Model BII viscometer

responding swiftly to your needs

TOKI SANGYO

ALLIANCE SUPPLIES SDN.BHD.
www.alliance-supplies.com | www.alliancesuppliesonline.com.my | info@alliance-supplies.com | T:+606 3338889/8887/8898

The Model B viscometer's success, with over 60,0 qualities which have made this model so popular - and a high standard of reliability.

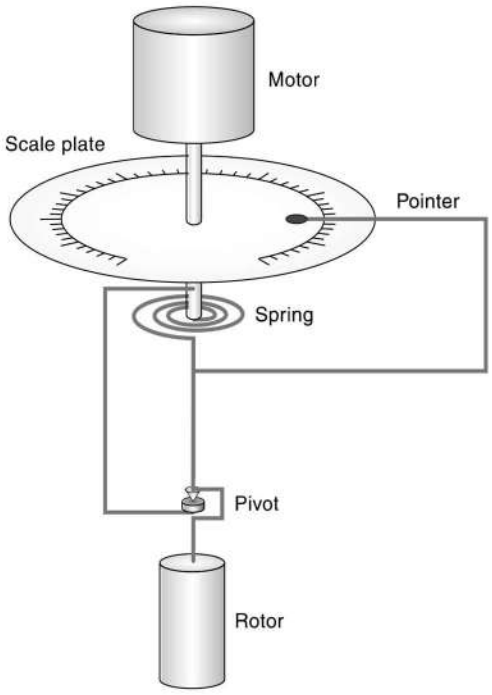
A mainstay favorite, the Model B series has gained a loyal following among users in a wide range of its first introduction in 1953.The field of rheological applications has grown along with industry sured of a product backed by a proven reputation and an enviable track record for dependability.

Features

- Wide measurement range - from low to high viscosities
- Suitable for rheological properties measurement of non-Newtonian fluids
- Can be used regardless of the radio frequency by the Pulse motor
- Product embodies our wealth of experience and cumulative knowhow

Principle of operation

The Model BⅡ Viscometer main case houses a motor.Motor rotation is transmitted to the rotor through a spring.Viscous frictional torque acts on the rotor immersed in the fluid and the rotor will rotate at a steady speed when equilibrium between the torque and spring force is achieved.The size of the torque is indicated as an angular deviation of the pointer fixed to the rotor shaft and is proportional to the reading on the dial directly connected to the motor shaft.Absolute viscosity is determined by a conversion factor based on this reading.



Specifications

Main unit specifications:

Accuracy	less than ±2.0% of full scale
Repeatabilitily	less than ±0.3% of full scale
Ambient temperature range	0~40°C
Ambient humidity range	less than 90% RH(non-condensation)
Wetted parts	stainless steel
Power input(Main unit)	DC12V 2A
Specialized AC adaptor	Input AC100 ~ 230V±10% 50/60Hz
Power consumption	less than 15VA
Dimension Viscometer main unit	150(W) x 265(D) x 210(H)
Dimension Stand	290(W) x 300(D) x 450(H)
Mass	Approx. 5kg(incl. stand)

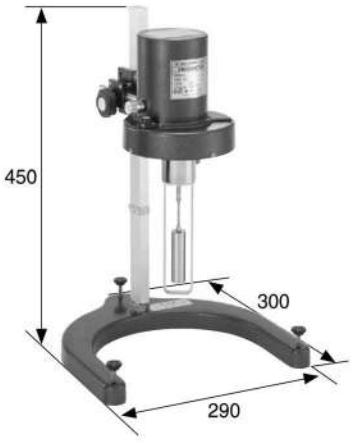
* Note: When power supply exceeds rated voltage of AC125V, please use separate special cable.

Viscosity measurement range

Model	Measurement range (full-scale torque)	Viscosity measurement range
BLⅡ	67.37μN·m	1 ~ 100,000 mPa·s
BMⅡ	67.37μN·m	15 ~ 100,000 mPa·s
BHⅡ	718.7μN·m	200 ~ 2,000,000 mPa·s*1
BSⅡ	2156.1μN·m	1,200 ~ 12,000,000 mPa·s*2

* Note1: When uses H1 rotor (option), the lower limit value becomes from 100mPa·s

* Note2: When uses H1 rotor (option), the lower limit value becomes from 300mPa·s



