

# **MODEL FT2A FLOW METER FEATURES**

## 1. Direct Mass Measurement

The Fox Thermal Model FT2A measures the mass flow of gases directly in Standard Cubic Feet per Minute (SCFM), Normal Cubic Meters per Hour (NM3H), Kilograms per Hour (Kg/Hr), and other mass units with out the need of pressure or temperature compensation. Isolated 4-20mA and pulse outputs are standard.

#### 2. Process Temperature Measurement

The FT2A measures the process gas temperature. An isolated 4-20mA output programmable for flow or temperature is standard.

# 3. Outstanding Low Flow Capability, Wide Turn-Down Ratio

The Fox Thermal flow meter is capable of providing precise measurement of extremely low velocity gas flows. This results in a wide measurement range and a turn down ratio of 100:1 is typical. In many applications, the ratio is higher.

## 4. Inline, Insertion, and Retractor Sizes

Inline type flow meters are available for <sup>1</sup>/<sub>4</sub>" to 6" pipes. Built-in flow conditioners reduce the requirement for long, straight pipe runs both upstream and down. The inline flow bodies are available in either 316 stainless or medium carbon steel. Insertion type flow meters are easy to install and can be installed in pipe diameters of 1 <sup>1</sup>/<sub>2</sub>" and up. Retractor sizes are 15", 18", 24", 30", and 36".

## 5. Pressure Ratings

The FT2A insertion meter is rated to 500 psig (34.5 barg) and the FT2A with a retractor is rated to 125 psig (8.6 barg). A 316 SS inline meter with NPT ends is rated for 500 psig (34.5 barg), a 316 SS inline meter with 150 lb. flanges is rated for 230 psig (15.6 barg), a carbon steel inline meter with NPT ends is rated for 300 psig (20.1 barg), and a carbon steel inline meter with 150 lb. flanges is rated for 285 psig (19.7).

#### 6. PowerPro<sup>™</sup> Sensor

The PowerPro<sup>™</sup> sensor is standard on all Fox Meters and operates at a higher power level than competitive models. This results in a faster response time and it allows a wider turn-down ratio.

# 7. Field-Programmable

The Display and Configuration Panel displays flow rate, flow total, elapsed time (hours since the totalizer was reset), process temperature and alarms. Field configurable variables include flow and temperature engineering units, 4-20mA scaling for flow and temperature, pulse output scaling, zero flow cut off, alarm settings (high flow, low flow, high temp, and low temp), filter setting, and many others.

#### 8. Digital Communications / FT2A View™

Bus options are RS485 Modbus, BACnet MS/TP, Profibus-DP, DeviceNet or Ethernet. The FT2A uses a standard USB port to connect to a PC. Fox's free FT2A View<sup>™</sup> software provides complete configuration and remote process monitoring functions.

#### 9. NIST Traceable Calibration

The Fox Calibration laboratory uses NIST traceable flow standards to ensure the highest level of accuracy and the fastest turn-around time. The Fox Lab can calibrate using a wide range of gases, gas mixtures and temperatures.

# **10. Discrete Input and Output**

The discrete input can be programmed to clear alarms or reset the totalizer. The discrete output can be set to provide a signal when alarms are generated.

#### **11. Enclosure and Area Rating**

NEMA 4X enclosure is FM and FMc approved for Class I, II, III, Division 2, Groups A, B, C, D, E, F, G, T4A hazardous areas. It is also CE approved.

## 12. Input Power

24 VDC standard; 100 to 240VAC, 50-60Hz optional.

Some of the features listed are optional features



# MODEL FT2A FLOW METER FEATURES (CONT'D)

# 13. Approvals

#### CE: Approved

EMC Directive; 2004/108/EC Emissions and Immunity Testing: EN61326-1:2008 Low Voltage Directive (LVD): 2006/95/EC Product Safety Testing: EN 61010-1: 2010 Pressure Equipment Directive: 97/23/EC Weld Testing: EN ISO 15614-1 and EN ISO 9606-1, ASME B31.3

## FM and FMc: Approved

Class I, II, III, Division 2, Groups A, B, C, D, E, F, G, T4A hazardous locations. NEMA Type 4X

Some of the features listed are optional features