

MODEL FT4A FLOW METER FEATURES

1. Direct Mass Measurement

The Fox Model FT4A 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 without the need for pressure or temperature compensation. One isolated 4 to 20mA output programmable for flow or temperature is standard; HART communication optional. A second output is selectable for pulse or RS485 Modbus RTU.

2. Outstanding Low Flow Capability, Wide Turn-Down Ratio

The Fox flowmeter is capable of providing precise measurement of extremely low velocity gas flows. This results in a wide measurement range and a turn down ratio up to 1000:1; 100:1 typical.

3. DDC-Sensor™

The non-cantilevered design of the DDC-Sensor™ is standard on all Model FT4A flowmeters. Instead of using traditional analog circuitry, the DDC-Sensor™ is interfaced directly to the FT4A microprocessor for more speed and programmability.

4. In-the-Pipe Calibration Validation with CAL-V™

The FT4A'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.

5. Gas-SelectX®

The Model FT4A has many common gases pre-programmed into the meter so that the user can select a gas from a list or create a custom gas mix to fit the application. Three gas menus are available: Pure Gas Menu, Mixed Gas Menu, and Oil & Gas Menu.

6. Process Temperature Measurement

The FT4A measures the process gas temperature. An isolated 4-20mA output programmable for flow or temperature is standard.

7. Inline, Insertion, and Retractor Sizes

Inline type flow meters are available for $\frac{3}{4}$ " 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 carbon steel. Insertion type flow meters are easy to install and can be installed in pipe diameters of 1 $\frac{1}{2}$ " and up. Retractor sizes are 15", 18", 24", 30", and 36".

8. FC10 Flow Conditioners

Tab-style flow conditioners are available for use with FT4A insertion meters. FC10 flow conditioners are installed between two 150# flanges and reduce the need for long straight pipe runs.

9. Pressure Ratings

The FT4A insertion meter is rated to 740 psig (51.02 barg) and the FT4A with a retractor is rated to 150 psig (10.3 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), a carbon steel inline meter with 150 lb. flanges is rated for 285 psig (19.7), and a carbon steel inline meter with 300 lb. flanges is rated for 740 psig (51.0).

10. 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 to 20mA scaling for flow and temperature, standard temperature and pressure (STP), pulse output scaling, zero flow cut off, alarm settings (high flow, low flow, high temp, and low temp), filter setting, and many others.

11. Digital Communications / FT4A View™

Bus options are RS485 Modbus RTU and HART. The FT4A uses a standard USB port to connect to a PC. Fox's free FT4A View™ software provides complete configuration and remote process monitoring functions.

12. NIST Traceable Calibration

The Fox Calibration laboratory uses NIST traceable flow standards to ensure the highest level of accuracy. A calibration certificate is supplied with every meter.



MODEL FT4A FLOW METER FEATURES (CONT'D)

13. Discrete Output

The discrete output can be set to provide a signal when alarms are generated.

14. Enclosure and Area Rating

NEMA 4X enclosure approved for FM and FMc Class I, Division 1; ATEX/IECEx Zone 1 approved. CE mark.

15. Input Power

Input Power: 12 to 28VDC, 20 watts max. Full Input Power Range: 10 to 30VDC, 20 watts max.

16. Approvals

CE: Approved

EMC Directive; 2014/30/EU

Emissions and Immunity Testing: EN61326-1:2013

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; T4, Ta = -40° C to 70° C; Class I, Zone 1, AEx/Ex d IIB + H2 T4; Gb Ta = -40° C to 70° C; Type 4X, IP66/67

ATEX (FM16ATEX0013X): Approved

II 2 G Ex db IIB + H2 T4; Gb Ta = -40° C to 70° C; IP66/67 II 2 D Ex tb IIIC T135°C; Db Ta = -40° C to 70° C; IP66/67

IECEx (IECEx FMG 16.0010X): Approved

Ex d IIB + H2 T4; Gb Ta = -40° C to 70° C; IP66/67 Ex tb IIIC T135°C; Db Ta = -40° C to 70° C; IP66/67