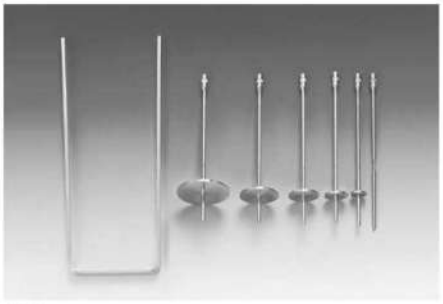
00 units sold, is proof positive of the outstanding simple construction, ease of use, sure measurement,

fields, including research, manufacturing processes, and quality control over the many years since and reliability of measurement is now a major issue. In selecting the Model BⅡ, users are as-

Configuration

Configuration/Item	BLⅡ	BMⅡ	BHⅡ	BSⅡ
Viscometer main unit	○	○	○	○
Rotor set	M rotor 4 set (No.1 ～ No.4)	M rotor 4 set (No.1 ～ No.4)	H rotor 6 set (No.2 ～ No.7)	H rotor 6 set (No.2 ～ No.7)
BL adaptor (incl, 20ml cup)	○	—	—	—
Guard	M Guard	M Guard	H Guard	H Guard
Stand	○	○	○	○
Viscometer storage case	○	○	○	○
Rotor storage case	○	○	○	○
Option			H1 Rotor	H1 Rotor

M Rotor set+BL adaptor



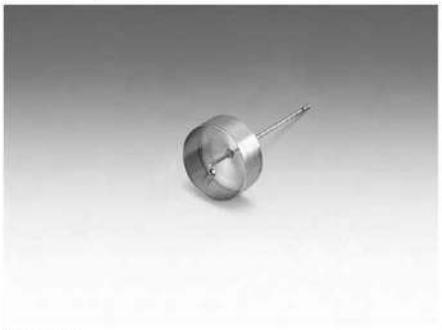
H Rotor set

Roller stand

M Rotor set

Viscometer storage case/Rotor storage case

Options



H1 Rotor

Small sample adoptor

Small sample adaptor

Mounts on various rotational viscometers.Suitable for small volume sample measurement of a wide range of viscosities including gel substances.

①Small sample volumes of 8 ～13ml
②Sample temperature can be quickly and accurately regulated
③Shear rate and shear stress can be calcurated.

Please use small sample adaptor in combination with temperature baths. Immersion type and circulation type are available.Select type to fit the application.

Upper Measurement Limit Tables(mPa·s)

BL Ⅱ	Rotational speed (rpm)			
Rotor	60	30	12	6
BL adaptor	10	20	50	100
No.1	100	200	500	1,000
No.2	500	1,000	2,500	5,000
No.3	2,000	4,000	10,000	20,000
No.4	10,000	20,000	50,000	100,000

Model BL is especially suitable for highly accurate measurement of low viscosities and is used in combination with the BL adaptor.The BL adaptor is comprised of a frame, an open bottom sleeve, a sealed bottom sleeve, and a rotor. Samples of 20 ml volume can be measured with the sealed bottom sleeve. Measurement with the open bottom sleeve is accomplished by simply immersing it in the sample liquid.

BM Ⅱ	Rotational speed (rpm)			
Rotor	60	30	12	6
No.1	100	200	500	1,000
No.2	500	1,000	2,500	5,000
No.3	2,000	4,000	10,000	20,000
No.4	10,000	20,000	50,000	100,000

Model BM is most suitable for general applications. The Model's four speed capability and four-piece rotor set accessory enables meassurement in the ranges indicated in this table.

BH Ⅱ	Rotational speed (rpm)			
Rotor	20	10	4	2
No.1*	500	1,000	2,500	5,000
No.2	2,000	4,000	10,000	20,000
No.3	5,000	10,000	25,000	50,000
No.4	10,000	20,000	50,000	100,000
No.5	20,000	40,000	100,000	200,000
No.6	50,000	100,000	250,000	500,000
No.7	200,000	400,000	1,000,000	2,000,000

Model BH is ideal for measurement of higher viscosities. The Model's four speed capability and six-piece rotor set accessory enables measurement in the ranges indicated in this table.

BS Ⅱ	Rotational speed (rpm)			
Rotor	10	5	2	1
No.1*	3,000	6,000	15,000	30,000
No.2	12,000	24,000	60,000	120,000
No.3	30,000	60,000	150,000	300,000
No.4	60,000	120,000	300,000	600,000
No.5	120,000	240,000	600,000	1,200,000
No.6	300,000	600,000	1,500,000	3,000,000
No.7	1,200,000	2,400,000	6,000,000	12,000,000

Model BS is designed for super high viscosities. The Model has three times the torque and one-half the rotation speed of the Model BH which enables a six-fold increase in measurement range over Model BH.

*denotes option

Accurate measurement values might not be obtained in portions of the Shaded areas of the above tables as they are subject to turbulent flow.