Clear Advantages.
The new OMP is made to measure fuel consumption.

Highly accurate.
The precision measurement chamber makes extremely accurate measurements to 0.1% possible. The turn-down ratio is 150:1.

Robust and precise.
The solid casing protects the precisely manufactured spindles – the OMP offers both robustness and precision.

Fast response measurement.
The fast response spindles track any fluctuations in flow. Every drop counts.

No-flow conditioning.
Upstream or downstream flow conditioners are not required. Flow changes and pressure do not influence measurement accuracy.

Minimal pressure loss.
Because of the high quality roller bearings, friction and pressure loss are low.

OEM.
OEM pricing is available.

Customized for fuel consumption measurement applications, including diesel engine, booster module and burner.

Flow range from 0.08 to 135 gpm.

Max. operating temperature 257 °F.

Max. design pressure 600 psi.

Accuracy of ±0.1%.

PNP or NAMUR output.

Standard with hybrid bearings – robust and long life.
Dimension Information.
Threaded and flanged flowmeter connections.

Technical Data.
The size to fit your application.

Every KRAL Volumeter® is calibrated and tested at the factory.
Two types of calibration are available. A KRAL standard factory calibration or alternatively a calibration which is in compliance with the internationally recognized and used standard ISO/IEC 17025.

One Source.
KRAL electronics for flowmeter units.
Enjoy improved performance when using KRAL electronics units in combination with KRAL flowmeters.
The high quality electronic components and evaluation algorithms used result in precisely measured flow values that are presented via the display as well as through signal outputs.
Clear Advantages.
The new OMP is made to measure fuel consumption.

Highly accurate.
The precision measurement element makes extremely accurate measurements to 0.1% possible. The turn-down ratio is 150:1.

Robust and precise.
The solid casing protects the precisely manufactured spindles – the OMP offers both robustness and precision.

Fast response measurement.
The fast response spindles track any fluctuations in flow. Every drop counts.

No-flow condensation.
Uptake or downstream flow conditioners are not required. Flow velocities and pressure do not influence measurement accuracy.

Minimal pressure loss.
Because of the high quality roller bearings, friction and pressure loss are low.

OEM.
OEM pricing is available.

Customized for fuel consumption measurement applications, including diesel engine, booster module and burners.

Flow range from 0.08 to 135 gpm.

Max. operating temperature 257 °F.

Max. design pressure 600 psi.

Accuracy of ±0.1%.

PNP or NAMUR output.

Standard with radial bearings – robust and long life.

KRAL Volumeter OMP.
The new standard in fuel consumption measurement.
Dimension Information.
Threaded and flanged flowmeter connections.

**Flow Measurement**

**Threaded and flanged flowmeter connections.**

<table>
<thead>
<tr>
<th>ANSI dimensions</th>
<th>CMP 20</th>
<th>CMP 32</th>
<th>CMP 52</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow</strong></td>
<td><strong>gpm</strong></td>
<td><strong>gpm</strong></td>
<td><strong>gpm</strong></td>
</tr>
<tr>
<td>Q_max</td>
<td>12</td>
<td>8</td>
<td>0.08</td>
</tr>
<tr>
<td>Q_nom</td>
<td>40</td>
<td>27</td>
<td>0.27</td>
</tr>
<tr>
<td>Q_min</td>
<td>90</td>
<td>60</td>
<td>0.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BSPP dimensions</th>
<th>CMP 20</th>
<th>CMP 32</th>
<th>CMP 52</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flow</strong></td>
<td><strong>gpm</strong></td>
<td><strong>gpm</strong></td>
<td><strong>gpm</strong></td>
</tr>
<tr>
<td>Q_max</td>
<td>12</td>
<td>8</td>
<td>0.08</td>
</tr>
<tr>
<td>Q_nom</td>
<td>40</td>
<td>27</td>
<td>0.27</td>
</tr>
<tr>
<td>Q_min</td>
<td>90</td>
<td>60</td>
<td>0.9</td>
</tr>
</tbody>
</table>

**Technical Data.**
The size to fit your application.

| 
|-----------------|--------|--------|--------|
| **Flow** | **gpm** | **gpm** | **gpm** |
| Q_max | 12 | 8 | 0.08 |
| Q_nom | 40 | 27 | 0.27 |
| Q_min | 90 | 60 | 0.9 |

Every KRAL Volumeter® is calibrated and tested at the factory.

