ROSEMOUNT 8700 SERIES CONFIGURATION DATA SHEET

All sections up to C1 Note are required on this form.
★= Default Value

◯Select only one of the items provided
☐One or more of the listed items can be selected

Customer Information

Customer:_____ Contact Name:_____

P.O./Reference No.:_____ Fax No./Email:_____

Phone No.:_____ P.O. Line Item:_____

Quote No.:_____ Model No.:_____

Customer Sign off:_____

Instrument Tag

Name Plate:_____(1 line, 21 characters max) Wire-On:_____(5 lines, 17 characters/line)

_____

_____

_____

_____

Meter

Model Type:	◯Sensor	◯Magmeter System (Sensor and Transmitter)	◯Transmitter
Transmitter Type:	◯Integral Mount	◯Remote Mount	

Fluid Selection

Fluid: Name:_____

Density or Specific Gravity(1):_____

Conductivity:_____

(1) Required for Mass Units only.

Process Information(1)

	Units	Minimum	Normal	Maximum	Design
Flow Rate:					
Pressure:					
Process Temp:					

(1) Gray boxes are required values.

Process Variable Configuration HART Output Only

	4 mA LRV (0.0★)	20 mA URV (30★)	Unit of Measure (ft/sec★)
Flow:			

C1 NOTE

The following sections are required only if C1 option is selected.

Basic Configuration

Damping = 2.0 seconds★_____

Sensor Size = 3-in. ★_____ 3 to 36-in. (8712H) / 0.10 to 80-in. (All others)

Special Units (HART only)

For a list of all standard configurable units, consult the appropriate product manual available on www.emersonprocess.com/rosemount.

Volume Units: _____(4 characters)

Base Units: ◯Gallons ◯Cubic Meters ◯Barrels ◯Short Ton ◯Kilogram

◯Liters ◯Cubic Centimeters ◯Barrels (beer) ◯Pound ◯Imperial Gallon

◯Feet ◯Cubic Feet ◯Metric Ton

◯Meters

Conversion Factors:_____where one special unit=Conversion Factor × Base Unit

Time Base: ◯Seconds ◯Minutes ◯Hours ◯Days

Rate Units: _____ (4 characters)

HART/Transmitter Information

Write Protect ◯Off★ ◯On

Alarm Option ◯High★ ◯Low (8732E/8712E only)

Alarm Standard ◯Rosemount★ ◯Namur

Descriptor_____(16 characters maximum) Date (day/month/year):_____/_____/_____

Message_____(32 characters maximum)

◯4-20 mA, scaled pulse, and auxiliary output with simultaneous digital signal based on HART® protocol★
◯Burst mode of HART digital process variable

Burst mode output options:
- ◯Primary variable in engineering units.
- ◯Primary variable in percent of range.
- ◯All dynamic variables in engineering units.
- ◯All dynamic variables in engineering units and the primary variable mA value.

◯Multidrop Communications [1]

Choose transmitter address (1-15) [2] _____

(1) This option fixes the transmitter's analog output at 4 mA.
(2) Default transmitter address is 1 if multidrop communication is selected.

Sensor Information (Data Only - Does Not Affect Transmitter Output)

Sensor Tag No. (Software)_____(8 characters HART; 32 characters Fieldbus)

Sensor Serial No._____(7 characters maximum)

Sensor Calibration No._____16 Digits from sensor 1000005010000000★

SST Sensor Tag No._____

Enter either the Rosemount sensor model number or select one option from each of the following groups of options:

Sensor Model No._____

Electrode Material
◯316 SST★
◯Titanium
◯Nickel Alloy-276
◯Tantalum
◯Platinum-Iridium
◯Special

Electrode Type
◯Standard★
◯Bullet
◯Standard, plus Grounding
◯Special

Flange Material
◯Carbon Steel★
◯316 SST
◯304 SST
◯Wafer

Liner Material
◯PTFE★
◯ETFE
◯Polyurethane
◯Neoprene
◯Linatex Rubber
◯Special

Advanced Configuration Options (Not Required for Typical Start-up)

Pulse Scaling. (Not available in FOUNDATION™ fieldbus)

◯0.03 ft★
◯1 Pulse = _____units

Pulse Width:_____ 0.5 ms★

Operation Mode:
◯Normal★
◯Filter

Signal Processing:
◯Off★ ◯On
_____ 90★ No. Samples
_____ 2★ Max.% Limit%
_____ 2★ Time Limit Sec

Low Flow Cutoff:_____ 0.04 ft/sec★

Coil Pulse Mode (Not available with 8712H)
◯5 Hz★
◯37.5 Hz

Local Display Language (8732E only)
◯English★ ◯Spanish
◯French ◯German
◯Portuguese

Flow Direction Reverse Flow	◯Enable	◯Disable★
Flowrate Display (Not available in FOUNDATION fieldbus)	◯Flow and % Span★ ◯% Span and Net Total	◯Flow and Net Total ◯ % Span and Gross Total ◯Flow and Gross Total
Totalizer Display (Not available in FOUNDATION fieldbus)	◯Net and Gross★	◯Forward and Reverse
Analog Loop Power (HART only)	◯Internal★	◯External (8732E/8712E only)
Pulse Loop Power (8732E only)	◯Internal★	◯External★
Simulate (FOUNDATION fieldbus only)	◯Off★	◯On★

