REVOLUTIONIZE YOUR CORIOLIS MEASUREMENT TECHNOLOGY

Micro Motion ELITE CMFS Series Meter



INTRODUCING EMERSON'S MICRO MOTION[®] ELITE[®] CMFS SERIES METER

Flow and Density Measurement with Performance and Confidence

The combination of our industry-leading technology, wide breadth of products, unparalleled application expertise and customer support allows us to deliver unbeatable performance and value, time and time again.



Our ELITE CMFS meter delivers unmatched, real-world performance for a wide range of applications. This compact, drainable meter provides superior measurement accuracy and reliability for the most critical and demanding measurement applications including chemical injection, production blending, process gas and batching operations.

The Micro Motion ELITE CMFS Meter Delivers:

Ultimate Real-World Performance

- Unchallengeable ELITE performance: liquid mass flow (±0.05%), volume (±0.05%) and density accuracy (±0.0002 g/cm³)
- Best-in-class gas mass flow accuracy (±0.25%)
- 30:1 flat spec optimum turndown and scalability
- Reliable two-phase mass flow measurement for the most challenging applications
- Immune to process, mounting and environmental effects

Best Fit-for-Application

- Scalable platform for the widest range of line sizes and applications hygienic, cryogenic, high pressure
- Compact, lightweight, drainable design optimized for ultimate performance

Superior Measurement Confidence

- Simple integration through scalable transmitter platforms and flexible I/O connectivity
- Smart Meter Verification provides in-situ verification without external tools or process shutdown
- State-of-the-art global ISO/IEC17025 calibration facilities uniquely calibrate meters for both mass and density, offering the best measurement uncertainties of ±0.014%

PRODUCT HIGHLIGHTS

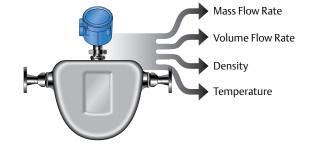
Compact Drainable Design

Patented dual-tube flowmeter for ultimate performance in critical process applications including: high pressure, sanitary and cryogenic



Multi-Variable Flow

Provides precision measurement for a range of variables including mass flow, volume flow, flow totals, density, concentration and temperature



Smart Meter Verification

Deliver absolute confidence in measurement integrity and performance with our patented methodology for meter verification in-line and on demand



Two-Phase Flow

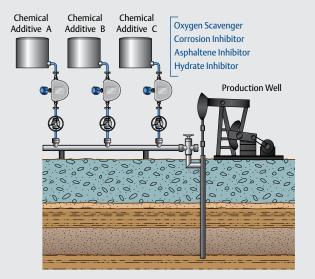
Ultimate performance in field and plant applications with two-phase flow, including production batching and loading. Allows for easy measurement of fluids with any Gas Void Fraction (GVF)



KEY APPLICATIONS

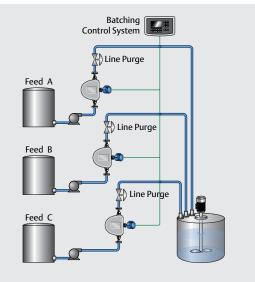
Chemical Injection

- Maximize overall system effectiveness with minimal chemical usage
- Optimize flow assurance and improve facility reliability via superior control of chemical feeds



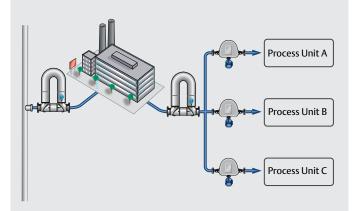
Production Batching & Blending

- Optimal final product quality via precision flow control
- Precise and accurate measurement reduces batching errors and minimizes production issues
- Robust measurement insensitive to entrained air from batch starts and stops
- Monitor in-line concentration to provide real-time ratio control blending



Process Gas Solutions

- Reduce gain and loss errors through best-in-class gas mass flow accuracy
- Accurate feedstock control under changing conditions
- Improve product quality and reactor control





YOUR SOLUTION FOR THE MOST DEMANDING PROCESS APPLICATIONS







MICRO MOTION

For over 30 years, Emerson's Micro Motion has been a technology leader delivering the most precise flow, density and concentration measurement devices for fiscal applications, process control and process monitoring. Our passion for solving flow and density measurement challenges is proven through the highly accurate and unbeatable performance of our devices.

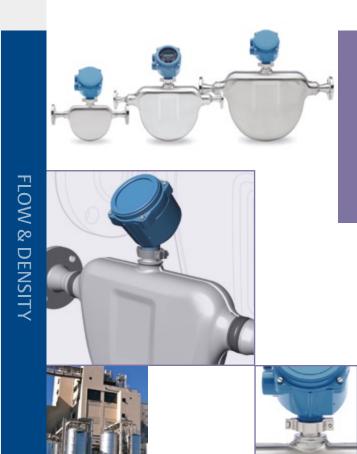
ELITE CMFS Series Specifications

Design

Line Sizes	DN1-DN40 (1/12 –1 1/2")
Flow Range	1- 54000 kg/h (0.04 - 1980 lb/min)
Wetted Parts	316L, Nickel Alloy C22
Surface Finish	32 and 15 Ra surface finish
Case Material	304L; 316L
Flanges	ASME B16.5, VCO, VCR, NAMUR, JIS B2220, EN1092-1 & ISO; Hygienic ASME BPE, DIN11864, DIN11851, ISO 2852, SMS 1145
Temperature Rating	-240°C to 204°C (-400°F to 400°F)
Pressure Rating	Up to 413 bar (6000 psi)
Safety Approvals	CSA, IECEx, ATEX, NEPSI, TIIS
Outputs & Connectivity	Modbus Direct Connect™, FOUNDATION™ fieldbus, Profibus DP/ PA, DeviceNet, HART, EtherNet/IP, WirelessHART™

Performance

Liquid Flow Accuracy	±0.1%; ±0.05%
Liquid Volume Accuracy	±0.1%; ±0.05%
Liquid Density Accuracy	$\pm 0.5 \text{ kg/m}^3; \pm 0.2 \text{ kg/m}^3$
Gas Flow Accuracy	±0.25%
Temperature Accuracy	\pm 1 °C \pm 0.5% of reading
Smart Meter Verification	Comprehensive in-situ meter check for traceable flowmeter verification
Two-Phase Flow	Low frequency design for unparalleled performance in two-phase flow conditions







High Performance Compact Drainable



Hygienic Compact Drainable



Sanitary



Utility Basic Performance



LF-Series Extreme Low Flow

For more information, please visit: www.MicroMotion.com/elite-cmfs

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