Two types of calibration are available. A KRAL standard factory calibration or alternatively a calibration which is in compliance with the internationally recognized and used standard ISO/IEC 17025.

**One Source.**
KRAL electronics for flowmeter units.

KRAL BEM electronics.
Users of conventional universal display units often experience the problem of not being able to make use of their unit's options. There is likewise sometimes a lack of functionality that can be important in unique applications.

Enjoy improved performance when using KRAL electronics units in combination with KRAL Volumeter units.

The high quality electronic components and evaluation algorithms used result in precisely measured flow values that are presented via the display as well as through signal outputs.
Dimension Information.
Threaded and flanged flowmeter connections.

### ANSI dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter 1</th>
<th>Diameter 2</th>
<th>Diameter 3</th>
<th>Diameter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMP 20</td>
<td>3/4</td>
<td>1</td>
<td>1 1/2</td>
<td>3</td>
</tr>
<tr>
<td>CMP 32</td>
<td>1</td>
<td>1 1/2</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>CMP 52</td>
<td>1 1/2</td>
<td>3</td>
<td>3 1/2</td>
<td>3 1/2</td>
</tr>
</tbody>
</table>

### BSP dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter 1</th>
<th>Diameter 2</th>
<th>Diameter 3</th>
<th>Diameter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMP 20</td>
<td>3/4</td>
<td>1</td>
<td>1 1/2</td>
<td>3</td>
</tr>
<tr>
<td>CMP 32</td>
<td>1</td>
<td>1 1/2</td>
<td>3</td>
<td>3 1/2</td>
</tr>
<tr>
<td>CMP 52</td>
<td>1 1/2</td>
<td>3</td>
<td>3 1/2</td>
<td>3 1/2</td>
</tr>
</tbody>
</table>

Technical Data.
The size to fit your application.

### Flow Measurement

#### Threaded and flanged flowmeter connections.

- **Sensor**: Long-life hybrid roller bearing (steel races / ceramic balls).
- **Nodular cast iron housing**.
- **FPM (fluoroelastomer) O-rings**.
- **Measuring screws made of hardened steel.**
- **A variety of possible connections.**

### Technical Data

- **KRAL BEM electronics.**
  Users of conventional universal display units often experience limited options. There is sometimes a lack of functionality that can be important in unique applications.

Enjoy improved performance when using KRAL electronics units in combination with KRAL Volumeter. The high quality electronic components and evaluation algorithms used result in precisely measured flow values that are presented via the display as well as through signal outputs.

Every KRAL Volumeter® is calibrated and tested at the factory.

### Two types of calibration are available.

- A KRAL standard factory calibration or alternatively a calibration which is in compliance with the internationally recognized and used standard ISO/IEC 17025.

### One Source.

KRAL electronics for flowmeter units.

FPM (fluoroelastomer) O-rings.

A variety of possible connections.
Clear Advantages.
The new OMP is made to measure fuel consumption.

Highly accurate.
The precision measurement chamber makes extremely accurate measurements to 0.1% possible. The turn-down ratio is 150:1.

Rebate and precise.
The solid casing protects the precisely manufactured spindles – the OMP offers both robustness and precision.

Fast response measurement.
The fast response spindles track any fluctuations in flow. Every drop counts.

No-flow conditioning.
Uptakes or downstream flow conditioners are not required. Flow turbulence and pulsation do not influence measurement accuracy.

Minimal pressure loss.
Because of the high quality roller bearings, friction and pressure loss are low.

OEHA.
OEHA pricing is available.

KRAL Volumeter OMP.
The new standard in fuel consumption measurement.

### Features:
- Customized for fuel consumption measurement applications, including diesel engine, booster module and burner
- Flow range from 0.08 to 135 gpm
- Max. operating temperature 257 °F
- Max. design pressure 600 psi
- Accuracy of ±0.1%
- PNP or NAMUR output
- Standard with hybrid bearings – robust and long life

### Specifications:
- Flow range: 0.08 to 135 gpm
- Max. operating temperature: 257 °F
- Max. design pressure: 600 psi
- Accuracy: ±0.1%
- PNP or NAMUR output
- Standard with hybrid bearings – robust and long life