Product Data Sheet
00813-0100-4716, Rev GA
Catalog 2004

Rosemount 3095MV MultiVariable™ Mass Flow Transmitter

THE PROVEN LEADER IN MULTIVARIABLE MASS FLOW MEASUREMENT.

- *1.0% of Mass Flow rate accuracy over 8:1 Flow Range*
- *Five year stability of ±0.125%*
- *Four measurements in one device*
- *"Real-Time" fully-compensated Mass Flow*
- *Coplanar™ platform enables DP Flowmeters*

Content

CE

ROSEMOUNT®

POWERS PlantWeb

This product is a core component of the PlantWeb digital plant architecture.

EMERSON™
Process Management

The Leader in Multivariable Mass Flow Measurement.

Rosemount delivers a tradition of excellence and technology leadership, featuring the state-of-the-art Rosemount 3095MV Multivariable Mass Flow transmitter. The Rosemount 3095MV delivers four measurements from one coplanar device with unmatched operating performance, including dynamically compensated mass flow. Engineered to combine best products with best installation practices, the fully compensated Rosemount 3095MV enables a complete offering of DP Flowmeters.

1.0% of Mass Flow rate accuracy over 8:1 Flow Range

Enabled by superior sensor technology and engineered for optimal flow performance, the Rosemount 3095MV delivers unprecedented ±0.075% reference accuracy, resulting in mass flow accuracy of ±1.0% over 8:1 flow range. Superior performance means reduced variability and improved plant safety.

Five year stability of ±0.125%

Through aggressive testing, the Rosemount 3095MV has proven its ability to maintain unprecedented performance under the most demanding conditions. Superior transmitter stability decreases calibration frequency for reduced maintenance and operation costs.

Four measurements in one device

The advanced Rosemount 3095MV measures three process variables simultaneously and dynamically calculates fully compensated mass flow. One transmitter means reduced process penetrations, inventory and installation costs.

“Real-Time” fully-compensated Mass Flow

Fully compensated mass flow reduces sources of traditional DP flow uncertainty. Rosemount 3095MV calculates Mass Flow by measuring process pressure and temperature to perform ‘real-time’ calculation of all flow equation parameters including density, viscosity, velocity, Reynolds number, beta ratio, discharge coefficient, velocity of approach, and the gas expansion factor. Superior flow calculations yield more accurate measurements to reduce variability and increase profitability.

Coplanar platform enables DP Flowmeters

The flexible coplanar platform allows integration with the complete offering of Rosemount primary elements for any flow application. The solution arrives factory calibrated, pressure-tested, and ready to install right out of the box. Only Rosemount has a scalable coplanar transmitter design to reduce engineering and inventory costs.

Rosemount DP-Flow Solutions

Rosemount 3051S Series of Instrumentation
Scalable pressure, flow and level measurement solutions improve installation and maintenance practices.

Rosemount 3095MV Mass Flow Transmitter
Accurately measures differential pressure, static pressure and process temperature to dynamically calculate fully compensated mass flow.

Rosemount 305 and 306 Integral Manifolds
Factory-assembled, calibrated and seal-tested manifolds reduce on-site installation costs.

Rosemount 1199 Diaphragm Seals
Provides reliable, remote measurements of process pressure and protects the transmitter from hot, corrosive, or viscous fluids.

Orifice Plate Primary Element Systems: Rosemount 1495 and 1595 Orifice Plates, 1496 Flange Unions and 1497 Meter Sections
A comprehensive offering of orifice plates, flange unions and meter sections that is easy to specify and order. The 1595 Conditioning Orifice provides superior performance in tight fit applications.

Annubar Flowmeter Series: Rosemount 3051SFA, 3095MFA, and 485
The state-of-the-art, fifth generation Rosemount 485 Annubar combined with the 3051S or 3095MV MultiVariable transmitter creates an accurate, repeatable and dependable insertion-type flowmeter.

Compact Orifice Flowmeter Series: Rosemount 3051SFC, 3095MFC, and 405
Compact Orifice Flowmeters can be installed between existing flanges, up to a Class 600 (PN100) rating. In tight fit applications, a conditioning orifice plate version is available, requiring only two diameters of straight run upstream.

ProPlate Flowmeter Series: Rosemount ProPlate, Mass ProPlate, and 1195
These integral orifice flowmeters eliminate the inaccuracies that become more pronounced in small orifice line installations. The completely assembled, ready to install flowmeters reduce cost and simplify installation.

Specifications

FUNCTIONAL

Service

Gas, liquid, or steam

Differential Sensor

Limits

- Code 1: 0 to 25 inH2O (0 to 0,062 bar)
- Code 2: –250 to 250 inH2O (–0,622 to 0,622 bar)
- Code 3: –1000 to 1000 inH2O (–2,49 to 2,49 bar)

Absolute Sensor

Limits

- Code 3: 0.5 to 800 psia (0,0344 to 55,2 bar)
- Code 4: 0.5 to 3,626 psia (0,0344 to 250 bar)

Gage Sensor

Limits

- Code C: 0–800 psig (0–55,2 bar)
- Code D: 0–3,626 psig (0–250 bar)

Temperature Sensor

Process Temperature Range

- –150 to 1500 °F (–101 to 816 °C)

Fixed Temperature Range

- –459 to 3500 °F (–273 to 1927 °C)

Overpressure Limit

0 psia to two times the absolute pressure sensor range with a maximum of 3,626 psia (250 bar).

Static Pressure Limit

Operates within specifications between static line pressures of 0.5 psia and the URL of the absolute pressure sensor.

Configuration:

HART Communicator

- Performs traditional Smart transmitter functions

PC-Based Engineering Assistance (EA) software package

- Contains built-in physical property database
- Enables flow configuration, maintenance, and diagnostic functions

Primary Elements:

Supports over 25 different primary elements including:

Annubar Averaging Pitot Tube	AGA Flange Taps
Rosemount 1195 Integral Orifice Plate	ISO/ASME Venturi
Rosemount 405 Compact Orifice	ISO/ASME Venturi Nozzle
ISO/ASME Orifice Flange Taps	Area Averaging Meter
Calibrated and Custom Primary Elements	V-Cone
ISO/ASME Corner Taps	

Physical Properties Database:

- Maintained in Engineering Assistant Software Configurator
- Applicable physical properties for over 110 fluids
- Natural gas per AGA
- Steam and water per ASME
- Other database fluids per American Institute of Chemical Engineers (AIChE)
- Optional custom entry

Output

Two-wire 4–20 mA, user-selectable for DP, AP, GP, PT, mass flow, or totalized flow. Digital HART protocol superimposed on 4–20 mA signal, available to any host that conforms to the HART protocol.

Power Supply

External power supply required. Transmitter operates on terminal voltage of 11–55 V dc.

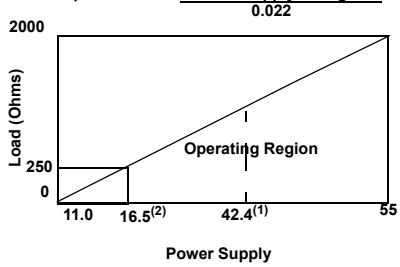
Zero Suppression

Can be set anywhere within the sensor limits as long as the span is greater than or equal to the minimum span, the lower range value does not exceed the lower range limit, and the upper range value does not exceed the upper range limit.

Load Limitations

Loop resistance is determined by the voltage level of the external power supply, as described by:

$$\text{Max. Loop Resistance} = \frac{\text{Power Supply Voltage} - 11.0}{0.022}$$



(1) For CSA approval, power supply must not exceed 42.4 V dc.

(2) HART protocol communication requires a loop resistance value between 250-1100 ohms, inclusive.

Humidity Limits

0–100% relative humidity

Failure Mode Alarm

If self-diagnostics detect a non-recoverable transmitter failure, the analog signal will be driven either below 3.75 mA or above 21.75 mA to alert the user. High or low alarm signal is user-selectable by internal jumper.

Turn-on Time

Digital and analog measured variables will be within specifications 7–10 seconds after power is applied to transmitter.

