Neptune Flow Meters for Enhanced Coriolis Flow Measurement

General Information

This page is intended to provide specifications on Neptune Flow Meters offered by Industrial Dynamics. It will provide information on MP flow meters, their various types, design features, advantages, and specifications.

Description

Neptune Flow Meters provide positive displacement flow meters. A leader in coriolis flow measurement devices, Neptune provides flow meters in two basic types – nutating disc, and magnetically coupled oscillating piston flow meters. Industrial Dynamics offers MP flow meters in the following sizes:

- 1/2" MP
- 1" MP
- 2" MP
- 3" MP

Design Features

Neptune NexGen SFT200 mass flow transmitter is the latest solution in coriolis flow measurement. Modbus protocol is used as central processor to handle multiple meters at the same time, thus reducing costs in flow metering systems. The transmitter within Modbus Protocol is designed to control basic measurements such as density, overall mass temperature, and determination of flow rates. The flow transmitter is designed to have a compact size for easy installation.

The features of the NexGen SFT200 mass flow transmitter enable the following capabilities.

- Oscillating pistons within the flow meter can resist high temperatures between 121°C and 250°F.
- The MP flow meters can provide accurate measurements between +0.5% over a 10:1 turndown.

- The Modbus protocol operates at standard speeds of 56.6 K baud.
- Reliable neptune fow meters have the capabilities to measure over 400 types of industrial liquids.
- Flow Rates of 3.8 to 1,140 Liters/Min. (1 to 300 gpm).

Construction

Depending on the size of the flow meter, Neptune NexGen SFT200 mass flow transmitter can be constructed using 316 type stainless steel, bronze, or iron. Bronze and stainless steel are used to manufacture the main body cover. Other materials can be used if required by the customer. Molded polymer is used to produce the oscillating piston. Material options for the O-ring seal include silicone, Buna-N, and Teflon.

Options

- **Air Release and Strainer:** A secondary option is the addition of strainer and air releases. The strainer is designed to be coupled directly into the inlet of the flow meter. Air release is used to prevent over speeding of the system, over recording of the register, and any kind of damage to the flow meter.

- **Alarms:** Warning devices are another option provided with Neptune Flow Meters. They are connected to Modbus Protocol via the pulse transmitters. They are used to indicate any deviation from the flow rate set points.

- **Additional Options:** Industrial Dynamics offers MP Series Neptune Flow Meters in a variety of options in terms of registers, pulse transmitters (digital and analog), and controlled batching (mechanical and electronic).

About Industrial Dynamics

Industrial Dynamics Co was incorporated in 1984 as a stocking distributor and manufacturers' representative offering a wide range of flow measurement products, level switches and transmitters, solenoid type, actuated, and control type valves, and liquid filtration housings and replacement filter bags and cartridges.

Our business has evolved to include complete "systems" responsibility for a wide range of product batching, blending, level control, product "custody transfer" dispensing, ……. etc applications.