

Mound Technical Solutions, Inc.

BUBBLER FLOW CALIBRATOR MODEL BFC100



The BFC100 Bubbler Flow Calibrator provides the convenient and cost effective solution to the calibration of Bubbler flow controllers. In-situ calibration provides NIST traceability, minimal down-time, and cost savings. The Bubbler and the flow controller stay in place; therefore, the costs of down-time, Bubbler service technician time, calibration service, and shipping/handling are eliminated.

MTS UNIQUELY OFFERS

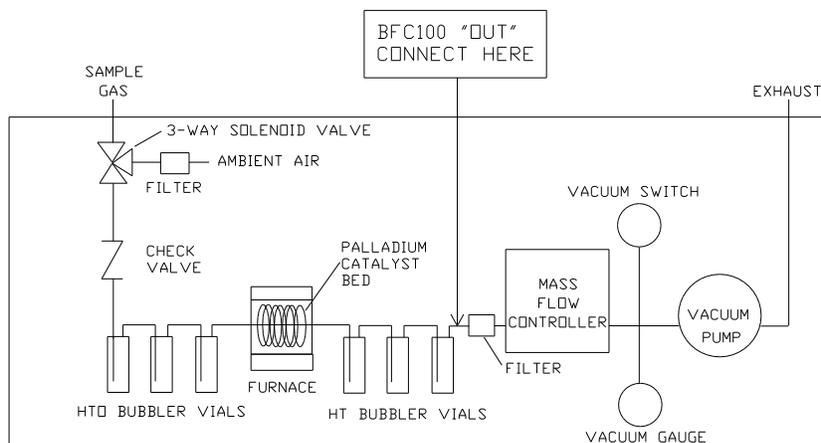
- 1) Experience in the design, fabrication, maintenance, and evaluation of Bubbler instruments since 1981
- 2) Evaluation of several designs and components over several years has established a knowledge base for quality and reliable construction
- 3) Well documented operating and maintenance procedures provide detailed information
- 4) Comprehensive Quality Assurance testing performed and documented on each production unit
- 5) Capabilities include calibration of mass flow devices, digital meters, and complete instrument operational evaluation
- 6) On-site, telephone, fax, and e-mail support are provided during and after the "front panel to back panel" one (1) year guarantee of materials and workmanship

Located in the Mound Advanced Technology Center

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PRINCIPLE OF OPERATION



MRB500 FLOW DIAGRAM REV A. 10/96

Calibration gas, typically ambient air, enters the instrument through the rear “IN” port and flows through a filter then a precision mass flow meter before leaving the instrument through the rear “OUT” port. The precision flow meter is calibrated with records traceable to NIST. A Bubbler flow controller/meter in series with this instrument receives a Transfer Calibration traceable to NIST. The BFC100 is re-certified at least annually to maintain this traceability.

SPECIFICATIONS

Dimensions:..... 8.5” W X 5.25” H X 12.5”D

Weight: 11.0 lbs

Flow range: 20-200 sccm displayed to 0.1 sccm increments

Accuracy:..... $\pm 1\%$ f.s. @15-25° C and 10-60 psia; $\pm 2\%$ f.s. @5-50° C and 5-150 psia

Repeatability: $\pm 0.15\%$ f.s.

Temperature Coefficient: .. 0.1% f.s. per 1° C, or better

Pressure Coefficient:..... 0.1% f.s. per 1 psi, or better

Gases: Air

Operating parameters: 5 to 50° C gas and ambient, 500 psi gauge maximum

Flow interface: ¼” Swagelok fitting on “IN” and “OUT” ports

Input power: 110 VAC, standard cord receptacle

System protection:..... In-line filter to protect flow meter; fuse on AC receptacle.