Digital and analog flow output will be within specifications 10–14 seconds after power is applied to transmitter.

Temperature Limits

Process (at transmitter isolator flange for atmospheric pressures and above)

- Silicone fill: –40 to 250 °F (–40 to 121 °C)
- Inert fill: 0 to 185 °F (–18 to 85 °C) (Process temperature above 185 °F (85 °C) require derating the ambient limits by a 1.5:1 ratio.)

Ambient:

- -40 to 185 °F (-40 to 85 °C)
- with integral meter: -4 to 175 °F (-20 to 80 °C)

Storage:

- -50 to 230 °F (-46 to 110 °C)
- with integral meter: -40 to 185 °F (-40 to 85 °C)

Damping

Response to step input change can be user-selectable from 0 to 29 seconds for one time constant.

Steam Flow Calculations:

- Steam densities calculated per ASME steam tables.
- Saturated steam configurable using static pressure based density calculations.

Natural Gas Flow Calculations

- Flow calculations per 1992 AGA (American Gas Association) Report No 3 or ISO-5167 (2003).
- Compressibilty Calculations per AGA Report No 8 or ISO-12213.

PERFORMANCE

(Zero-based spans, reference conditions, silicone oil fill, 316 SST isolating diaphragms, 4–20 mA analog output.)

Specification Conformance

The Rosemount 3095MV maintains a specification conformance of at least 3σ.

Mass Flow

Fully compensated for pressure, temperature, density, viscosity gas expansion, discharge coefficient, and thermal correction variances over operating range.

$$Qm = NC_d E Y_1 d^2 \{DP(p)\}^{1/2}$$

Mass Flow Reference Accuracy

- ±1.0% of Mass Flow Rate over 8:1 flow range (64:1 DP range) for liquids and gases

Totalized Mass Flow

- ±1.0% of Total Mass Flow

NOTE:
Assume 64:1 DP range for liquids and gases.

(Uncalibrated differential producer (Orifice) installed per ASME MFC3M or ISO 5167-1. Uncertainties for discharge coefficient, producer bore, tube diameter, and gas expansion factor defined in ASME MFC3M or ISO 5167-1. Density uncertainty of 0.1%. Differential pressure calibrated at up to 1/10th full scale for optimum flow accuracy/rangeability.)

Differential Pressure (DP)

Range 1

- 0–0.5 to 0–25 inH2O (0–0,0344 to 0–0,0623 bar) (50:1 rangeability is allowed)

Range 2

- 0–2.5 to 0–250 inH2O (0–6,22 to 0–622,7 mbar) (100:1 rangeability is allowed)

Range 3

- 0–10 to 0–1000 inH2O (0–24,9 to 0–2490,9 mbar) (100:1 rangeability is allowed)

Reference Accuracy (including Linearity, Hysteresis, Repeatability)

Range 2-3

- ±0.075% of span for spans from 1:1 to 10:1 of URL
- For rangedowns greater than 10:1 of URL,

$$\text{Accuracy} = \left[0.025 + 0.005\left(\frac{URL}{Span}\right)\right] \text{ \% of Span}$$

Range 1

- ±0.10% of span for spans from 1:1 to 15:1 of URL
- For rangedowns greater than 15:1 of URL,

$$\text{Accuracy} = \left[0.025 + 0.005\left(\frac{URL}{Span}\right)\right] \text{ \% of Span}$$

Ambient Temperature Effect per 50 °F (28 °C)

Range 2-3

- ±(0.025% of URL + 0.125% of span) for spans from 1:1 to 30:1
- ±(0.035% of URL – 0.175% of span) for spans from 30:1 to 100:1

Range 1

- ±(0.20% of URL + 0.25% of span) for spans from 1:1 to 30:1
- ±(0.24% of URL +0.15% of span) for spans from 30:1 to 50:1

Static Pressure Effects

Range 2-3

- Zero error = ±0.05% of URL per 1,000 psi (68,9 bar)
- Span error = ±0.20% of reading per 1,000 psi (68,9 bar)

Range 1

- Zero error = ±0.05% of URL per 800 psi (55,1 bar)
- Span error = ±0.40% of reading per 800 psi (55,1 bar)

DP Stability

Ranges 2-3

- ±0.125% URL for 5 years for ±50 °F (28 °C) ambient temperature changes, and up to 1000 psi (6,9MPa) line pressure.

Range 1

- ±0.2% of URL for 1 year

Absolute/Gage Pressure

Range 3 (absolute)/Range C (gage)

- 0–8 to 0–800 psia (0–0,55 to 0–55,1 bar) (100:1 rangeability is allowed)

Range 4 (absolute) /Range D (gage)

- 0–36.26 to 0–3,626 psia (0–2,5 to 0–250 bar) (100:1 rangeability is allowed)

Reference Accuracy (including Linearity, Hysteresis, Repeatability)

±0.075% of span for spans from 1:1 to 6:1 of URL
For rangedowns greater than 6:1 of URL,

$$\text{Accuracy} = \left[0.025 + 0.005\left(\frac{URL}{Span}\right)\right] \text{ \% of Span}$$

Ambient Temperature Effect per 50 °F (28 °C)

- ±(0.050% of URL + 0.125% of span) spans from 1:1 to 30:1
- ±(0.060% of URL – 0.175% of span) spans from 30:1 to 100:1

Stability

- ±0.125% URL for 5 years for ±50°F (28 °C) ambient temperature changes, and up to 1000 psi (6,9MPa) line pressure.

Process Temperature (PT)

Specification for process temperature is for the transmitter portion only. Sensor errors caused by the RTD are not included. The transmitter is compatible with any PT100 RTD conforming to IEC 751 Class B, which has a nominal resistance of 100 ohms at 0 °C and $\propto$ = 0.00385. Examples of compatible RTDs include the Rosemount Series 68 and 78 RTD Temperature Sensors.

RTD Range

–150 to 1,500 °F (–101 to 816 °C)

PT Accuracy (including Linearity, Hysteresis, Repeatability)

For 12 and 24 ft. Cables

- ±1.0 °F (0.56 °C) for process temperatures from –150 to 1200 °F (–101to 649 °C)
- For process temperatures above 1200 °F (649 °C), add ±1.0 °F (0.56 °C) per 100 °F (38 °C)

For 75 ft. cables:

- ±2.0 °F (1.12 °C) for process temperatures from –150 to 1200 °F (–101 to 649 °C)
- For process temperatures above 1200 °F (649 °C), add ±1.0 °F (0.56 °C) per 100 °F (38 °C)

PT Stability

±1.0 °F (0.56 °C) for 12 months

PHYSICAL

Security

- Transmitter security jumper mounted on electronics board, when enabled prevents changes to transmitter configuration.
- User Engineering Assistant provides two levels of optional password security

Electrical Connections

½–14 NPT, M20 × 1.5 (CM20), PG-13.5

RTD Process Temperature Input

100-ohm platinum RTD per IEC-751 Class B

Process Connections

Transmitter: ¼–18 NPT on $2^1/_8$-in. centers $^1/_2$–14 NPT on 2-, $2^1/_8$-, or $2^1/_4$-in. centers with optional flange adapters
RTD: RTD dependent.

Process Wetted Parts

Isolating Diaphragms

- 316L SST or Hastelloy C-276®. CF-8M (last version of 316 SST, material per ASTM-A743)

Drain/Vent Valves

- 316 SST or Hastelloy C®

Flanges

- Plated carbon steel, 316 SST, or Hastelloy C

Wetted O-rings

- Glass-Filled TFE

Non-Wetted Parts

Electronics Housing

- Low copper aluminum. NEMA 4X, CSA Enclosure Type 4X, IP 65, IP 66, IP 68

Bolts

- Plated carbon steel per ASTM A449, Grade 5 or austenitic 316 SST

Fill Fluid

- Silicone or halocarbon inert oil (Inert oil only available for gage sensor modules.)

