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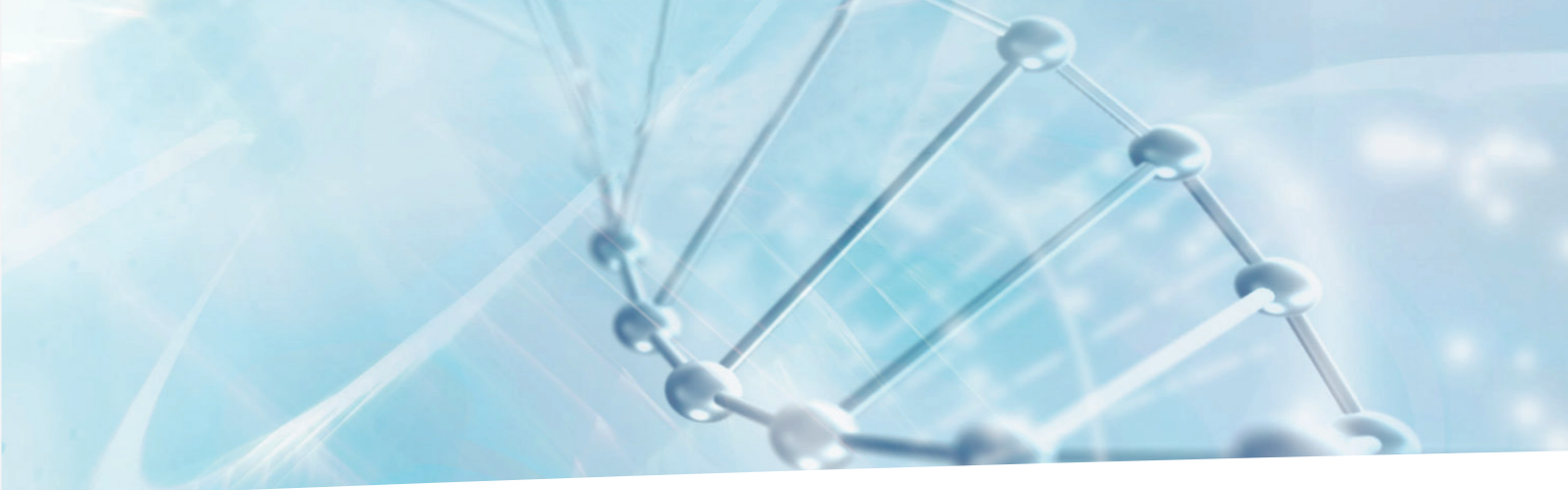
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Floorstanding General Purpose Centrifuge Series



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About us

Innova Bio-Meditech is one of the professional solution provider of laboratory and medical devices. Firmly committed to our mission of “sharing innovative bio-meditech solutions with the world”, we are dedicated to innovation in the fields of Biology Project, Life Science, Pharmacy Industry and Medical Treatment.

Innova Bio-Meditech possesses a sound distribution and service network with business partners in North and Latin America, Europe, Africa and Asia-Pacific etc. We have built up a well established R&D, manufacture network with 3 centers in Qingdao, Shanghai and Suzhou. Inspired by the needs of our customers, we adopt advanced technologies and transform them into accessible innovation. This means constant effort and research, in order to more fully understand the developments of the market, INNOVA produce constantly upgraded product ranges by adding new products year after year.

The passion for science

Floorstanding Centrifuge Content

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Floorstanding High Speed Refrigerated Centrifuge



TorpH 2313R

Product Features :

- 7inch HD touch screen control is convenient and visual for operation. The setup and running parameters can be displayed on the screen simultaneously.
- Large capacity data storage, can store few months' run datas, fault records, it is convenient for tracking run information. Users can edit hundreds of custom running programs, and describe programs in detail.
- Super control system can realize ladder centrifugation, booking start, sample ID, curve model, program mode and Chinese-English shift.
- Strong safety performance, the user management function can prevent tampering and removing programs accidentally.
- Automatic door lock, users just need click a button to open and close the door cover.
- The protective functions of rotor identification, imbalance, overtemperature and overspeed for safe operation.

