media Contact

SCIENTIFIC DEVICES (BOMBAY) PVT. LTD

ads.sdbpl@gmail.com

+91 7738894716

Source : Scientific Devices Bombay Pvt Ltd

[See on IssueWire](#)