



Badger Meter Inc.
Impeller Product Line

Series 380 Impeller Btu System Certificate of Calibration

Calibration Date: 04/14/2011

Model Number: Model 380HS 2"

Tee Size: 2"

Serial Number: 380HS-200-00-1104-007211

Firmware Revision: 01.200

A multi-point flow calibration was performed on the meter to verify $\pm 2\%$ accuracy at all flow velocities between 1 and 15 ft/sec while using Schedule 40 pipe.

Calibration Fluid: Water

Lab Temperature: 75 °F

Lab Relative Humidity: 37%

Test Point #	Frequency Hz	Flow Rate GPM	Fluid Temp F	Viscosity cStk	Density g/cc
1	16.0717	5.917178	77.8978	0.97853	0.99631
2	21.3741	7.702153	77.9006	0.97853	0.99631
3	28.7398	10.24291	77.9051	0.97852	0.99631
4	59.2361	20.70915	77.8384	0.97867	0.99632
5	3.25946	30.85460	77.8937	0.97854	0.99631
6	90.0122	31.31738	77.8614	0.97862	0.99632
7	150.740	52.18716	77.7986	0.97877	0.99633
8	212.168	73.04745	77.7666	0.97884	0.99633
9	303.684	104.4193	77.6641	0.97909	0.99635
10	361.608	124.3057	77.5383	0.97939	0.99637
11	450.728	155.1763	77.3546	0.97983	0.99640

Flow Rate Units: gpm

Flow Total Units: Gallons

Energy Rate Units: kBtu/hr

Energy Total Units: Btu

Temperature Units: °F

Calculation Mode: Absolute

Scaled Pulse Output: Flow
300 ms

Gallons per pulse: 0.100000001490116 **Pulse Width:**

Flow Filter Coefficient: 5

Temperature Filter Coefficients: 5

Network Type: BACnet

Equipment Used in Calibration

Description	Asset Number	Serial Number	Re-Calibration Date
Liquid Calibrator	John Deere stand	JD01	11/06/2007

Certification Statement

All input and output functions for this unit have been fully tested and meet published specifications as of the date of manufacture. Flow calibration has been performed according to Badger Meter test procedures and quality standards to determine a custom calibration for this specific meter assembly. All measurements have been made with calibrated equipment traceable to N.I.S.T.

Technician: Admin