

Product Code

CNG050S290NCAAEZZZ

PUCR700

Serial ID

15333020

34258149

Order ID

10495128

Line Item

2.1 2

Customer Tag

221013408



Process

Process ID : 1.36886882

Process Time : 2022.08.09 22:29:56

Process Stand : TSM1C@SSCB:1

Stand Uncertainty : +/-0.030%

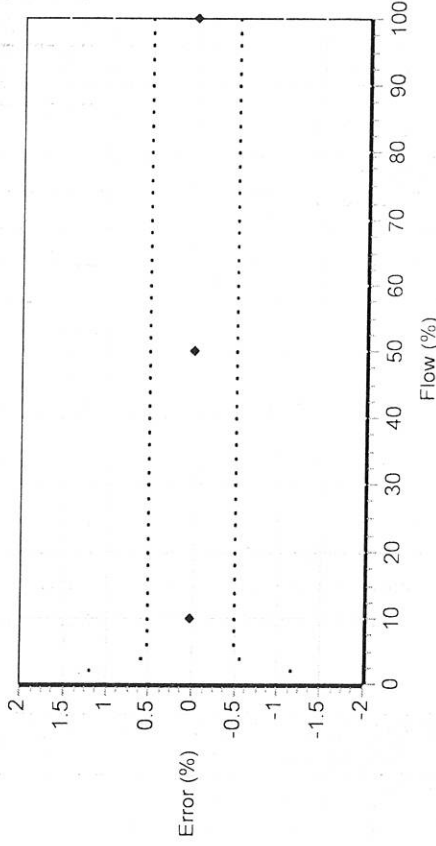
Fluid : H2O

100% Rate : 38.6 KG/MIN

Pickoff : 1

Max Rate P/T : 29.14 PSIG/22.3 C

Detail



Results

Status : PASS

D1 : 0

D2 : 1

K1 : 4061.968

K2 : 4230.55

DT : 4.25

FD : 0

DTG : 0

DFQ1 : 0

DFQ2 : 0

FlowCal : 139.654.50

FFQ : 0

FTG : 0

DensCal : 04062042314.25

FCF : 139.65

FT : 4.5

Flow (%)	Flow Rate (kg/min)	Meter Total (kg)	Reference Total (kg)	Error (%)	Specification (±%)
100.0	38.6	39.43698	39.43456	0.006	0.500
10.0	3.86	5.617265	5.616123	0.020	0.500
50.0	19.3	19.17519	19.17542	-0.001	0.500
100.0	38.6	39.31217	39.31273	-0.001	0.500

Bahal

BHIM DAHAL

Technician

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

Product Code

CNG050S290NCAAEZZZ

2700I13ABAEZWZ

PUCK700

Serial ID

15333020

12217834

34258149

Order ID Line Item Customer Tag

10495128 2.1 2

10495128 2.33 2

22101340B

Process

Process ID : 1.36887264

Process Time : 2022.08.10 6:30:42

Process Stand : CONFIGURATION@SSCB

Sensor

Units

D1 : 0

D2 : 1

DFQ1 : 0

DFQ2 : 0

DT : 4.25

DTG : 0

Dens PCF : 0

Density Meter Factor : 1

FCF : 139.65

FD : 0

FFQ : 0

FT : 4.5

FTG : 0

Flow PCF : 30

Flow PCF : 0

K1 : 4061.968

K2 : 4230.55

Mass Flow Meter Factor : 1

Volume Flow Meter Factor : 1

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 B Power : Active (internally powered)

Assignments

Event 1 Variable : Density

Event 2 Variable : Density

Frequency1 Scaling Method : Frequency = Flow

Frequency Variable 1 : Mass Flow Rate

mA1 Variable : Mass Flow Rate

Units

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 : 0.64333333

mA1 LRV : 0

mA1 URV : 643.3333

Faults

Frequency1 Fault Behavior : Upscale

22101340B

Faults

Frequency1 Fault Value : 15000
 mA1 Fault Behavior : Downscale (Default)
 mA1 Fault Value : 2

Other

Calibration Process ID : 1.36886882
 Core Software Rev : 35
 Density Cutoff : 0.2
 Density Damping : 0.8
 Density High Limit : 5
 Density Low Limit : 0
 Direction : FORWARD
 Fault Dwell Time : 0
 Feature Key : 1
 Flow Damping : 0.8
 HART Device ID : 4262230
 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
 Slug Duration : 0
 Tag :
 Temperature Damping : 2.4
 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

12/12/2022

Dispenser Serial Number 22101340 (H1)

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: 12217834
Sensor Serial Number: 15333020
Flow Calibration Factor: 139.684.50
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

