Fungilab

Products for Resarchs, Analysis and Quality Control

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Rotational viscometers

Rotational viscometers

Fungilab

Alpha series viscometers allow fast and accurate viscosity readings.

They are low budget and easy to use.

Alpha **Series**

Main Features

> Data displayed

Selected speed	r.p.m
Selected spindle	SP
Viscosity reading	cP (mPa•s)
Percentage of full scale	%

> Relative and absolute viscosity.
> Unit converter SI to CGS.
> AUTO-TEST with sound and visual malfunction alarm.
> AUTO-RANGE function.
> User-enabled calibration.
> 10 language options.

Standard delivery: The equipment is supplied complete with standard spindles (4 spindles for L model, and 6 spindles for R and H models), viscometer stand and spindle protector.

Technical File

> Precision: ± 1% of full scale.
> Resolution:
Using low viscosity adapter: 0.01
For lower than 10.000 viscosity cP: 0.1
For viscosity equal to or above 10.000 cP: 1
> Repeatability: 0.2%
> Supplied at 100-240 VAC, 50/60 Hz

Spindles

AISI 316 stainless steel spindles, easily identified by number and letter when changed according to range of viscosity.

Code	Model	Measuring Range (cP)	Speed (r.p.m.)	Number of speeds
V100003	ALPHA L	20 - 2.000.000	0.3 - 100	18
V100002	ALPHA R	100 - 13.000.000	0.3 - 100	18
V100001	ALPHA H	200 - 106.000.000	0.3 - 100	18

Smart series
Indispensable in QC and R&D laboratories.

Smart Series

Main Features

> Touch key board 6 keys.
> Direct readout on a graphic display.
> Data displayed:

Selected speed	r.p.m.
Selected spindle	SP
Viscosity reading	cP (mPa·s) or cSt
Percentage of full scale	%
Sample temperature	ºC or ºF (Optional)
Shear Rate (with coaxial spindles)	SR (s-1)
Shear Stress (with coaxial spindles)	SS (N/m2)
Density (introduced by the user)	g/cm3

> Viscosity reading: dynamic viscosity (cP or mPa·s) or kinematics viscosity (cSt).
> Unit converter SI to CGS.
> Program features:
Time to torque: target torque pre-setting device.
Time to stop: target time pre-setting device.
10 working memories.
> AUTO-TEST with sound and visual malfunction alarm.
> AUTO-RANGE function.
> Temperature reading by PT100 (optional).
> User-enabled viscosity and temperature (optional) calibration.
> 10 language options.
> Interface: USB.
> Datalogger Software: USB allows data transfer to a PC Excel format.

Standard delivery: The equipment is supplied complete with standard spindles (4 spindles for L model, and 6 spindles for R and H models), viscometer stand and spindle protector, carrying case, USB cable and Datalogger Software.

Technical File

> Precision: ± 1% of full scale
> Resolution:
With low viscosity adapter: 0.01
For lower than 10.000 viscosity cP: 0.1
For viscosity equal to or above 10.000 cP: 1
> Repeatability: 0.2%
> Thermometer features:

Temperature margins:
0ºC to +100ºC
32ºF to 212.0 ºF

Resolution: 0.1ºC / 0.1722 ºF
Precision: +/- 0.1 ºC
Type of probe: PT100

> Supplied at 100-240 VAC, 50/60 Hz

Spindles

AISI 316 stainless steel spindles, easily identified by number and letter when changed according to range of viscosity.

Code	Model	Measuring Range (cP)	Speed (r.p.m.)	Number of speeds
V200003	SMART L	20 - 2.000.000	0.3 - 100	18
V200002	SMART R	100 - 13.000.000	0.3 - 100	18
V200001	SMART H	200 - 106.000.000	0.3 - 100	18

Expert series

Add essential performances to determine viscosity and other rheological features of homogeneus samples.

Expert **Series**

Main Features

> Touch key board 12 keys.
> Direct readout on a graphic display.
> Data displayed:

Selected speed	r.p.m.
Selected spindle	SP
Viscosity reading	cP (mPa·s) or cSt
Percentage of full scale	%
Sample temperature	ºC or ºF
Shear Rate (with coaxial spindles)	SR (s-1)
Shear Stress (with coaxial spindles)	SS (N/m2)
Density (introduced by the user)	g/cm3

> Viscosity reading: dynamic viscosity (cP or mPa·s) or kinematics viscosity (cSt).
> Unit converter SI to CGS.
> Program features:
Time to torque: target torque pre-setting device.
Time to stop: target time pre-setting device.
10 working memories.
Costumizable Options.
Programmable.
Multistep.
Ramp.
> AUTO-TEST with sound and visual malfunction alarm.
> AUTO-RANGE function.
> Temperature reading by PT100.
> User-enabled viscosity and temperature calibration.
> 10 language options.
> Interface: USB.
> Datalogger Software: USB allows data transfer to a PC Excel format.

