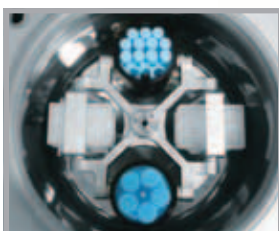


Multi-purpose Centrifuge

Combi R515

- Real multi-purpose centrifuge for using both fixed angle and swing-out rotors
- Robust and practical benchtop design
- For up to 15,000 rpm (24,000 xg) with 6 x 85 mL
- Large capacity swing-out rotor for 4 x 500 mL up to 4,500 rpm (4,300 xg)
- A variety of tube adaptors to be fit into 750 mL and 500 mL swing buckets
- Automatic rotor identification
- Imbalance cutoff and tracking
- Intuitive and easy control and extensively informative display
- Smoothly working, motorized lid opening and closure
- Cooled using CFC free, environmental friendly refrigerant
- Excellent temperature control
- Drainage from the chamber hole of refrigerated models could be cleaned daily
- Password lock function



S750-4 / B750 & TM96



S500-4 / B500 & TM96



A50-8



A0.2-48

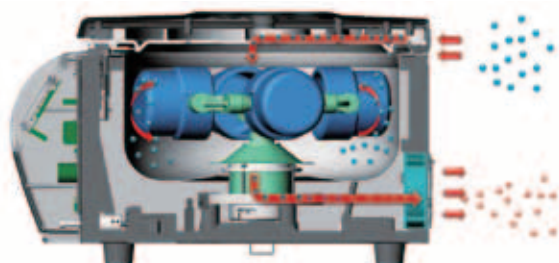
Multi-purpose Centrifuges

Combi R515 / Combi 508

Multi-purpose Centrifuge

Combi 508

- Compact benchtop, multi-purpose centrifuge
- Ideal for routine usage of 4 x 750 mL swing-out centrifugation
- Very quiet and static operation with BLDC motor
- A variety of tube adaptors could be fitted into the 750 mL and 500 mL swing buckets
- Automatic rotor identification
- Imbalance cutoff and tracking
- Intuitive and easy control and extensive and informative display
- Smoothly working, motorized lid opening and closure



Unique air flow structure for effective noise reduction and excellent cooling



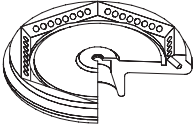
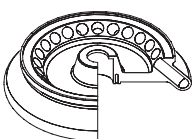




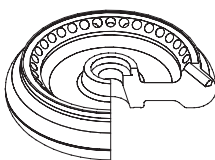




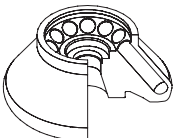
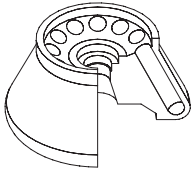
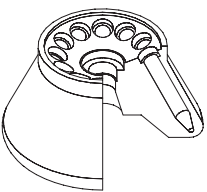
Technical Specifications

		Combi R515 / *Combi 514R	Combi 508 / *Combi 408
Speed RCF (xg)	Max. RPM / Fixed angle	15,000 rpm	8,000 rpm
	Max. RCF / Fixed angle	26,664 xg	8,279 xg
	Max. RPM / Swing-out	4,500 rpm	4,000 rpm
	Max. RCF / Swing-out	4,392 xg	3,515 xg
Max. capacity	Fixed angle	6 x 250 mL, 36 x 1.5/2.0 mL	6 x 85 mL
	Swing-out	4 x 750 mL, 76 x 15 mL, 4 MTPs	4 x 750 mL
ACC/DEC ramps		10/10 steps	
Temperature range		-10°C to 40°C	-
Time control		< 100 hr, pulse, continuous	< 2 hr, continuous
Program memory		100	
Noise level		≤ 65 dB	≤ 65 dB
Imbalance cutoff / tracking		Yes / Yes	Yes / Yes
Rotor identification		Automatic	Automatic
Dimension (W x D x H, mm)		723 x 665 x 387	530 x 676 x 400
Weight without rotor		112 kg	61 kg
Power requirement (VA)		1.7 kVA	1.0 kVA
Power input (V, Hz)		210V~240V, 50/60 Hz (110V optional)	
Cat. No.		CB-R515	CB-508

