

Product Code

CNG050S290NCAAEZZZ

Serial ID

15083235

Order ID

10365729

Line Item

1.1 2

Customer Tag

20041289A

Process



Process ID : 9.27005381

Process Time : 2020.04.29 16:55:06

Process Stand : SSFLE@SSCCL:1

Stand Uncertainty : +/-0.030%

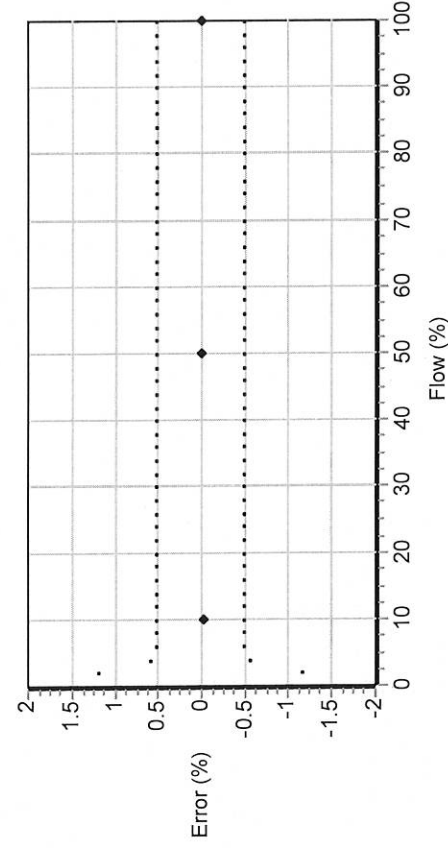
Fluid : H2O

100% Rate : 38.6 KG/MIN

Pickoff : 1

Max Rate P/T : 41.74 PSIG/21.3 C

Detail



Results

Status : PASS

D1 : 0

D2 : 1

K1 : 4036.906

K2 : 4206.597

DT : 4.25

FD : 0

DTG : 0

DFQ1 : 0

DFQ2 : 0

FlowCal : 138.964.50

FFQ : 0

FTG : 0

DensCal : 04037042074.25

FCF : 138.96

FT : 4.5

(Signature)

RAZVAN OCTAVIAN, COSMA

Technician

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

20041288A

Order ID Line Item Customer Tag

Serial ID

Product Code

| | | | |
|----------|----------|------|---|
| 15083235 | 10365729 | 1.1 | 2 |
| 3465566 | 10365729 | 1.33 | 2 |
| 33822610 | | | |

ONG050290NCAAEZZZ
 2700I13ABAEZHZ
 PUCK700

Process

Process ID : 1.35788588
 Process Time : 2020.05.18 19:02:44
 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 : 138.96
 FD : 0
 FFQ : 0
 FT : 4.5
 FTG : 0
 Flow PCP : 30
 Flow PCF : 0
 K1 : 4036.906
 K2 : 4206.597
 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)

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 Behavior : Upscale

Faults

20041288A

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

Other

Calibration Process ID : 9.27005381
Core Software Rev : 35
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 : 3838160
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 : 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

6/18/2020
Dispenser Serial Number 20041288
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: 3465566
Sensor Serial Number: 15083235
Flow Calibration Factor: 138.964.50
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

CNG050S290NCAAEEZZZ

Serial ID

15082927

Order ID

10365729

Line Item

1.1 1

Customer Tag

20041288B

Process

Process ID : 9.27004152

Process Time : 2020.04.29 10:53:41

Process Stand : SSFLE@SSCCL:1

Stand Uncertainty : +/-0.030%

Fluid : H2O

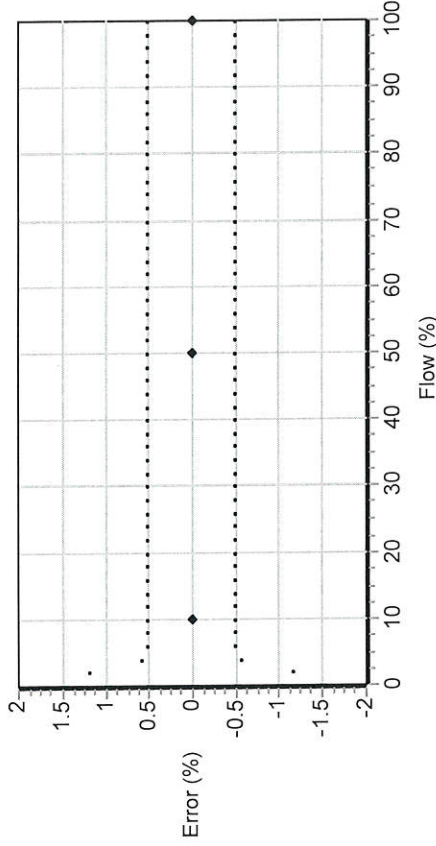
100% Rate : 38.6 KG/MIN

Pickoff : 1

Max Rate P/T : 41.71 PSIG/20.7 C



Detail



Results

Status : PASS

D1 : 0

D2 : 1

K1 : 4043.897

K2 : 4213.738

DT : 4.25

FD : 0

DTG : 0

DFQ1 : 0

DFQ2 : 0

FlowCal : 139.654.50

FFQ : 0

FTG : 0

DensCal : 04044042144.25

FCF : 139.65

FT : 4.5

| Flow (%) | Meter Total (kg) | Reference Total (kg) | Error (%) | Specification (±%) |
|----------|------------------|----------------------|-----------|--------------------|
| 100.0 | 38.315 | 38.31705 | -0.005 | 0.500 |
| 10.0 | 3.884768 | 3.884578 | 0.005 | 0.500 |
| 50.0 | 19.74905 | 19.7501 | -0.005 | 0.500 |
| 100.0 | 38.24874 | 38.25277 | -0.011 | 0.500 |

BUNGARDEAN, OVIDIU

Technician

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Product Code

CNG050S290NCAAEZZZ

2700I13ABAENZWZ

PUCK700

Serial ID

15082927

3462530

33823026

Order ID

10365729

10365729

Line Item

1.1 1

1.33 1

Customer Tag

20041288B

Process

Process ID : 1.35788751

Process Time : 2020.05.18 21:00:45

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 : 139.65

FD : 0

FFQ : 0

FT : 4.5

FTG : 0

Flow PCP : 30

Flow PCF : 0

K1 : 4043.897

K2 : 4213.738

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 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

Faults

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

Other

Calibration Process ID : 9.27004152
Core Software Rev : 35
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 : 3838152
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 : 4.8
Transmitter Software Rev : 80
Volume Flow Cutoff : 0.11016

200412986



Tulsa Gas Technologies, Inc.
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6/18/2020

Dispenser Serial Number 20041288

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: 3462530
Sensor Serial Number: 15082927
Flow Calibration Factor: 139.654.50
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