

MANUAL FOR FL7200, 7300, 7400, 7500, and 7600 SERIES ROTAMETERS

To get the most from the flowmeter you are about to install take time to read the following information before beginning work.

- 1) Carefully inspect the meter for damage that may have occurred during shipping.
 - 2) Make sure your pressure, temperature, fluid and other requirements are compatible with the meter.
 - 3) Select a suitable location for installation to prevent excess stress on the meter which may result from:
 - a) Misaligned pipe.
 - b) The weight of related plumbing.
 - c) "Water Hammer" which is most likely to occur when flow is suddenly stopped as with quick closing solenoid and operated valves. (If necessary a surge chamber should be installed. This will also be useful in high pressure start-up situations.)
 - d) Thermal expansion of liquid in a stagnated or valve isolated system.
 - e) Instantaneous pressurization which will stress the meter and could result in tube failure.
- Note: In closed thermal transfer or cooling systems install the meter in the cool side of the line to minimize meter expansion and contraction and possible related fluid leaks.
- 4) Handle the meter carefully during installation.
 - a) Use an appropriate amount of Teflon tape on external pipe threads before making connections. Do not use paste or stick type thread sealing products.
 - b) **Extreme caution should be exercised when using PVC solvent cement around Acrylic. Solvents can cause acrylic to stress crack.**
 - 5) Install the meter vertically with the inlet port at the bottom.
 - 6) Meters should be cleaned with a mild soap solution. This will be an effective cleaner of rust stains. Caution must be used so that materials of construction are not damaged by cleaning solutions. Hard water deposits can be removed with a 5% acetic acid solution (vinegar).

CAUTION:

- 7) Meters are not oxygen cleaned. Use with incompatible fluids will cause O-rings to swell and break tubes. Meters used in gas service should have suitable valves plumbed in at the inlet and outlet of the meter. The valve at the outlet should be used to create back pressure as required to prevent float bounce. The inlet valve should be used for throttling purposes.
- 8) **Meters with shields must never be operated without shields securely in place. Failure to use safety shields may result in serious injury to personnel and property.**
- 9) **Meters without case enclosures are designed to operate at 14.7 psia. Meters in pressure service must be sufficiently shielded using 3/16" polycarbonate to protect personnel and equipment in the event of tube failure.**
- 10) **Pressure and temperature maximums must never be exceeded.**

PRESSURE/TEMPERATURE

ACRYLIC BLOCK MODELS

Water Service	PSIG/°F
	125/130

Air Service	100/100
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