* Registered as medical device at MFDS¹⁾

¹⁾ MFDS : Ministry of Food and Drug Safety (KOREA)

Fixed Angle Rotors for Combi Series (1)

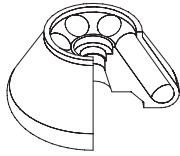










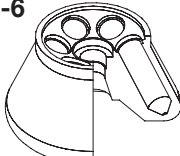

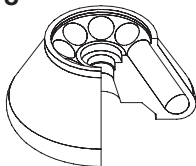










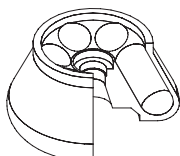


















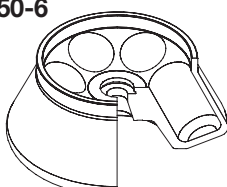

Rotor	Adaptable Centrifuge	Tube Capacity Bottom Type	Required Adaptor	Bore Ø x L (mm) Radius (mm)	Max. RPM (rpm) Max. RCF (xg)	
A0.2-48  Hole angle : $\angle 45^\circ$ Max. Capacity : 48 x 0.2 mL Size (ø x H) : ø200 x 56 mm Incl. a coupling bolt lid	Combi R515	0.2 mL -	-	6.5 x 17 88.9	12,500 15,530	
		0.2 mL PCR strip	-			
	Combi 508	0.2 mL -	-	6.5 x 17 88.9	8,000 6,361	
		0.2 mL PCR strip	-			
A2.0-24  Hole angle : $\angle 40^\circ$ Max. Capacity : 24 x 1.5/2.0 mL Size (ø x H) : ø202 x 79 mm Max. height for tube fit : 46 mm Incl. a coupling bolt lid	Combi R515	1.5/2.0 mL -	-	11.5 x 38 80.8	15,000 20,325	
		0.5 mL -	TR0.5		8 x 37 76.5	15,000 19,244
		0.2 mL -	TR0.2		6 x 21 67	15,000 16,854
	Combi 508	1.5/2.0 mL -	-	-	11.5 x 38 80.8	8,000 5,781
		0.5 mL -	TR0.5		8 x 37 76.5	8,000 5,473
		0.2 mL -	TR0.2		6 x 21 67	8,000 4,795
A2.0-36  Type : Fixed Angle Rotor 30° Max. Capacity : 36 x 1.5/2.0 mL Size (ø x H) : ø240 x 64 mm Max. height for tube fit : 49 mm Incl. a coupling bolt lid	Combi R515	1.5/2.0 mL Micro-filter tube	-	11.5 x 38 115.7	14,000 25,353	
		0.5 mL	TR0.5		8 x 37 111	14,000 24,323
		0.2 mL	TR0.2		6 x 21 100	14,000 21,913
	Combi 508	1.5/2.0 mL Micro-filter tube	-	-	11.5 x 38 115.7	8,000 8,279
		0.5 mL	TR0.5		8 x 37 111	8,000 7,942
		0.2 mL	TR0.2		6 x 21 100	8,000 7,155
A10-12  Hole angle : $\angle 36^\circ$ Max. Capacity : 12 x 10 mL Size (ø x H) : ø179.9 x 82 mm Max. height for tube fit : 85.5 mm Incl. a coupling bolt lid	Combi R515	10 mL Round	-	16.3 x 74.5 85.1	15,000 21,407	
	Combi 508				8,000 6,089	
A15-12  Hole angle : $\angle 30^\circ$ Max. Capacity : 12 x 15 mL Size (ø x H) : ø222.7 x 106 mm Max. height for tube fit : 121 mm Incl. a coupling bolt lid	Combi R515	15(16) mL Round	-	17 x 96 106	15,000 26,664	
	Combi 508				8,000 7,585	
A15c-12  Hole angle : $\angle 25^\circ$ Max. Capacity : 12 x 15 mL conical Size (ø x H) : ø215 x 121 mm Max. height for tube fit : 124.5 mm Incl. a coupling bolt lid	Combi R515	15 mL Conical	-	17 X 115 99.4	15,000 25,004	
	Combi 508				8,000 7,105	