Paint (Aluminum Housing only)

- Polyurethane

O-rings

- Buna-N

Weight

Component	Weight in lb (kg)
Rosemount 3095MV Transmitter	6.0 (2.7)
SST Mounting Bracket	1.0 (0.4)
12 ft (3.66 m) RTD Shielded Cable	0.5 (0.2)
12 ft (3.66 m) RTD Armored Cable	1.1 (0.5)
24 ft (7.32 m) RTD Shielded Cable	1.0 (0.4
24 ft (7.32 m) RTD Armored Cable	2.2 (1.0)
75 ft (22.86 m) RTD Shielded Cable	1.9 (0.9)
75 ft (22.86 m) RTD Armored Cable	7.2 (3.2)
21 in (53 cm) RTD Armored Cable	0.5 (0.2)
12 ft (3.66 m) RTD CENELEC Cable	2.1 (0.9)
24 ft (7.32 m) RTD CENELEC Cable	3.0 (1.4)
75 ft (22.86 m) RTD CENELEC Cable	7.1 (3.2)
21 in (53 cm) RTD CENELEC Cable	1.2 (0.5)

Product Certifications

Approved Manufacturing Locations

Rosemount Inc. — Chanhassen, Minnesota USA

Fisher-Rosemount GmbH & Co. — Wessling, Germany

Emerson Process Management Asia Pacific
Private Limited — Singapore

Beijing Rosemount Far East Instrument Co., Limited – Beijing, China

European Directive Information

The EC declaration of conformity for all applicable European directives for this product can be found on the Rosemount website at www.rosemount.com. A hard copy may be obtained by contacting our local sales office.

ATEX Directive (94/9/EC)

Emerson Process Management complies with the ATEX Directive.

European Pressure Equipment Directive (PED) (97/23/EC)

3095F_2/3,4/D and 3095M_2/3,4/D Flow Transmitters — QS Certificate of Assessment - EC No. PED-H-20 Module H Conformity Assessment

All other 3095_ Transmitters/Level Controller — Sound Engineering Practice

Transmitter Attachments: Process Flange - Manifold — Sound Engineering Practice

Electro Magnetic Compatibility (EMC) (89/336/EEC)

3095MV Flow Transmitters

— EN 50081-1: 1992; EN 50082-2:1995;
EN 61326-1:1997 – Industrial

Ordinary Location Certification for Factory Mutual

As standard, the transmitter has been examined and tested to determine that the design meets basic electrical, mechanical, and fire protection requirements by FM, a nationally recognized testing laboratory (NRTL) as accredited by the Federal Occupational Safety and Health Administration (OSHA).

Hazardous Locations Certifications

North American Certifications

Factory Mutual (FM) Approvals

A Explosion Proof for Class I, Division 1, Groups B, C, and D. Dust-Ignition Proof for Class II/Class III, Division 1, Groups E, F, and G. Enclosure type NEMA 4X. Factory Sealed. Provides nonincendive RTD connections for Class I, Division 2, Groups A, B, C, and D.

J Intrinsically Safe for use in Class I, II and III, Division 1, Groups A, B, C, D, E, F, and G hazardous outdoor locations. Non-incendive for Class I, Division 2, Groups A, B, C, and D. Temperature Code T4. Factory Sealed.

For input parameters and installation see control drawing 03095-1020.

Canadian Standards Association (CSA) Approvals

C Explosion Proof for Class I, Division 1, Groups B, C, and D. Dust-Ignition Proof for Class II/Class III, Division 1, Groups E, F, and G. CSA enclosure Type 4X suitable for indoor and outdoor hazardous locations. Provides nonincendive RTD connection for Class I, Division 2, Groups A, B, C, and D.Factory Sealed. Install in accordance with Rosemount Drawing 03095-1024. Approved for Class I, Division 2, Groups A, B, C, and D.

K Intrinsically Safe for Class I, Division 1, Groups A, B, C, and D. when installed in accordance with Rosemount drawing 03095-1021. Temperature Code T3C.

For input parameters and installation see control drawing 03095-1021.

European Certifications

F ATEX Intrinsic Safety Certification
Certificate Number: BAS98ATEX1359X ⟨Ex⟩ II 1 G

EEx ia IIC T5 (T_{amb} = –45 °C to 40 °C)
EEx ia IIC T4 (T_{amb} = –45 °C to 70 °C)
CE 1180

TABLE 1. Connection Parameters (Power/Signal Terminals)

U_i = 30V
I_i = 200 mA
P_i = 1.0 W
C_i = 0.012 µF
L_i = 0

TABLE 2. Temperature Sensor Connection Parameters

U_o = 30V
I_o = 19 mA
P_o = 140 mW
C_i = 0.002 µF
L_i = 0

TABLE 3. Connection Parameters for Temperature Sensor Terminals

C_o = 0.066 µF	Gas Group IIC
C_o = 0.560 µF	Gas Group IIB
C_o = 1.82 µF	Gas Group IIA
L_o = 96 mH	Gas Group IIC
L_o = 365 mH	Gas Group IIB
L_o = 696 mH	Gas Group IIA
L_o/R_o = 247 µH/ohm	Gas Group IIC
L_o/R_o = 633 µH/ohm	Gas Group IIB
L_o/R_o= 633 µH/ohm	Gas Group IIA

Special Conditions for Safe Use

The 3095, when fitted with the transient terminal block (order code B), are not capable of withstanding the 500 volts insulation test required by EN50 020, Clause 6.4.12 (1994). This condition must be accounted for during installation.

G ATEX Type N Certification
Certificate Number: BAS98ATEX3360X ⟨Ex⟩ II 3 G

EEx nL IIC T5 (T_{amb} = –45 °C to 40 °C)
EEx nL IIC T4 (T_{amb} = –45 °C to 70 °C)
U_i = 55V
CE
The apparatus is designed for connection to a remote temperature sensor such as a resistance temperature detection (RTD)

Special Conditions for Safe Use

The 3095, when fitted with the transient terminal block (order code B), are not capable of withstanding the 500 volts insulation test required by EN50 021, Clause 9.1 (1995). This condition must be accounted for during installation.

H ATEX Flameproof Certification
Certificate Number: KEMA02ATEX2320X ⟨Ex⟩ II 1/2 G
EEx d IIC T5 (-50°C ≤ T_{amb} ≤ 80°C)
T6 (-50°C ≤ T_{amb} ≤ 65°C)
CE 1180

Special Conditions for Safe Use (x):

The device contains a thin wall diaphragm. Installation, maintenance, and use shall take into account the environmental conditions to which the diaphragm will be subjected. the manufacturer's instructions fro installation and maintenance shall be followed in detail to assure safety during its expected lifetime.

Combinations of Certifications

Stainless steel certification tag is provided when optional approval is specified. Once a device labeled with multiple approval types is installed, it should not be reinstalled using any other approval types. Permanently mark the approval label to distinguish it from unused approval types.

