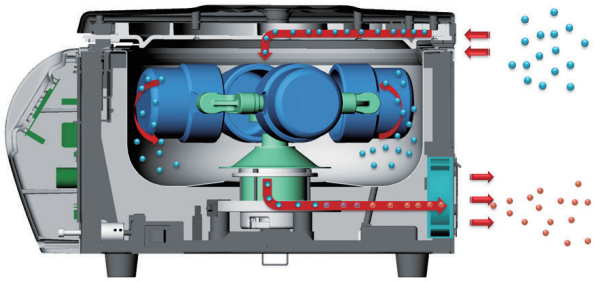
Multi-purpose Centrifuge

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
- The extensive range of accessories can accommodate tubes from 0.2 mL to 750 mL as well as microtiter plates.
- Automatic rotor identification
- Imbalance cutoff and tracking
- Intuitive and easy control and informative display
- Smooth operation with motorized lid opening and closure



Unique air flow structure for effective noise reduction and excellent cooling

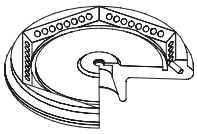
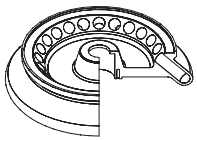
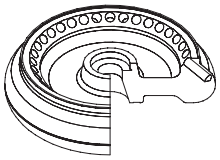
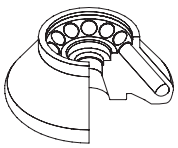
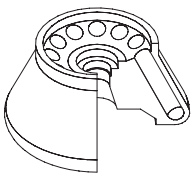
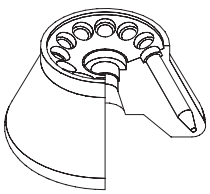
Technical Specifications

		Combi 508 / Combi 408*	Combi R515 / Combi 514R*
Speed RCF (xg)	Max. RPM (Fixed angle)	8,000 rpm	15,000 rpm
	Max. RCF (Fixed angle)	8,279 xg	25,353 xg
	Max. RPM (Swing-out)	4,000 rpm	4,500 rpm
	Max. RCF (Swing-out)	3,515 xg	4,392 xg
Max. capacity	Fixed angle	6 x 85 mL	6 x 250 mL, 36 x 1.5 / 2.0 mL
	Swing-out	4 x 750 mL	4 x 750 mL, 76 x 15 mL, 4 MTPs
ACC/DEC ramps		10/10 steps	
Temperature range		-	-10℃ to 40℃
Time control		< 2 hr, continuous	< 100 hr, pulse, 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)		530 x 676 x 400	723 x 665 x 387
Weight without rotor		61 kg	95 kg
Power consumption		2.1 kVA	2.5 kw
Power supply (V/Hz)		210 V ~ 240 V, 50 / 60 Hz (110 V optional)	210 V~240 V, 50 / 60 Hz (110 V optional)
Cat. No.		CB-508 / CB-408	CB-R515 / CB-514R

*** Registered as medical device at MFDS[1)]**

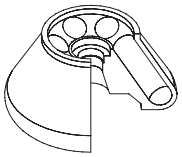
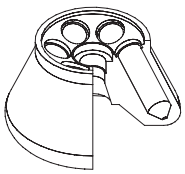
[1)] MFDS : Ministry of Food and Drug Safety (KOREA)

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 : ∠45° 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 15,531
			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 : ∠40° 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 x 37.5 80.8	15,000 20,325
			0.5 mL -	**TR0.5(2)**	8 x 31 76.5	15,000 19,244
			0.2 mL -	**TR0.2(2)**	6.5 x 23 67	15,000 16,854
		Combi 508	1.5/2.0 mL -	-	11 x 37.5 80.8	8,000 5,781
			0.5 mL -	**TR0.5(2)**	8 x 31 76.5	8,000 5,473
			0.2 mL -	**TR0.2(2)**	6.5 x 23 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 x 37.5 115.7	14,000 25,353
			0.5 mL	**TR0.5(2)**	8 x 31 111	14,000 24,323
			0.2 mL	**TR0.2(2)**	6.5 x 23 100	14,000 21,913
		Combi 508	1.5/2.0 mL Micro-filter tube	-	11.5 x 37.5 115.7	8,000 8,279
			0.5 mL	**TR0.5(2)**	8 x 31 111	8,000 7,942
			0.2 mL	**TR0.2(2)**	6.5 x 23 100	8,000 7,155
A10-12 	Hole angle : ∠36° Max. Capacity : 12 x 10 mL Size (ø x H) : ø179.9 x 82 mm Max. height for tube fit : 87.1 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
A15S-12 	Hole angle : ∠25° Max. Capacity : 12 x 15 mL Size (ø x H) : ø205 x 109 mm Max. height for tube fit : 109.5 mm **Incl. a coupling bolt lid**	**Combi R515**	15(16) mL Round	-	19 x 96 96.1	15,000 24,174
		Combi 508				8,000 6,876
A15c-12 	Hole angle : ∠25° Max. Capacity : 12 x 15 mL conical Size (ø x H) : ø215 x 121 Max. height for tube fit : 123.2 mm **Incl. a coupling bolt lid**	**Combi R515**	15 mL Conical	-	17.2 X 110 99.4	15,000 25,004
		Combi 508				8,000 7,105