* Radius : From the center of the rotor to the inner end of tube carrier.

Multi-purpose Centrifuges

Combi R515 / Combi 508

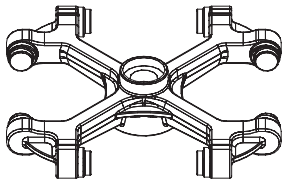
Fixed Angle Rotors for Combi Series (2)

Rotor	Adaptable Centrifuge	Tube Capacity Bottom Type	Required Adaptor	Bore Ø x L (mm) Radius (mm)	Max. RPM (rpm) Max. RCF (xg)
A50-6  Hole angle : $\angle 30^\circ$ Max. Capacity : 6 x 50 mL Size (ø x H) : ø200 x 109 mm Max. height for tube fit : 126.5 mm Incl. a coupling bolt lid	Combi R515	 50 mL Round	-	29 x 100 96.1	15,000 24,174
		 15 mL Round	TR15(50) 	17 x 94 89.9	15,000 22,614
		 15 mL Conical	TR15c(50) 	17 x 105 91	15,000 22,891
	Combi 508	 50 mL Round	-	29 x 100 96.1	8,000 6,876
		 15 mL Round	TR15(50) 	17 x 94 89.9	8,000 6,433
		 15 mL Conical	TR15c(50) 	17 x 105 91	8,000 6,511
A50c-6  Hole angle : $\angle 23^\circ$ Max. Capacity : 6 x 50 mL conical Size (ø x H) : ø205.7 x 119 mm Max. height for tube fit : 118.1 mm Incl. a coupling bolt lid	Combi R515	 50 mL Conical	-	30 x 108.6 91	15,000 22,891
	Combi 508		8,000 6,511		
A50-8  Hole angle : $\angle 30^\circ$ Max. Capacity : 8 x 50 mL Size (ø x H) : ø213 x 110.7 mm Max. height for tube fit : 126.5 mm Incl. a coupling bolt lid	Combi R515	 50 mL Round	-	29 x 100 98.9	15,000 24,878
		 15 mL Round	TR15(50) 	17 x 94 92.8	15,000 23,344
		 15 mL Conical	TR15c(50) 	17 x 105 93.9	15,000 23,621
	Combi 508	 50 mL Round	-	29 x 100 98.9	8,000 7,077
		 15 mL Round	TR15(50) 	17 x 94 92.8	8,000 6,640
		 15 mL Conical	TR15c(50) 	17 x 105 93.9	8,000 6,719
A85-6  Hole angle : $\angle 25^\circ$ Max. Capacity : 6 x 85 mL Size (ø x H) : ø209.1 x 112 mm Max. height for tube fit : 115.4 mm Incl. a coupling bolt lid	Combi R515	 85 mL Round	-	38.3 x 95 97.6	15,000 24,551
		 50 mL Round	TR50(85) 	29 x 95 92.9	15,000 23,369
		 50 mL Conical	TR50c(85) 	29.5 x 100 93	15,000 23,394
		 15 mL Round	TR15(85) 	17 x 94 89	15,000 22,388
		 15 mL Conical	TR15c(85) 	17 x 100 89.2	15,000 22,438
	Combi 508	 85 mL Round	-	38.3 x 95 97.6	8,000 6,983
		 50 mL Round	TR50(85) 	29 x 95 92.9	8,000 6,647
		 50 mL Conical	TR50c(85) 	29.5 x 100 93	8,000 6,654
		 15 mL Round	TR15(85) 	17 x 94 89	8,000 6,368
		 15 mL Conical	TR15c(85) 	17 x 100 89.2	8,000 6,382
A250-6  Hole angle : $\angle 25^\circ$ Max. Capacity : 6 x 250 mL Size (ø x H) : ø295.6 x 147.8 mm Max. height for tube fit : 124 mm Incl. a coupling bolt lid	Combi R515	 250 mL Round	-	62 x 103 138.3	8,000 9,896