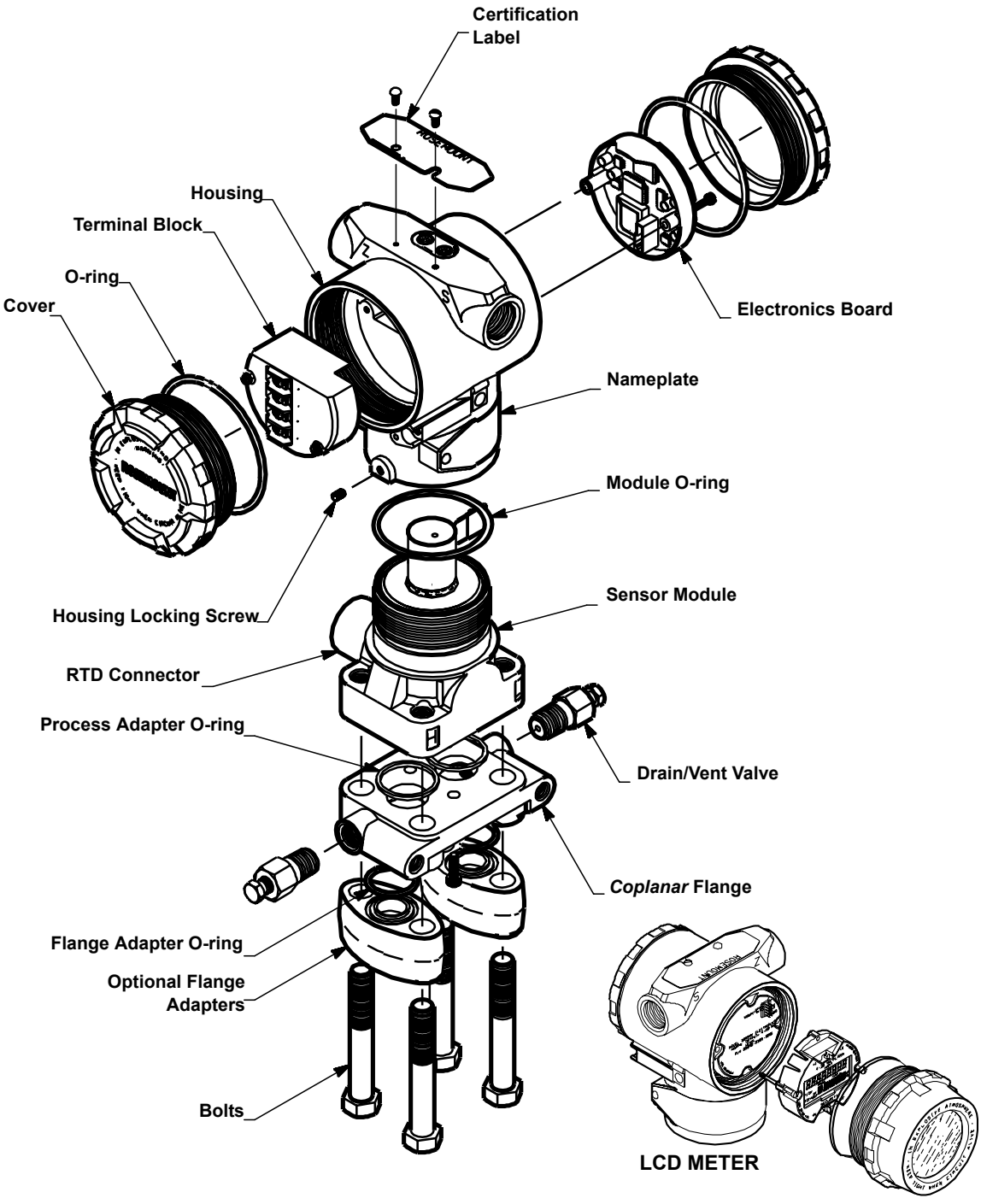
B A and J combination

D C and K combination

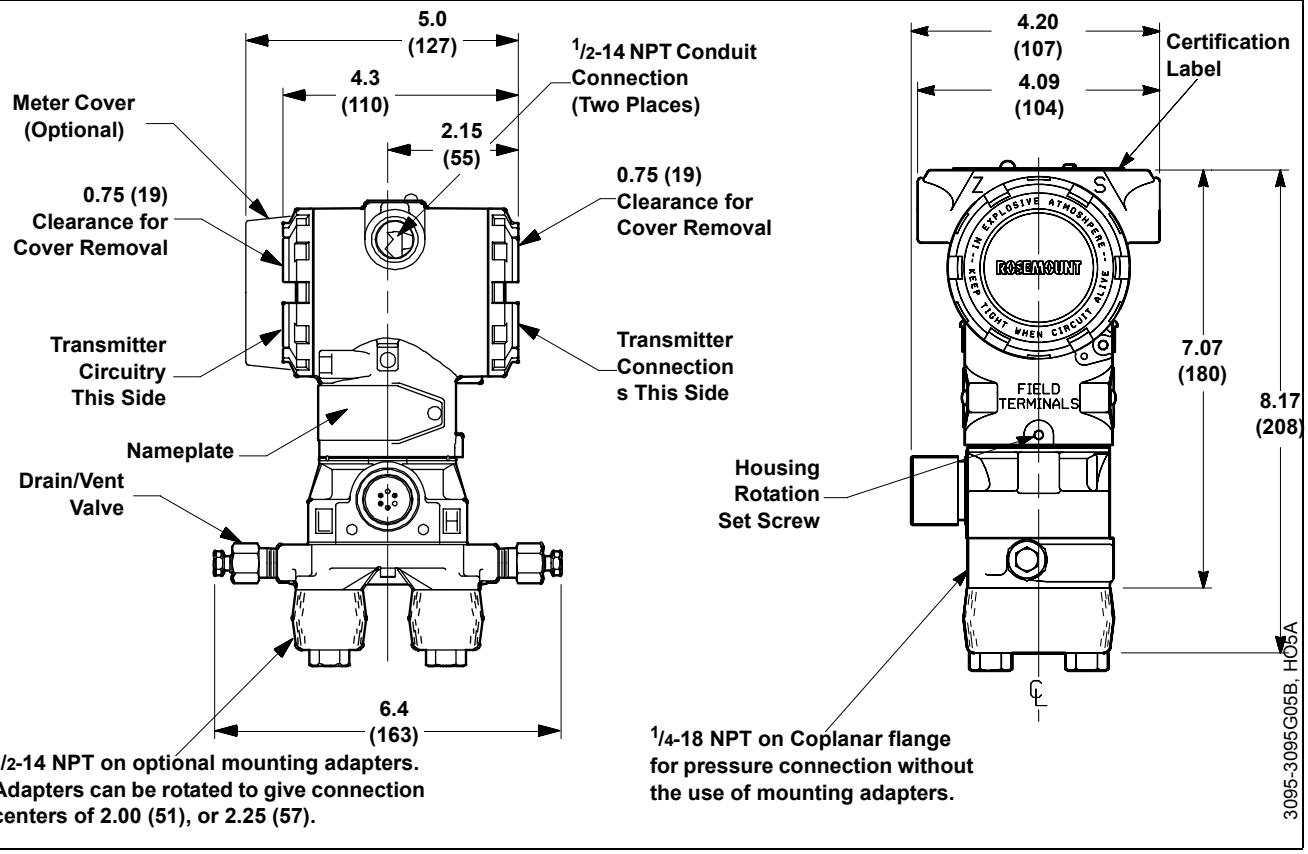
L F, G, and H combination

Dimensional Drawings

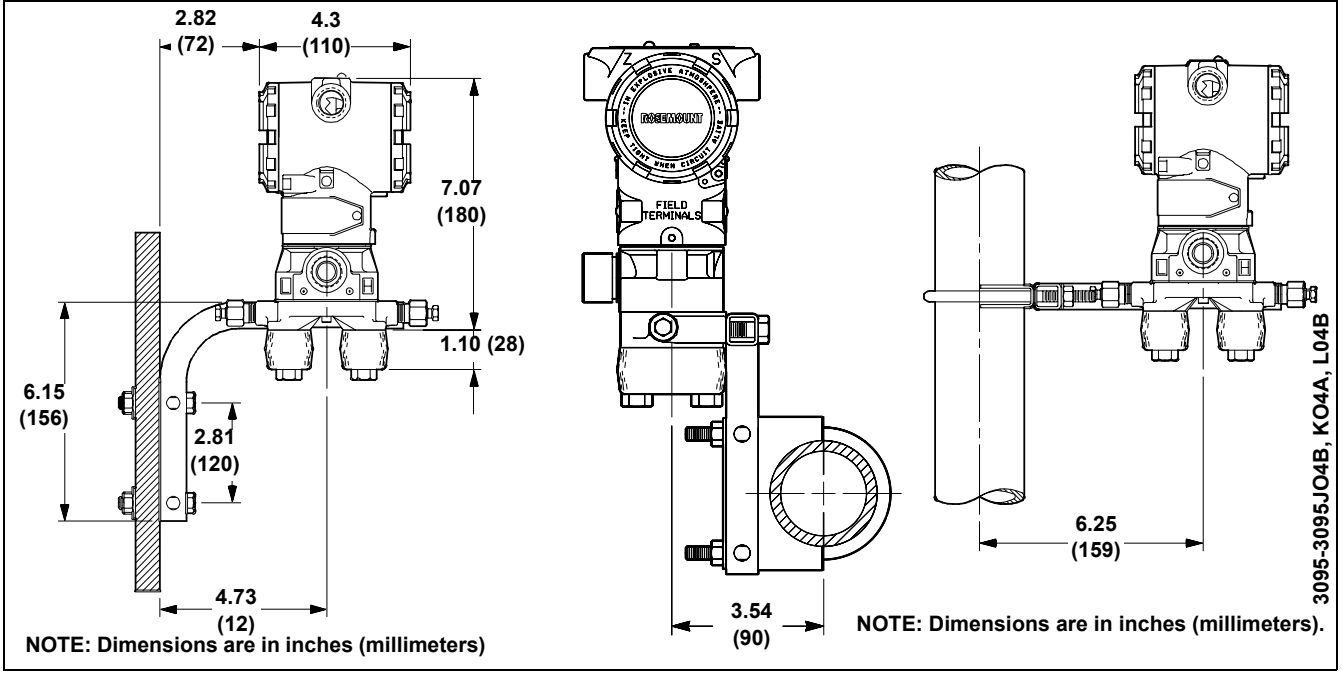
Exploded View of the Rosemount 3095MV



Rosemount 3095MV



Mounting Configurations



Ordering Information

Model	Product Description		
3095M	Multivariable Mass Flow Transmitter		
Code	**Output**		
A	4–20 mA with digital signal based on *HART* protocol		
Code	**Differential Pressure Range**		
1[1]	0–0.5 to 0–25 inH_2O (0–1,25 to 0–62,3 mbar)		
2	0–2.5 to 0–250 inH_2O (0–6,22 to 0–622,7 mbar)		
3	0–10 to 0–1000 inH_2O (0–0,024 to 0–2,49 bar)		
Code	**Static Pressure Ranges**		
3	0–8 to 0–800 psia (0–0,55 to 0–55,1 bar)		
4	0–36.26 to 0–3,626 psia (0–2,5 to 0–250 bar)		
C	0–8 to 0–800 psig (0–0,55 to 0–55,1 bar)		
D	0–36.26 to 0–3,626 psig (0–2,5 to 0–250 bar)		
Code	**Isolator Material**	**Fill Fluid**	
A	316L SST	silicone	
B[2]	*Hastelloy C-276*	silicone	
J[3]	316L SST	inert	
K[2][3]	*Hastelloy C-276*	inert	
Code	**Flange Style**		**Material**
A	*Coplanar*		CS
B	*Coplanar*		SST
C	*Coplanar*		*Hastelloy C*
F[4]	*Coplanar*		SST, non-vented
J	DIN compliant traditional flange, SST 10 mm adapter/manifold bolting		SST, $^7/_{16}$ — 20 Bolting
0	None (required for option code S3 or S5)		
Code	**Drain/Vent Material**		
A	SST		
C[2]	Hastelloy C		
0	None (required for option code S3 or S5)		
Code	**O-ring**		
1	Glass-filled TFE		
Code	**Process Temperature Input (RTD ordered separately)**		
0	Fixed process temperature (no cable)		
1	RTD Input with 12 ft. (3,66 m) of Shielded cable (intended for use with conduit)		
2	RTD Input with 24 ft. (7,32 m) of Shielded cable (intended for use with conduit)		
7	RTD Input with 75 ft. (22,86 m) of Shielded cable (intended for use with conduit)		
3	RTD Input with 12 ft. (3,66 m) of Armored, Shielded cable		
4	RTD Input with 24 ft. (7,32 m) of Armored, Shielded cable		
5[5]	RTD Input with 21 in. (53 cm) of Armored, Shielded cable		
8	RTD Input with 75 ft. (22,86 m) of Armored, Shielded cable		
A	RTD Input with 12 ft. (3,66 m) of CENELEC Flameproof cable		
B	RTD Input with 24 ft. (7,32 m) of CENELEC Flameproof cable		
C	RTD Input with 75 ft. (22,86 m) of CENELEC Flameproof cable		
D[5]	RTD Input with 21 in. (53 cm) of CENELEC Flameproof cable (typically ordered with Approval Code H)		
Code	**Transmitter Housing Material**	**Conduit Entry Size**	
A	Polyurethane-covered aluminum	½–14 NPT	
B	Polyurethane-covered aluminum	M20 × 1.5 (CM20)	
C	Polyurethane-covered aluminum	PG 13.5	
J	SST	½–14 NPT	
K	SST	M20 × 1.5 (CM20)	
L	SST	PG 13.5	

Code	Terminal Block
A	Standard
B	With integral transient protection
Code	**Meter**
0	None
1	LCD meter
Code	**Bracket**
