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# Fox Announces the New Zero CAL-CHECK™ Calibration Validation Feature

Fox recently developed Zero CAL-CHECK<sup>™</sup> to be a companion test to the CAL-V<sup>™</sup> Calibration Validation feature available on the Fox Model FT3 Thermal Mass Flow Meter & Temperature Transmitter. Where CAL-V<sup>™</sup> tests the functionality of the sensor and its associated signal processing circuitry, Zero CAL-CHECK<sup>™</sup> does the following:

- Checks for build-up on sensor that could affect calibration
- Further validates the zero stability of the meter
- Checks the thermal conductivity repeatability of the sensor

Unlike CAL-V™, which may be performed in the pipe and at process conditions, Zero CAL-CHECK™ must be performed at zero flow to insure a valid test result. Depending upon the configuration - in-situ or out of pipe - zero flow will either be compared to a customer-established field baseline or factory baseline as illustrated in the image below. Learn More

# Zero CAL-CHECK™

#### SENSOR TEST AT ZERO FLOW VS. FIELD BASELINE

## INSITU

- Customer-set zero flow baseline established under normal zero flow conditions
- Test compares sensor characteristics at zero flow with customerset zero flow baseline
- Operator-initiated from front panel, FT3 View™, or MODBUS
- Fail condition indicates possible dirty sensor
- Use of Fox Packing Gland Assembly to retract probe is a convenient way to establish a zero flow condition
- Test takes less than 5 minutes after zero flow condition established
- Calibration Validation Certificate can be generated if test is initiated using FT3 View™ software

or

#### SENSOR TEST AT ZERO FLOW VS. FACTORY BASELINE

## OUT OF PIPE

- Test compares sensor characteristics at zero flow at ambient temperature and atmospheric pressure with factory characteristics
- Used to confirm Zero CAL-CHECK<sup>™</sup> when insitu zero flow condition cannot be established
- Operator-initiated from front panel, FT3 View™, or MODBUS
- Test takes less than 5 minutes after out of pipe set-up complete
- Calibration Validation Certificate can be generated if test is initiated using FT3 View™ software

## Full Calibration Validation with CAL-V™ and Zero CAL-CHECK™ Tests

A passing CAL-V<sup>™</sup> in-situ sensor and electronics test coupled with a passing Zero CAL-CHECK<sup>™</sup> test provide complete validation of flow meter calibration accuracy including confirmation that the sensing elements are clean. It is recommended CAL-V<sup>™</sup> be performed at least semiannually or as required by federal, state and local agencies, if applicable. Read more...

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Download the FT3 Datasheet to learn more about what Fox can do for your particular application.