Product Code

CNG050S290NCAAEZZZ

PUCK700

Serial ID

15333211

34258151

Order ID

10495128

Line Item

2.1 1

Customer Tag

22101340A



Process

Process ID : 1.36886764

Process Time : 2022.08.09 21:44:01

Process Stand : TSM1C@SSCB:1

Stand Uncertainty : +/- 0.030%

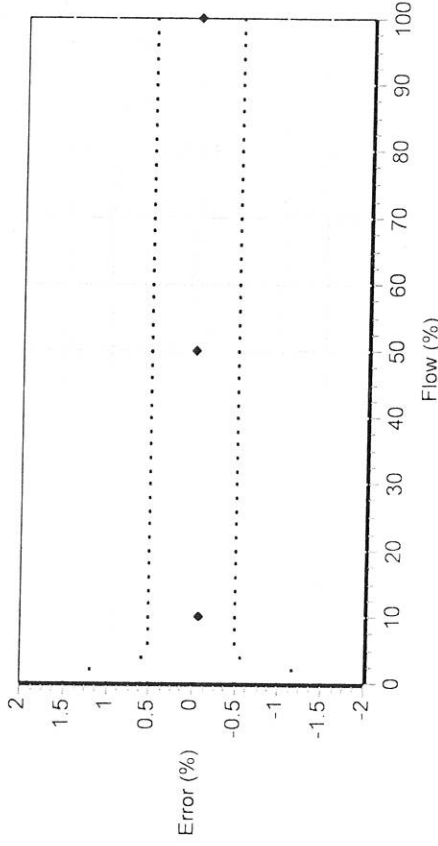
Fluid : H2O

100% Rate : 38.6 KG/MIN

Pickoff : 1

Max Rate P/T : 29.15 PSIG/22.4 C

Detail



Results

Status : PASS

D1 : 0

D2 : 1

K1 : 4072.832

K2 : 4242.017

DT : 4.25

FD : 0

DTG : 0

DFQ1 : 0

DFQ2 : 0

FlowCal : 139.194.50

FFQ : 0

FTG : 0

DensCal : 04073042424.25

FCF : 139.19

FT : 4.5

Flow (%)	Flow Rate (kg/min)	Meter Total (kg)	Reference Total (kg)	Error (%)	Specification (±%)
100.0	38.6	39.40031	39.39909	0.003	0.500
10.0	3.86	5.612955	5.616527	-0.064	0.500
50.0	19.3	19.11311	19.11301	0.001	0.500
100.0	38.6	39.25684	39.25379	0.008	0.500

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Technician

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Product Code

CNG050S290NCAAEZZZ

2700I13ABAEZWZ

PUCK700

Serial ID

15333211

12217835

34258151

Order ID Line Item Customer Tag

10495128 2.1 1

10495128 2.33 1

22101340A

Process

Process ID : 1.36887093

Process Time : 2022.08.10 0:19:43

Process Stand : CONFIGURATION@SSCB

Sensor

D1 : 0

D2 : 1

DFQ1 : 0

DFQ2 : 0

DT : 4.25

DTG : 0

Dens PCF : 0

Density Meter Factor : 1

FCF : 139.19

FD : 0

FFQ : 0

FT : 4.5

FTG : 0

Flow PCP : 30

Flow PCF : 0

K1 : 4072.832

K2 : 4242.017

Mass Flow Meter Factor : 1

Volume Flow Meter Factor : 1

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 B Power : Active (internally powered)

Assignments

Event 1 Variable : Density

Event 2 Variable : Density

Frequency1 Scaling Method : Frequency = Flow

Frequency Variable 1 : 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 : 0.64333333

mA1 LRV : 0

mA1 URV : 643.3333

Faults

Frequency1 Fault Behavior : Upscale

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

22101340A

Faults

Frequency1 Fault Value : 15000
 mA1 Fault Behavior : Downscale (Default)
 mA1 Fault Value : 2

Other

Calibration Process ID : 1.36886764
 Core Software Rev : 35
 Density Cutoff : 0.2
 Density Damping : 0.8
 Density High Limit : 5
 Density Low Limit : 0
 Direction : FORWARD
 Fault Dwell Time : 0
 Feature Key : 1
 Flow Damping : 0.8
 HART Device ID : 4260902
 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
 Slug Duration : 0
 Tag :
 Temperature Damping : 2.4
 Transmitter Software Rev : 80
 Volume Flow Cutoff : 0.11016



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PHONE: 918-665-2641 FAX: 918-665-2657

12/12/2022

Dispenser Serial Number 22101340 (H2)

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: 12217835
Sensor Serial Number 15333211
Flow Calibration Factor: 139.684.50
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