

# VISCO STAR Plus

*New features*



VISCO STAR Plus series add essential performances to determine viscosity and other rheological features of homogeneous samples. These instruments are indispensable in quality control laboratories and research departments.

## *Main Features*

- Direct readout on an illuminated Liquid Crystal Display.
- Data on the screen:

Selected speed	r.p.m.
Selected spindle	SP
Viscosity reading	cP (mPa·s) or cSt
Percentage of full scale	%
Sample temperature	°C or °F
Shear Rate (with coaxial spindles)	SR (s <sup>-1</sup> )
Shear Stress (with coaxial spindles)	SS (N/m <sup>2</sup> )
Density	g/cm <sup>3</sup>
- Relative and absolute viscosity determinations.
- Viscosity reading: dynamic viscosity (cP or mPa·s) or kinematics viscosity (cSt).
- Possibility to change the data units from SI to CGS.
- The viscometer has 19 fixed speed, from 0.3 to 200 r.p.m.
- **New program features:**
  - **Time to torque: fix a determined torque to stop when the viscometer achieve it.**
  - **Time to stop: fix a determined time to stop the experiment.**
- Progressive decrease in speed every time the rotation is brought to a stop, avoiding sudden shakes in the spindle.
- The equipment carries out an AUTO-TEST with acoustic and visual alarms in case of any malfunction.
- Sound alarm when working under 15% of full scale.
- AUTO-RANGE function.
- 10 working memories.
- Temperature reading by PT100.
- Viscometer calibration by the user (viscosity and temperature).
- Interface: RS232, I2C, Plotter.
- 8 language options.
- Datalogger Software: Download obtained results to a PC in an Excel format.



## Technical File

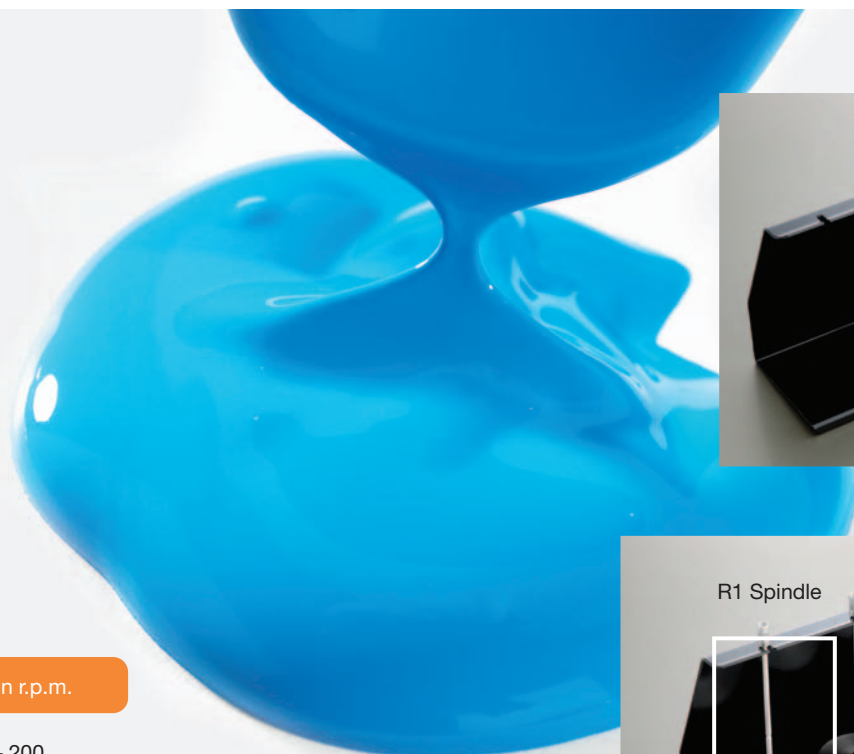
- Precision:  $\pm 1\%$  of full scale.
- Resolution:
  - Using LCP (Low Viscosity Adapter): 0.01
  - When viscosity is lower than 10,000 cP: 0.1
  - When viscosity is equal or higher than 10,000 cP: 1
- Repeatability: 0.2%
- Features of thermometer:
  - Temperature margins:
    - 0°C to +100.0 °C
    - +32.0 °F to +212.0 °F
  - Resolution: 0.1 °C / 0.1722 °F
  - Precision:  $\pm 0.1$  °C
  - Type of probe: PT100
- All models are supplied in 100-240 VAC, 50/60 Hz.

Code	Model	Measuring range	Speed in r.p.m.
V50003	VISCO STAR Plus L	20 – 2,000,000 cP	0.3 – 200
V50002	VISCO STAR Plus R	100 – 13,000,000 cP	0.3 – 200
V50001	VISCO STAR Plus H	2 – 1,060,000 Poise	0.3 – 200

The equipment is supplied complete with standard spindles, viscometer stand and spindle protector, carrying case, RS232C cable and Datalogger software.

## Spindles

The spindles are manufactured in AISI 316 stainless steel. They can be identified by the appropriate number and letter, and are easily interchangeable depending on the range of viscosity to be determined.



Standard spindles for L model.



R1 Spindle

Standard spindles for R and H models.  
\* The R1 spindle is supplied as an accessory

## Standards

The design of the standard spindles and the measurement principles of Fungilab viscometers are as described in ISO 2555 and ISO 1652 standards.