

# Viscotester



# **Uni-Cylinder Rotational Viscotester Allows Easy Measurement of Fluid Viscosity**



The VT-06 is designed for quality control applications in the manufacturing process of industrial products such as petrochemicals, paint, and adhesives, as well as foodstuffs. Viscosity measurements covering a wide range are possible, such as gear oil used in construction machinery. Measurement is performed by simply submerging a rotor in the fluid. The resistance to rotor movement caused by the viscosity (torque) is measured to obtain direct readings.

- Compact and light weight make the unit easily portable and allow operation with one hand
- Can be powered by alkaline batteries, nickel-hydride rechargeable batteries, or AC adapter
- Direct indication of viscosity in decipascal-seconds (SI units)
- Dedicated stand for measurement available as option

# [Usage]

- 1. Attach rotor to unit and hold unit in the hand or place on dedicated stand. (Unit should be approximately horizontal in either case.)
- 2. Insert rotor in sample fluid, turn power on, and select rotor number.
- 3. Press start button and read indicated viscosity.
- \*The supplied extension rod can reach fluid that is further away. (Only for use with the No.1 and No.2 rotors.)

#### Specifications

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Measurement range	No. 3 rotor: 0.3 to 13 dPa·s (with No. 3 cup)			
	No. 1 rotor: 3 to 150 dPa·s (with JIS 300 mL beaker*1)			
	No. 2 rotor: 100 to 4000 dPa·s (with JIS 300 mL beaker*1)			
Sample fluid capacity	No. 1 and No. 2 rotor	(with JIS 300 mL beaker*1)	approx. 300 mL	
	No. 3 rotor	(with No. 3 cup)	approx. 150 mL	
	Clearance between rotor end and cup bottom:			
		about 15 mm		
Measurement accuracy	±10 %±1 digit of indicated value, reproducibility ±5 %			
Rotor speed	62.5 rpm			
Power supply	IEC LR6 (size AA) alkaline batteries,			
	nickel-hydride rechargeable batteries, AC adapter VA-05J			

Dimensions and Weight	175 (H) × 77 (W) × 40 (D) mm (without protruding parts),		
	Approx. 260 g (without batteries)		
Supplied accessories	No. 1 rotor (dia. 24 × 53 × 166 mm)	SUS304	1
	No. 2 rotor (dia. 15 x 1 x 113 mm)	SUS304	1
	No. 3 rotor (dia. 45 × 47 × 160 mm)	SUS304	1
	No. 3 Cup (dia. 52.6 x 75 mm)	SUS304	1
	Extension rod (900 mm · 300× 3)	SUS304	1
	IEC LR6 (size AA) alkaline batteries		4

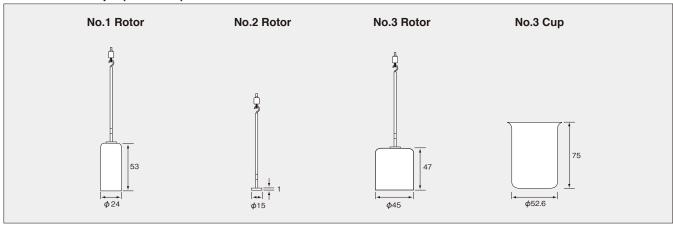
Note: The Viscotester cannot measure accurately with anything other than supplied cups or the JIS 300 mL beaker.

\*1 JIS R 3503 : 1994, φ78×103 (H)

#### Options

Product name	Product number  VA-04  VA-05J	
Stand		
AC adapter		

### Rotors and Cups (unit: mm)



#### Sample amount for measurement

No.3 Cup	approx.150 mL		
Commercially available 300 mL beaker	approx.350 mL		

Note: For certain fluids, readings may differ slightly from other viscometers, depending on properties of target fluids, mechanical factors, as well as specific gravity, rotor speed, and other aspects.

## ■ Viscotester measurement examples (for reference)

Viscosity	Rotor
6 dPa⋅s	No.3
1000 dPa·s	No.2
16 dPa·s	No.1
25 dPa·s	No.1
43 dPa·s	No.1
76 dPa·s	No.1
320 dPa·s	No.2
310 dPa·s	No.2
	6 dPa·s 1000 dPa·s 16 dPa·s 25 dPa·s 43 dPa·s 76 dPa·s 320 dPa·s

<sup>\*</sup>Measurement temperature: 23 °C

# ■CGS Unit and SI Unit

$$1cP = \frac{1}{1.000}Pa \cdot s = 0.01 dPa \cdot s$$
  $1P = \frac{1}{10}Pa \cdot s = 1 dPa \cdot s$ 

P(poise), cP(centi poise), Pa·s(pascal-seconds), dPa·s(decipascal-seconds)



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\* Specifications subject to change without notice.

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