# Micro Motion, Inc.

**Mass Flowmeter Calibration Certificate**

**15652631**

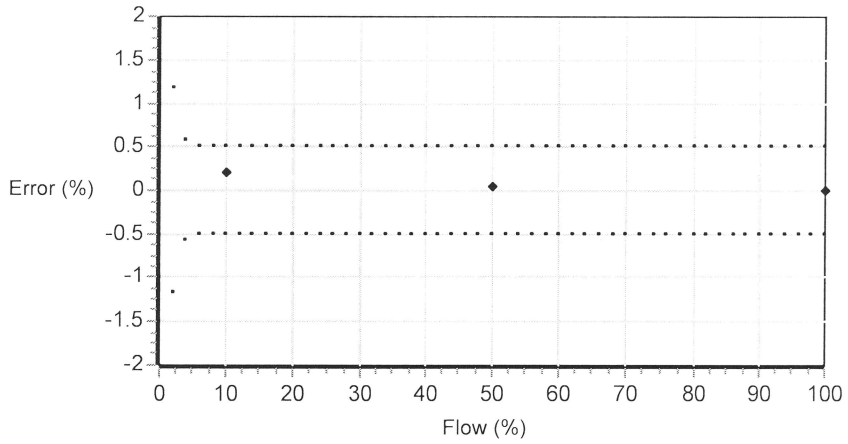
TGT

| Product Code | Serial ID | Order ID | Line | Item | Customer Tag |
|---|---|---|---|---|---|
| CNG050S290NCAAEZZZ | 15652631 | 6589086 | 1.1 | 1 | SN 26081560 |

## Process

Process ID : 9.31355149
Process Time : 2026.07.03 15:07:10
Process Stand : TSM2G@SSCCL:1
Stand Uncertainty : +/-0.030%
Fluid : H2O
100% Rate : 38.6 KG/MIN
Pickoff : 1

## Detail




## Results

Status : PASS
D1 : 0
D2 : 1
K1 : 4081.06
K2 : 4250.416
DT : 4.25
FD : 0
DTG : 0
DFQ1 : 0
DFQ2 : 0
FlowCal : 141.294.50
FFQ : 0
FTG : 0
DensCal : 04081042504.25
FCF : 141.29
FT : 4.5
Flow PCP (PSIG) : 35.0
Flow PCF : 0
Dens PCF : 0

| Flow (%) | Flow Rate (kg/min) | Meter Total (kg) | Reference Total (kg) | Error (%) | Specification (±%) | Ref Temp (°C) |
|---|---|---|---|---|---|---|
| 100.0 | 38.6 | 38.18955 | 38.18481 | 0.012 | 0.500 | 24.5 |
| 10.0 | 3.86 | 12.33489 | 12.31013 | 0.201 | 0.500 | 24.6 |
| 50.0 | 19.3 | 19.84555 | 19.83855 | 0.035 | 0.500 | 24.8 |
| 100.0 | 38.6 | 38.17862 | 38.17318 | 0.014 | 0.500 | 24.7 |

By Roland Varga

ROLAND, VARGA
Technician

This certificate is produced by an electronic data system and is valid without signature.

# Micro Motion, Inc.

**Transmitter Configuration Report**

**12319087**

| Product Code | Serial ID | Order ID | Line | Item | Customer Tag |
|---|---|---|---|---|---|
| CNG050S290NCAAEZZZ | 15652631 | 6589086 | 1.1 | 1 | TGT SN 26081560 |
| 2700I13ABAEZWZ | 12319087 | 6589086 | 1.31 | 1 | |
| PUCK800 | 26337957 | | | | |

## Process

**Process ID :** 1.39371761
**Process Time :** 2026.08.21 12:18:18
**Process Stand :** SSCB-CONFIG1@SSCB

## Sensor

**D1 :** 0
**D2 :** 1
**DFQ1 :** 0
**DFQ2 :** 0
**DT :** 4.25
**DTG :** 0
**Dens PCF :** 0
**Density Meter Factor :** 1
**FCF :** 141.29
**FD :** 0
**FFQ :** 0
**FT :** 4.5
**FTG :** 0
**Flow PCF :** 0
**Flow PCP :** 30.0
**K1 :** 4081.06
**K2 :** 4250.416
**Mass Flow Meter Factor :** 1
**Volume Flow Meter Factor :** 1

