

2-Wire Coriolis Flow and Density Technology

Accurate, reliable measurement for loop-powered applications



2-Wire Coriolis



2-Wire HART[®] Coriolis Flow and Density Technology – only from Micro Motion[®]

Emerson's Micro Motion 2-Wire Coriolis meters with MVD™ technology extend highly accurate flow and density measurement to loop-powered applications eliminating the need for additional power wiring.



Micro Motion 2-Wire Coriolis Meter Benefits

Reduce Installation Costs

- Replace existing 2-wire flow devices with minimal effort and without incurring additional power or cabling costs
- Reduce complexity and improve the performance of new process plants, with a Coriolis meter that is loop-powered and provides a milliamp HART output
- Compact integral transmitter design saves money by reducing the footprint and installation costs

Increase Reliability and Efficiency

- Accurate, repeatable measurement ensures higher quality production and overall improved process profitability
- Direct mass measurement improves process control while reducing number of measurement devices required
- Volume flow measurement over the widest measurement range

Expand Applications

- Low energy, loop-powered design enables integration of Coriolis into existing processes
- Improves measurement quality and reduces maintenance for all flow points

Micro Motion 2-Wire Coriolis measurement delivers benefits for a range of applications:

- Tightens process control
- Improves mass balance
- Increases quality monitoring

Inherent Advantages of Micro Motion Coriolis

- No moving parts result in no maintenance or repair
- Install anywhere with no flow conditioning or straight pipe run required
- Accuracy over a wide flow range from a single meter to optimize plant efficiency
- Repeatable, direct mass flow measurement eliminates problems of inferred-mass from volumetric technologies
- Improve startup and availability with simple commissioning and reduced risk

Wide Application Range of 2-Wire Coriolis



2-Wire Coriolis Measurement takes your process *to the next level*

Designed for Optimal Process Performance

Accurate, reliable measurement, from maintenance-free field instruments, is the key to product quality and production control. With its ground-breaking, loop-powered design, Emerson's extensive range of Micro Motion 2-Wire Coriolis allows for the upgrade of existing processes to improve performance and output, without incurring the cost of additional wiring or power into the existing process environment.

- Designed to reduce installation complexity while delivering measurement performance
- Suitable for accurate measurement of liquids and gaseous flows
- Intrinsically safe transmitter is suitable for C1D1 / ATEX Zone 1 areas
- Stainless steel housing transmitter available for harsh environments
- Compact and lightweight design eliminates the need for special mounting or installation requirements
- HART output provides access to all variables and diagnostic information.



The Micro Motion Model 2200S 2-wire transmitter enables the use of reliable, accurate, compact and hygienic Micro Motion Coriolis meters virtually anywhere in your plant. The 2-wire design brings measurement accuracy, repeatability and operational savings on a level not previously possible for flowpoints with only loop power.

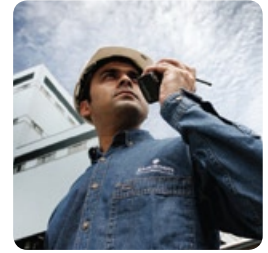
Key Specifications

Micro Motion 2-Wire Coriolis Flow and Density Meter with MVD™ Technology

Mass and Volume Flow Accuracy	ELITE	F-Series
Liquid	±0.10% of rate	±0.20% of rate
Gas	±0.35% of rate	±0.50% of rate
Density Accuracy		
Liquid	±0.0005 g/cm ³	±0.001 g/cm ³
Temperature Rating	-400°F to 400°F (-240°C to 204°C)	-148°F to 400°F (-100°C to 204°C)
Pressure Rating	1450 psi to 6000 psi (100 to 413 bar)	1450 psi to 5000 psi (100 to 345 bar)
Typical Line Sizes	1/10" (DN2) to 6" (DN150)	1/4" (DN15) to 4" (DN100)
Flow Range	0.075 lb/min (2 kg/h) to 20,000 lb/min (545,500 kg/h)	6.5 lb/min (176 kg/h) to 10,000 lb/min (272,500 kg/h)

MVD™ Technology





Emerson's Micro Motion is known globally in over 85 countries for its quality and reliability. As part of the Emerson PlantWeb® digital plant architecture, Micro Motion enables increased plant availability, decreased costs and enhanced safety. With over 750,000 meters installed around the world, Micro Motion delivers application expertise, service and technical support not available elsewhere.

Benefit from the wide range of Micro Motion solutions available

- In-line meter verification of electronics and sensor – without the need for tools or down-time
- Exceptional measurement and operating performance in entrained gas conditions
- World-leading dedicated density measurement devices
- Solutions for high and extreme temperature applications
- Best-in-class compact and drainable Coriolis
- Exida Safety-certified Coriolis for SIL-2 and SIL-3 applications



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