High Capacity Coriolis
Superior measurement accuracy and reliability for high flow rate applications
Superior Performance High Capacity Coriolis – only from Micro Motion®

Emerson’s expanded line of Micro Motion ELITE® High Capacity Coriolis meters deliver exceptional measurement accuracy for high flow rates in large line sizes 6”-16” (150-400mm).

Micro Motion Measurement Benefits

Reduce Costs
- Significant cost savings against traditional measurement devices, such as PD meters, for high flow rate applications
- Sustained accuracy over wide turndown and bi-directional flow reduces the need for multiple meters
- Measure flow, volume and density with one device

Increase Uptime
- In-situ meter verification delivers the only true and complete assessment of meter performance at the touch of a button
- Unique, simple design reduces system complexity, installation and maintenance for greater productivity
- Highest possible measurement reliability and unbeatable accuracy over time ensures trouble-free operation

Improve Performance
- Best-in-class two-phase flow measurement capability for reliable, repeatable measurement
- Superior application support from experience gained with tens of thousands of meters installed in custody transfer applications around the world
- Field-proven, industry-accepted measurement that meets standards for crude oil and hydrocarbon product (e.g. API)

Inherent Advantages of Micro Motion Coriolis
- Direct mass measurement, high accuracy, wide turndown
- Multivariable (flow, density and temperature) measurement from a single device
- 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
- Repeatable, direct mass flow measurement
- Improved startup and simple commissioning
High Capacity Measurement
when every drop *counts*

**Designed for High Flow Performance**

Micro Motion ELITE Coriolis meters deliver exceptionally accurate, direct mass measurement with no maintenance or ancillary devices required. Count on Micro Motion measurement devices to handle high capacity flow rates with robust and reliable performance.

- Compliant, custody transfer accuracy that delivers sustainable measurement performance, without the maintenance
- No slippage, moving parts, no density effects, and 20:1 turndown for custody transfer and 100:1 turndown capability
- Verify meter performance, at the touch of a button and without removing the meter from service, with in-situ meter verification
- Super Duplex alloy material (available in 6-10’ line sizes) offers excellent high chloride resistance, to avoid corrosion and reduce operating costs, and improved strength for a higher pressure rating up to class 900 or 2320 PSI
- All Super Duplex materials comply with NORSOK M-650

**Key Specifications**

<table>
<thead>
<tr>
<th>Property</th>
<th>ELITE Meters</th>
<th>Mass flow accuracy</th>
<th>Volume flow accuracy</th>
<th>Repeatability</th>
<th>Temperature rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CMFHC2</td>
<td>Liquid</td>
<td>±0.10% of rate</td>
<td>Liquid</td>
<td>-400°F to 662°F</td>
</tr>
<tr>
<td></td>
<td>CMFHC3</td>
<td></td>
<td>±0.35% of rate</td>
<td>Gas</td>
<td>(-240°C to 350°C)</td>
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<tr>
<td></td>
<td>CMFHC4</td>
<td></td>
<td></td>
<td></td>
<td>Super Duplex:</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>-29°F to 350°F</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>(-20°C to 177°C)</td>
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<tr>
<td>Pressure rating</td>
<td></td>
<td>Liquid</td>
<td>±0.10% of rate</td>
<td>Liquid</td>
<td>±0.05% of rate</td>
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<tr>
<td>Process connections</td>
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<td></td>
<td></td>
<td>Gas</td>
<td>±0.20% of rate</td>
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<tr>
<td></td>
<td></td>
<td>1480 psi (103 bar)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Super Duplex:</td>
<td>2320 psi (160 bar)</td>
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</table>

**High Flow Rate Performance**

**Typical Flow Rate (Gas)**

<table>
<thead>
<tr>
<th>Mass</th>
<th>Volume</th>
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</thead>
<tbody>
<tr>
<td>lb/min</td>
<td>kg/h</td>
</tr>
<tr>
<td>SCFM</td>
<td>Nm³/h</td>
</tr>
<tr>
<td>Air</td>
<td>1,220</td>
</tr>
<tr>
<td></td>
<td>1,900</td>
</tr>
<tr>
<td>CMFHC4</td>
<td>3,000</td>
</tr>
<tr>
<td>CMFHC2</td>
<td>4,450</td>
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<tr>
<td>CMFHC3</td>
<td>8,500</td>
</tr>
<tr>
<td>CMFHC4</td>
<td>10,000</td>
</tr>
</tbody>
</table>

**Typical Flow Rate (Liquid)**

<table>
<thead>
<tr>
<th>Mass</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>lb/min</td>
<td>kg/h</td>
</tr>
<tr>
<td>SCFM</td>
<td>Nm³/h</td>
</tr>
<tr>
<td>CMFHC2</td>
<td>13,500</td>
</tr>
<tr>
<td>CMFHC3</td>
<td>24,000</td>
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<tr>
<td>CMFHC4</td>
<td>38,000</td>
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</table>

**Maximum Flow Rate (Liquid)**

<table>
<thead>
<tr>
<th>Mass</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>lb/min</td>
<td>kg/h</td>
</tr>
<tr>
<td>SCFM</td>
<td>Nm³/h</td>
</tr>
<tr>
<td>CMFHC2</td>
<td>54,000</td>
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<tr>
<td>CMFHC3</td>
<td>94,000</td>
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<tr>
<td>CMFHC4</td>
<td>120,000</td>
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</table>

Complies with Country Specific Weights & Measures approvals. See Product Data Sheet for more information.
Benefit from the wide range of Micro Motion solutions available

- Meter verification of the complete Coriolis meter - sensor through electronics - with no downtime
- 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