Viscosity Sensors

The Global Standard for Small Sample Viscosity Measurement

- Accurate and Reliable Viscosity Measurement for the Process
- Rugged and Durable Due to Unique Design
- Simple to Install Requiring Little Maintenance
Viscosity Sensors

VISCOSITY SENSOR 374 - INLINE VISCOMETER
The Model 374 is a flow through viscometer that is installed in process fluids to provide continuous viscosity and temperature tracking. The 374 has an integrated heater that can be controlled to give spot on viscosity readings at temperatures from 50°C to 100°C.

The model 374 viscometer installs directly into a small process loop using ½ inch sanitary fittings on the sensor. The 374 sensor also has an integrated heater for tight temperature control under flow conditions up to 1 ft/sec. The small sample size requirements, integrated heater and quick release connections make it ideal for miniature or small-scale research projects.

Measurements can be made in 13 different viscosity ranges within an overall span of 0.2 to 20,000 cP or the equivalent cSt. Recommended flow rate over the sensor is up to 30.5cm/sec (1.0 ft/sec.).
VISCOSITY SENSOR 501 - MINIATURE VISCOMETER
The viscosity sensor 501 is used extensively for compressor, used oil analysis, on-engine and hydraulic fluid applications. It is ideal for installations where form factor and small sample volume are important.

A built-in temperature detector (RTD) senses the actual temperature in the sampling chamber. Constant in and out motion keeps samples fresh, mechanically scrubs the sampling area and provides excellent viscosity tracking. Measurements can be made in any of 6 different 20:1 viscosity ranges between 0.5 and 500 centipoise (cP). Recommended fluid flow over the sensor is up to 30 cm/sec. (1.0 ft/sec.).

Options:
• Multiple Ranges (one piston per range)
• Additional Cable
• *High Pressure System (also available)

KEY FEATURES VISCOSITY SENSOR 501
- Easily installed and serviced
- Internal platinum temperature probe
- Automatic self-cleaning
- No seals
- All 316 stainless steel construction
- Small sample volume
- Proven technology
- Mates to 1/2” NPT threaded opening

VISCOSITY SENSOR 571 - AUTOMATIC VISCOMETER
The viscosity sensor 571 OILSENSE™ is used extensively for compressor, used oil analysis, on-engine and hydraulic fluid applications. It is ideal for installations where form factor and small sample volume are important.

Measurements can be made in any of 6 different 20:1 viscosity ranges between 0.5 and 500 centipoise (cP). Recommended fluid flow over the sensor is up to 30 cm/sec. (1.0 ft/sec.).

Options:
• Multiple Ranges (one piston per range)
• Additional Cable
• *High Pressure System (also available)

KEY FEATURES VISCOSITY SENSOR 571
- Easily installed and serviced
- Internal platinum temperature probe
- Simple to clean
- Proven technology
- Mates to 13/16-20 UNEF threaded opening
# SPECIFICATIONS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>VISCOSITY SENSOR 374</th>
<th>VISCOSITY SENSOR 501</th>
<th>VISCOSITY SENSOR 571</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity Range</td>
<td>0.2-10,000cP</td>
<td>0.5-500cP</td>
<td></td>
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<tr>
<td>Sensor Range</td>
<td>0.2-2cP, 0.25-5cP, 0.5-10cP, 1-20cP, 2.5-50cP, 5-100cP, 10-200cP, 25-500cP, 50-1,000cP, 100-2,000cP, 250-5,000cP, 500-10,000cP</td>
<td>0.5-10cP, 1-20cP, 2.5-50cP, 5-100cP, 10-200cP, 25-500cP</td>
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<tr>
<td>Viscosity Accuracy</td>
<td>± 1.0% of full scale with VISCOpro 2000</td>
<td></td>
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<tr>
<td>Viscosity Repeatability</td>
<td>± 0.8% of Reading</td>
<td></td>
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<tr>
<td>Temperature Sensor</td>
<td>PT100</td>
<td></td>
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<tr>
<td>Wetted Components</td>
<td>316L / 430 Stainless Steel</td>
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<tr>
<td>Maximum Particle Size</td>
<td>25-800 Microns (Range Dependent)</td>
<td>25-100 Microns (Range Dependent)</td>
<td></td>
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<tr>
<td>Maximum Ambient Temperature</td>
<td>212°F (100°C)</td>
<td>375°F (190°C)</td>
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<tr>
<td>Maximum Operating Pressure</td>
<td>1,000 psi (70.3 bar)</td>
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<tr>
<td>Standard Cable Length</td>
<td>15 Feet (4.57 Meter)</td>
<td>3 Feet (1 Meter)</td>
<td></td>
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<tr>
<td>Power</td>
<td>Requires VISCOpro2000 electronics</td>
<td>Requires VISCOpro electronics</td>
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<tr>
<td>Heater</td>
<td>24VDC/66w</td>
<td></td>
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<tr>
<td>System Volume</td>
<td>&lt; 6ml</td>
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</table>

Cambridge Viscosity

With more than 10,000 installations worldwide, Cambridge Viscosity is the proven leader in viscosity management technology. With over 25 years of experience, Cambridge Viscosity understands and meets the needs of laboratory researchers and process engineers in a wide range of industries whose jobs depend on the quality, accuracy, and reliability of viscosity measurement equipment. With their patented sensor technology, Cambridge Viscosity has become the gold standard in small sample viscosity measurement.

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