

The New

# Fungilab Portable Viscometer



## For easy and precise measurements of fluid viscosity

The FPV 01/02 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 viscosity (torque) is measured to obtain readings.

- **Compact and light weight:** The unit is portable and allows for one-handed operation
- **Direct indication of viscosity in millipascal-seconds or decipascal-seconds (SI Units)**
- **Optional stand for measurement available**

## SPECIFICATIONS

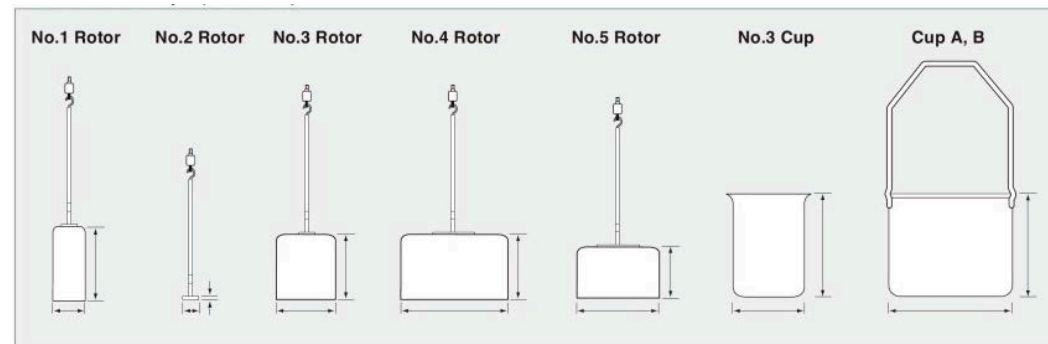
	FPV 01 (Low Viscosity)	FPV 02 (High Viscosity)
Measurement Range	No. 4 rotor: 2 to 33 mPa·s No. 5 rotor: 15 to 150 mPa·s No. 3 rotor: 50 to 300 mPa·s	No. 3 rotor: 0.3 to 13 dPa·s (with No. 3 cup) No. 1 rotor: 3 to 150 dPa·s (with JIS 300 mL beaker) No. 2 rotor: 100 to 4000 dPa·s (with JIS 300 mL beaker)
Sample Fluid Capacity	Approx. 460 mL (with Cup A or Cup B)	No. 1 and No. 2 rotor (with JIS 300 mL beaker) approx. 300 mL No. 3 rotor (with No. 3 cup) approx. 170 mL Clearance between rotor end and cup bottom: about 15 mm.
Measurement Accuracy	Within ±5% of maximum measurement range for each rotor	±10% of indicated value, reproducibility ±5%
Rotor Speed	62.5 rpm	
Power Supply	IEC LR6 (size AA) alkaline batteries, nickel-hydrate rechargeable batteries, AC adapter VA-05J	
Dimensions and Weight	175 (H) x 77 (W) x 40 (D) mm (without protruding parts). Approx. 260 g (without batteries)	
Supplied Accessories	No. 3 rotor (dia. 45 x 47 x 160 mm) SUS304 1 No. 4 rotor (dia. 78 x 46 x 159 mm) A1050 (alumite) 1 No. 5 rotor (dia. 61.2 x 36 x 149 mm) A1050 (alumite) 1 Cup A (dia. 92 x 76 mm, without hole) A1050 (alumite) 1 Cup B (dia. 92 x 76 mm, with hole) A1050 (alumite) 1 IEC LR6 (size AA) alkaline batteries 4	No. 1 rotor (dia. 24 x 53 x 166 mm) SUS304 1 No. 2 rotor (dia. 15 x 1 x 113 mm) SUS304 1 No. 3 rotor (dia. 45 x 47 x 160 mm) SUS304 1 No. 3 Cup (dia. 45 x 47 x 160 mm) SUS304 1 Extension rod (900mm, 300x3) SUS304 1 IEC LR6 (size AA) alkaline batteries 4

1 JIS R 3503 : 1994 78x103

### Options

Product Name	Product Number
Stand	VA-04
AC Adapter	VA-05J

## ROTORS AND CUPS (UNIT: mm)



## SAMPLE AMOUNT FOR MEASUREMENT

	FPV 01	FPV 02
Cup A	approx. 460 mL	—
No. 3 Cup	—	approx. 170 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.

## CGS UNIT AND SI UNIT

P (poise), cP (centi poise),

Pa·s (pascal-seconds), dPa·s (decipascal-seconds),

mPa·s (millipascal-seconds)

$$1 \text{ cP} = \frac{1}{1000} \text{ Pa} \cdot \text{s} = 1 \text{ mPa} \cdot \text{s}$$

$$1 \text{ P} = \frac{1}{10} \text{ Pa} \cdot \text{s} = 1 \text{ dPa} \cdot \text{s}$$

## VISCOTESTER MEASUREMENT EXAMPLES (FOR REFERENCE)

Product Type	Viscosity	Viscotester	Rotor
<b>Newtonian Fluids:</b>			
Milk	2.6 mPa·s	FPV 01	No. 4
Soy Sauce	5 mPa·s	FPV 01	No. 4
Lactic Fermented Beverage	28 mPa·s	FPV 01	No. 5
Olive Oil	71 mPa·s	FPV 01	No. 5
Castor Oil	6 dPa·s	FPV 02	No. 3
Starch Syrup	1000 dPa·s	FPV 02	No. 2
<b>Non-Newtonian Fluids:</b>			
Tomato Juice	230 mPa·s	FPV 01	No. 3
Condensed Milk	16 dPa·s	FPV 02	No. 1
Chocolate Syrup	25 dPa·s	FPV 02	No. 1
Tomato Ketchup	43 dPa·s	FPV 02	No. 1
Pure Honey	76 dPa·s	FPV 02	No. 1
Toothpaste	320 dPa·s	FPV 02	No. 2
Starch Paste	310 dPa·s	FPV 02	No. 2

**Fungilab**  
Leading Viscosity Technology

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