Liquid Hydrogen and Ultra Cryogenic Solutions

Micro Motion ELITE Coriolis Flow Meters

Emerson's Micro Motion ELITE Ultra Cryogenic Coriolis flow meters offer the lowest temperature rating, highest accuracy and reliability available in the market.

Reliable, safe, and accurate measurement for ultra cryogenic applications, such as:

- Liquid hydrogen and liquid oxygen measurement
- Liquid rocket fuel
- Particle physics research
- Cryogenic fuel stations (hydrogen vehicles and submarines)
- Airline industry
- Aircraft, truck/bus, train, ship
- Dispenser
- Liquefier
- Cryogenic fluid bulk transport loading & offloading
- Production, transportation, distribution & application of liquid hydrogen

Temperature Range: -254 °C to -196 °C (-425 to -320 °F)

Mass/Volume Flow Accuracy Options:

- +/-1.0% Standard
- +/- 0.25% Available with 5700 and ETO software option. (consult factory)

Line Sizes: Available in ¼" to 14" (DN6 to DN350)

Paired with the Micro Motion 5700 Transmitter to provide a window into your process

The Micro Motion 5700 Transmitter has the fastest processing speed and delivers the best response in the most challenging applications

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Emerson expands cryogenic measurement capabilities with Coriolis meters rated to temperatures as low as -254 °C (-425 °F)

SMART METER VERIFICATION

Smart Meter Verification provides the confidence you need in your meter performance

For more information, contact your Sales Representative

EMERSON

Liquid Hydrogen and Ultra Cryogenic Solutions

Ordering Information

This is an Engineered to Order product. Please contact your Sales Representative, call 1-800-522-6277 or email Flow.Support@Emerson.com.

Information Requirements

- External temperature measurement.
- Fluid to be liquid state and known composition.
- Pressure input with temperature or a density input with temperature.

Case Options

- **Vacuum Sealed** – Standard case backfill gas is Nitrogen, which is known to condense around -320 ° F (-195 ° C). A special vacuum case may be requested for reliable performance and improved insulation.

- **Vacuum Sealed with Pump Down Valve** – Adding a vacuum pump-down valve to the sensor allows end users to verify and re-apply a vacuum seal on the sensor case. Alternatively, the sensor case can be integrated into a vacuum jacketing system using vacuum rated seals and valves.

- **Purge Fittings** – selected when the sensor will be located inside a vacuum chamber, the sensor can be provided with purge fittings with removable sealing nuts. Removing the purge seals leaves the sensor case open to the vacuum chamber conditions and ensures that equal vacuum conditions will be applied to the sensor and the other piping components in the chamber.

Process Connections

- No process connections, pipes are welded directly into the manifolds
- Standard Process Connection
- Engineered to Order Process Connection or Pipe Stubs

Approvals

- Contact your Sales Representative

Micro Motion ELITE Coriolis Flow Meters

Sizes Available

ELITE Model	DN (inch)
CMF025	DN6 (0.25")
CMF050	DN15 (0.50")
CMF100	DN25 (1")
CMF200	DN50 (2")
CMF300	DN80 (3")
CMF350	DN100 (4")
CMF400	DN100-150 (4" to 6")
CMFHC2	DN150-200 (6" to 8")
CMFHC3	DN200-250 (8" to 10")
CMFHC4	DN250-350 (10" to 14")

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MC-002566

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