

Product Code

CNG050S290NCAAEZZZ

PUCK700

Serial ID

15089507

26135106

Order ID

10404359

Line

1.1

Item

2

Customer Tag

21051312A

Process

Process ID : 1.36206055

Process Time : 2021.04.22 17:28:57

Process Stand : TSM1C@SSCB:1

Stand Uncertainty : +/-0.030%

Fluid : H2O

100% Rate : 38.6 KG/MIN

Pickoff : 1

Max Rate P/T : 27.44 PSIG/22.5 C

Results

Status : PASS

D1 : 0

D2 : 1

K1 : 4081.185

K2 : 4246.241

DT : 4.25

FD : 0

DTG : 0

DFQ1 : 0

DFQ2 : 0

FlowCal : 140.834.50

FFQ : 0

FTG : 0

DensCal : 04081042464.25

FCF : 140.83

FT : 4.5

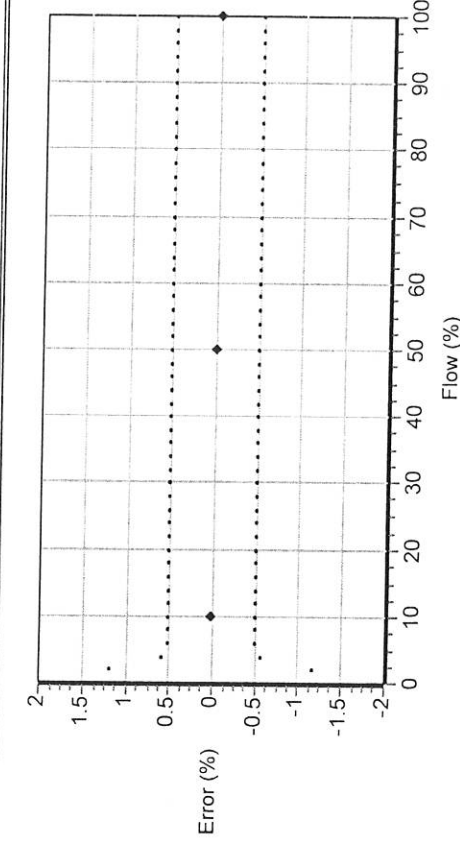


SHRESTHA, G

Technician

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

Detail



Flow (%)	Flow Rate (kg/min)	Meter Total (kg)	Reference Total (kg)	Error (%)	Specification (±%)
100.0	38.6	39.72197	39.72412	-0.005	0.500
10.0	3.86	5.69691	5.695397	0.027	0.500
50.0	19.3	19.23374	19.23189	0.010	0.500
100.0	38.6	39.50774	39.51129	-0.009	0.500

Product Code

CNG050S290NCAAEZZZ

2700I13ABAEZWW

PUCK700

Serial ID

15089507

3485003

26135106

Order ID Line Item Customer Tag

10404359 1.1 2

10404359 1.34 2

21051312A

Process

Process ID : 1.36206308

Process Time : 2021.04.22 19:30:23

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 : 140.83

FD : 0

FFQ : 0

FT : 4.5

FTG : 0

Flow PCP : 30

Flow PCF : 0

K1 : 4081.185

K2 : 4246.241

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

Faults

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

Other

Calibration Process ID : 1.36206055
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 : 3968352
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

21051312A



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

6/17/2021

Dispenser Serial Number 21051312

Side A

Micro Motion Transmitter Configuration

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

Transmitter Model Number: 2700
Sensor Model Number: CNG095
Transmitter Serial Number: 3485003
Sensor Serial Number: 15089507
Flow Calibration Factor: 140.834.50
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: 00000 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

CNG050S290NCAAEEZZ

PUCK700

Serial ID

15089357

26135120

Order ID

10404359

Line Item

1.1 1

Customer Tag

21051312-B



Process

Process ID : 1.36206129

Process Time : 2021.04.22 18:29:56

Process Stand : TSM1C@SSCB:1

Stand Uncertainty : +/- 0.030%

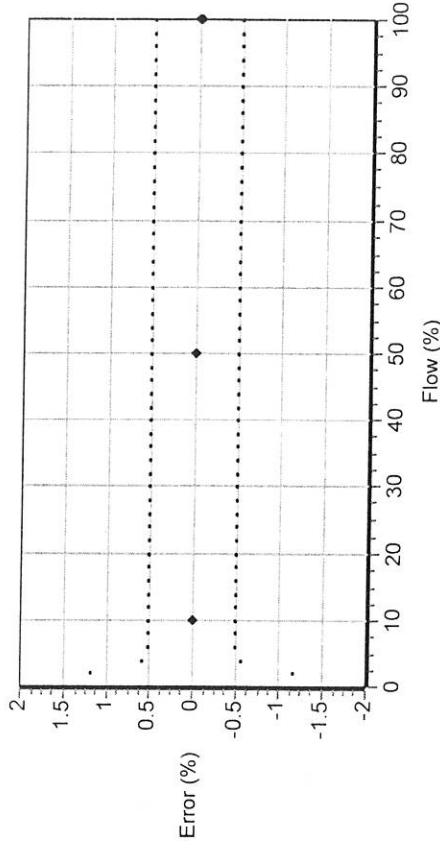
Fluid : H2O

100% Rate : 38.6 KG/MIN

Pickoff : 1

Max Rate P/T : 27.88 PSIG/22.5 C

Detail



Results

Status : PASS

D1 : 0

D2 : 1

K1 : 4044.529

K2 : 4214.76

DT : 4.25

FD : 0

DTG : 0

DFQ1 : 0

DFQ2 : 0

FlowCal : 139.894.50

FFQ : 0

FTG : 0

DensCal : 04045042154.25

FCF : 139.89

FT : 4.5

Flow (%)	Flow Rate (kg/min)	Meter Total (kg)	Reference Total (kg)	Error (%)	Specification (±%)
100.0	38.6	39.77408	39.77467	-0.001	0.500
10.0	3.86	5.650011	5.650737	-0.013	0.500
50.0	19.3	19.19096	19.19199	-0.005	0.500
100.0	38.6	39.56822	39.57464	-0.016	0.500

BIJAY KHALING

Technician

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

Product Code
CNG050S290NCAAEZZZ

2700I13BAEZWZ

PUCK700

Serial ID

15089357
3484701
26135120

Order ID Line Item Customer Tag

10404359 1.1 1
10404359 1.34 1

2105131213

Process

Process ID : 1.36206354
Process Time : 2021.04.22 19:57:36
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 : 139.89
FD : 0
FFQ : 0
FT : 4.5
FTG : 0
Flow PCP : 30
Flow PCF : 0
K1 : 4044.529
K2 : 4214.76
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

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

Frequency1 Fault Behavior : Upscale

21051312B

Faults

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

Other

Calibration Process ID : 1.36206129
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 : 3968318
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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6/17/2021

Dispenser Serial Number 21051312

Side B

Micro Motion Transmitter Configuration

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

Transmitter Model Number: 2700
Sensor Model Number: CNG095
Transmitter Serial Number: 3484701
Sensor Serial Number 15089357
Flow Calibration Factor: 139.894.50
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 00000 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