



**Uncompromising Performance for
Your Most Critical Measurement
Applications**

**Micro Motion® ELITE® Coriolis
Flow & Density Meters**

ELITE Coriolis flow meters offer superior accuracy you can trust long after installation.



Need a flow measurement you can trust? We can help.

With each year, processes are impacted by the ever-evolving demands for greater precision. Challenges associated with downtime, reliability and accuracy can undermine the potential benefits and financial rewards that come with making improvements to your process. Smart businesses like yours constantly weigh the cost of CAPEX and OPEX against revenue over the long-haul. Why? Because experience shows that success isn't determined by how little you spend, but how wisely you spend. That's value.

Don't settle for less.

Instrumentation that maintains accuracy keeps you ahead of your competitors. Reliable measurements can reduce uncertainty in your process and ensure a consistent, high-quality product.



Reduce your maintenance costs; increase your bottom line.

In refineries around the world, maintenance can cost up to \$70 million per year and account for the third largest expenditure behind raw materials and energy expense.



Maximize your process efficiency.

In all custody transfer applications, having a smart metering system you can trust to slash unexpected losses allows you to take control of your operation.



Understanding your process while maintaining confidence in your devices offers you the peace of mind that your plant is running smoothly. That's the operational certainty your management is looking for.

Measurement tells a story – ELITE Coriolis flow meters make it possible.



With over 40 years of proven performance, our premier line of Micro Motion Coriolis flow meters combine unmatched accuracy, functionality, line size breadth and turndown range to provide the ultimate solution for your most critical processes. ELITE Coriolis flow meters are the preferred solution for critical applications such as custody transfer, two-phase flow and more.

MICRO MOTION™



The Micro Motion ELITE Coriolis flow meter is just that: elite. Our top performing flow meter ensures that you deliver high quality products, every time.

Gain confidence in your measurement.

Industry leading liquid ($\pm 0.05\%$) and gas ($\pm 0.25\%$) mass flow accuracy with multi-variable capability, including volume, density, and temperature measurements. ELITE Coriolis flow meters are designed to minimize process and environmental effects and can deliver reliable measurements in the most challenging fluid conditions.

Enjoy peace of mind.

We are the pioneers of Coriolis technology, and solving tough engineering problems is in our blood. With over 40 years of measurement expertise and the largest installed base in the world, you can consider us a trusted advisor for your measurement needs.

Reduce cost, increase uptime.

Our Coriolis meters have a unique, simple design with no moving parts, making them easy to install, configure, and maintain. Not only will ELITE simplify your day-to-day operations, but it can also provide actionable insights to help optimize your process.

Engineered to fit processes in every industry.

Don't let your measurement device limit your process. ELITE offers a truly scalable platform with the widest range of line sizes, multiple wetted materials, and options for hygienic, cryogenic, high pressure, and high temperature applications.



Unchallengeable performance, even in the toughest conditions.

Not all processes are created equal. ELITE Coriolis flow meters excel under the widest range of conditions and applications, ensuring that your process consistently operates smoothly – wherever you are in the world. Micro Motion Coriolis flow meters lead the industry in quality, measurement performance and reliability, and are part of Emerson’s broad range of intelligent, digital field devices that power the PlantWeb® digital plant architecture. Further cost savings, increased plant availability, and enhanced safety and environmental compliance are achieved when the flow meters are integrated into the PlantWeb digital plant architecture.

What’s your challenge?



“I’m held accountable when my plant experiences process upsets. I need to be confident that my instrumentation maintains accuracy and reliability, regardless of the process conditions.”

What’s your opportunity?



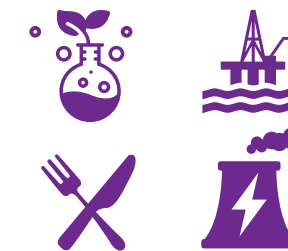
“An ELITE Coriolis flow meter has improved measurement accuracy by providing a larger turndown ratio for better control. By adding the Smart Meter Verification option, structural integrity of the tubes and the transmitter can be verified”

Superior measurement starts with intentional design



Proven Performance

- ELITE liquid mass and volume flow accuracy of $\pm 0.05\%$
- Industry leading gas mass flow accuracy of 0.25%
- ± 0.0002 g/cc density accuracy



Widest Application Coverage

- Line size range from 1/12" (DN1) to 14" (DN350)
- High pressure, high temperature, and cryogenic models available
- Available in Stainless Steel (316L & 304L), Nickel alloy C22, and Super Duplex



Unmatched Capabilities in Two-Phase Flow Conditions

- Low-frequency sensor design enables high accuracy in the presence of entrained gas
- Advanced electronics features such as real-time clock and historian can diagnose process events or upsets
- Unmatched long-term stability

Ultimate versatility to fit any process, any industry



Oil and Gas

Assured liquid or gas measurement accuracy with industry standards (e.g. API, AGA) and custody transfer approvals (e.g. MID, NTEP, Measurement Canada).



