Datasheet

SpectroVisc Q3000

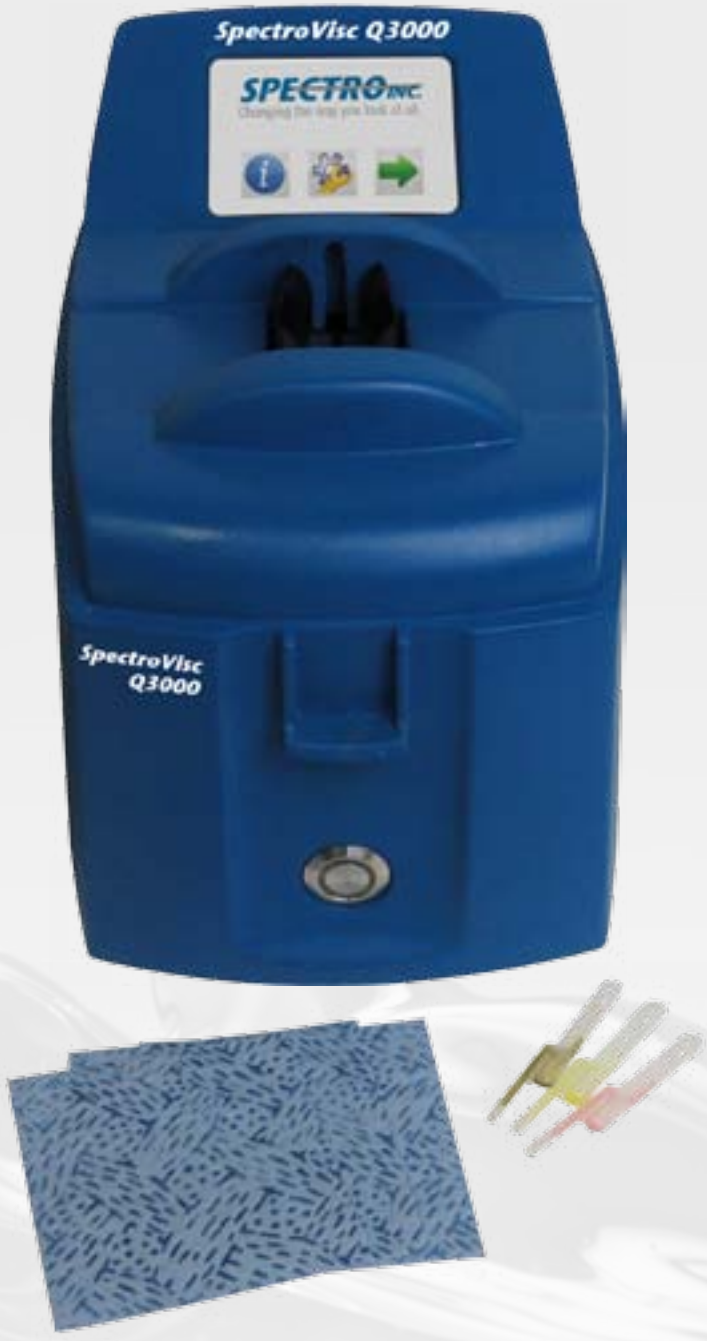
The portable, solvent-free viscometer that provides fast and accurate results

The SpectroVisc Q3000 was designed to determine kinematic viscosity in the field for applications where immediate results are essential to determine the health of critical equipment.

Weighing 1.8 kg (4 lbs.), this portable, battery-operated instrument has a touch-screen interface and is easy to use.

Requiring no solvents, no density checks and no thermometer, the SpectroVisc Q3000 is ready for use whenever and wherever it's required. Each sample is measured at a constant temperature for consistent accuracy without pre-test measurements.

The SpectroVisc Q3000 is an easy-to-use, quick and reliable instrument designed for remote field use when immediate lubricant viscosity measurement is required.



Battery operated, solvent-free viscometer that goes where you need it, when you need it.

SPECTRO INC.
Changing the way you look at oil.

SpectroVisc Q3000 Key Benefits

Small and Lightweight for Use Wherever You Need It
With Spectro's renowned rugged design, state-of-the-art electronics and patent pending sampling design, this powerful self-contained instrument is lightweight and fits in a toolbox or carry bag to take wherever it's needed.

Simple, Intuitive User Interface, No Training Needed
Requiring no training, the SpectroVisc Q3000 uses a full-color, touch-screen display to guide the operator through testing. The high-resolution, high-contrast display lets the operator perform tests anytime, day or night, even in bright sunlight. Compare the result to any lubricant specification for verification.

Save Time
Unlike older methods of testing viscosity, the SpectroVisc Q3000 does not require thermometers, visual estimates of fluid levels, sample averaging, or reference fluids. Operators need only insert a sample and read out the results.

Reduced Cost to Test
Once the measurement is complete, the operator opens the sampling cell and, using an absorbent, non-abrasive towel, wipes it clean. The cleaning process requires no toluene, hexane, or other toxic solvent, which means fewer consumables and fewer worries.

Less waste - Environmentally friendly
Using a small, disposable pipette, the operator simply deposits a few drops (60µL) of oil or other fluid onto the sampling cell.

Test all of your Fluids
Using the split-cell capillary channel, the SpectroVisc Q3000 accurately handles dark, sooty samples – often a challenge, even in laboratories – as well as transparent samples, without any pre-checks.