0	None
1	*Coplanar* SST flange bracket for 2-in. pipe or panel mount, SST bolts
2	Traditional Flange Bracket for 2” Pipe Mounting, CS Bolts
3	Traditional Flange Bracket for panel Mounting, CS Bolts
4	Traditional Flange Flat Bracket for 2” Pipe Mounting, CS Bolts
5	Traditional Flange Bracket for 2” Pipe Mounting, 300-Series, SST Bolts
6	Traditional Flange Bracket for panel Mounting, 300-Series, SST Bolts
7	Traditional Flange Flat Bracket for 2” Pipe Mounting, 300-Series, SST Bolts
8	SST Traditional Flange Bracket for 2” Pipe Mounting, 300-Series, SST Bolts
9	SST Traditional Flange Flat Bracket for 2” Pipe Mounting, 300-Series, SST Bolts
Code	**Bolts**
0	CS bolts
1	Austenitic 316 SST bolts
N	None (Required for Option Code S3 or S5)
Code	**Approvals**
0	None
A	Factory Mutual (FM) Approvals Explosion-proof approval
B	Factory Mutual (FM) Approvals Explosion-proof approval and non-incendive/intrinsic safety approval combination
C	Canadian Standards Association (CSA) Explosion-proof approval
D	Canadian Standards Association (CSA) Explosion-proof approval and non-incendive/intrinsic safety approval combination
F	ATEX Intrinsic safety certification
G	ATEX Type N certification
H	ATEX Flame-proof certification
J	Factory Mutual (FM) Approvals Intrinsic Safety
K	Canadian Standards Association (CSA) Intrinsic Safety
Code	**Engineered Measurement Solution (EMS)**
B	Mass Flow and Measured Variables (DP, P, and T)
Code	**Options**
C2	Custom Flow Configuration (Requires completed Configuration Data Sheet 00806-0100-4716.)
S3	Assembly with Rosemount 405 Compact Orifice (requires compact orifice model number, see 00813-0100-4810)
S4(6)	Assembly with Rosemount Annubar Averaging Pitot Tubes or Rosemount 1195 Integral Orifice Plates (requires corresponding model number, see 00813-0100-4809, 00813-0100-4760, or 00813-0100-4686)
S5	Assembly with Rosemount 305 Integral Manifold (Requires integral manifold model number – see 00813-0100-4733)
S6	Assembly with Rosemount 309 Hookups (Required traditional Flange Style Options J, K, or L)
P1	Hydrostatic Testing
P2	Cleaning for Special Services
Q4	Inspection Certificate for Calibration Data
Q8(7)	Material Inspection Certificate per EN 10204 3.1B
DF(8)	Flange Adapters — Adapter Type Determined by Selected Flange Material: Plated CS, SST, *Hastelloy C*
Typical Model Number	**3095M A 2 3 A A A 1 3 A B 0 1 1 0 B**

(1) Available only with 3 or C sensor modules and A 316L SST/silicone, Isolator/Fill Fluid option.

(2) Materials of Construction meet NACE material recommendation per MR 01-75. Environmental limits apply to certain materials. Consult standard for details.

(3) Only available with C or D Gage Sensor Modules.

(4) Requires that Drain/Vent Material Code set to 0 (none).