Chemical

Improve plant-wide mass balance, extend proof test intervals for SIS, and simplify compliance for Green House Gas measurement with Smart Meter Verification.



Refining

Optimize fired heater efficiency with direct mass flow measurement of fuel gas to the burner.



Power

Accurate flow and density measurements facilitate cost effective EPA compliance, and reduce uncertainty in plant or unit performance testing.



Marine

Compatible with all marine fuel types, including HFO, MGO, MDO, and LNG. OIML/MID compliance allows for traceability in fuel bunkering measurements.



Food and Beverage

Drainable and hygienic products with the most accurate in-line density and concentration measurements. Eliminate batch variation caused by changes in ingredients, temperature, or density.



For more information, visit www.Emerson.com/ELITE

More insight into your process means greater operational efficiency.



Unmatched operational flexibility

- Up to 5 fully configurable I/O channels, with options for 2-wire, ethernet, and WiFi
- Integral, remote, wall mount, and DIN rail available
- Application specific software such as Batching, Advanced Phase Measurement, and Concentration

Measurements you can trust

- Data historian and visualization tools to capture short and long-term insight on process events, fluid quality, and measurement stability
- Real-Time Clock produces timestamps for process data, alerts, Smart Meter Verification reports, and audit logs

Integration made easy

- Configure and control your transmitter from anywhere with the integrated Webserver software
- Our Plantweb portfolio of technologies, software, and services enables effective digital transformation

ELITE Coriolis Flow Meters overview

The Micro Motion 5700 transmitter delivers best in measurement technology by providing repeatable, reliable and accurate measurements. Have a window into your process with measurement history and real-time indication of process upsets. The 5700 transmitter with Smart Meter Verification takes your flow measurement to the next level. The all-encompassing diagnostic package ensures your flow meter's health while keeping safety as the highest priority.



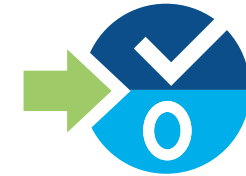
Easily verify flow meter performance - in line, and on demand

Smart Meter Verification



Check the health of your meter and process without taking your device out of line with Smart Meter Verification.

Zero Verification



Determine if your meter needs to be re-zeroed by checking the stability of your process with Zero Verification.

Electronics options that are tailored to your process

Petroleum Measurement



Delivers time-saving calculations including API gravity, gross volume and flow-weighted average observed gravity.

Batching



Offers integrated single and dual stage batch control based on totalizer values.

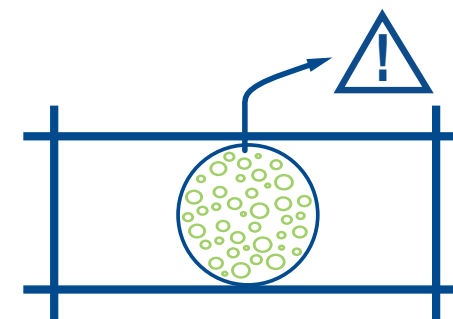
Concentration



Provides concentration measurement based on industry-specific or liquid-specific units.

Optimize your process

Advanced Phase Measurement



Multiphase Measurement Advanced Phase Measurement accurately measures liquid or gas flow in limited multiphase conditions, providing continuous real-time data at $\pm 3\%$ accuracy in up to 15% gas-void fraction.