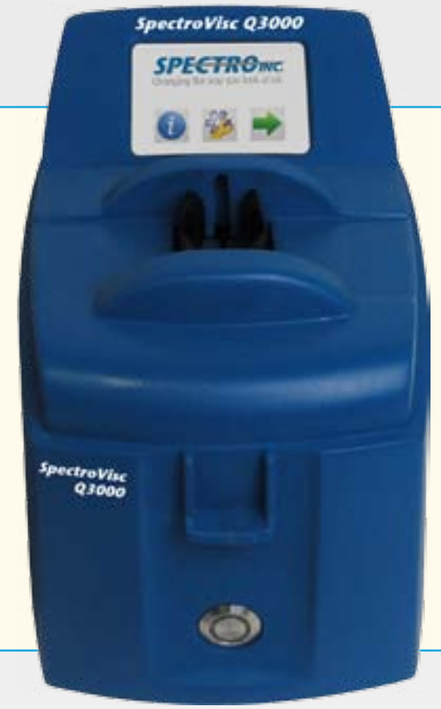
Trend used Oil Analysis Results
Use the Q3000 to determine used oil viscosity results. The kinematic viscosity can be trended with Spectrotrack Information management software to predict when equipment problems will occur. The SpectroVisc Q3000 helps to eliminate the guesswork of maintenance scheduling by determining the most critical physical property of oil: its viscosity. The operator is able to detect viscosity variations caused by fuel/coolant dilution, contamination or lubricant mix-up.

Innovative Design

The innovative SpectroVisc Q3000 utilizes a Hele-Shaw kinematic viscometer technique, which employs a split-cell capillary channel to measure viscosity. Each plate of the capillary channel is maintained at a temperature of 40°C (±0.1°C) to control the accuracy of each measurement. Using infrared sensors, the sample trajectory is timed. Low-shear sample flow based on gravity allows direct determination of kinematic viscosity.

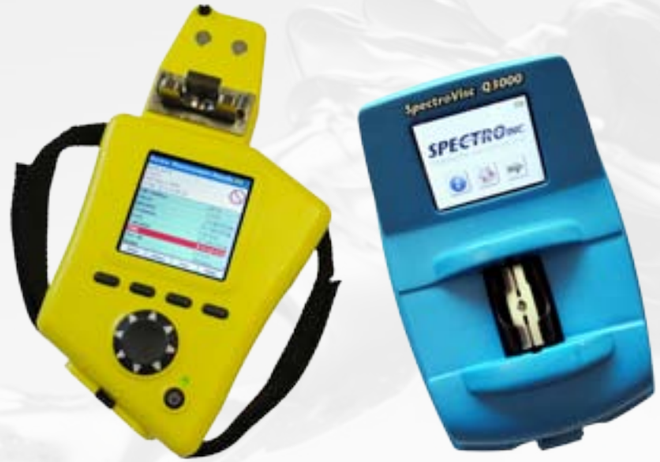
A little bit of lubricant is all that's needed.

The operator collects a sample into a 60µL disposable pipette and dispenses the sample into the top of the split-cell capillary channel. The sample then traverses the channel and is accurately timed by the internal processor, reporting kinematic viscosity.



Specifications

Measuring Range	Kinematic Viscosity 10-350 mm_2/s (centiStokes (cSt)) at 40°C
Accuracy	Accuracy ≤ 3% of measured value, calibrated
Repeatability	Repeatability ≤ 3% of measured value, typical
Temperature Control	+/- 0.1 °C
Sample Volume	60 µL (about 3-4 drops)
Environmental	0°-40°C [32°F-104°F], 10% to 90% relative humidity (r.h.) non-condensing
Altitude	Up to 5,000 meters (16,404 feet)
Fluids Measured	Includes lubricant oils, coolants, synthetics and glycol
Power	Built-in Li-Ion battery Supplied charger: 18VDC 2.5A Input power: 100-240V AC, 50/60hz, 45W
Dimensions	H x W x D: 152 x 127 x 203mm (6.0" x 5.0" x 8.0")
Weight	Weight: 1.8 kg (4.0 pounds)
Compliance	CE Mark: EMC Directive (2004/108/EC); RoHS



Results When You Need Them

Viscosity results from SpectroVisc Q3000 can be added to lubricant condition information created by Spectro Fluidscan Q1000, The combination of both technologies enables lubricant health decisions to be made in the field.

Ordering Information

Part Number	Description	
Main Product		
PV3000		
SpectroVisc Q3000 Consumables		
PV1012	60µL Disposable Pipettes and Non-Abrasive Cleaning Pad kit; package of 100 each	
PV1011	Disposable Non-Abrasive Cleaning Pads; package of 500	
P-11031	60µL Disposable Pipettes; package of 500	
Power Cables	(One included per instrument; select the correct model)	
F3087	Cordset, USA, Japan, Thailand, Philippines, Mexico, Saudi Arabia, Brazil, Venezuela	B
P-10912	Cordset, British, Malaysia, UK, UAE	G
P-10913	Cordset, Australian / New Zealand	I
P-10914	Cordset, Danish	K
P-10915	Cordset, Continental European, Indonesia, Argentina, Chile, Czech Republic, Israel	E & C
P-10916	Cordset, Italian, Detachable	L
P-10917	Cordset, South Africa	M
P-10918	Cordset, China, Detachable	I
P-10919	Cordset, India/South Africa	M
P-10920	Cordset, Germany, Turkey, S. Korea	F

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