

# **BDC Product Showcase, September 2016: Fox Thermal FT1 Mass Flow Meter**

For this month's product showcase, we wanted to highlight the Fox Thermal FT1 Mass Flow Meter. The FT1 is a gas flow meter specifically designed for industrial, environmental, energy monitoring, and process control applications. Fox Thermal Instruments, Inc.—the makers of the FT1—have won awards for their innovative designs and products, so you know that their instruments are top-of-the-line.

Fox Thermal's flow meters use a constant temperature differential (constant  $\Delta T$ ) technology to measure mass flow rate for gases (including air). Fox sensors consist of two Resistance

Temperature Detectors (RTD's), which measure gas temperature. The instrument works by heating the mass flow sensor to a constant temperature differential above the gas temperature and then measuring the cooling effect of the gas flow. The Fox Model FT1 measures gas flow rate in standard units without the need for additional temperature or pressure compensation.

## **Other features of the Fox Thermal FT1 Mass Flow Meter includes:**

- Accurate and reliable measurement of gas flow
- Measures gas flow rate in SCFM, NM3 / HR, LBS/HR, KG/HR, & many more
- Wide measurement range: up to 1000:1 turndown; 100:1 typical
- Insertion probes suitable for 1.5" to 70" pipes

- Advanced DDC-Sensor™ technology
- Gas-SelectX® gas selection feature
- Zero CAL-CHECK® Calibration Validation
- Rotatable probe (allows ±180 degree swivel)
- 10-30VDC power input, standard
- NIST-traceable calibration
- Free FT1 View™ Software
- High and low alarm limits
- Wetted materials are all welded, 316 stainless steel
- Optional on-board 2-line x 16-character, backlit display

## Zero CAL-CHECK®

One feature that merits a little further discussion is the Zero CAL-CHECK® feature. This feature is perfect for operations where you need a quick, easy way to verify the calibration of the meter in the field.

The Zero CAL-CHECK® feature can be accessed and run through the meter's optional display configuration panel or the FT1 View™ Software. The test takes less than 5 minutes to run and produces a pass/fail result at the conclusion of the test. (A fail result may indicate either a dirty sensor or the need to recalibrate.)

If the Zero CAL-CHECK® test is performed using the FT1 View™ software, a Calibration Validation Certificate can be produced at the conclusion of the test. The certificate will show the date and time of the test along with meter data such as firmware version and meter serial number. This kind of field calibration validation helps operators comply with environmental mandates and eliminates the cost and inconvenience of annual factory calibration.

# Is the Fox Thermal FT1 Mass Flow Meter right for you?

For more about the technical details of the Fox FT1, visit our product page and download the specs from the download tab. Its features make it suitable for a large variety of industrial and commercial gas flow measurement applications.

Plus, this device was a 2015 Flow Control Innovation Award Winner, meaning that it is a best-in-class solution for gas flow measurement and control. It's fit, then, is more a matter of your specific needs. If you want more guidance as to whether the Fox FT1 is right for you, contact us.