



SMART SERIES

ROTATIONAL VISCOMETERS

*Essential in investigation and
quality control Laboratories.*

- + Program features
- + Data displayed
- + Temp. Reading by PT100
- + Viscosity readings
- + USB interface
- + Datalogger software included
- + Universal adapter

2 YEAR WARRANTY



AUTO-TEST



PROGRAMS



MEMORIES



MAIN FEATURES:

- **6 key Touch Keyboard.**
- **Direct readout on a TFT display.**
- **Screen Data:**
 - 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⁻¹)
 - Shear Stress (with coaxial spindles) - SS (N/m²)
 - Density (introduced by the user) - g/cm³
- **Viscosity reading:**
 - Dynamic viscosity (cP or mPa·s)
 - Kinematic viscosity (cSt).
 - Units Converter from SI to CGS.
- **Program Features:**
 - **Time to torque:** Ending of the test upon reaching a programmed torque.
 - **Time to stop:** Ending of the test upon reaching a programmed time.
 - **10 working memories.**

Other main features:

- Direct readout on a TFT display.
- AUTO-TEST with visual and resonant alarm
- AUTO-RANGE function
- Temperature Reading through PT100 probe
- User-enabled viscosity and temperature calibration
- 6 language options
- Port: USB
- Datalogger: Possibility to transfer data to a pendrive into Excel format
- 6 key Touch Keyboard
- Software (optional): The FDB software complies the FDA 21CFR PART 11 regulation.



Spindles: AISI 316 Stainless steel spindle, easily to identify according to its letter and number, in terms of the range of viscosity. Our units fulfill the next standards: BS: 6075, 5350 / ISO: 2555, 1652 / ASTM: 115, 789, 1076, 1084, 1286, 1417, 1439, 1638, 1824, 2196, 2336, 2364, 2393, 2556, 2669, 2849, 2983, 2994, 3232, 3236, 3716

TECHNICAL SPECIFICATIONS:

- **Precision:** +/- 1% full scale of range
- **Resolution:**
 - For a minus viscosity of 100 cP : 0.01 cP
 - For a major viscosity of 1000 cP : 0.1 cP
 - For a major viscosity of 5000 cP : 1.0 cP
 - For a major viscosity of 10.000 cP : 5.0 cP
 - For a major viscosity of 25.000 cP : 10.0 cP
 - For a major viscosity of 50.000 cP : 25.0 cP
 - For a major viscosity of 100.000 cP : 100.0 cP
 - For a major viscosity of 1.000.000 cP : 1.000.0 cP
- **Repeatability:** 0.2%
- **Temperature probe features: Temperature limits:**
 - 40°C to 300°C -40°F to 572°F Resolution: 0.1°C / -17.722 °F
- **Precision:** +/- 0.2°C / +/- 17.666 °F
- **Type of probe:** PT100
- **Supplied at** 110-240VAC, 50/60 Hz.

Standard delivery:

- The equipment is supplied complete with standard spindles (4 spindles for L model / 6 spindles for R and H models)
- Viscometer stand
- Spindle protector
- Temperature probe PT100
- Carrying case

Code	Model	Measuring Range (cP)	Speed (r.p.m.)	Number of speeds
V210003	SMART L	*1 - 6.000.000	0.01 - 200	54
V210002	SMART R	25 - 40.000.000	0.01 - 200	54
V210001	SMART H	200 - 320.000.000	0.01 - 200	54

PPR system Fast spindle switch (push plug and release)

Code	Model	Measuring Range (cP)	Speed (r.p.m.)	Number of speeds
V211003	SMART L + PPR	*1 - 6.000.000	0.01 - 200	54
V211002	SMART R + PPR	25 - 40.000.000	0.01 - 200	54
V211001	SMART H + PPR	200 - 320.000.000	0.01 - 200	54

- Ranges**
- (L) Low viscosity model
 - (M) Medium viscosity model
 - (H) High viscosity model

*Low viscosity: The minimum viscosity when using a "L" range with standard spindles is 10 cP
 * For measurements < 10cP its recommended to use in conjunction with the low viscosity adapter (LCP or LCP/B)