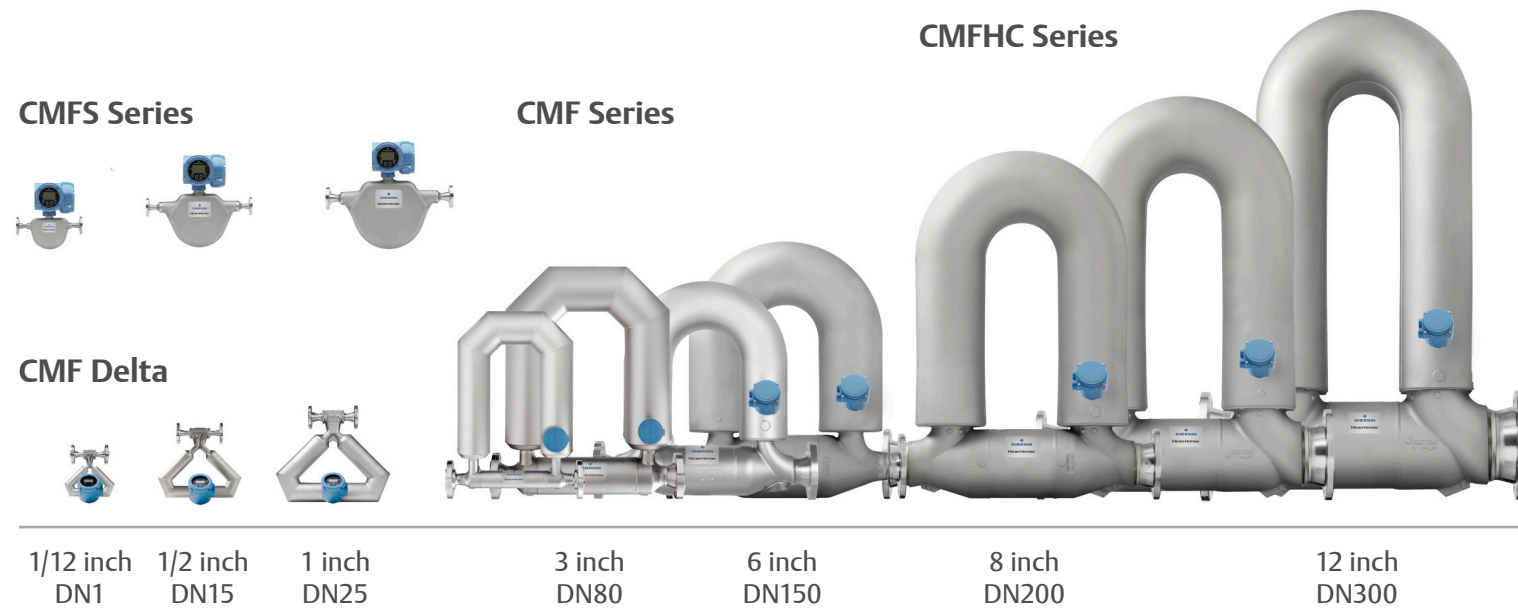
Plantweb/Plantweb Insights



Discover how Plantweb enables effective digital transformation through a portfolio of technologies, software and services that drive performance improvements.

End-to-end solutions for the toughest applications.

The ELITE family of Coriolis flow meters has unmatched functionality, line size breadth, accuracy, and turndown range. Designed for immunity to external effects, ELITE Coriolis meters deliver accurate measurements even in challenging fluid conditions or environments.



The ELITE Coriolis flow meter product family hosts a scalable platform, offering solutions in the widest range of line size and application coverage including hygienic, cryogenic, high pressure, and high temperature. Our flow meters are also available with the broadest range of I/O offerings highlighted by expansive digital protocol support.

ELITE Coriolis Flow Meters Specifications

	CMFS	CMF	CMFHC
Line Sizes			
Inches	1/12 - 1 1/2	1/10 - 10	6-14
DN	1 - 40	2 -150	150-300
Max Flow Rate	54,000 kg/hr 1,980 lb/min	545,000 kg/hr 20,000 lb/min	3,266,000 kg/hr 120,000 lb/min
Wetted Materials			
Stainless Steel	316L	316L, 304L	316L
Nickel Alloy C22	●	●	
Super Duplex			●
Capabilities			
Self Draining	●		
Sanitary/Hygienic	●		
Two-Phase Flow	●	●	●
High Temperature	Up to 350°C (662°F)	Up to 350°C (662°F)	Up to 350°C (662°F)
High Pressure	Up to 6,000 psig (414 barg)	Up to 6,000 psig (414 barg)	Up to 2,320 psig (160 barg)
Cryogenic		●	

Performance	
Mass/Volume Flow Accuracy	
Liquid	Up to ±0.05% of rate
Gas	Up to ±0.25% of rate
Mass/Volume Flow Repeatability	
Liquid	Up to ±0.025% of rate
Gas	±0.2% of rate
Density Accuracy	Up to ±0.0002 g/m ³ (±0.2 g/m ³)
Density Repeatability	Up to 0.0001 g/m ³ (0.1 g/m ³)
Temperature Accuracy	±1°C ±0.5% of reading; BS1904 Class, DIN43760 Class A (±0.15% 0.002 x T° C)
Temperature Repeatability	0.2°C

Proven performance for your most critical flow applications.



Contact your local Emerson sales office to learn more about Micro Motion ELITE Coriolis flow meters

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