

FL-10 SERIES FLOW METER OPERATING INSTRUCTIONS

GENERAL INFORMATION

Inspect instrument for possible visible damage resulting from shipping. Notify UPS or other carrier as well as the distributor where the flow meter was purchased of any claims.

Flow meters always must be installed in a vertical position, any significant deviation from vertical will affect the readings. Valves should be closed before installation and opened gradually after all connections are carefully inspected. A leak test is highly recommended especially when hazardous fluids are involved.

CAUTION: Excessive tightening of valves may damage the orifice.

It is important that all lines to be connected to the flow meter are purged of any dust or other residual contamination prior to installing the meter. In some applications an additional filter should be installed at the inlet of the flow meter.

Before installing open the valve of the flow meter and check to make sure that the float or floats are moving freely in the flow tube. This is best done by slowly tilting the flow meter from horizontal to vertical while observing if the float is rolling freely.

All meters are thoroughly inspected at the factory prior to shipping and are sealed in polyethylene bags to prevent dirt from entering into the flow passages. Certain small bore flow tubes have a clearance between the float and the inside walls of the flow tube of only a few ten thousandths of an inch. In some cases these flow tubes are found to have floats that are sluggish or not moving due to condensation resulting from temperature changes during shipping.

It is advisable to blow a dry clean gas through the meter to free float.

SAFETY INFORMATION

FL-10 Series flow meters are designed to be operated at pressures not exceeding 100 psig (6.7 bars), or temperatures not exceeding 250 degrees F (121deg.C).

Never operate the flowmeter without the safety shield in place.

All meters are factory tested for leakage prior to shipping. For hazardous fluids the flow meter must be re-tested at the time of installation in the system, prior to usage.

Flow meters must be protected from breakage due to external conditions such as objects bumping into or hitting the instrument or extreme vibrations. The selection of material of construction, and its suitability for use, is the responsibility of the customer. The manufacture accepts no liability.

It is the responsibility of the customer to acquaint the operator(s) of this flow meter with all appropriate safety information.

VALVE ALIGNMENT

The built-in needle valve may be positioned at the outlet of the flow meter.

OPERATING INSTRUCTIONS

Close valve (if applicable) before initial use, then pressurize the system.

Slowly open the valve until the float is at the desired flow rate. Flow reading instructions can be found on the calibration data sheet supplied with the meter.

MAINTENANCE

Under normal operating conditions no special maintenance is required. Dirt or contamination may create problems within the flow tube by causing a restriction in the flow passage. Such conditions can be diagnosed by examining the flow tube. The most obvious indication of obstruction is the float being stuck in the flow tube. If the existence of the contamination is determined the condition may be rectified in a number of ways. The easiest being (if possible) is to disconnect the inlet and the outlet of the flow meter and purge the instrument by using a clean and dry stream of gas. The action of the float within the bore of the flow tube very often causes particles to be dislodged through the outlet of the flow meter.