Technical Parameter

Model	TorpH 2313R		
Max. speed	Angle rotor 23000r/min	Temperature accuracy	±1 ℃
	Swing rotor 4000r/min	Compressor unit	high performance compressor unit, environment-friendly refrigerant (R404a)
Max. RCF	Angle rotor 60460×g	Drive system	High torque brushless motor
	Swing rotor 3500×g	Power supply	AC220V±22V, 50Hz
Max. capacity	Angle rotor 4×1000ml	Power consumption	5kW
	Swing rotor 4×750ml	Noise	≤65dB(A)
Speed accuracy	±10r/min	Dimension (W×D×H)(mm)	730×930×960
Time setting range	1min to 99h 59min	Packing dimension (W×D×H)(mm)	880×1120×1180
Timing mode	start timing after spinning, start timing after reach setting speed, continuous timing, short spinning	Weight	260kg
Temperature setting range	-20 ℃ to 40 ℃ (step 1 ℃ adjustable)	Pre-cooling function	Yes

Rotor parameters

Order code	Rotor type	Max. speed (r/min)	Max. RCF (×g)	Capacity
AR2301810	Angle rotor	23000	60460	18×10ml
	Adaptor	23000	60460	1.5ml/5ml/7ml
AR2104802	Angle rotor	21000	47630	48×1.5/2ml
	Adaptor	21000	47630	0.2ml/0.5ml
AR2100850	Angle rotor (aluminum alloy/titanium alloy)	21000	52356	8×50ml
	Adaptor	21000	52356	1.5ml/5ml/10ml/15ml 20ml/25ml/30ml
	Angle rotor (carbon fiber)	21000	52356	8×50ml
	Adaptor	21000	52356	1.5ml/5ml/10ml/15ml/20ml /25ml/30ml
AR15004250	Angle rotor	15000	33800	4×250ml
	Adaptor	15000	33800	1.5ml/10ml/15ml(Conical) /50ml(Conical/round)/100ml
AR14006250	Angle rotor (carbon fiber)	14000	30070	6×250ml
	Adaptor	14000	30070	1.5ml/10ml/15ml(Conical)/50ml (Conical/round)/100ml
	Angle rotor	14000	30070	6×250ml
	Adaptor	14000	30070	1.5ml/10ml/15ml(Conical)/50ml (Conical/round)/100ml
AR10006500	Angle rotor	10000	17700	6×500ml
	Adaptor	10000	17700	1.5ml/5ml/10ml/15ml(Conical) /30ml/50ml(Conical/round) /100ml/250ml
	Angle rotor (carbon fiber)	10000	17700	6×500ml
	Adaptor	10000	17700	1.5ml/5ml/10ml/15ml/ 25ml/50ml/100ml/250ml (Conical/round)
AR080041000	Angle rotor	8000	12040	4×1000ml
	Adaptor	8000	12040	50ml/250ml/500ml (Conical/round)
	Angle rotor (carbon fiber)	8000	12040	4×1000ml
	Adaptor	8000	12040	50ml/250ml/500ml (Conical/round)
AR1603216	Angle rotor	16000	33200	32×16ml
	Adaptor	16000	33200	5ml
AR16010100	Angle rotor	16000	37846	10×100ml
	Adaptor	16000	37846	5ml/10ml/15ml/25ml/50ml (Conical/round)
SR1000650	Swing rotor	Swing rotor	15680	6×50ml (With windshield)
AR1401250	Angle rotor	14000	30070	12×50ml (Conical)
	Adaptor	14000	30070	15ml (Conical)

Rotor parameters

Order code	Rotor type	Max. speed (r/min)	Max. RCF (×g)	Capacity			
SR04004750	Swing rotor yoke	4000	3500	4×750ml			
	Round bucket/aerosol -tight round bucket	4000	3500	4×1×500ml (Conical)			
				4×1×500ml (Flat)			
				4×1×250ml (Conical)			
				4×1×250ml (Flat)			
				4×4×100ml			
				4×5×50ml			
				(Self-standing tube)			
				4×7×50ml (Conical)			
				4×7×50ml			
				4×10×20ml			
				4×15×15ml (Conical)			
				4×19×10ml			
				(Self-standing tube)			
				4×21×10ml			
				4×27×5/7ml Vacuum blood collection tube			
4×37×5ml (RIA tube)							
4×56×1.5ml							
SR04004500	Swing rotor yoke	4000	3345	4×500ml			
	Round bucket/aerosol -tight round bucket	4000	3345	4×1×250ml			
				4×2×100ml			
				4×4×50ml (Conical/round)			
				4×7×20ml			
				4×9×15ml (Conical/round)			
				4×11×15ml(Conical)			
				Tube cap≤21.5mm			
				4×14×10ml			
				4×19×5/7ml Vacuum blood collection tube			
				4×36×1.5ml			
				Rectangular bucket/ aerosol-tight rectangular bucket	4000	3345	4×1×250ml
							4×3×100ml
							4×6×50ml (Conical/round)
							4×12×15ml(conical)
							4×12×15ml(round)
4×20×10ml							
4×31×5/7ml Vacuum blood collection tube							
4×56×1.5ml							
Microplate bucket	4000	3345	4×2×96 MTP				
			4×1×96 DWP				
				Only for plastic microplate			