(5) For use with Annubars *with integral RTDs.*

(6) With a primary element installed, the maximum operating pressure will be the lesser of either the transmitter or the primary element.

(7) This option is available for the sensor module housing, Coplanar and Coplanar flange adapters.

(8) Not available with assembly to Rosemount 1195 Integral Orifice Option Code S4.

OPTIONS

Standard Configuration

Unless otherwise specified, transmitter is shipped as follows

Engineering units:

Differential	inH_2O (Range 2)
Absolute/gage	psi (all ranges)
Output:	4 - 20 mA HART
Flange type:	Specified model code option
Flange material:	Specified model code option
O-ring material:	Specified model code option
Drain/vent:	Specified model code option
Flow Configuration Parameters:	Factory default
Software tag:	(Blank)

In addition, transmitter is shipped as follows:

- The three process variables are digitally trimmed to the specified upper and lower range values.
- For Mass Flow and Measured Variables (EMS Code B), process variable output order is set to Flow, DP, AP/GP, PT.
- Flow is configured to measure air via ASME Orifice: Flange Tap, with a primary element minimum diameter of 0.5 in. (SST material), meter tube diameter of 2 in. (carbon steel material), flow range configured from 0–8,262 SCFH, 10–100 psia operating pressure range, and 50–100 °F operating temperature range.

Custom Configuration (Option Code C2)

If Option Code C2 is ordered, the customer specifies the custom flow configuration parameters in addition to the standard configuration parameters. (See page Pressure-122)

Fixed Process Temperature

If process temperature input code is set to 0, the fixed process temperature is set to 68 °F unless specified during order entry.

Tagging

Three customer tagging options are available:

- Standard SST tag is wired to the transmitter. Tag character height is 0.125 in. (3.18 mm),85 characters maximum.
- Tag may be permanently stamped on transmitter nameplate upon request. Tag character height is 0.0625 in. (1.59 mm), 65 characters maximum.
- Tag may be stored in transmitter memory. Software tag (8 characters maximum) is left blank unless specified.
- Software tag (8 characters maximum) is left blank unless specified.

Assembly with Primary Elements (Option Code S3 or S4)

Rosemount 3095MV Flow Transmitters and either Annubar Averaging Pitot Tubes or Rosemount 1195 Integral Orifice Plates are fully assembled and calibrated by the factory.

Primary Element Product Data Sheets are listed below:

Annubar Flowmeter Series: Rosemount 3051SFA Probar Rosemount 3095MFA Mass Probar Rosemount 485 Annubar Primary Element	00813-0100-4809
Proplate Flowmeter Mass Proplate Flowmeter Rosemount 1195 Integral Orifice Plate	00813-0100-4686
Compact Orifice Flowmeter Rosemount 3051SFC Flowmeter Rosemount 3095MFC Mass Flowmeter Rosemount 405 Compact Orifice Primary	00813-0100-4810
Rosemount 1495 Orifice Plate Rosemount 1496 Flange Union Rosemount 1497 Meter Section	00813-0100-4792

Optional Rosemount 305 Integral Manifolds

Rosemount 3095MV Transmitter and 305AC (305BC) Integral Manifold are fully assembled, calibrated, and seal tested by the factory. Refer to PDS 00813-0100-4733 for additional information.

Temperature Sensors and Assemblies

Rosemount offers many types of temperature sensors and assemblies.

ACCESSORIES

Rosemount 333 HART Tri-Loop™ HART-to-Analog Signal Converter

The Rosemount 333 HART Tri-Loop can be installed with the 3095MV without disrupting existing device wiring. The Tri-Loop provides up to three additional analog outputs for monitoring or other controlling purposes without additional penetrations into the pipe.

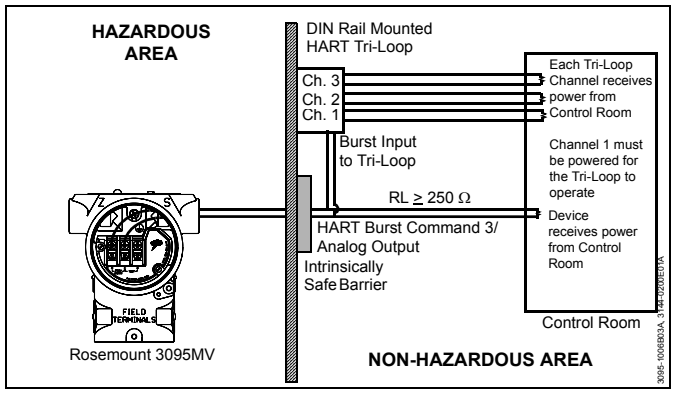
The HART Tri-Loop accepts the 3095MV digital signal and converts it to three independent isolated 4–20 mA analog signals. Any of the 3095MV process variables (DP, AP, GP, PT, or flow) can be provided via the Tri-Loop.

Rosemount 333 HART Tri-Loop Converter

Model	Product Description
333	HART Tri-Loop (standard configuration)
Code	**Alarm Option**
U	High Alarm
D	Low Alarm
Code	**Configuration Option**
(no code)	Standard Configuration
C2	Custom Configuration. Requires a completed Configuration Data Sheet (00806-0100-4754)
Typical Model Number: 333 U	

HART Tri-Loop Converter Accessories

Item Description	Part Number
HART Modem and Cables Only	03095-5105-0001



Rosemount 3095MV Engineering Assistant Software Packages

The Rosemount 3095MV Engineering Assistant software package is available with or without the HART modem and connecting cables. All configurations are packaged separately.

For best performance of the EA Software, the following computer hardware and software is recommended:

Optional Software Code W

- DOS-based 386 personal computer or above
- 640K Base RAM memory with 8 MB extended
- Mouse or other pointing device
- 4 MB of available hard disk space
- Color computer display
- DOS 5.0 or higher
- Windows™ 3.1, Windows for Workgroups 3.11, Windows 95

Option Code N:

- Pentium, 800MHz personal computer or above
- 512 MB RAM
- 350 MB of available hard disk space
- Mouse or other pointing device
- Color computer display
- Windows 98, NT, 2000 or XP

Engineering Assistant Software Packages

Code	Product Description
EA	MV Engineering Assistant Software program
Code	**Diskette Type**
1(1)	EA Rev. 4.0, 3.5-inch diskettes (2)
2(2)	EA Rev. 5, CD-ROM (includes HART Tri-Loop Configurator Software)
Code	**Language**
E	English
Code	**HART Modem and Connecting Cables**
O	None
H	HART Modem and Cables included
Code	**Operating Software**
W	Windows Version 3.1, Windows Workgroup 3.11, or Windows 95
N	EA Rev. 5 (3)
Code	**License**
1	Single PC license
2	Site license
Code	**Additional Software**
0	None
Typical Model Number: EA1E0W10	

(1) Must be ordered with Code W Operating Software.

(2) Must be ordered with Code N Operating Software.

(3) Revision 5.2 supports Windows 98, NT, or 2000. Revision 5.3 supports Windows NT, 2000, or XP and upgrades only on Windows 98.

Configuration Data Sheet

Complete this form to define a Custom Flow Configuration for the Rosemount 3095MV. Unless Specified, the 3095MV will ship with the default values identified by the ★ symbol.For technical assistance in filling out this CDS, contact your local Rosemount representative.
Note: Any missing information will be processed with the indicated default values.

Customer Information

Customer_____ P.O. No _____

Customer Line Item_____ Model No. (1)_____

Tag Type ☐ SST Wire-on Tag (85 characters maximum) ☐ Stamped on Nameplate (65 characters maximum)

Tag Information_____

Transmitter Information (Optional)

Software Tag |__|__|__|__|__|__|__|__| (8 characters)

Descriptor |__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|(16 characters maximum)

Message |__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|

|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__|__| (32 characters)

Date |__|__| (dd) |__|__|__| (MMM) |__|__| (yy)

Flow Configuration (required)

Select units for each Process Variable, then enter sensor Lower Trim Value (LTV) and sensor Upper Trim Value (UTV).
Note: LTV and UTV must be within the range limits.

