

## Model 35 Viscometer Accessories



### *Thermo-Cup*

Electrically heated sample cups incorporate a precision thermostat for close temperature control. Operating temperatures up to 200°F (93°C) are reached quickly and verified by an included dial thermometer. Pins in the base locate and lock to the stage of Model 35 Viscometers. Powder-coated aluminum alloy housing ensures better heat distribution and easy cleaning.

**No. 101558383 - Thermo-Cup, 115 VAC 50/60 Hz, 2 Amps**

**No. 101558384 - Thermo-Cup, 230 VAC 50/60 Hz, 1 Amp**



### *Model DW-3 Calibration Check Kit*

Dead Weight calibration checks help to maintain the accuracy of the torque measuring system on all Model 35 Viscometers. Quickly determine the condition of bearings and the accuracy of torsion spring setting. Kit includes support bracket, spool for bob-shaft, 5 metric weights, spare thread, instructions, and case.

**No. 207853 – Model DW-3 Calibration Check Kit**



### *Fluid Calibration Check Kit*

This check kit is designed for checking the calibration of any rheological instrument. The kit contains certified viscosity standard fluids (NIST certified) in containers labeled with certification numbers and including temperature/viscosity tables. Kit contains all required containers, thermometer, and instructions for easily determining the accuracy of any viscosity measuring instrument to  $\pm \frac{1}{2}$  centipoise in the 20-27°C range, and  $\pm 1$  centipoise in the 100-300°F temperature range.

**No. 207026 – Fluid Calibration Check Kit**

## Certified Viscosity Standard Fluids

Silicone fluids are the most commonly used standard for verifying calibration of Fann Viscometers and Rheometers. Silicone Standards are Newtonian fluids which are accurate to  $\pm 1\%$  of viscosity value. Silicone fluids provide excellent temperature stability and are less temperature sensitive than oil viscosity standards. Fann Viscosity Standards are certified by methods traceable to the United States National Institute of Standards and Technology (NIST). The selection of one or two fluids will normally provide sufficient measurement points to verify calibration of your instrument. All fluids are supplied in 16 oz (1 pint) containers complete with a certificate of calibration and a temperature/viscosity table.

No. 207124	Certified Calibration Fluid	10 Centipoise (cP)
No. 207119	Certified Calibration Fluid	20 Centipoise (cP)
No. 207120	Certified Calibration Fluid	50 Centipoise (cP)
No. 207121	Certified Calibration Fluid	100 Centipoise (cP)
No. 207122	Certified Calibration Fluid	200 Centipoise (cP)
No. 207123	Certified Calibration Fluid	500 Centipoise (cP)
No. 207126	Certified Calibration Fluid	30,000 Centipoise (cP)
No. 207125	Certified Calibration Fluid	100,000 Centipoise (cP)

## Torsion Springs, Rotors & Bobs

### Torsion Springs



Torsion springs are readily interchanged on all Model 35 Viscometers. Instruments are normally supplied with the F1 torsion spring, which has a spring constant of 386 dyne-cm/degree deflection and provides a full-scale shear-stress capability of 1,533 dynes/cm<sup>2</sup> at 300 degrees deflection with the B1 bob. Other torsion spring assemblies are designed to be integral multipliers of the standard spring and can be used to increase or decrease the shear-stress range and, hence, the viscosity range of the instrument. Precision drawn, tempered beryllium-copper wire helps ensure the precision, linearity and long service life for these torsion springs, even in adverse environments.

Torsion Spring Assembly	Part Number	Torsion Spring Constant k1 (dyne-cm/deg. defl)	F Factor	Maximum Shear Stress With B1 Bob (dynes/cm2)	Color Code
F0.2	207656	77.2	0.2	307	Green
F0.5	207657	193	0.5	766	Yellow
F1	207465	386	1	1,533	Blue
F2	207658	772	2	3,066	Red
F3	207659	1,158	3	4,600	Purple
F4	207660	1,544	4	6,132	White
F5	207661	1,930	5	7,665	Black
F10	207662	3,860	10	15,330	Orange



## ***Rotors***

The outer cylinder, the R1 rotor sleeve, normally supplied with the Model 35 Viscometer has an open bottom. The R2 rotor is available for smaller gaps, higher shear rates. Both the R1 and the R2 rotors are available in closed-end, rotor-cup configuration. An open-end R3 rotor is available for a larger shear gap. All Rotor sleeves are constructed of Stainless Steel for long wear and corrosion resistance.

***No. 207523 – R1 Rotor Open Bottom***  
***No. 207942 – R2 Rotor Open Bottom***  
***No. 207943 – R3 Rotor Open Bottom***  
***No. 208983 – R1 Rotor Closed End***  
***No. 208985 – R2 Rotor Closed End***

## ***Bobs***

The inner cylinder normally supplied the B1 bob, is the standard for drilling fluids and cements and handles other applications as well. This bob is made of 303 stainless steel for good wear resistance and is hollow for neutral buoyancy, low rotational inertia and fast response in typical test fluids. Recommended maximum-use temperature is 200°F (93°C). Three additional bobs are available and are normally used with the R1 family of rotors.

***No. 207521 – B1 Bob, Hollow, Stainless Steel***  
***No. 207520 – B2 Bob, Solid, Stainless Steel***  
***No. 207519 – B3 Bob, Solid, Stainless Steel***  
***No. 207518 – B4 Bob, Solid, Stainless Steel***



## ***Power Inverter***

Inverter plugs into auto cigarette lighter/power outlet and operates Model 35 Viscometer to within +/- 0.1 RPM for an hour without significant drain on the battery. This unit produces 60 Hz to +/- 0.05 Hz from DC sources of 10 to 15 Volts. The Power Inverter has a capacity of 150 watts. Model 35 Viscometers require less than 100 watts power.

***No. 206088 - Power Inverter***

Contact Fann for more information on ***Model 35 Viscometers***  
and our complete line of Fluids Testing Equipment