

Bioshaker BR-40/41/42/43 Series

Widely used for Cultivation of microbes such as Yeast, E.Coli. etc. that require temp. control. Sufficient capacity, Space saving and High versatility.

Dimensions --> P.038 OD-Monitor Turbidimeter while shaking --> P.034 LED irradiation unit --> P.037 Shaker NR-10/20/30 --> P.064

Lift-up door offers allows good visibility inside chamber (BR-40LF)



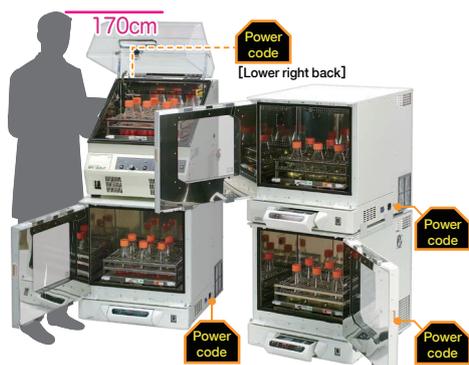
Open rightward and leftward "Double hinged door" (BR-41/42/43 series)

Features

- "8 models" can be selected by temp. range and shaking motion.
- Capacity : Erlenmeyer flask 500mL x 6 pcs, 5L x 1 pc
- Stackable up to Two levels. Platform can be changed.

Applications

- Cultivation of microbes such as E. Coli. etc.
- Cultivation of Yeast and Insect cell (LF/FL)
- Cultivation of Thermophile and Hybridization (FH).



Open rightward and leftward "Double hinged door" and "Stackable"

Open rightward and leftward "Double hinged door". Stackable up to Two levels with "Stackable base (Option)." Excellent performance for Cultivation of microbe thanks to the shaking speed Max. 300r/min even 200r/min at the upper of stacked units.

LED irradiation unit is available as an option.

LED (Light emitting diode) irradiation unit available as an option. Good effect on photosynthesis. * Recommended to use with Small and Medium sized unit (See ? page for details)



Temperature range	4°C to 70°C				5°C above RT to 70°C			5°C above RT to 100°C
Model	BR-40LF	BR-41FL-MR	BR-42FL-MR	BR-43FL-MR	BR-41FM-MR	BR-42FM-MR	BR-43FM-MR	BR-43FH-MR
Shaking motion	Reciprocal/Orbital	Reciprocal	Orbital	Reciprocal/Orbital	Reciprocal	Orbital	Reciprocal/Orbital	Reciprocal/Orbital
Temp. control accuracy (*1)	±0.3 to ±1.0°C							
Speed range	20 to 200r/min	20 to 300r/min (200r/min at the upper of stacked units)						
Shaking width	10 to 40mm	25mm						
Capacity	Universal shaking platform MT-4430: Erlenmeyer flask 500mLx8, Universal shaking platform MT-4030: Erlenmeyer flask 5Lx1 *BR-40LF: 2L x 2 (*2)							
Door type	Swing lift-up door	Double hinged door (Rightward/Leftward open)						
Maximum load	approx. 7 kg (Platform and Vessel holder included)							
Ambient temp. range	5°C to 30°C	5°C to 35°C						
Heating method	Heater 500W	Heater 800W						
Cooling method	Compressor 75W	Compressor 140W						-
Timer/Program functions	BR-40LF (Timer): Temp. transition time and ON-OFF changeover (Non-functional by only temp. transition time *e.g.: Shaking at 37°C → Shaking stop at 4°C.) BR-41/42/43 (Program): 1 program, 9 segments: Temp., Shaking speed and time/per segment (Setting range: 00h00min to 99h59min), Temp. gradient function (*3)							
Safety devices/functions	Leakage/Overcurrent breaker, Fuse, High temp, Alarm of abnormal sample temp. (Set as desired), Detecting the door opening and closing, Self-diagnosis function for sensor error, Motor current limiter, Compressor overheating cut-off circuit (BR-40LF and FL)							
Dimensions (W x D x H)	586 x 630 x 679mm	600 x 686 x 643mm						
Weight	Approx. 70 kg	Approx.95 kg	Approx.98 kg		Approx.77 kg	Approx.80 kg		Approx.81 kg
Power supply	AC100V/9A	AC100V/12A			AC100V/9A			
Standard accessories	1 x Spring net shaking platform (MR-4030), 1 x Drain-reception plastic bottle with hose (BR-40LF)							

(*1)The temp. of defrost function that just starting is not included.

