

Flow

DP FLOWMETERS

Annubar® Flowmeter Series

3051SFA, 3095MFA Flowmeters, 485, 285 Primary Elements

The state-of-the-art, fifth generation Rosemount 485 Annubar combined with the 3051S or 3095 MultiVariable™ transmitter creates an accurate, repeatable and dependable insertion-type flowmeter. The Annubar Flowmeter Series optimizes performance through an innovative measuring technique, minimal permanent pressure loss and an integral temperature sensor.

Compact Orifice Flowmeter Series

3051SFC, 3095MFC Flowmeters, 405 Primary Elements

Compact Orifice Flowmeters are designed to lower the installed cost of traditional orifice installations. Based on an innovative, wafer-style design that facilitates direct mounting to coplanar transmitters, these systems 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.

Integral Orifice Flowmeter Series

3051SFP, 3095MFP Flowmeters, 1195 Primary Elements

This family of integral orifice flowmeters has increased performance by eliminating inaccuracies that become more pronounced in small orifice line installations - ID uncertainty, velocity profile distortion and plate misalignment. The completely assembled, ready-to-install flowmeters reduce cost and simplify installation.

Orifice Plate Primary Element Systems

1495 Orifice Plate, 1496 Flange Unions, 1497 Meter Sections

A comprehensive offering of orifice plates, flange unions and meter sections that is easy to specify and order. Each product is manufactured in strict accordance with ISO, DIN, ASME and AGA standards ensuring precision flow measurement through quality and performance.

1595 Conditioning Orifice Plate

The 1595 Conditioning Plate improves upon the most common primary element in the world and sets a new standard in orifice-based measurement. It is designed to provide superior performance in tight fit applications, requiring only two diameter of straight run upstream while achieving $\pm 0.5\%$ performance.

MAGNETIC FLOWMETERS

Magnetic Flow Transmitters

8732, 8742 and 8712 Transmitters

Rosemount E-Series magnetic flow transmitters provide technology leading performance, reliability, and advanced diagnostics to optimize plant performance. In addition the 8714i Calibration Verification™ diagnostic provides an easy method to verify meter performance and troubleshoot magnetic flowmeter installations. The Rosemount 8732 and 8742 feature rugged, explosion-proof integral and remote mount configurations for accurate, repeatable measurements in all environments. The Rosemount 8712 remote wall mount transmitter features the easiest to use local operator interface.

Magnetic Flowtubes

8705, 8707, 8711, 8721 Flowtubes

Rosemount 8705 and 8707 are reliable, all welded flanged flow tubes featuring a broad range of materials for reliable performance in a wide range of processes. The Rosemount 8711 is an economical, compact, lightweight wafer flowtube. The 8721 Hygienic flowtube is specifically designed to meet the requirements of food, beverage, and life science applications.

High-Signal Magmeter System

Rosemount 8712H and 8707 High-Signal DC system provides industry leading measurement stability in the most difficult high noise applications such as high consistency pulp stock applications or high solid content slurries.

VORTEX FLOWMETERS

8800D Vortex Flowmeter

The Rosemount 8800D fully cast, all welded meter body requires no process seals, which eliminates plugging and sources of fugitive emissions. It has superior vibration immunity with mass balanced sensing design and Adaptive Digital Signal Processing.

8800DR Reducer™ Vortex Flowmeter

The 8800DR Reducer Flowmeter is based on the proven 8800D design with built-in reducers, which improves low flow performance while reducing installation costs and risk.

8800DD Dual Vortex Flowmeter

The 8800DD Dual Vortex Flowmeter provides true flow redundancy by integrating two sets of electronics and sensors into one meter. It is a premier solution for SIL 2 or critical applications where redundancy is important.

8800 MultiVariable™ Vortex

The 8800 MultiVariable Vortex Flowmeter incorporates an isolated, independent temperature sensor into the proven 8800D design. The electronics are capable of outputting a temperature compensated mass flow for saturated steam or flow and temperature as separate variables. This reduces installation and maintenance costs compared to separate devices.