Floorstanding High Speed Refrigerated Centrifuge



TorpH 105R



TorpH 2317R

Product Features :

Intelligent control system

- RCF and speed separately and switching free, automatically calculate RCF.
- Up to 99 program groups and parameters can be revised during operation without stopping.
- The electric door lock can choose whether to open the chamber door automatically after the centrifugal operation.

Excellent kernel performance

- HD large LCD display and the parameters can be revised during operation without shutdown.
- Microcomputer control ,AC frequency conversion brush-less motor with fast speed and stable operation.
- 10 gears acceleration /deceleration with linear drive.
- Two modes can be set: start timing/arrival revolution timing.
- Energy-efficient ECO friendly refrigeration system with special thermal insulation inside the machine .

Technical parameter

Model	TorpH 2317R	TorpH 105R
Max Speed	23000rpm	10000rpm
Max RCF	35500×g	18300×g
Max Capacity	4×750ml	6×1000ml
Timer	1s~23h59min	
Revolutions/min	±10r/min	
Temp Range	-20℃~40℃	
Temp Accuracy	±1.0℃	
Voltage	AC 220±22V 50Hz 15A	
Power	1300W	4500W
Noise Level	≤ 65dB (A)	
Size	820×660×520	1250×870×730
Net Weight (mm)	139kg	315kg
Rotor automatic recognition	Yes	

Rotor parameters

Model	Rotor type	Order code	Capacity	Max Speed(r/min)	Max RCF(×g)
TorpH 105R	Angle rotor	AR10006250	6×250ml	10000rpm	18300×g
			6×300ml	10000rpm	18300×g
	Angle rotor	AR08006500	6×500ml	8000rpm	11620×g
	Angle rotor	AR072061000	6×1000ml	7200rpm	12166×g
	Swing-out rotor	SR042041000	4×1000ml	4200rpm	4430×g
	Swing-out rotor	SR042061000	6×1000ml	4200rpm	5100×g

Rotor parameters

Model	Rotor type	Order code	Capacity	Max Speed(r/min)	Max RCF(×g)
TorpH 2317R	Angle rotor	AR2301215	12×1.5ml	23000rpm	35500×g
		AR2101615	16×1.5ml	21000rpm	30230×g
		AR1851205	12×5ml	18500rpm	23000×g
		AR1802402	24×1.5/2.0ml	18000rpm	29650×g
		AR1701210	12×10ml	17000rpm	29700×g
		AR1604802	48×1.5/2.0ml	16000rpm	26760×g
		AR1600650	6×50ml (Round bottom)	16000rpm	23430×g
		AR1400650	6×50ml (Conical/round bottom)	14000rpm	20800×g
		AR13004100	4×100ml	13000rpm	18160×g
		AR1301215	12×15ml (Conical bottom)	13000rpm	19177×g
		AR12506100	6×100ml	12500rpm	18550×g
		AR1200850	8×50ml (Conical/round bottom)	12000rpm	16000×g
		AR12004250	4×250ml	12000rpm	21630×g
		AR08004500	4×500ml	8000rpm	10375×g
	Swing-out rotor	SR04096B	96×2~7ml (Blood collection tube)	4000rpm	3580×g
			4×750ml (with biosafety lid)	4000rpm	3580×g
			4×750ml	4000rpm	3580×g
			4×500ml (with biosafety lid)	4000rpm	3580×g
			4×500ml	4×500ml	3580×g
		SR04004250	4×250ml (with biosafety lid)	4000rpm	3500×g
			4×250ml	4000rpm	3500×g
			6×250ml	4000rpm	3500×g
	Swing-out rotor		Micro-plate 4×2×96 hole	4000rpm	3550×g
Swing-out rotor (Square basket)	SR0404296	Square basket include: Adapter 4×10×15ML (Conical bottom) Adapter 4×4×50ML (Conical bottom)	4000rpm	3550×g	