## Units

**Density Unit :** G/CM3
**GSV Flow Unit :** SCFM
**Mass Flow Unit :** G/SEC
**Pressure Unit :** POUNDS/SQUARE INCH
**Special GSV Base Time Unit :** MIN
**Special GSV Base Volume Unit :** Standard cubic feet
**Special GSV Conv Factor :** 1
**Special GSV Flow Unit Text :** NONE
**Special GSV Total Text :** NONE
**Special Mass Base Unit :** G
**Special Mass Conv Factor :** 1
**Special Mass Flow Text :** NONE

## Units

**Special Mass Time Unit :** SEC
**Special Mass Total Text :** NONE
**Special Volume Base Unit :** L
**Special Volume Conv Factor :** 1
**Special Volume Flow Text :** NONE
**Special Volume Time Unit :** SEC
**Special Volume Total Text :** NONE
**Temperature Unit :** C
**Volume Flow Unit :** L/MIN

## MVD Channel Assignments

**Channel A Assignment :** Milliamp (Primary) Output [#1]
**Channel B Power :** Active (internally powered)

## Assignments

**Event 1 Variable :** Density
**Event 2 Variable :** Density
**Frequency1 Scaling Method :** Frequency = Flow
**Frequency1 Variable :** Mass Flow Rate
**mA1 Variable :** Mass Flow Rate

## Ranges

**Event 1 Setpoint :** 0
**Event 1 Type :** Event Low (Event "OFF" if PV > SP)
**Event 2 Setpoint :** 0
**Event 2 Type :** Event Low (Event "OFF" if PV > SP)
**Frequency1 Active State :** Active High
**Frequency1 Hertz :** 1000
**Frequency1 Output Mode :** Single
**Frequency1 Pulses/Unit :** 1.554404
**Frequency1 Rate :** 643.3333
**Frequency1 Units/Pulse :** 0.6433333
**mA1 LRV :** 0
**mA1 URV :** 643.3333

## Faults

TGT SN 26081560

## Faults

| | |
|---|---|
| Frequency1 Fault Behavior | Upscale |
| Frequency1 Fault Value | 15000 |
| mA1 Fault Behavior | Downscale (Default) |
| mA1 Fault Value | 2 |

## Other

| | |
|---|---|
| Calibration Process ID | 9.31355149 |
| Core Software Rev | 57 |
| Density Cutoff | 0.2 |
| Density Damping | 1.6 |
| Density High Limit | 5 |
| Density Low Limit | 0 |
| Direction | FORWARD |
| Fault Dwell Time | 0 |
| Feature Key | 1 |
| Flow Damping | 0.8 |
| HART Device ID | 5129632 |
| LD Type | 0 |
| Mass Flow Cutoff | 1.836 |
| Pressure Comp Line Pressure | 0 |
| Pressure Compensation State | OFF |
| RS485 Baud | 1200 baud |
| RS485 Parity | Odd |
| RS485 Protocol | HART |
| Density Slug Duration | 0 |
| Tag | |
| Temperature Damping | 4.8 |
| Transmitter Software Rev | 80 |
| Volume Flow Cutoff | 0.11016 |

**Tulsa Gas Technologies, Inc.**
4809 S. 101st East Ave Tulsa, OK 74146
PHONE: 918-665-2641 FAX: 918-665-2657

8/27/2026

Dispenser Serial Number 26081560

# Micro Motion Transmitter Configuration

Required settings for correct operation of Micro Motion mass flow meter.

| | |
|---|---|
| Transmitter Model Number: | 2700 |
| Sensor Model Number: | CNG050 |
| Transmitter Serial Number: | 12319087 |
| Sensor Serial Number | 15652631 |
| Flow Calibration Factor: | 141.294.50 |
| Flow Units | LB/min |

**Communication on RS-485**

| | |
|---|---|
| Protocol | Modbus ASCII 7 Bit |
| Modbus Address | 1 |
| Baud Rate | 9600 |
| Parity | Even |
| Stop Bits | 1 |

**HART Communication**

Superimposed on Primary mA (PV)

**Analog Output (4-20 mA)**

| | |
|---|---|
| Analog Variable (PV) | Mass Flow |
| Lower Range Value | 0.2500 lb/min |
| Upper Range Value | 300.000 lb/min |
| mA Cutoff | 0.0000 lb/min |

**Freq/Rate**

| | |
|---|---|
| Frequency variable (TV) | Mass Flow |
| Frequency Cutoff | 0.2500 lb/min |
| Pulses per Unit | 1000.00000 per lb |

**Temperature**

| | |
|---|---|
| Temp Units | deg F |