MODEL FT3 FLOW METER FEATURES

1. **Direct Mass Measurement**
   The Fox Model FT3 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. **In-the-Pipe Calibration Validation with CAL-V™ and Zero CAL-CHECK™**
   The FT3's CAL-V™ function allows operators to validate the meter's calibration accuracy by testing the functionality of the sensor and associated signal processing circuitry - all this with the simple push of a button. Fox's innovative approach lets users validate calibration in-the-pipe -- under actual process conditions, including zero flow. Zero CAL-CHECK™ is used to ensure that the flow meter still retains its original NIST-traceable calibration at zero flow.

   The FT3 View™ software automatically logs the date and results of each CAL-V™ and Zero CAL-CHECK™ test and can produce Calibration Validation Certificates at the conclusion of the tests.

3. **Outstanding Low Flow Capability, Wide Turn-Down Ratio**
   Fox's thermal dispersion technology 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. **Process Temperature Measurement**
   The FT3 measures the process gas temperature. An isolated 4-20mA output programmable for flow or temperature is standard.

5. **Measure Mass or Standard Volumes and Process Gas Temperature/Outputs**
   The Fox FT3 measures the mass flow of gases in pounds, kilograms or metric tons (per unit of time). It also provides standardized (normalized) volumetric measurement in SCFM, SCFH, NMPS, NM3/M, NM3/H, NM3/D, NLPS, NLPH, MSCFD, SCFD, MMSCFD, MMSCFM, SMPS, SM3/H. Process gas temperature measurement is standard. Outputs include two 4 to 20mA and one pulse.

6. **PowerPro™ Sensor**
   The PowerPro™ 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. **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 calibration lab can calibrate using a wide range of gases, gas mixtures and temperatures.

8. **Inline, Insertion, and Retractor Sizes**
   Inline type flow meters are available for ¼" 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 ½" and up. Retractor sizes are 15", 18", 24", 30", and 36".

9. **Pressure Ratings**
   The FT3 insertion meter is rated to 500 psig (34.5 barg) and the FT3 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 (16 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 barg).

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. **Display and Configuration Panel**
    The optional Display and Configuration Panel displays flow rate, flow total, elapsed time, process temperature and alarms. The Configuration Panel allows programming of a large variety of meter settings.

Some of the features listed are optional features

12. Digital Communications / FT3 View™

Bus options are HART and RS485 Modbus. The FT3 uses a standard USB port to connect to a PC. Fox's free FT3 View™ software provides complete configuration and remote process monitoring functions. FT3 View™ lets you adjust meter configuration, evaluate transmitter alarm conditions, data log process information, and view measurements from your PC or control station.

13. DC or AC Powered

The FT3 accepts 24VDC power or 85 to 264VAC (50-60 Hz) power is an option (100-240VAC for CE Mark).

14. 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, Div. 1, Gps B, C, D; Class II, Div. 1, Gps E, F, G; Class III, Div. 1; T3C, Ta = -40°C to 70°C;
Class I, Zone 1, AEx/Ex d IIB + H2 (T6, T4, or T1*); Ta = -20°C to 70°C; Type 4X, IP67

ATEX (FM12ATEX0034X): Approved

II 2 G Ex d IIB + H2 (T6, T4, or T1*) Gb Ta = -20°C to 70°C; IP67
II 2 D Ex tb IIIC (T185°C, T135°C, or T450°C*) Db Ta = -20°C to 70°C; IP67

IECEx (IECEx FMG 12.0010X): Approved

Ex d IIB + H2 (T6, T4, or T1*) Gb Ta = -20°C to 70°C; IP67
Ex tb IIIC (T85°C or T135°C*) Db Ta = -20°C to 70°C; IP67**

Temperature code ratings for Zones are dependent on external process temperature factors and equipment enclosure configuration. See the table below for specific temperature code ratings.
*** The IECEx dust rating does not apply to the Remote Enclosure.*

Temperature Code Ratings by Enclosure Type

Model Code		Temp. Code Marking (Gas)		Temp. Code Marking (Dust)	
Encl.	Sensor Type	Main Encl.	Remote Encl.	Main Encl.	Remote Encl.**
E1	ST	T4	N/A	135°C	N/A
E2	ST	T4	N/A	135°C	N/A
E3	ST	T6	T4	85°C	135°C**
E4	ST	T6	T4	85°C	135°C**
E3	HT	T6	T1	85°C	450°C**
E4	HT	T6	T1	85°C	450°C**

Note: The EU Pressure Equipment Directive (PED) requires that the minimum ambient and fluid temperature rating for carbon steel flow bodies not be below -29C.

Some of the features listed are optional features