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 x 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★ ◯ Tantalum ◯ Titanium ◯ Platinum-Iridium ◯ Nickel Alloy-276 ◯ Special	Electrode Type ◯ Standard★ ◯ Standard, plus Grounding ◯ Bullet ◯ Special
Flange Material ◯ Carbon Steel★ ◯ 304 SST ◯ 316 SST ◯ Wafer	Liner Material ◯ PTFE★ ◯ Neoprene ◯ Special ◯ ETFE ◯ Linatex Rubber ◯ Polyurethane

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 _____ 1000 kOhm★
Electrode Coating Level 2 _____ 2000 kOhm★

8714i Meter Verification Diagnostic (requires DA2/D02 Option) (8732E HART and Modbus only, 8712E 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 with HART and Modbus only)

Test Criteria _____ 5%★

Transmitter
◯ Enable★
◯ Disable

Coil
◯ Enable★
◯ Disable

Electrode Resistance
◯ Enable
◯ Disable★

Analog Signal
◯ Enable★
◯ Disable

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

DI/DO Channel 1

◯ Input★
◯ Output
◯ Disable

Discrete Input Configuration

◯ Positive Zero Return (PZR)★
◯ Totalizer Reset

Discrete Output Configuration

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

DO Channel 2

◯ Enable★
◯ Disable

Discrete Output Configuration

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

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

Flow Limit 1 Configuration

Control1 ◯ ON ◯ OFF★
Mode 1 ◯ > High Limit
◯ < Low Limit
◯ In Range
◯ Out of Range

High Limit 1:_____
Low Limit 1:_____

Flow Limit 2 Configuration

Control 2 ◯ ON ◯ OFF★
Mode 2 ◯ > High Limit
◯ < Low Limit
◯ In Range
◯ Out of Range

High Limit 2:_____
Low Limit 2:_____

Totalizer Limit Configuration

Control ◯ ON ◯ OFF★
Mode ◯ > High Limit
◯ < Low Limit
◯ In Range
◯ Out of Range

High Limit:_____
Low 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

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