Floorstanding low speed high capacity centrifuge



TorpL 53R

Product Features:

- The sturdy rotor adopt 7075-T6 alloy aluminum, hard oxidation, corrosion resistance.
- Blood components separation: It can separate 4x450ml triple blood bags or 8x200ml triple blood bags with quick centrifugation programs, compact design as well as ideal cost-effectiveness.
- Multiple adapters available, accommodate to almost all the tubes used in hospitals. Swing rotor 6x500ml, it can spin up to 168pcs vacuum blood collection tube in one cycle, meet the requirement of high-volume mass centrifugation in hospital.
- It can handle the samples with large capacity or with multiple tubes.
- Featuring 10 ACC and 11 DEC rate to prevent second emulsion or turbid, to achieve best centrifugation result.
- In Manual mode, parameters can be set quickly. RCF and speed be shifted by just touch the key. The stability of temperature and speed during spinning can be viewed through the curve.

Technical Parameter

Model	Torpl 53R		
Max. speed	5000rpm	Temp. accuracy	±1 C
Max. RCF	4640×g (Angle rotor)	Step centrifugation	Yes (100 programs, each program can be divided into 5 steps.)
	6100×g (Swing rotor)	Compressor	environment-friendly refrigerant (R404a)
Max. capacity	6x500ml (Angle rotor)	Drive system	brushless motor with high torque
	4x1000ml (Swing rotor)	Noise	≤65dB(A)
Speed accuracy	±10rpm	Power supply	AC220V±22V 50Hz 15A
Time setting range	1min to 99h59min	Power consumption	3.0kW
Mode of timing	Timing after start-up, timing when reaching the max speed, Instantaneous & continuous timing, start-up at the specified time	Dimensions (W×D×H)(mm)	700×880×930
		Packing size (W×D×H)(mm)	820×1000×1080
Temp. setting range	-20℃ to 40℃ (1℃ increment)	Weight	260kg
Pre-cooling	Yes (up to -20℃ setting)	Key parts material	316 centrifuge chamber, PPCO test bottle, Aluminum alloy rotor.

Rotor parameters

Order code	Rotor type	Max. speed(rpm)	Max. RCF(×g)	Capacity
AR05006500	Angle rotor	5000	4640	6x500ml
	Adaptor	5000	4640	6x250ml
				6x100ml
				6x2x50ml(Falcon)
				6x50ml
				6x50ml(Round/falcon)
				6x3x30ml
				6x7x15ml(Falcon)
				6x7x10ml
				6x10x5ml
6x13x1.5ml				
SR050041000	Swing-out rotor	5000	6100	4x1000ml (Round bucket)
	Adaptor	5000	6100	4x1x500ml
				4x1x300ml
				4x1x250ml (Falcon)
				4x1x200ml blood bag
				4x3x100ml
				4x5x50ml (Falcon)
				4x5x50ml (Round)
				4x14x15ml (Falcon)
				4x14x15ml
				4x37x7ml
	4x24x5ml			
	4x28x1.5ml			
	Swing-out rotor	5000	6100	4x1000ml (Oval bucket)
	Microplate rotor	5000	6100	4x1x96 deep-well plate, total height<72mm 4x2x96 microplate
	SR05006500	Swing rotor	5000	5980
Adaptor		5000	5980	6x1x250ml
				6x2x100ml
				6x4x50ml (Round/falcon)
				6x7x20ml
				6x9x15ml (Round/falcon)
				6x14x10ml
				6x19x5/7ml vacutainer
6x36x1.5ml				
Swing-out rotor		5000	5980	6x500ml (Rectangular bucket)
Adaptor		5000	5980	6x1x250ml
				6x2x100ml
				6x4x50ml (Round/falcon)
	6x10x15ml (Falcon)			
	6x10x15ml (Round)			
	6x20x10ml			
6x28x5/7ml vacutainer				
6x56x1.5ml				

Floorstanding low speed high capacity centrifuge



TorpL 94R

Product Features:

- Automatic door locking system (optional).
- Automatic suction device of centrifuging windshield (optional).
- Safe Structure: the overall unit has passed MCA.
- Featuring multiple protection, such as automatic rotor identification, imbalance protection, over-speed protection, over-temperature protection, motor overheating protection, door lid protection and so on.
- ACC/DEC Rates: featuring 10 acceleration and 11 deceleration rates, to prevent the sample from second emulsion or turbid, and achieve best centrifuging result.
- Main interface function.
- Powerful System Setting Function.
- Centrifuge Management System (Optional).