ROSEMOUNT ENGINEERED ASSEMBLIES

Factory-assembled, calibrated and leak-tested, Engineered Assemblies offer complete, ready-to-install flow solutions for both common and unique process applications.

Comprehensive Product Catalog

Flow Product Selection Chart	Applications					Pressure Loss	Velocity Measurement	Mass Measurement	Accuracy	Flow Rangeability	Line Sizes	Required Upstream Pipe Diameter	Maximum Temperature
	Clean Liquid	Dirty Liquid	Viscous Liquid	Slurry	Gas and Steam								

Annubar Flowmeter Series

3051SFA Probar Flowmeter	1	2	3	3	2	L	X	±0.8% of volumetric flow rate	14:1	2-96 in. (50-2400 mm)	8 D	1250°F (677°C)
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3095MFA Mass Probar	1	2	3	3	1	L	X	±0.9% of mass flow rate	10:1	2-96 in. (50-2400 mm)	8 D	1250°F (677°C)
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Compact Orifice Flowmeter Series

3051SFC Compact Orifice Flowmeter	1	2	2	3	2	M	X	±1.40% of volumetric flow rate	14:1	0.5-12 in. (15-300 mm)	10 D	850°F (454°C)
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3051SFC with Conditioning Orifice Plate Option	1	2	2	3	2	M	X	±0.8% of volumetric flow rate (0.4 beta)	14:1	2-12 in. (50-300 mm)	2 D	850°F (454°C)
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3095MFC Compact Orifice Mass Flowmeter	1	2	2	3	1	M	X	±1.4% of mass flow rate	10:1	0.5-12 in. (15-300 mm)	10 D	850°F (454°C)
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3095MFC with Conditioning Orifice Plate Option	1	2	2	3	1	M	X	±0.7% of mass flow rate (0.4 beta)	10:1	2-12 in. (50-300 mm)	2 D	850°F (454°C)
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ProPlate Flowmeters Series

3051SFP ProPlate Flowmeter	1	2	2	3	2	M	X	±0.95% of volumetric flow rate	14:1	0.5-1.5 in. (15-40 mm)	10 D	1250°F (677°C)
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3095MFP Mass ProPlate Flowmeter	1	2	2	3	1	M	X	±0.9% of mass flow rate	10:1	0.5-1.5 in. (15-40 mm)	10 D	1250°F (677°C)
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Orifice Plate Assemblies

1495 Orifice Plate	1	2	2	3	1	M	X	Discharge Coefficient: ±0.6%	-	2-24 in. (50-600 mm)	10 D	700°F (371°C)
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1595 Conditioning Orifice Plate	1	2	2	3	1	M	X	Discharge Coefficient: ±0.5% (0.4 beta)	-	2-24 in. (50-600 mm)	2 D	1200°F (649°C)
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Magnetic Flowmeter Systems

8732, 8712, 8742 Flowmeters	1	1	1	1	3	N	X	±0.25% of rate (standard)	40:1	0.15-36 in. (4-900 mm)	0.5 D	350°F (177°C)
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8705/8707, 8711, 8721 Flowtubes High-Signal Magnetor Systems	1	1	1	1	3	N	X	±0.15% of rate (optional)	40:1	0.15-36 in. (4-900 mm)	0.5 D	350°F (177°C)
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Vortex Flowmeter Systems

8800D Vortex Flowmeter	1	1	2*	2	2	M	X	±0.65% of rate (liquids)	20:1	0.5-12 in. (15-300 mm)	10 D	800°F (427°C)
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8800DD Dual Vortex Flowmeter	1	1	2*	2	1	M	X	±1.35% of rate (gas/steam)	20:1	2.0-12 in. (50-300 mm)	10 D	800°F (427°C)
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8800D MultiVariable Vortex Flowmeter	1	1	2*	2	1	M	X	2.0% of mass flow rate for saturated steam	20:1	2.0-12 in. (50-300 mm)	10 D	800°F (427°C)
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Applications: 1 = Ideal 2 = Suitable 3 = Not Suitable

Pressure Loss: L = Low M = Medium N = None

*Size considering Signal Amplitude (ρ x VZ) and Reynolds Number.

Flow Products