(*2)Maximum inside height are 331mm (40LF) and 350mm (41/42/43).

(*3)The transfer time of temperature can be set up.

•Temp. range and Temp. stability may not be meet the specs when frost by continuous operation. Required to defrost it regularly.

Optional accessories and Capacity/Qty of Vessels

Spring net shaking platform and Capacity/Qty of Vessels

Model	MR-4030			
	Vessels can be easily mounted on regardless its shapes. It can be used by removing some springs and changing the height of the spring net as necessary. Universal shaking platform recommended for 5 L Erlenmeyer flask or 1 to 2L Shake flask.			
Spring net Pitch	20mm			
Spring net stage	2 stage (Height is changeable.)			
External dimension / Weight	400x300x108Hmm, Apporx.3.3kg			
Capacity of Vessel	φ16 mm test tubes (*1)	96 (*2)	Erlenmeyer flask 300mL	9
	Disposable Centrifuge tube for 50 mL	48 (*2)	Erlenmeyer flask 500mL	6
	Erlenmeyer flask 50mL	24	Erlenmeyer flask 1L	3
	Erlenmeyer flask 100mL	20	Erlenmeyer flask 2L	2
	Erlenmeyer flask 200mL	12	Erlenmeyer flask 3L (*3)	1
	Erlenmeyer flask 250mL	9	Sakaguchi flask 500mL	6

(*1)φ16 mm or less should be with the stand to be mounted on in Spring net.
 (*2)The qty when Angle rack tilted 45°.
 (*3)It cannot be used with BR-40LF.

Shaking platforms and Capacity of Flasks

Model	MT-4030/MT-4430			
	MT-4030 is used together Clamps, Angle racks and "OD-Monitor" series. It can hold flasks tightly than Spring shaking platform. In MT-4430 the mounting position for Flasks are fixed and the capacity of (Num. of flasks) is larger than that of MT-4030.			
External dimension / Weight	400/440x300x23Hmm, Apporx.1.4kg			
Capacity of Flask	Erlenmeyer flask 50mL	35/ -	Erlenmeyer flask 2L	2/ -
	Erlenmeyer flask 100mL	18/ -	Erlenmeyer flask 3L (*1)	2/ -
	Erlenmeyer flask 200mL	12/ -	Erlenmeyer flask 5L (*1) (*2)	1/ -
	Erlenmeyer flask 250mL	9/12	Sakaguchi flask 500mL	6/ -
	Erlenmeyer flask 300mL	9/12	Sakaguchi flask 1L	4/ -
	Erlenmeyer flask 500mL	6/ 8	Sakaguchi flask 2L	2/ -
	Erlenmeyer flask 1L	4/ 6		

(*1)It cannot be used with BR-40LF. (*2)The height is up to 350mm height.

Angle rack for Test tubess (Mounted on MT-4030 for use)

Model	AT-1250	AT-1620	AT-1650	AT-1820
Capacity	φ12mm x50	φ16.5mm x20	φ16.5mm x50	φ18mm x20
Mounting qty on MT-4030	2 (*)	3 (*)	2 (*)	3 (*)
External dimension (mm)	250x100x95H	285x70x80H	286x110x100H	320x70x80H
Weight	Apporx.0.8kg	Apporx.0.6kg	Apporx.0.9kg	Apporx.0.7kg

(*)The qty when Angle rack with 160mm test tube tilted 45°.