* Radius : From the center of the rotor to the inner end of tube carrier.

Swing-out Rotors for Combi Series

S750-4



∠90°
 Max. RPM : 4,000 rpm
 Size (W x D x H)
 : 277 x 277 x 55 mm

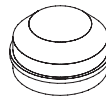
Bucket/Adaptor for S750-4



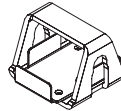
Round Bucket
B750S
 Capacity : 750 mL
 * Cap Available (optional)



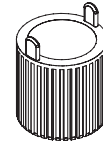
Round Bucket
B750
 Capacity : 750 mL



Cap
BL750



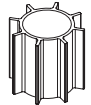
MicroTiter Plate Rack
TM96 (750-4)



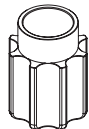
Adaptor
TR500 (750)



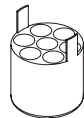
Adaptor
TR500c (750)



Adaptor
TR250 (750)



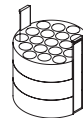
Adaptor
TR250c (750)



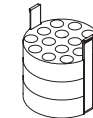
Adaptor
TR50-7



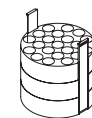
Adaptor
TR50c-5



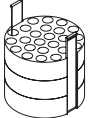
Adaptor
TR15-19



Adaptor
TR15c-14

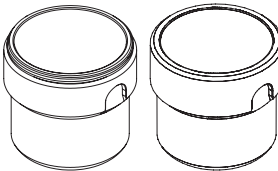
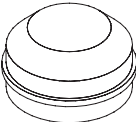





















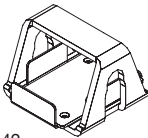



Adaptor
TR10-21



Adaptor
TR5-24

Buckets and Tube Racks of S750-4

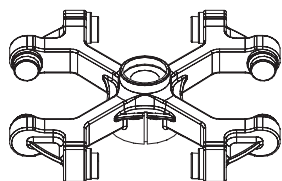
Bucket	Required Adaptor	Tube Capacity Bottom Type	Tube per Adaptor / Rotor	Bore (Ø x L, mm)	Max. height for tube fit (mm)	Max. RPM (rpm) Max. RCF (xg)
B750S / B750  BL750  Radius : 196.5 mm Bucket bore (Ø x L, mm) : 99 x 103 Max. height for tube fit : 142 mm (w/ cap), 159 mm (w/o cap)	-	 750 mL Flat	1 / 4	99 x 103	150	4,000 3,515
	TR500(750) 	 500 mL Flat	1 / 4	75.5 x 98.7	138.7	4,000 3,458
	TR500c(750) 	 500 mL Conical	1 / 4	99 x 58	142	4,000 3,515
	TR250(750) 	 250 mL Flat	1 / 4	62.3 x 87	138	4,000 3,443
	TR250c(750) 	 250 mL Conical	1 / 4	60.5 x 124.4	138.5	4,000 3,452
	TR50-7 	 50 mL Round	7 / 28	29.2 x 97	138	4,000 3,443
	TR50c-5 	 50 mL Conical	5 / 20	29 x 91	142	4,000 3,515
	TR15-19 	 15 mL Round	19 / 76	17.2 x 87	138	4,000 3,443
	TR15c-14 	 15 mL Conical	14 / 56	17 x 89	140	4,000 3,479
	TR10-21 	 10 mL Round	21 / 84	16 x 87	138	4,000 3,443
TR5-24 	 3 mL / 5 mL Round	24 / 96	13.2 x 60 (3 mL) 13.2 x 87 (5 mL)	138	4,000 3,443	
TM96(750-4) Radius : 163.5 mm MTP holder size (w x d x L, mm) : 88 x 128.5 x 42 Max. height for tube fit : 88 x 128.5 x 42 mm		 MTP	1 / 4	88 x 128.5 x 42		4,000 2,925

* Radius : From the center of the rotor to the inner end of tube carrier.

