



FOX MODEL FT3 FLOW METER PROCUREMENT SPECIFICATION

1. The flow meter shall operate on the Constant Delta Temperature (Constant Delta T) thermal mass principal. The sensing elements shall consist of two platinum RTD's. The sensor's heated element shall operate a constant temperature of 100°F above the gas temperature.
2. The flow meter shall have a built-in display of flow rate, flow total, temperature, and elapsed time. The read-out shall utilize a backlit LCD display consisting of two lines each 16 characters.
3. Two 4 to 20mA outputs are required; one output for flow rate and the second output is programmable for flow rate or process temperature. A pulse output is also required.
4. An optional non-resetting totalizer shall be available as required by air quality management districts.
5. A 4-key infrared keypad will be employed for user programming. Input parameters shall be protected by use of a password. Non-volatile memory will retain totalizer and user parameters for up to seven (7) years.
6. The flow meter shall have a built-in microprocessor allowing field programmability of the 4mA setting, 20mA setting, pulse output setting, pipe/duct area, zero flow cutoff and alarm settings.
7. The flow meter shall measure gas flows over a range of 0-50,000 standard feet per minute. Sensor response time shall be 0.9 seconds for a one (1) Sigma change in velocity.
8. Accuracy shall be ± 1.0 percent of reading plus 0.2 percent of full scale and repeatability ± 0.2 percent of full scale over an operating temperature range of -40°F to 250°F.
9. All wetted parts are to be 316SS utilizing an all welded design. Other alloys will optionally be available.
10. All electronics to be mounted in a single NEMA 4X enclosure. Input power will be 24VDC or 85-264VAC, 47-63 Hz.
11. USB serial communication port is standard; the following communication options are also available: RS485 Modbus and HART.
12. The manufacturer shall provide an NIST traceable calibration certificate for the instrument.
13. The meter will have a calibration validation feature - without requiring external equipment, removing the meter from the process or stopping the flow - to evaluate meter performance.
14. The instrument will be the Model FT3 manufactured by Fox Thermal Instruments, Inc., 399 Reservation Road, Marina, CA 93933 Phone: 831-384-4300, Fax: 831-384-4312, Email: sales@foxthermalinstruments.com, Website: www.foxthermalinstruments.com