VF3/VF4 FLOW METER FEATURES

1. **Vortex Shedding Multivariable Flow Measurement**
   The VF3/VF4 measures the flow of liquids, steam, and gases using the vortex shedding principle, where vortices shed are directly proportional to flow velocity.
2. **Multivariable Inputs: Process Flow, Temperature, and Pressure Measurement**
   The VF3/VF4 Multivariable flow meter offers flexibility using temperature and pressure measurements for a mass flow measurement in one flow meter. An energy monitoring option permits real-time calculation of energy consumption that can be programmed to measure steam, hot water, or chilled water. Selectable energy units include BTU, joules, calories, Watt-hours, Megawatt-hours, and Horsepower-hours.
3. **Outstanding Low Flow Capability, Wide Turndown Ratio**
   The VF3/VF4 provides precise measurement of extremely low-velocity fluid flows. This results in a wide measurement range and a turndown ratio up to 100:1 (application dependent). Consult the online product configurator on the Fox Thermal website for exact values.
4. **NIST Traceable Calibration**
   The Fox Thermal calibration laboratory uses NIST traceable flow standards to ensure the highest level of accuracy and the fastest turn-around time. A calibration certificate is supplied with every meter.
5. **Inline, Insertion, and Retractor Sizes**
   Inline type flow meters are available for 0.5" to 12" pipes. The inline flow bodies are available in 316 stainless, carbon steel, or Hastelloy. Insertion type flow meters are available with compact, standard, or extended length probe sizes, are viable in pipe diameters of 2" and up, and are easy to install. Process connections (with or without retractors) available with 2" NPT, ANSI flanges, and PN Flanges.
6. **Pressure Ratings**
   The VF3/VF4 pressure transducer is rated up to 1500 psia (100 bara). Contact Fox about higher-pressure applications.
7. **Display and Configuration Panel**
   The standard display and configuration panel shows flow rate, flow total, process temperature, pressure, density, fluid type, and alarms. The Configuration Panel allows programming of a large variety of meter settings.
8. **Measurement Outputs**
   The flow meter provides up to 3 simultaneous 4-20mA outputs and alarms, one pulse output, and options for HART, Modbus, and BACnet.
9. **Digital Communications**
   Bus options are HART, Modbus RTU, Modbus TCP/IP, BACnet MS/TP, and BACnet/IP.
10. **PoE (Power Over Ethernet)**
    The VF3/VF4 offers the ability to power the meter over ethernet and transmit data via IP communications.
11. **Enclosure and Area Rating**
    NEMA 4X enclosure approved for FM and FMc Class I, Division 1; ATEX/IECEx Zone 1 approved. CE mark.
12. **Input Power**
    The VF3/VF4 accepts 12-36VDC (25mA, 1W max), 12-36VDC (300mA, 9W max), or 100 to 240VAC (50-60 Hz) power.
13. **Approvals**

CE: Approved
- EMC Directive; 2014/30/EU
- Immunity Industrial Environment: EN61000-6-2:2005
- Emission Residential, Commercial: EN 61000-6-3:2007 +A1:2011
- Emissions and Immunity Testing: EN61326-1:2013
- ISM Radio-frequency Equipment - Group 1, Class A: EN 55011:2009 +A1:2010
- Low Voltage Directive (LVD): 2014/35/EU
- Product Safety Testing: EN 61010-1: 2010 +A1:2019
- Pressure Equipment Directive: 2014/68/EU
- RoHS Directive 2011/65/EU
- Explosion Protection Directive 2014/34/EU

FM (FM25US0096X) and FMc (FM25CA0047X): Approved
Class I, Division 1, Groups B,C,D; Class II/III, Division 1, Groups E,F,G;
Type 4X, IP66, T6, Ta=-40 to 60°C

ATEX (FM25ATEX0016X): Approved
II 2 G Ex d IIB + H2 T6
II 2 D Ex tD A21 IP66 T85˚C, Ta = - 40˚C to +60˚C

IECEx (IECEx FMG 25.0021X): Approved
Ex d IIB + H2 T6
Ex tD A21 IP66 T85˚C, Ta = - 40˚C to +60˚C

Some of the features listed are optional features