Multi-purpose Centrifuges

Combi R515 / Combi 508

S500-4



∠90°
 Max. RPM : 4,500
 Size (W x D x H)
 : 262 x 262 x 55 mm

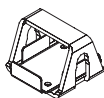
Bucket/Adaptor for S500-4



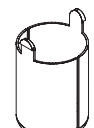
Round Bucket
B500
 Capacity : 500 mL
 * Cap included



Cap
BL500



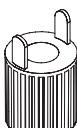
MicroTiter Plate Rack
TM96
(500-4)



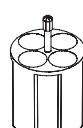
Adaptor
TR500
(500)



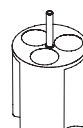
Adaptor
TR250
(500)



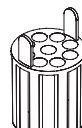
Adaptor
TR100
(500)



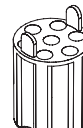
Adaptor
TR50-4



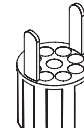
Adaptor
TR50c-3



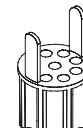
Adaptor
TR15-9



Adaptor
TR15c-7

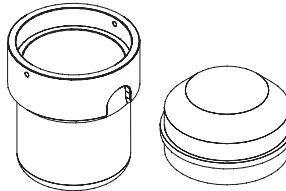


















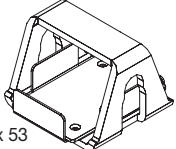



Adaptor
TR10-9



Adaptor
TR5-9

Buckets and Tube Racks of S500-4

Bucket	Required Adaptor	Tube Capacity Bottom Type	Tube per Adaptor / Rotor	Bore (Ø x L, mm)	Max. height for tube fit (mm)	Max. RPM (rpm) Max. RCF (xg)
 Radius : 194 mm Bucket bore (ø x L, mm) : 80 x 111 Max. height for tube fit : 144 mm (w/ cap), 157.7 mm (w/o cap) Incl. a cap Combi R515 Max. RPM : 4,500 Max. RCF : 4,392 xg Combi 508 Max. RPM : 4,000 Max. RCF : 3,435 xg	 TR500(500)	 500 mL Flat	1 / 4	73 x 125	142	4,500 4,347
	 TR250(500)	 250 mL Flat	1 / 4	62 x 100	139.5	4,500 4,290
	 TR100(500)	 100 mL (85 mL) Round	1 / 4	38.5 x 84.5	139.5	4,500 4,290
	 TR50-4	 50 mL Round	4 / 16	29.5 x 85.5	139.5	4,500 4,290
	 TR50c-3	 50 mL Conical	3 / 12	30 x 90	140	4,500 4,302
	 TR15-9	 15 mL Round	9 / 36	16.5 x 85	139.5	4,500 4,290
	 TR15c-7	 15 mL Conical	7 / 28	17 x 95.5	140.5	4,500 4,313
	 TR10-9	 10 mL Round	9 / 36	17 x 64	138.9	4,500 4,279
	 TR5-9	 5 mL Round	13 x 64	138	4,500 4,256	
TM96(500-4) Radius : 154 mm MTP holder size (w x d x L, mm) : 87 x 128.5 x 53 Max. height for tube fit : 87 x 128.5 x 53 mm	 TM96 (500-4)	 MTP	1 / 4	-		4,000 2,755

* Radius : From the center of the rotor to the inner end of tube carrier.