

FOX MODEL FT4X FLOW METER PROCUREMENT SPECIFICATION

- 1. The flow meter shall operate on the Constant Delta Temperature (Constant Δ T) thermal mass principal.
- 2. A DDC-Sensor[™], or direct digitally controlled sensor, shall be standard.
- 3. The Gas-SelectX[®] menu will offer pre-programmed and selectable gases and gas mixtures.
- 4. The flow meter will have CAL-V[™] calibration validation features to evaluate meter performance.
- 5. The flow meter will have a standard Data Logger for 40 24-hour daily totals; 7 year history of alarm/event logs.
- 6. 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.
- 7. A 4-key keypad will be employed for user programming. Input parameters shall be protected by use of a password. Nonvolatile memory will retain totalizer and user parameters for up to seven (7) years.
- 8. Two 4-20mA outputs are required; one output for flow rate and a HART communication option; a second output is programmable for flow rate or process temperature. A pulse output is also required.
- 9. The flow meter shall have a built-in microprocessor allowing field programmability of the 4mA setting, 20mA setting, pulse output setting, pipe diameter, zero flow cutoff, standard temperature and pressure (STP), and alarm settings.
- 10. The flow meter will have approvals from CE, FM/FMc, ATEX, and IECEx for use in potentially explosive atmospheres.
- 11. The flow meter shall measure gas flows over a range of 15-60,000 standard feet per minute. Sensor response time shall be 0.8 seconds for a one (1) time constant.
- 12. In an operating temperature range of -40°F to 250°F, accuracy shall be ± 1.0 percent of reading, ± 0.2 percent of full scale for air calibrations; ± 1.5 percent of reading, ± 0.5 percent of full scale for other gases. Repeatability ± 0.2 percent of full scale.
- 13. All wetted parts are to be 316SS utilizing an all welded design. Other alloys will optionally be available for inline flow bodies.
- 14. All electronics to be mounted in a single NEMA 4X enclosure. Input power will be 10-30VDC.
- 15. USB serial communication port is standard; the following communication options are also available: RS485 Modbus RTU and HART.
- 16. The manufacturer shall provide an NIST-traceable calibration certificate for the instrument.
- 17. The instrument will be the Model FT4X manufactured by Fox Thermal, 399 Reservation Road, Marina, CA 93933 Phone: 831-384-4300, Fax: 831-337-5786, Email: sales@foxthermal.com, Website: www.foxthermal.com