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 Signoff: _____

Tagging

Hardware Tag.: _____ (21 characters max)

Software Tag: _____ (8 characters max)

Meter

Model Type: ◯ Sensor ◯ Magmeter System (Sensor and Transmitter) ◯ Transmitter

Transmitter Type: ◯ Integral Mount ◯ Remote

Fluid Selection

Liquid: ◯ Water ◯ Acetic Acid ◯ Nitric Acid ◯ Orange Juice Concentrate ◯ Milk ◯ Other(1)

Custom: Name: _____

Density or Specific Gravity(2): _____

Conductivity: _____

(1) Requires Custom information below.
(2) 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

	LRV(1) (0.0 ft./sec★)	URV(2) (30 ft/sec★)	Unit of Measure
Flow:			

(Not available in FOUNDATION fieldbus)

(1) Note that the LRV for the Process Variable that is mapped to the PV will determine the 4 mA set point of the transmitter.

(2) The URV for the Process Variable that is mapped to the PV will determine the 20 mA setpoint of the transmitter.

C1 NOTE

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

Basic Configuration

Damping = 2.0 seconds★_____ (2.0 seconds for FOUNDATION fieldbus)
Sensor Size = _____3-in.★ 3 to 36-in. (8712H) / 0.15 to 60-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 ◯ Liters ◯ Feet
- ◯ Cubic Meters ◯ Cubic Centimeters ◯ Cubic Feet ◯ Meters
- ◯ Barrels ◯ Barrels (beer) ◯ Metric Ton
- ◯ Short Ton ◯ Pound
- ◯ Kilogram ◯ Imperial Gallon

Conversion Factors: _____ where one special unit = Conversion Factor x Base Unit

Time Base: ◯ Seconds ◯ Minutes ◯ Hours ◯ Days

Rate Units: _____ (4 characters)

Totalizer Units: _____ (4 characters) Totalizer Units can be set independently of the flow units

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 maximum)

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 ◯ Special	Liner Material: ◯ PTFE★ ◯ Neoprene ◯ Ryton ◯ ETFE ◯ Natural Rubber ◯ Special ◯ 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: _____ 1.5 m/s★

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

Flowrate Display (Not available in FOUNDATION fieldbus)	◯ Eng Units and % span★	◯ Eng Units and Gross Total	◯ % Span and Gross Total
Totalizer Display (Not available in FOUNDATION fieldbus)	◯ Net and Gross★	◯ Forward and Reverse	
Analog Loop Power	◯ 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.

8714i Meter Verification Diagnostic (Requires DA2/D02 Option) (8732E/8712E 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 (8732E only)

Test Criteria _____ 5%★

Transmitter	Coil	Electrode Resistance	Analog Signal
◉ Enable★	◯ Enable★	◯ Enable	◉ Enable★
◯ Disable	◯ Disable	◉ Disable★	◯ Disable

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

DI/DO Channel 1
- ◯ Input★
- ◯ Output
- ◯ Disable

Digital Input Configuration
- ◯ Positive Zero Return (PZR)★
- ◯ Totalizer Reset
- ◯ Transmitter Reset

DO Channel 2
- ◯ Enable★
- ◯ Disable

DO Configuration (Select 2 options if channel 1 is configured as a DO)

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

Rosemount 8700 Series

Configuration Data Sheet
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Flow and Totalizer Alert Configuration (8732E/8712E only)		
Flow Limit 1 Configuration	Flow Limit 2 Configuration	Totalizer Limit Configuration
Control 1 ◯ ON ◯ OFF	Control 2: ◯ ON ◯ OFF	Control: ◯ ON ◯ OFF
Mode 1 ◯ > High Limit	Mode 2: ◯ > High Limit	Mode: ◯ > High Limit
◯ < Low Limit	◯ < Low Limit	◯ < Low Limit
◯ In Range	◯ In Range	◯ In Range
◯ Out of Range	◯ Out of Range	◯ Out of Range
High Limit 1:_____	High Limit 2:_____	High Limit:_____
Low Limit 1:_____	Low Limit 2:_____	Low Limit:_____
Flow Limit Hysteresis:_____		Totalizer Limit Hysteresis:_____

Diagnostic Status Alert (8732E/8712E only)		
☐ Electronics Failure	☐ Reverse Flow	☐ Electronics Temp Out of Range
☐ Coil Open Circuit	☐ Grounding / Wiring Fault	☐ Continuous Meter Verification
☐ Empty Pipe	☐ High Process Noise	*Select as many options as needed for the application

Diagnostic Analog Alarm Configuration

Analog Output to Alarm
◯ Enable
◯ Disable★

☑ 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	

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