Standard Diagnostics Information

Empty Pipe

○Enable★
○Disable

Trigger Level_____100★ (8732E/8712E only)
Empty Pipe Counts_____5★ (8732E/8712E only)

Electronics Temperature (8732E/8712E only)
○Enable★
○Disable

Advanced Diagnostics Information (Requires DA1/D01 Option) (8732E/8712E only)

High Process Noise

○Enable★
○Disable

Grounding/Wiring Faults

○Enable★
○Disable

Note
If DA1/D01 is selected in the model code, Empty Pipe and Electronics Temp Diagnostics will also be enabled.

Electrode Coating Detection (HART and Modbus® only)
(8732E Only)

○Enable★
○Disable

Electrode Coating Level 1_____1000kOhm★
Electrode Coating Level 2_____2000kOhm★

8714i Meter Verification Diagnostics (Requires DA2/D02 Option) (8732E HART and Modbus only, 8712 HART only)

Test Criteria
Empty Pipe:_____5%★
Flowing Full:_____5%★
Full, No Flow:_____5%★

Note
The Test Criteria value sets the pass fail value for the meter calibration verification check. This value must be an integer value between 1 and 10%.

Continuous Meter Verification (Requires DA2/D02 Option) (8732E HART and Modbus only)

Test Criteria_____5%★

Transmitter	Coil	Electrode Resistance	Analog Signal
○Enable★	○Enable★	○Enable	○Enable★
○Disable	○Disable	○Disable★	○Disable

Discrete Input/Discrete Output Information (Requires AX Option) (8732E/8712E only)

DI/DO Channel

○Input★
○Output
○Disable

Discrete Input Configuration

○Positive Zero Return (PZR)★
○Totalizer Reset

Discrete Output Configuration

☐Reverse Flow	☐Flow Limit 1
☐Zero Flow★	☐Flow Limit 2
☐Transmitter Fault (Alarm)	☐Diagnostic Status Alert
☐Empty Pipe	☐Totalizer Limit 1

DO Channel 2

○Enable★
○Disable

Discrete Output Configuration

☐Reverse Flow	☐Flow Limit 1
☐Zero Flow★	☐Flow Limit 2
☐Transmitter Fault (Alarm)	☐Diagnostic Status Alert
☐Empty Pipe	☐Totalizer Limit 1

Flow and Totalizer Alert Configuration (8732E/8712E HART only)

Flow Limit 1 Configuration

Control 1 ○ON ○OFF★

Mode 1
○ > High Limit
○ < Low Limit
○ In Range
○ Out of Range

High Limit 1: _____
High Limit 1: _____

Flow Limit 2 Configuration

Control 2 ○ON ○OFF★

Mode 2
○ > High Limit
○ < Low Limit
○ In Range
○ Out of Range

High Limit 2: _____
High Limit 2: _____

Totalizer Limit Configuration

Control ○ON ○OFF★

Mode
○ > High Limit
○ < Low Limit
○ In Range
○ Out of Range

High Limit: _____
High Limit: _____

Flow Limit Hysteresis:_____

Totalizer Limit Hysteresis:_____

Diagnostic Status Alert (8732E/8712E HART only)

☐Electronics Failure	☐Coil Open Circuit	☐Continuous Meter Verification (8732E only)
☐Electronics Temp Out of Range	☐Coil Over Current (8732E only)	☐Grounding/Wiring Fault
☐Empty Pipe	☐Coil Power Limit (8732E only)	☐High Process Noise
☐Reverse Flow	☐Sensor Electrode Saturation (8732E only)	☐Electrode Coating Level 1 (8732E only)
*Select as many options as needed for the application		☐Electrode Coating Level 2 (8732E only)

Diagnostic Analog Alarm Configuration (8732E only)

Analog Output to Alarm

☐Empty Pipe	☐Totalizer Limit Alert
☐Reverse Flow	☐Flow Limit 1 Alert
☐Grounding and Wiring	☐Flow Limit 2 Alert
☐High Process Noise	☐Continuous Meter Verification
☐Electronics Temperature Out of Range	☐Electrode Coating Level 2

Modbus RS-485 Configuration (*default)

Soft Tag_____(8 characters) Address_____(1-247; default = 1)

Format Code	Byte Transmission Order	Description
◯ 0	[AB] [CD]	Straight word order, most significant byte first
◯ 1	[CD] [AB]	Inverse word order, most significant byte first
◯ 2	[DC] [BA]	Inverse word order, least significant byte first
◯ 3	[BA] [DC]	Straight word order, least significant byte first

Baud Rate

◯ 1200	◯ 2400	◯ 4800	◯ 9600
◯ 19200*	◯ 38400	◯ 57600	◯ 115200

Parity

◯ Even*	◯ Odd	◯ No Parity

Stop Bits

◯ 1 Bit*	◯ 2 Bit

For more information, visit
Emerson.com/RosemountMagneticFlow

00806-0100-4727, Rev UE

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