Differential Pressure

DP Units
☐ inH_2O-68 °F ☐ inH_2O-0 °C ☐ ftH_2O-68 °F ☐ mmH_2O-68 °F
☐ mmH_2O-0 °C ☐ psi ☐ bar ☐ mbar
☐ g/SqCm ☐ Kg/SqCm ☐ Pa ☐ kPa
☐ torr ☐ Atm ☐ inH_2O-60 °F

Trim Values LTV_____(0 ★) UTV_____(URL in H2O-68 °F ★)

Static Pressure

Static Units
☐ inH_2O-68 °F ★ ☐ inH_2O-0 °C ☐ ftH_2O-68 °F ☐ mmH_2O-68 °F
☐ mmH_2O-0 °C ☐ psi ☐ bar ☐ mbar
☐ g/SqCm ☐ Kg/SqCm ☐ Pa ☐ kPa
☐ torr ☐ Atm ☐ inH_2O-60 °F

Trim Values(1) LTV_____(0 ★) UTV_____(URL psi ★)

Process Temperature

PT Units ☐ °F ★ ☐ °C

Trim Values LTV_____(-300 ★) UTV_____(1500 °F★)

Flow Rate

Flow Units
☐ StdCuft/s ☐ StdCuft/min ☐ StdCuft/h ☐ StdCuft/d
☐ StdCum/h ☐ StdCum/d ☐ lbs/sec ☐ lbs/min
☐ lbs./hour ★ ☐ lbs/day ☐ grams/sec ☐ grams/min
☐ grams/hour ☐ kg/sec ☐ kg/min ☐ kg/hour
☐ NmlCuM/hour ☐ NmlCuM/day ☐ Special (see Flow Rate Special Units)

Flow Rate Special (use if "Special" is checked in Flow Rate above)

NOTE: Flow Rate Special Units = Base Flow Unit multiplied by Conversion Factor.
Base Flow Units (select from above Flow Rate units)_____
Conversion Factor_____
Display As|__|__|__|__|__| *(available units A-Z, 0-9)*

Continued on Next Page

Flow Configuration (required) Continued

Flow Rate Output

Low PV (4 mA)_____ (0.00 ★) High Pv (20 mA)_____

(1) If absolute pressure module, then lower static pressure values must be ≥ 0.5 psia (34.5 mbar)

Flow Total

Flow Units
☐ Grams ☐ Kilograms ☐ Metric Tons ☐ Pounds
☐ Short Tons ☐ Long Tons ☐ Ounces ☐ NmlCuM
☐ Normal Liters ☐ StdCuM ☐ StdCuFt
☐ Special (see Flow Total Special Units)

Flow Total Special (use if "Special" is checked in Flow Total above)

NOTE: Flow Rate Special Units = Base Flow Unit multiplied by Conversion Factor.

Base Flow Units (select from above Flow Total units)_____

Conversion Factor_____

Display As|__|__|__|__|__| *(available units A-Z, 0-9)*

Fluid Type (Select One)

☐ Gas ☐ Liquid

Fluid Information (Complete one section only)

☐ **Steam (ASME Saturated and/or Superheated)**

☐ **Natural Gas** ***NOTE: If you selected Natural Gas, complete the Compressibility Factor Information on page Pressure-124***

☐ **Gas or Liquid from AIChE database: Circle ONE fluid name below:**

Acetic Acid	Cyclopropane	Isopropanol	n-Heptane	1-Dodecanol
Acetone	Divinyl Ether	Methane	n-Hexane	1-Heptanol
Acetonitrile	Ethane	Methanol	n-Octane	1-Heptene
Acetylene	Ethanol	Methyl Acrylate	n-Pentane	1-Hexene
Acrylonitrile	Ethylamine	Methyl Ethyl Ketone	Oxygen	1-Hexadecanol
Air	Ethylbenzene	Methyl Vinyl Ether	Pentafluorothane	1-Octanol
Allyl Alcohol	Ethylene	m-Chloronitrobenzene	Phenol	1-Octene
Ammonia	Ethylene GlycolEthylene	m-Dichlorobenzene	Propane	1-Nonanal
Argon	Oxide	Neon	Propadiene	1-Nonanol
Benzene	Fluorene	Meopentane	Pyrene	1-Pentadecanol
Benzaldehyde	Furan	Nitric Acid	Propylene	1-Pentanol
Benzyl Alcohol	Helium-4	Nitric Oxide	Styrene	1-Pentene
Biphenyl	Hydrazine	Nitrobenzene	Sulfur Dioxide	1-Undecanol
Carbon Dioxide	Hydrogen	Nitroethane	Toluene	1,2,4-Trichlorobenzene
Carbon Monoxide	Hydrogen Chloroide	Nitrogen	Trichloroethylene	1,1,2-Trichloroethane
Carbon Tetrachloride	Hydrogen Cyanide	Nitromethane	Vinyl Acetate	1,1,2,2-Tetrafluoroethane
Chlorine	Hydrogen Peroxide	Nitrous Oxide	Vinyl Chloride	1,2-Butadiene
Chlorotrifluoroethylene	Hydrogen Sulfide	n-Butane	Vinyl Cyclohexane	1,3-Butadiene
Chloroprene	Isobutane	n-Butanol	Water	1,2,5-Trichlorobenzene
Cycloheptane	Isobutene	n-Butyraldehyde	1-Butene	1,4-Dioxane
Cyclehexane	Isobutylbenzene	n-Butyronitrile	1-Decene	1,4-Hexadiene
Cyclopentane	Isopentane	n-Decane	1-Decanal	2-Methyl-1-Pentane
Cyclopentene	Isoprene	n-Dodecane	1-Decanol	2,2-Dimethylbutane
		n-Heptadecane	1-Dodecene	

☐ **Custom Gas or Liquid**

Enter your custom fluid name _____

NOTE: If you are defining a custom fluid, complete the density and viscosity information on page Pressure-125

Required For Natural Gas Only

Compressibility Factor Information

Choose desired characterization method, and only enter values for that method:

☐ Detail Characterization Method (AGA8 1992)			Mole	Valid Range
CH4	Methane mole percent	_____	%	0-100 percent
N2	Nitrogen mole percent	_____	%	0-100 percent
CO2	Carbon Dioxide mole percent	_____	%	0-100 percent
C2H6	Ethane mole percent	_____	%	0-100 percent
C3H8	Propane mole percent	_____	%	0-12 percent
H2O	Water mole percent	_____	%	0-Dew Point
H2S	Hydrogen Sulfide mole percent	_____	%	0-100 percent
H2	Hydrogen mole percent	_____	%	0-100 percent
CO	Carbon Monoxide mole percent	_____	%	0-3.0 percent
O2	Oxygen mole percent	_____	%	0-21 percent
C4H10	i-Butane mole percent	_____	%	0-6 percent[(2)]
C4H10	n-Butane mole percent	_____	%	0-6 percent[(2)]
C5H12	i-Pentane mole percent	_____	%	0-4 percent[(3)]
C5H12	n-Pentane mole percent	_____	%	0-4 percent[(3)]
C6H14	n-Hexane mole percent	_____	%	0-Dew Point
C7H16	n-Heptane mole percent	_____	%	0-Dew Point
C8H18	n-Octane mole percent	_____	%	0-Dew Point
C9H20	n-Nonane mole percent	_____	%	0-Dew Point
C10H22	n-Decane mole percent	_____	%	0-Dew Point
He	Helium mole percent	_____	%	0-3.0 percent
Ar	Argon mole percent	_____	%	0-1.0 percent
☐ Gross Characterization Method, Option 1 (AGA8 Gr-Hv-Co2)		Valid Range		
Specific gravity at 14.73 psia and 60 °F		_____		0.554-0.87
Volumetric Gross Heating Value at Base Conditions		_____	BTU/SCF	477-1150 BTU/SCF
Carbon Dioxide mole percent		_____	%	0-30 percent
Hydrogen mole percent		_____	%	0-10 percent
Carbon Monoxide mole percent		_____	%	0-3 percent
☐ Gross Characterization Method, Option 2 (AGA8 Gr-CO2-N2)		Valid Range		
Specific gravity at 14.73 psia and 60 °F		_____		0.554-0.87
Carbon Dioxide mole percent		_____	%	0-30 percent
Nitrogen mole percent		_____	%	0-50 percent
Hydrogen mole percent		_____	%	0-10 percent
Carbon Monoxide mole percent		_____	%	0-3 percent

[(2)] The summation of i-Butane and n-Butane cannot exceed 6 percent.

