

Product Code

CNG050S29NCAAEZZZ

PUCK700

Serial ID

15353515

26256538

Order ID

10604585

Line

1.1

Item

1

Customer Tag

24111485A

Process

Process ID : 1.37444652

Process Time : 2023.07.26 19:30:34

Process Stand : TSM1A@SSCB:1

Stand Uncertainty : +/-0.030%

Fluid : H2O

100% Rate : 38.6 KG/MIN

Pickoff : 1

Max Rate P/T : 32.88 PSIG/25 C

Results

Status : PASS

D1 : 0

D2 : 1

K1 : 4065.627

K2 : 4233.818

DT : 4.25

FD : 0

DTG : 0

DFQ1 : 0

DFQ2 : 0

FlowCal : 139.624.50

FFQ : 0

FTG : 0

DensCal : 04066042344.25

FCF : 139.62

FT : 4.5

By *RswasThg*

DINESH KARKI

Technician

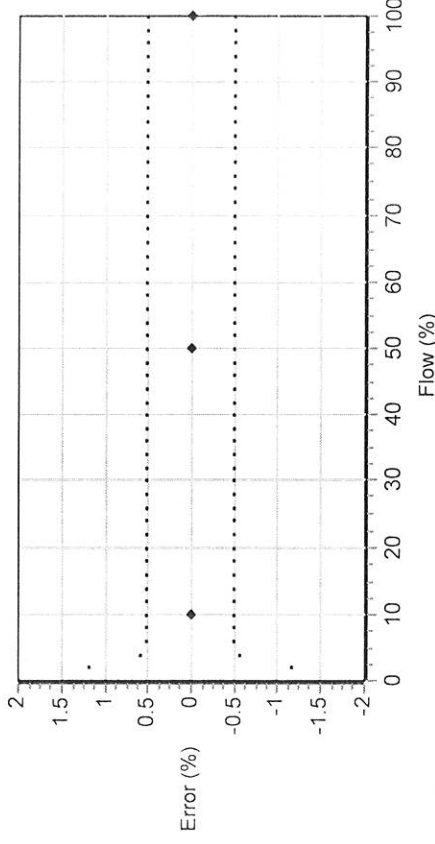
This certificate is produced by an electronic data system and is valid without signature.

Traceable to one or more of the following National Metrology Institutes: NIM-China, NIST-USA, and VSL-The Netherlands
Micro Motion calibration facilities are accredited in accordance with the recognized International Standard ISO/IEC 17025. This Certificate is not covered by the available ISO/IEC 17025 accreditation.

28.0.0.298 2023.07.26 19:33:23

1 / 1

Detail



Flow (%)	Flow Rate (kg/min)	Meter Total (kg)	Reference Total (kg)	Error (%)	Specification (±%)
100.0	38.6	38.0403	38.04298	-0.007	0.500
10.0	3.86	4.031384	4.03125	0.003	0.500
50.0	19.3	19.42191	19.42449	-0.013	0.500
100.0	38.6	38.03322	38.03659	-0.009	0.500

Product Code

CNG050S290NCAAEZZZ

2700I13ABAEZWZ

PUCK700

Serial ID

15353515

12240818

26256538

Order ID

10604585

10604585

Line Item

1.1 1

1.33 1

Customer Tag

24111485A

Process

Process ID : 1.37444842

Process Time : 2023.07.26 21:05:25

Process Stand : SSCB-CONFIG2@SSCB

Sensor

D1 : 0

D2 : 1

DFQ1 : 0

DFQ2 : 0

DT : 4.25

DTG : 0

Dens PCF : 0

Density Meter Factor : 1

FCF : 139.62

FD : 0

FFQ : 0

FT : 4.5

FTG : 0

Flow PCP : 30

Flow PCF : 0

K1 : 4065.627

K2 : 4233.818

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 : 0.6433333

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 : 1.37444652
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 : 6251883
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

24111405A



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

11/25/2024

Dispenser Serial Number 24111485

Side A

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: 12240818
Sensor Serial Number: 15353515
Flow Calibration Factor: 139.624.50
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

15354064

26256638

Order ID

10604585

Line

1.1

Item

2

Customer Tag

241114858

Process

Detail

Process ID : 1.37444739

Process Time : 2023.07.26 20:21:20

Process Stand : TSM1A@SSCB:1

Stand Uncertainty : +/-0.030%

Fluid : H2O

100% Rate : 38.6 KG/MIN

Pickoff : 1

Max Rate P/T : 32.96 PSIG/24.7 C

Results

Status : PASS

D1 : 0

D2 : 1

K1 : 4083.864

K2 : 4255.405

DT : 4.25

FD : 0

DTG : 0

DFQ1 : 0

DFQ2 : 0

FlowCal : 139.994.50

FFQ : 0

FTG : 0

DensCal : 04084042554.25

FCF : 139.99

FT : 4.5



SHRESTHA, RAJESH

Technician

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

Traceable to one or more of the following National Metrology Institutes: NIM-China, NIST-USA, and VSL-The Netherlands

Micro Motion calibration facilities are accredited in accordance with the recognized International Standard ISO/IEC 17025. This Certificate is not covered by the available ISO/IEC 17025 accreditation.

28.0.0.298 2023.07.26 21:02:43

1 / 1

Product Code

CNG050S290NCAAEZZZ

2700I13ABAEZWZ

PUCK700

Serial ID

15354064

12240817

26256638

Order ID

10604585

10604585

Line Item

1.1 2

1.33 2

Customer Tag

24111485B

Process

Process ID : 1.37445095

Process Time : 2023.07.26 23:32:34

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 : 139.99

FD : 0

FFQ : 0

FT : 4.5

FTG : 0

Flow PCP : 30

Flow PCF : 0

K1 : 4083.864

K2 : 4255.405

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 : 0.64333333

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 : 1.37444739
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 : 6251911
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

24111485B



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

11/25/2024

Dispenser Serial Number 24111485

Side B

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: 12240817
Sensor Serial Number: 15354064
Flow Calibration Factor: 139.994.50
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