Other optional accessories

Inner rack RSB-5032

It can be installed to the upper of chamber. The Maximum load 1kg.



Angle rack for Disposable Centrifuge tubes

Stackable base	Junction pipe	Model	AT-3518
The fixing tool for Two stages. For BR-41/42/43/53: STB-6070 For BR-40LF: Stackable baseA	The pipe (w/o Lid) for connection to the outside. (JCP-3657) Be sure to be used below 50°C. (*)	Capacity	50mLx18
		Mounting qty on MT-4030	2 (When Angle rack tilted 45°)
		External dimension	285x110x102Hmm
		Weight	Apporx.0.8kg

(*Electrical equipment should not be placed inside the chamber.

● Protuberances not included in Dimensions. ● Vessels of photo not included.

Stick sheet shaking platform

Model	SR-4030
	Flat bottoms such as Erlenmeyer flask and Petri dish can be held simply by placing on the platform. The decreasing an adhesive force by dirt can be recovered by washing with water and drying it. Even Erlenmeyer flasks can be used up to 200r/min by using Optional Clamp belt.
Max. shaking speed	100r/min (200r/min when using Clamp belt)
External dimension / Weight	400x300x30Hmm, Apporx.1.7kg
Standard accessories	Stick sheetx1

Stick sheet, Clamp belt

Stick sheet (ST-4030) above also available as sold separately. Clamp belt (CB-0205/1000) is for securely holding Erlenmeyer flask on Stick sheet shaking platform.

Model	ST-4030	Model	CB-0205	CB-1000
External dimension	400x300mm	Capacity of Erlenmeyer flask	200 to 500 mL	1 to 3 L (*)

(*1)Up to 2L of Erlenmeyer flask can be used with the BR-40LF.

Clamps (Mounted on MT-4030 and AF-2070/2570 for use)

	Vessels / Capacity		Model
	Above 300mL Clamps comes with Spring and Above 500 mL comes with Octagonal rubber sheet.  MT-4030 with Multiple clamps mounted.	50mL	CF-0050
100mL		CF-0100	
200mL		CF-0200	
250mL		CF-0250	
300mL		CF-0300	
500mL		CF-0500	
1L		CF-1000	
2L		CF-2000	
3L		CF-3000	
5L		CF-5000	
Up to 2L sets of Erlenmeyer flask can be used in BR-40LF.	500mL	SF-0500	
	1L	SF-1000	
	2L	SF-2000	

Angle rack for Erlenmeyer flasks (Mounted on MT-4030 *Clamps required)

Model	AF-2070	AF-2570
Capacity	50mL:4, 100mL:3, 200 to 300mL:2, 500mL:1	50mL:5, 100mL:4, 200mL:3, 250 to 500mL:2
Mounting qty on MT-4030	2 (*1)	2 (*1)
External dimension	250x110x50Hmm	300x110x50Hmm
Weight	Apporx.0.8kg	Apporx.0.9kg

(*1)The qty when Angle rack tilted 30°.*Clamps are available as an option.

Tube holders (Mounted on MT-4030 for use)

Model	M-0150	M-0500	Tube holder M-0015
	3 sets x 8 racks for 1.5/2.0 mL Microtube and Micro Vial		
Tube holder M-0150	Disposable Centrifuge tube for 15 mL 3 sets x 6 racks		
Tube holder M-0500	Disposable Centrifuge tube for 50 mL 3 sets x 4 racks		

Selection guide

Constant temperature incubator shaker
OD-Monitor

CO₂ incubator shaker

Shaker

Mixer
Rotator
Stirrer

Bead beater
homogenizer
Ultrasonic homogenizer

Aluminum block bath
Minimize bath

Water bath
Shaking water bath
Immersion cooler

Hybridization oven
Constant temperature chamber

Centrifugal concentrator
Cold trap

Freeze dryer

Electrophoresis and blotting apparatus

Constant temperature water circulating system (Chiller)

Appendix