Standard delivery: The equipment is supplied complete with standard spindles (4 spindles for L model, and 6 spindles for R and H models), viscometer stand and spindle protector, carrying case, USB cable and Datalogger Software.

Technical File

> Precision: ± 1% of full scale
> Resolution:
With low viscosity adapter: 0.01
For lower than 10.000 viscosity cP: 0.1
For viscosity equal to or above 10.000 cP: 1
> Repeatability: 0.2%
> Thermometer features:

Temperature margins:
0ºC to +100ºC
32ºF to 212.0 ºF

Resolution: 0.1ºC / 0.1722 ºF
Precision: +/- 0.1 ºC
Type of probe: PT100
> Supplied at 100-240 VAC, 50/60 Hz

Spindles

AISI 316 stainless steel spindles, easily identified by number and letter when changed according to range of viscosity.

Code	Model	Measuring Range (cP)	Speed (r.p.m.)	Number of speeds
V300003	EXPERT L	20 - 6.000.000	0.01 - 200	54
V300002	EXPERT R	100 - 40.000.000	0.01 - 200	54
V300001	EXPERT H	200 - 106.000.000	0.01 - 200	54

Premium series viscometers, monitored by our SUPERVISC software, offer a wider and unique range of rheological applications.

Premium Series

Main Features

> Touch key board 12 keys.
> Direct readout on a graphic display.
> Data displayed:

Selected speed	r.p.m.
Selected spindle	SP
Viscosity reading	cP (mPa·s) or cSt
Percentage of full scale	%
Sample temperature	ºC or ºF
Shear Rate (with coaxial spindles)	SR (s-1)
Shear Stress (with coaxial spindles)	SS (N/m2)
Density (introduced by the user)	g/cm3

Step Program Status
Analyze & visual characteristics (flow curves)
> Viscosity reading: dynamic viscosity (cP or mPa·s) or kinematics viscosity (cSt).
> Program features:
Time to torque: target torque pre-setting device.
Time to stop: target time pre-setting device.
10 working memories.
Costumizable Options.
Programmable.
Multistep.
Ramp.
> AUTO-TEST with sound and visual malfunction alarm.
> AUTO-RANGE function.
> Temperature reading by PT100.
> User-enabled viscosity and temperature calibration.
> 10 language options.

Standard delivery: The equipment is supplied complete with standard spindles (4 spindles for L model, and 6 spindles for R and H models), viscometer stand and spindle protector, carrying case, USB cable and Datalogger Software.

Technical File

> Precision: ± 1% of full scale
> Resolution:
With low viscosity adapter: 0.01
For lower than 10.000 viscosity cP: 0.1
For viscosity equal to or above 10.000 cP: 1
> Repeatability: 0.2%
> Thermometer features:

Temperature margins:
0ºC to +100ºC
32ºF to 212.0 ºF

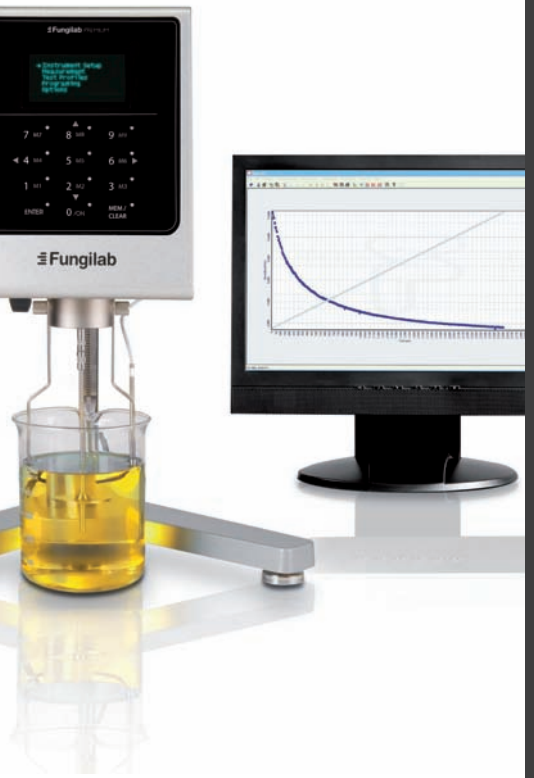
Resolution: 0.1ºC / 0.1722 ºF
Precision: +/- 0.1 ºC
Type of probe: PT100
> Supplied at 100-240 VAC, 50/60 Hz

Spindles

AISI 316 stainless steel spindles, easily identified by number and letter when changed according to range of viscosity.

