



ACCREDITED  
CALIBRATION CERTIFICATE



# \_\_\_\_\_

2033.01

This is to certify that the following meter was calibrated in accordance with procedures LWI-112 and LWI-115 for performing primary gravimetric calibrations in the Micro Motion Measurement Technology Test Lab. This calibration is compliant to ISO 17025:2005 & ANSI/NCSL Z540-1-1994. The meter has been calibrated with standards whose accuracies are traceable to N.I.S.T.

**STANDARDS USED**

PFS7K, PFS150

One, or both, of these primary flow stands may have been used for this calibration.

**ESTIMATED UNCERTAINTY  $\pm 0.014\%$**

The uncertainty is estimated using a coverage factor (k) of 2, providing a confidence level of approximately 95 %

**STATUS**

☐ As Found

☐ As Left

**CUSTOMER**

Name:

Address:

**SALES ORDER**

Number:

**TEST DATE & TIME**

1/0/1900 12:00:00 AM

**TEST COMMENTS**

0

**SENSOR DATA**

Serial Number: 0

Model: 0

Size: 0

Material: 0

Press Rating: 0

Temp Rating: 0

**SENSOR CALIBRATION**

Flow Calibration Factor: 0

D1: 0.00000

D2: 0.00000

K1: 0.000

K2: 0.000

FD: 0.00

Density Temp Coeff.: 0.00

**TRANSMITTER DATA**

Serial Number: 0

Model: 0

Mass Flow Units: 0

Density Units: 0

Temperature Units: 0

Mass Flow Cutoff: 0.000

Mass Flow Damping: 0.00

Flow Direction: 0

Frequency Flow Rate: 0

Frequency Span: 0

**METER SPECIFICATIONS**

Flow Accuracy: 0.00 %

Flow Repeatability: 0.00 %

Zero Stability: 0.000 lb/min

Density Accuracy: 0.0000 g/cc

Density Repeatability: 0.0000 g/cc



7070 Winchester Circle  
Boulder, CO 80301

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TEST TECHNICIAN

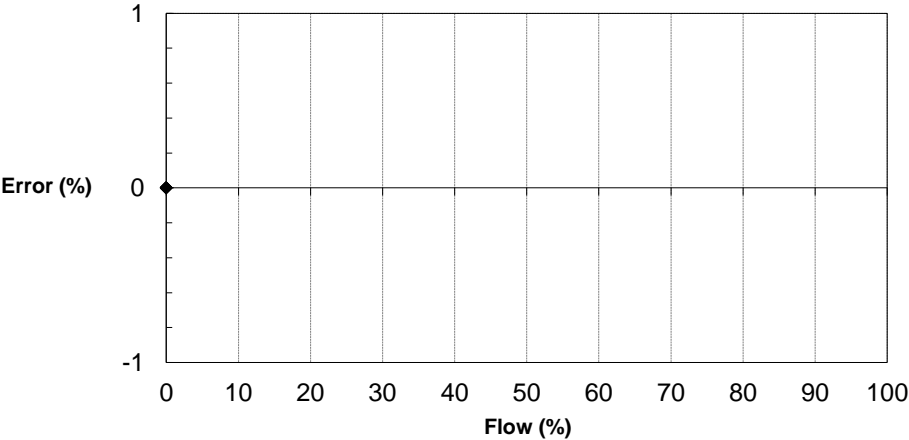
\_\_\_\_\_  
DATE

\_\_\_\_\_  
QUALITY ASSURANCE REVIEW

\_\_\_\_\_  
DATE

Product Code	Serial ID	Order ID	Line	Item	Customer Tag
CMF050M320N0A2E2ZZ					
2400SIA11B2EZCZ					
FLOW VERIFICATION - FLOW CAL FACTORS SAME AS INITIAL CAL (AS FOUND / AS LEFT)					
Process		Detail			

Process ID:  
Process Time: 1900.01.00 0:00:00  
Process Stand: PFS150  
Stand Uncertainty: ± 0.014%  
Fluid: H2O  
100% Rate: 0.00 KG/MIN  
Pickoff: 1  
100% P/T: #DIV/0!



Results

Status: PASS  
D1: 0.0  
D2: 0.0  
K1: 0.000  
K2: 0.000  
DT: 0.00  
FD: 0.00  
DTG: 0  
DFQ1: 0  
DFQ2: 0  
FlowCal: 0  
FFQ: 0  
FTG: 0  
DensCal: 000  
FCF: 0  
FT: 0

Flow (%)	Nominal Flow Rate (kg/min)	Meter Total (kg)	Reference Total (kg)	Error (%)	Specification (±%)
#DIV/0!	0.00	0.000	0.000	#DIV/0!	#DIV/0!
#DIV/0!	0.00	0.000	0.000	#DIV/0!	#DIV/0!
#DIV/0!	0.00	0.000	0.000	#DIV/0!	#DIV/0!
#DIV/0!	0.00	0.000	0.000	#DIV/0!	#DIV/0!

D. Bates  
Technician

**TEST DATE & TIME**

**TEST COMMENTS:**

**SENSOR DATA**

Serial Number:  
Model:  
Size:  
Material:  
Press Rating:  
Temp Rating:

**SENSOR CALIBRATION**

Flow Calibration Factor:  
D1:  
D2:  
K1:  
K2:  
FD:  
Density Temp Coeff.:

**TRANSMITTER DATA**

Serial Number:  
Model:  
Mass Flow Units:  
Density Units:  
Temperature Units:  
Mass Flow Cutoff:  
Mass Flow Damping:  
Flow Direction:  
Frequency Flow Rate:  
Frequency Span:

**Meter Specifications**

Flow Accuracy:	%
Flow Repeatability:	%
Zero Stability:	lb/min
Density Accuracy:	g/cc
Density Repeatability:	g/cc

**Nominal Flow Rate**

lb/min

**Meter zero**

nsec

Data Point	Set Point	UUT Flow	UUT Temp	UUT Density	UUT Zero nsec	Error Dig-Scale %	Error Hz-Scale %	Density Error
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Temp	UUT Total	UUT Dig	UUT Dig	Reset Cnt	Corrected	Start	Start	End Scale	End Scale
Error	Pulse	Total	Total1	N	Scale Total	Scale	Scale	Gross lb	Gross lb
					lb	Gross lb	Corr lb		Corr lb

Real-time Bouyancy	Inlet Press psig	Diff Press psid	Inlet Temp °C	Exit Temp °C	Fluid Density g/cc	Ambient Press psia	Ambient Temp °C	Ambient % RH	VFD Speed %
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Batch	Rdgs		Analog
Time sec	Avg'd	Timestamp	Output
			mA

Error Limit	Flow Rate		FALSE			
Turndown	lb/min	% Flow	+ Limit	- Limit	+ D Limit	- D Limit
1.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
1.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
2.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
2.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
3.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
3.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
4.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
4.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
5.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
5.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
6.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
6.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
7.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
7.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
8.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
8.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
9.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
9.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
10.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
10.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
11.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
11.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
12.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
12.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
13.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
13.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
14.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
14.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
15.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
15.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
16.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
16.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
17.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
17.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
18.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
18.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
19.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
19.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
20.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
20.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
21.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
21.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
22.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
22.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
23.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
23.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
24.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
24.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
25.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
25.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
26.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
26.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
27.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0



[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

195.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
196.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
196.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
197.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
197.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
198.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
198.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
199.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
199.5	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0
200.0	0.000	#DIV/0!	#DIV/0!	#DIV/0!	0	0