Technical Parameter

Model	TorpL 94R		
Max. speed	9000rpm (Angle rotor)	Temp. setting range	-20°C to 40°C (1°C increment)
	4500rpm (Swing rotor)	Pre-cooling	yes (up to -20°C Setting)
Max. RCF	18610×g (Angle rotor)	Temp. accuracy	±1°C
	6756×g (Swing rotor)	Step centrifugation	yes (100 programs, each program can be divided into 5 steps, more programs can be set through external memory)
Max. capacity	6×1000ml (Angle rotor)	Noise	≤70dB(A)
	8×2200ml (swing rotor) / 16×500ml blood bag or 6×2400ml/ 12×500ml blood bag	Power supply	AC220V +/-22V, 50Hz 50A
Speed accuracy	±10rpm	Power consumption	7.5kW
Speed range	100rpm~max. speed, 100rpm increment	Dimension (W×D×H)(mm)	875×996×1000
Time setting range	1min to 99h59min	Package size (W×D×H)(mm)	1080×1310×1340
Mode of timing	-20°C to 40°C (1°C increment)	Weight	575kg
		Key parts material	316 centrifuge chamber, PPCO test bottle, Aluminum alloy rotor.

Order code	Rotor type	Max. speed (rpm)	Max. RCF (×g)	Capacity
AR080061000	Angle rotor	8000	14472	6×1000ml
	Adaptor	8000	14472	6×500ml
				6×250ml
				6×4×50ml (Round/falcon)
SR045062400	Swing-out rotor	4500	6756	6×2400ml (Retangular bucket)
	Blood bag adaptor	4500	6756	6×2×500ml (Two cavities)
				6×2×450ml
				6×3×300ml (One cavity)
SR045061000	Swing-out rotor	4500	6315	6×2×1000ml (Double round bucket)
SR040082200	Swing-out rotor	4000	5606	8×2200ml
	Retangular bucket	4000	5606	8×2200ml
SR090061000	Angle rotor	9000	18610	6×1000ml (Carbon fiber rotor)
	Adaptor	9000	18610	6×500ml
				6×250ml
				6×4×50ml (Falcon)
				6×4×50ml (Round)

Floorstanding low speed high capacity centrifuge



TorpL 63R/63/84R

Product Features:

Intelligent control system

- With five groups of optional programs and can store 99 program groups.
- Electric lid lock.
- Long press the start/short-time key to realize instantaneous centrifugation.
- Up to 10 level acceleration/ deceleration with Linear drive.

Excellent kernel performance

- HD large LCD display and the parameters can be revised during operation without shutdown.
- Microcomputer control ,AC frequency conversion brush-less motor with fast speed and stable operation.
- Two modes can be set: start timing/arrival revolution timing.
- ECO friendly refrigeration system with Special thermal insulation process.

Careful and safe

- With rotor automatic identification system .
- Over speed,over heat,unbalance etc protections .
- Steel Structure,centrifuge chamber made of stainless steel with Environmentally friendly anti-corrosion coating treatment.

Technical Parameter

Model	TorpL 63R	TorpL 63	TorpL 84R
Max Speed	6500rpm	6500rpm	8000rpm
Max RCF	6680×g	6680×g	12166×g
Max Capacity	6×1000ml	6×1000ml	6×2400ml
Timer	1s~23h59min		
Revolutions/min	±10r/min		
Temp Range	-20℃~40℃	\	-20℃~40℃
Temp Accuracy	±1.0℃	\	±1.0℃
Power	1500W		
Noise Level	≤65dB (A)		
Size (mm)	840×730×1240	840×730×1240	1180×970×860
Net Weight	190kg	190kg	590kg
Rotor automatic recognition	Yes		
Voltage	AC 220±22V 50Hz 30A		