Code	Model	Measuring Range (cP)	Speed (r.p.m.)	Number of speeds
V400003	PREMIUM L	20 - 6.000.000	0.01 - 250	2,600
V400002	PREMIUM R	100 - 40.000.000	0.01 - 250	2,600
V400001	PREMIUM H	200 - 106.000.000	0.01 - 250	2,600

Premium **series**
SUPERVISC Software



Control software

Establishing viscosity programs, documenting the procedure and the results in real time are some of the options offered by the SUPERVISC software developed by FUNGILAB.

The software operates under Windows, and has been designed to be very intuitive. They only require basic tools on the user level.
An options menu provides a clear view of the program.
The help menu provides charts and descriptive texts that offer a clear explanation of the working options.

SUPERVISC software

The Supervisc software developed by Fungilab, has been designed to program the PREMIUM viscometer and it is a powerful key to document and study the viscosity behaviour of fluids.
As its predecessor, it has the possibility to program the viscometer for simple curves, ramps and “multi-step” curves, and it is an important tool to study the behaviour of the different materials.
A powerful graph key helps the user to design the flow curves needed.

Features

> Complete viscometer control.
> Easy to use. All programs eliminate user errors when programming the instrument to collect data.
> Provides instantaneous viscosity flow curves when performing new experiments, with definable parameters.
> Clear view of program options using flanges.
> Definable graphics and zoom function.
> Different types of experiments can be programmed: simple curves, ramps and multi-step.
> All experiments are recorded in different databases to be able to consult them anytime.
> Experiment documentation with name, number and additional data.
> In order to compare different flow curves, up to 4 experiments can be plotted simultaneously.
> Over 12 different charts can be obtained.

This product is supplied in a CD.

◀ USB conection for temperature probe.

◀ Usb conection for pc.

Accesoires for rotational viscometers

Small Sample Adapters

The small sample adapter consists of a cylindrical sample chamber and coaxial spindles, designed for flawless, accurate viscosity measurements of small volumes. Cylindrically designed for shear measurements. (Spindles supplied separately).

TECHNICAL FEATURES
> Removable, easy-to-clean stainless steel sample chamber.
> Flow jacket sample thermostatisation between -10 and +100ºC (optional).
> Sample volume: from 8 to 13 ml, varies with spindle.
> PT100 probe for accurate sample temperature (optional).

Viscometer type	Measuring range (cP)
L	2 - 200.000
R	38 - 3.300.000
H	300 - 26.660.000

Low Viscosity Adapters

The low viscosity adapter is used on the rotational viscometers to perform accurate and reproducible readings on materials with viscosity as low as 1 cP (mPa·s). Cylindrically designed for shear measurements. (Supplied with spindle.)

TECHNICAL FEATURES
> Easy to clean, removable stainless steel sample container.
> Sample volume: from 16 to 18 ml.
> Flow jacket for sample thermostatisation from -10 to +100ºC (optional).
> PT100 accurate temperature probe (optional).

Viscometer type	Measuring range (cP)
L	1 - 2.000
R	5 - 21.333

Heldal unit for helicoidal movement

Accessory designed for viscosity measurements of non-flowing substances. In these materials the viscosity cannot be measured by standard methods and spindles due to cavitation effect around the spindle. We recommend using the HELDAL unit and T-bar spindles for comparative measurements on non-flowing substances.
A Fungilab viscometer is mounted on the Heldal unit, and it restricts measuring head to smoothly run up and down within pre-established limits, allowing constant contact between T-bar spindle and test sample thanks to the helical line described.

ADDITIONAL FEATURES
> Easy to use, install and clean.
> Supplied with motor, 6 T-shaped spindles and carrying case.
> Compatible with all FUNGILAB rotational viscometers.

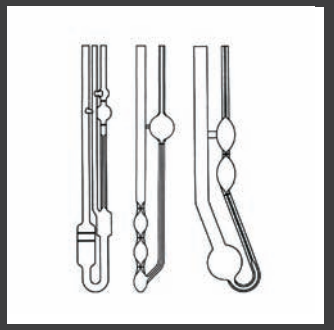
APPLICATIONS
> Creams - Gels
> Pastes - Gelatin
> Other non-flowing substances.

Viscometer type	Measuring range (cP)
L	234 - 3.120.000
R	2,490 - 33.300.000
H	19,500 - 260.000.000

Other Fungilab's Products

Silicone Standard Oils

Silicone viscosity standards for rotational viscometers



Capillary Viscometers

These FUNGILAB glass capillary viscometers allow determine viscosities using ASTM and DIN testing methods. Each viscometers comes with a calibration certificate that includes the viscometer constant and formulas to calculate viscosities.

Fungicrom Separating Chambers

Thin Layer Chromatography (TLC) is like all chromatographic techniques, based on a multistage distribution process.

Visco Ball

The Visco BAll viscometers measures accurately the viscosity of transparent Newtonian liquids and gases (with a special glass ball)

Flow Cup Viscometers

STANDARDS: ISO 2431, ASTM D-1200

Thermovisc 100 and Thermovisc 200

Digitally controlled inmersion Thermostats