[(3)] The summation of i-Pentane and n-Pentane cannot exceed 4 percent.

Required for Custom Gas Only

Gas Compressibility and Viscosity Information

1. Fill in the following operating pressures and operating temperatures.
   Min and max values must match values entered under Process Operating Conditions.

Operating Pressures

(1) _____min

(2)_____[1/3(max-min)]+min

(3)_____[2/3(max-min)]+min

(4)_____max

Operating Temperatures

(5)_____min

(6)_____[1/2(max-min)]+min

(7)_____max

(8)_____[1/3(max-min)]+min

(9)_____[2/3(max-min)]+min

2. Transfer the values from the above section to the numbered lines below.

3. Check one Density/Compressibility box, then enter the 12 values for each pressure/temperature range.

4. Check one Viscosity box, then enter values for each temperature. (At least one viscosity value is required.)

5. Enter values for molecular weight, isentropic exponent, and standard density (or standard compressibility).

☐ Density in Kg/CuM
☐ Density in Lbs/CuFt
☐ Compressibility

☐ Viscosity in Centipoise
☐ Viscosity in Lbs/Ft Sec
☐ Viscosity in Pascal Sec

Pressure	Temp		Temp.	
(1)_____	(5)_____	_____	(5)_____	_____
(2)_____	(5)_____	_____	(8)_____	_____
(3)_____	(5)_____	_____	(9)_____	_____
(4)_____	(5)_____	_____	(7)_____	_____
(1)_____	(6)_____	_____		
(2)_____	(6)_____	_____	Molecular Weight	_____
(3)_____	(6)_____	_____		
(4)_____	(6)_____	_____	Isentropic Exponent	_____1.4 ★
(1)_____	(7)_____	_____		
(2)_____	(7)_____	_____		
(3)_____	(7)_____	_____		
(4)_____	(7)_____	_____		

Standard density/compressibility _____
(at standard reference conditions specified on page Pressure-128)

NOTE: Custom Gas Configuration order will be delayed if any fields on this page are left blank.

Required for Custom Liquid Only

Liquid Density and Viscosity Information

NOTE: Only fill out this page if you have selected a custom liquid.

1. Fill in the following operating temperatures. (Min and max values must match values entered under Process Operating Conditions)

Operating Temperatures

(a)_____min

(b)_____[1/3(max-min)]+min

(c)_____[2/3(max-min)]+min

(d)_____max

2. Transfer the values from the above section to the lettered lines below.

3. Check one Density box, then enter values for each temperature and the standard density.

4. Check one Viscosity box, then enter values for each temperature. (At least one viscosity value is required.)

☐ Density in Lbs/CuFt
☐ Compressibility

☐ Viscosity in Centipoise
☐ Viscosity in Lbs/Ft Sec
☐ Viscosity in Pascal Sec

Temp.		Temp.	
(a)_____	_____	(a)_____	_____
(b)_____	_____	(b)_____	_____
(c)_____	_____	(c)_____	_____
(d)_____	_____	(d)_____	_____

Standard density/compressibility _____
(at standard reference conditions specified on page Pressure-128)

NOTE: Custom Liquid Configuration order will be delayed if any fields on this page are left blank.

★ = Indicates default value

Primary Element Information

Select Differential Producer (Select One)

- ☐ 405P Compact Orifice
- ☐ 405C Compact Conditioning Orifice
- ☐ 1195 Integral Orifice
- ☐ Annubar/Mass Probar ★
- ☐ Nozzle, Long Radious Wall Taps, ASME
- ☐ Nozzle, Long Radious Wall Taps, ISO
- ☐ Nozzle, ISA 1932, ISO
- ☐ Orifice, $2^{1}/_{2}$D & 8D Taps
- ☐ Orifice, Corner Taps, ASME
- ☐ Orifice d & D/2 Taps, ASME
- ☐ Orifice, D & D/2 Taps, ISO
- ☐ Orifice, Flange Taps, ASME
- ☐ 1595 Conditioning Orifice
- ☐ Orifice, Flange Taps, AGA3
- ☐ Orifice, Flange Tape, ISO
- ☐ Small Bore Orifice, Flange Taps, ASME
- ☐ Venturi Nozzle, ISO
- ☐ Venturi, Rough Cast/Fabricated Inset, ASME
- ☐ Venturi, Rough Cast Inlet, ISO
- ☐ Venturi, Machined Inlet, ASME
- ☐ Venturi, Welded Inlet, ISO

Selecting Area Averaging Meter, V-Cone®, or calibrated primary element requires a constant value for discharge coefficient: _____ .

☐ Area Averaging Meter ☐ V-Cone ☐ Calibrated Venturi
☐ Calibrated output

Primary Element Minimum Diameter (d) _____ ☐ in. ☐ mm

at _____ ☐ °F ☐ °C in. at 68 °F ★

or

Sensor Series No. _____ Enter series designation

Differential Producer Material (Select One) ☐ Carbon Steel ☐ SST 304 ☐ SST316 ☐ *Hastelloy C* ☐ *Monel*

Pipe Tube Diameter (Pipe ID) (D)_____ ☐ in. ☐ mm at _____ ☐ °F ☐ °C in. at 68 °F ★

Pipe Tube Material (Select One) ☐ Carbon Steel ★ ☐ SST 304 ☐ SST 316 ☐ *Hastelloy C* ☐ *Monel*

Process Operating Conditions

Operating Pressure Range _____ to _____

☐ psia ☐ psig ☐ kPa (absolute) ☐ kPa (gage)

Operating Temperature Range _____ _____ to _____ ☐ °F ☐ °C

For fixed process temperatures (Model Code = 0), enter value _____

Valid range: -459 to 3500 °F (-273 to 1927 °C)

NOTE: For steam applications, temperatures must be equal to or greater than the saturation temperature at the given pressures.

Atmospheric Pressure

Atmospheric Pressure= _____ ☐ psia ☐ kPa (absolute) ☐ Bar 14.696 psia ★

Product Data Sheet
00813-0100-4716, Rev GA
Catalog 2004

Rosemount 3095MV

Standard Reference Conditions

NOTE: The information in only required if any of the following flow units were selected:
StdCuft/s, StdCuft/min, StdCuft/h, StdCuft/d, StdCum/h, StdCum/d

Standard Reference Conditions:

Standard Pressure=_____	☐ psia ☐ Bar	14.696 psia ★
(gas/steam only)	☐ kPa (absolute)	
Standard Temperature_____	☐ °F★ ☐ °C	60 °F ★ (For steam, 212 °F ★)

Transmitter Information (Required)

Failure Mode Alarm Direction (select one) ☐ Alarm High★ ☐ Alarm Low

LCD Meter Configuration

Process variables displayed on LCD:

- ☐ Absolute Pressure
- ☐ Analog Output Current
- ☐ Differential Pressure
- ☐ Flow
- ☐ Flow Total
- ☐ Gauge Pressure
- ☐ Percent of Range
- ☐ Process Temperature

Number of seconds to display each variable: _____

(available ranges from 2-10 seconds, in one second increments)

Burst Mode

☐ Disabled ☐ Enabled

If the transmitter is to be used with Rosemount Rosemount 333, burst mode must be enabled.

For RMD Internal Use Only

House Order No.: _____

Line Item No.: _____

Transmitter Serial No.: _____

RCC Tech.: _____

(1) A complete model number is required before Rosemount Inc. can process this custom configuration order.

Emerson Process Management

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