Rotor parameters

Model	Rotor type	Order code	Capacity	Max Speed(r/min)	Max RCF(×g)
TorpL 63R	Angle rotor	AR06506250	6×250ml	6500rpm	6610×g
			6×300ml	6500rpm	6610×g
		AR06006500	6×500ml	6000rpm	6680×g
	Swing-out rotor	SR042061000	6×1000ml (Round bucket)	4200rpm	5100×g
			6×1000ml (Square bucket)	4200rpm	5100×g
			Automatic uncap 168*2~7ml (Blood collection tube)	4200rpm	5100×g
TorpL 63	Angle rotor	AR06506250	6×250ml	6500rpm	6610×g
			6×300ml	6500rpm	6610×g
		AR06006500	6×500ml	6000rpm	6680×g
	Swing-out rotor	SR042061000	6×1000ml (Round bucket)	4200rpm	5100×g
			6×1000ml (Square bucket)	4200rpm	5100×g
TorpL 84R	Angle rotor	AR08006500	6×500ml	8000rpm	11680×g
		AR072061000	6×1000ml	7200rpm	12166×g
	Swing-out rotor	SR042061000	6×2×1000ml	4200rpm	5000×g
		SR042062400	6×2400ml	4200rpm	5600×g

Rotor reference

Rotor integral

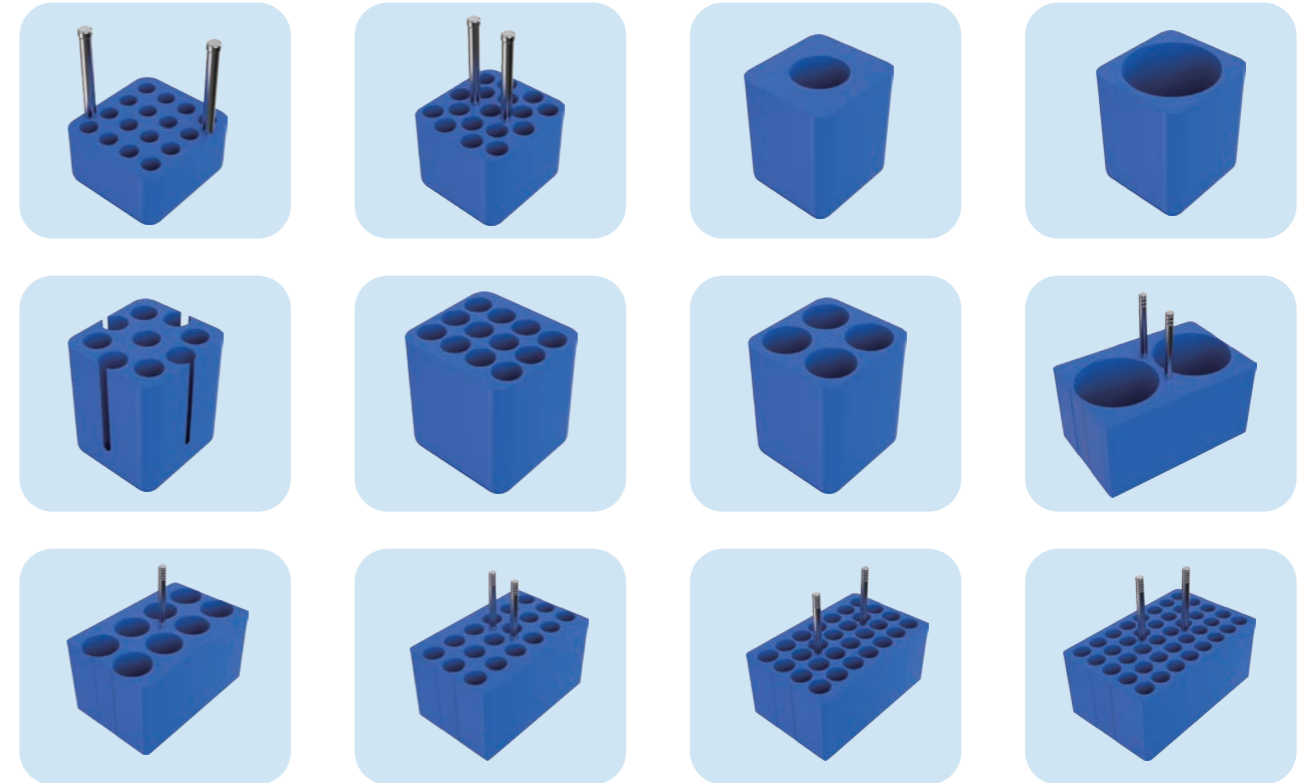


Rotor structure



Adapter reference

Square adapter



Round adapter

