# Purge Set (Flowmeter with Constant Flow Regulator)



- Combine a flowmeter and flow regulator in a single unit
- Maintaining a constant flow-rate independent of inlet pressure fluctuations
- Maintaining a constant flow-rate independent of outlet pressure fluctuations.
- Heavy duty design
- For liquid and gas
- Reliable operation
- Easy maintenance
- Vertical installa



**FL22** 

### PRODUCT OVERVIEW

Purge set flow meter is combination of a flowmeter and flow regulator in a single unit. The regulator serves to maintain the flow rate set on the precision adjusting valve independent of fluctuations in inlet or outlet pressure. It is a sturdy, industrial constant flow regulator and is designed to provide constant flow of liquids or gases regardless of pressure variations. Typical applications are control of seal water, control of flush water, water purging and air purging.

### MATERIALS

Model FL22 constant flow regulator has a stainless-steel body. For acrylic tube and glass tube models, please check data sheets for FL03 and FL12, respectively.

# **OPERATING PRINCIPLE**

We at Sangan Sanat produce two types of purge flow meters:

1) The first is inlet pressure variation control model. In this type, the fluid is introduced from IN to the lower chamber of the C series Constant Flow as shown in figure 1. The load pressure (Secondary pressure) is connected to the upper chamber. The differential pressure between the lower chamber and the upper chamber is always constant thanks to the function of the spring and the diaphragm. The differential pressure across the needle valve is kept always constant and the flow rate of the fluid is proportional only to the opening of needle valve.

2) The second type is outlet pressure control model. The opposite action is taken for this type and the flow rate is kept also constant even when the load pressure changes. Operating principle of outlet pressure variation control model is shown in below figure.

# **DIMENSIONAL DRAWING**







Figure 2. Design for outlet pressure variation control



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