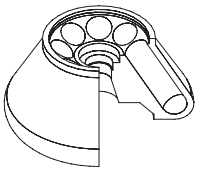
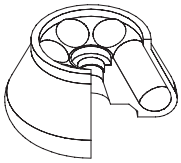
* Radius : From the center of the rotor to the inner end of tube carrier.

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 : ∠30° Max. Capacity : 6 x 50 mL Size (ø x H) : ø200 x 109 mm Max. height for tube fit : 122.7 mm **Incl. a coupling bolt lid**	**Combi R515**	50 mL Round	-	29.5 x 100 96.1	15,000 24,174
			30mL Round	**TR30(50)**	26 x 83.8 90.4	15,000 22,740
			25mL Conical	**TR25c(50)**	27.1 x 14.1 76	15,000 19,118
			15 mL Round	**TR15(50)**	17 x 94 89.9	15,000 22,614
			15 mL Conical	**TR15c(50)**	17.2 x 105 91	15,000 22,891
		Combi 508	50 mL Round	-	29.5 x 100 96.1	8,000 6,876
			30mL Round	**TR30(50)**	26 x 83.8 90.4	8,000 6,468
			25mL Conical	**TR25c(50)**	27.1 x 14.1 76	8,000 5,438
			15 mL Round	**TR15(50)**	17 x 94 89.9	8,000 6,433
			15 mL Conical	**TR15c(50)**	17.2 x 105 91	8,000 6,511
A50c-6 	Hole angle : ∠23° Max. Capacity : 6 x 50 mL conical Size (ø x H) : ø205.7 x 119 mm Max. height for tube fit : 118.5 mm Incl. a coupling bolt lid	**Combi R515**	50 mL Conical	-	29.8 x 108.6 91	15,000 22,891
			50mL Round	**TR50(50c)**	29 x 11 88.5	15,000 22,262
			30mL Round	**TR30(50c)**	26 x 83.8 87.5	15,000 22,011
			25 mL Conical	**TR25c(50c)**	29 x 14.1 75.5	15,000 18,992
			15 mL Conical	**TR15c(50c)**	17 x 94 86.2	15,000 21,684
		Combi 508	50 mL Conical	-	29.8 x 108.6 91	8,000 6,511
			50mL Round	**TR50(50c)**	29 x 11 88.5	8,000 6,332
			30mL Round	**TR30(50c)**	26 x 83.8 87.5	8,000 6,261
			25 mL Conical	**TR25c(50c)**	29 x 14.1 75.5	8,000 5,402
			15 mL Conical	**TR15c(50c)**	17 x 94 86.2	8,000 6,168

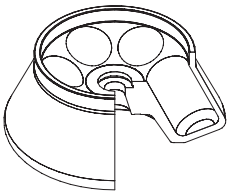
* Radius : From the center of the rotor to the inner end of tube carrier.

Fixed Angle Rotors for Combi Series (3)

