

Viscosity

Rotational Viscometers

For rapid, precise, relative or absolute, viscosity measurements in Newtonian and non-Newtonian fluids. Comprises drive module and set of spindles for measuring ranges as indicated.

- ◆ Choice of model:
 - Alpha series: with backlit, alphanumeric LCD, indicating speed, spindle selected, viscosity in cP (mPas) and % of scale. Spindle speed range 0.3 to 100rpm in 18 steps
 - Smart series: as Alpha series, but additionally with alternative display of viscosity in cSt, sample temperature (using a built-in Pt100 sensor) in °C or °F, shear rate (s⁻¹) and shear stress (N/m²) using accessory, coaxial spindles and density in g/cm³ (entered by the user). Also features 10 programme memory, datalogging/downloading software and USB interface. Spindle speed range 0.3 to 100rpm in 18 steps. Temperature range 0 to 100°C x 0.1°C (32 to 212.0°F)
 - Expert series: as Smart series, but additionally with programmes for time to torque with target torque pre-setting, time to stop with target time pre-setting, customisation of programmes, multistep and ramp functions. Programming via touch-key numerical keypad. Spindle speed range 0.01 to 2000rpm in 54 steps. Temperature range 0 to 100°C x 0.1°C (32 to 212.0°F)
- ◆ Auto-test function checks the instrument whenever it is switched on. Audio-visual alarms indicate any malfunction
- ◆ Choice of units: SI or CGS
- ◆ Calibration function allows recalibration by the user
- ◆ Choice of 10 display languages

Model	Alpha L Smart L Expert L	Alpha R Smart R Expert R	Alpha H Smart H Expert H
Measuring range, cP	20 to 2,000,000	100 to 13,000,000	200 to 106,000,000
Resolution, cP	0.01*/0.1 (viscosities <10,000cP), 1 (viscosities 10,000cP) — all models		
Repeatability	0.2% of full scale — all models		
Overall	590 x 440 x 300mm L x W x H — all models		
Weight	13kg — all models		

*Using low viscosity adapter and spindle.

Rational Viscometers

As described. Supplied with a set of standard spindles, levelling stand and spindle protector. Smart and Expert series models are additionally supplied with carrying case, USB cable and data-logging software for operation on a personal computer (not supplied). For 100-240V 50/60Hz single phase supplies.

- VC820-17 Alpha L
- VC820-22 Alpha R
- VC820-37 Alpha H

- VC820-47 Smart L
- VC820-57 Smart R
- VC820-67 Smart H

- VC820-72 Expert L
- VC820-78 Expert R
- VC820-83 Expert H

Spare and Accessory Spindles

Interchangeable spindles in AISI 316 stainless steel.

- VC822-03 Spare spindle set for -L models
- VC822-06 Spare spindle set for -R and -H models
- VC822-10 LCP adapter (Low viscosity adapter) and spindle
- VC822-17 Spare Pt100 temperature probe for Smart and Expert series using standard spindles
- VC822-19 Accessory Pt100 temp. probe for Smart and Expert series using low viscosity adapter and spindle VC822-10
- VC822-25 APM/B sample adapter (8 to 13ml) for shear rate and shear stress measurements, with spindles



VC820-17 to VC820-37 in use



VC820-47 to VC820-67 in use