

SpectroVisc Q3000 Series

PORTABLE KINEMATIC VISCOMETERS

Solvent-free, simple to use, fast and accurate results



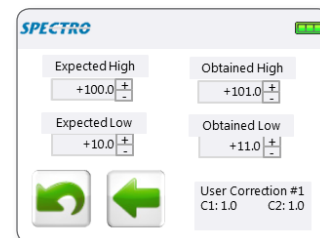
Applications include:

- **Machine Condition Monitoring**
Increase availability of critical equipment by monitoring viscosity changes due to oil degradation and contamination. Avoid inadequate lubrication which causes adhesive wear in machinery and is a principal cause of equipment downtime.
- **Quality Control for Fuel/Oil Production and Blending**
- **Incoming Inspection Quality Control**

High accuracy 40C kinematic viscosity measurements for new and in-service oils

Lab-quality results when and where you need them

- Accuracy +/- 3% Relative Standard Deviation to NIST viscosity standards.
- User Correction feature allows in-house calibration using viscosity standards to support user calibration requirements.



Solvent-free operation

- Fewer consumables, lower disposal costs and less environmental impact.
- Easy cleaning with the patented split-cell design – just wipe off the surfaces with a nonabrasive cleaning pad between samples.

Requires only a few drops of oil to test

- Obtain samples without impacting lubricant level. A small, disposable pipette is used to deposit a few drops (60 µL) of oil or fluid onto the sampling cell.

Test even dark and sooty samples

- Innovative design allows testing of virtually any sample including dark and sooty or transparent samples without any pre-checks.

Fast and Easy to use

- Test results in only a few minutes for direct measurement of kinematic viscosity.
- Full-color touchscreen display guides the operator through testing, and supports multiple languages.
- Self-contained unit without thermometers, density checks or other preparation needed. Simply insert the sample and read results.
- Print feature enables the Export of a log file via USB cable to a desktop PC running ViscTrack desktop tool.

Portable, battery-powered design

- Fits easily into a toolbox or carrying bag and capable of operation for over six hours before recharge.



SpectroVisc Q3000 Series Ordering information

The SpectroVisc Q3000 and Q3050 include the base viscometer, cleaning pads and pipettes for 100 samples, two viscosity standards, battery charger, USB cable, CD manual and ViscTrack software CD.

The SpectroVisc units can also be ordered in combination kits with the FluidScan® Q1000 or Q1100 portable infrared fluid condition monitors.

PART NUMBER	
SpectroVisc-Q3050	SpectroVisc Q3050 Portable Viscometer, 1-700 cSt. Requires SA1002 Standard Accessories Kit.
SpectroVisc-Q3000	SpectroVisc Q3000 Portable Viscometer, 10-350 cSt. Requires SA1002 Standard Accessories Kit.
Spectro-Q1100/Q3050	FluidScan Q1100 Lubricant Condition Monitor & SpectroVisc Q3050 Combo Kit. Requires SA1004 Standard Accessories for Combo Kit.
Spectro-Q1000/Q3050	FluidScan Q1000 Lubricant Condition Monitor & SpectroVisc Q3050 Combo Kit. Requires SA1004 Standard Accessories for Combo Kit.

PRODUCT INFORMATION	
Applications	Lubricant oils (mineral and synthetic), coolants, glycol, and any Newtonian fluid within the measuring range
Output	Kinematic Viscosity (cSt) @ 40°C V100 viscosity calculation from VI index input (Q3050 only)
Methodology	ASTM D 7279 modified, ASTM D 445 modified
Standard Analytical Range	Q3000: 10-350 cSt @ 40°C Q3050: 1-700 cSt @ 40°C
Accuracy	Q3000: ≤ ± 3% of measured value over range 10-350 cSt Q3050: ≤ ± 3% of measured value over range 1-350 cSt ≤ ± 5% of measured value for viscosity > 350 cSt <i>Accuracy specification is with use of user correction function.</i>
Repeatability	Q3000: ≤ ± 3% RSD of measured value, typical Q3050: ≤ ± 3% RSD of value, typical, over range 1-350 cSt ≤ ± 5% RSD of measured value for viscosity > 350 cSt <i>RSD is Relative Standard Deviation.</i>
Test Temperature Control	± 0.1°C
Calibration	Not Required

OPERATIONAL SPECIFICATIONS	
Sample Volume	60µL (about 3-4 drops)
Solvents/Reagents	None
Ambient Operating Temperature	0°C to 40°C (32°F to 104°F)
Relative Humidity	10% to 80% r.h. non-condensing
Ambient Altitude	Up to 5,000 meters (16,404 feet)

USER INTERFACE SPECIFICATIONS	
Display	Fixed Angle Color Touchscreen Display
Data Transfer	USB for software updates
Data Entry	Touchscreen

POWER REQUIREMENTS	
Battery Power Source	Built in Rechargeable Lithium Ion Battery
Power	AC 110/240 V, 50/60 Hz, 10 Watts
Typical Runtime	6-8 hours with full charge
Recharge Time	2.5 hrs

MECHANICAL SPECIFICATIONS	
Dimensions	152 mm (H) x 127 mm (W) x 203 mm (D) (6.0 in x 5.0 in x 8.0 in)
Weight	1.8 kg (4.0 lbs)
Shipping Package Dimensions	7.9 cm (H) x 6.3 cm (W) x 5.5 cm (L) (20 in x 16 in x 14 in)
Shipping Package Weight	4.9 kg (11 lbs)

COMPLIANCE	
CE Mark: EMC Directive (2004/108/EC); RoHS	

CONSUMABLES	
PV1012	60 µL Disposable Pipettes and Non-Abrasive Cleaning Pad Kit; package of 100
P-11052	60 µL Disposable Pipettes, package of 500
PV1011	Disposable Non-Abrasive Cleaning Pads; package of 500
PV1025	Low viscosity calibration standard
PV1026	High viscosity calibration standard



Combination Kit includes a FluidScan Q1000 Series infrared fluid condition monitor and a SpectroVisc Q3000 Series portable kinematic viscometer.