

SAE J306Compliance Setup

SVM Series + ViscoQC



Fully automate your process and eliminate hazardous cooling liquids for increased safety.

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Did you know?

For classification of driveline lubricants, SAE J306 typically demands both high- and low-temperature viscosity measurements, which are covered by SVM (ASTM D7042 as the officially accepted alternative to D445) and ViscoQC (ASTM D2983) respectively.

What makes SVM stand out for measurement of hightemperature kinematic viscosity?

- → Wider range: one measuring cell covers 0.2 mm²/s to 30,000 mm²/s viscosity and 0 g/cm³ to 3 g/cm³ density
 - no need to change capillaries for different products
- → Reduced costs: 80 % lower sample and solvent volume (minimum of 1.5 mL), and 95 % lower power consumption (minimum of 50 W)
- → No liquid bath needed: built-in temperature control eliminates bath maintenance
- → Enhanced flexibility: multiple parameters viscosity, density, VI, and more all from a single sample

Why is ViscoQC the best choice for ASTM D2983?

- → Peltier cooling/heating technology: no need for hazardous and high-risk cooling liquids (e.g., methanol)
- → Automated heating, cooling, and measurement procedure to free up operator time
- → Reduced running costs (no liquid bath maintenance required) and 90 % lower power consumption
- → Stand-alone operation with pre-configured ASTM D2983 procedure D method – no external PC required

SVM configuration (ASTM D7042)

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| Solution | When to choose |
| SVM 1001 (Simple Fill) or SVM 2001 | Simple and cost-effective. Ideal if you need only kinematic viscosity according to SAE J306, cost is a key factor, and your measurements are above 15 °C. |
| SVM 3001 | For more than just viscosity. Perfect when you also require density (ASTM D4052) and API gravity, and need to test at temperatures below 15 °C – e.g., when working with brake or hydraulic fluids in addition to driveline lubricants. |
| SVM 4001 | For rapid automatic VI determination. Recommended if your main goal is to determine the viscosity index (VI) automatically. This model eliminates the need for two separate baths. |
| SVM 2001 3001 4001 + Xsample 340 | Semi-automated workflow. Choose this setup if you want automated filling and cleaning but are okay with manual syringe exchange by the operator. |
| SVM 2001 3001 4001 + Xsample 530 | High-throughput automation. Best for labs handling high sample volumes. This fully automated system can process up to 71 samples using a magazine, with no user intervention required for filling and cleaning. |
| | ViscoQC configuration |

(ASTM D2983 procedure D)

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| Solution | When to choose |
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| ViscoQC 300 L + PTD 175 + V-Curve + 4B2 | All SAE viscosity grades that require tests at -40 °C, -26 °C and -12 °C. |
| Measuring System | |