Rotor		Adaptable Centrifuge	Tube Capacity Bottom Type	Required Adaptor	Bore Ø x L (mm) Radius (mm)	Max. RPM (rpm) Max. RCF (xg)
A50-8 	Hole angle : ∠30° Max. Capacity : 8 x 50 mL Size (ø x H) : ø213 x 110.7 mm Max. height for tube fit : 110.7 mm Incl. a coupling bolt lid	**Combi R515**	50 mL Round	-	29.5 x 100 98.9	15,000 24,878
			30mL Round	**TR30(50)**	26 x 83.8 93.2	15,000 23,444
			25mL Conical	**TR25c(50)**	27.1 x 14.1 78.8	15,000 19,822
			15 mL Round	**TR15(50)**	17 x 94 92.8	15,000 23,344
			15 mL Conical	**TR15c(50)**	17.2 x 105 93.9	15,000 23,621
		Combi 508	50 mL Round	-	29.5 x 100 98.9	8,000 7,077
			30mL Round	**TR30(50)**	26 x 83.8 93.2	8,000 6,669
			25mL Conical	**TR25c(50)**	27.1 x 14.1 78.8	8,000 5,639
			15 mL Round	**TR15(50)**	17 x 94 92.8	8,000 6,640
			15 mL Conical	**TR15c(50)**	17.2 x 105 93.9	8,000 6,719
A85-6 	HHole angle : ∠25° 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	-	38.5 x 95 97.6	15,000 24,551
			50 mL Conical	**TR50c(85)**	29.5 x 98 93	15,000 23,394
			50 mL Round	**TR50(85)**	29.2 x 95 92.9	15,000 23,369
			30mL Round	**TR30(85)**	26 x 85.4 91.6	15,000 23,042
			25mL Conical	**TR25c(85)**	29.5 x 62.5 80.3	15,000 20,199
			15 mL Round	**TR15(85)**	17 x 94 89	15,000 22,388
			15 mL Conical	**TR15c(85)**	17 x 98 89.2	15,000 22,438
		Combi 508	85 mL Round	-	38.5 x 95 97.6	8,000 6,983
			50 mL Conical	**TR50c(85)**	29.5 x 98 93	8,000 6,654
			50 mL Round	**TR50(85)**	29.2 x 95 92.9	8,000 6,647
			30mL Round	**TR30(85)**	26x85.4 91.6	8,000 6,554
			25mL Conical	**TR25c(85)**	29.5 x 62.5 80.3	8,000 5,746
			15 mL Round	**TR15(85)**	17 x 94 89	8,000 6,368
			15 mL Conical	**TR15c(85)**	17 x 98 89.2	8,000 6,382

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

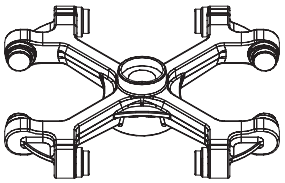
Fixed Angle Rotors for Combi Series (4)

Rotor		Adaptable Centrifuge	Tube Capacity Bottom Type	Required Adaptor	Bore Ø x L (mm) Radius (mm)	Max. RPM (rpm) Max. RCF (xg)
A250-6 	Hole angle : ∠25° Max. Capacity : 6 x 250 mL Size (ø x H) : ø295.6 x 147.8 mm Max. height for tube fit : 132 mm Incl. a coupling bolt lid	**Combi R515**	250mL Flat	-	62 x 103 138.3	8,000 9,896
			100mL Round	**TR100(250)**	44.2 x 93 124.5	8,000 8,908
			85mL Round	**TR85(250)**	38.5 x 96 122.5	8,000 8,765
			50mL Conical (Skirt)	**TR50sc(250)**	29.8 x 93 125	8,000 8,944
			50mL Conical	**TR50c(250)**	29.8 x 98 119	8,000 8,515
			50mL Round	**TR50-2(250)**	29.5 x 90 120	8,000 8,586
			30mL Round	**TR30-3(250)**	26 x 85 132.5	8,000 9,481
			25mL Conical	**TR25c(250)**	29.5 x 61.5 120	8,000 8,586
			15mL Conical	**TR15c-4 (250)**	17.2 x 104.5 131	8,000 9,373
			15mL Round	**TR15-4(250)**	17.5 x 103.5 133.5	8,000 9,552
			10mL Round	**TR10-7(250)**	16 x 80 133.5	8,000 9,552
			5mL Round	**TR7-8(250)**	13.5 x 60 135.5	8,000 9,695
			5mL Conical	**TR5c-4(250)**	17.2 x 50 131	8,000 9,373
			1.5mL/ 2mL	**TR2.0-9(250)**	11.1 x 39 135	8,000 9, 660

* 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

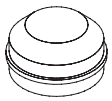
Bucket/Adaptor for S750-4



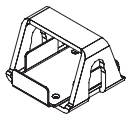
Round Bucket
B750S
Capacity : 750 mL
* Cap Available (optional)



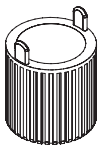
Round Bucket
B750
Capacity : 750 mL



Cap
BL750



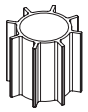
MicroTiter Plate Rack
TM96 (750-4)



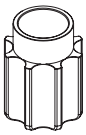
Adaptor
TR500 (750)



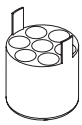
Adaptor
TR500c (750)



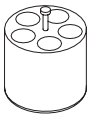
Adaptor
TR250 (750)



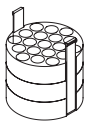
Adaptor
TR250c (750)



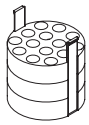
Adaptor
TR50-7N (750)



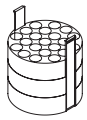
Adaptor
TR50c-5N (750)



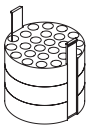
Adaptor
TR15-19 (750)



Adaptor
TR15c-14 (750)

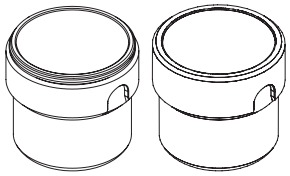
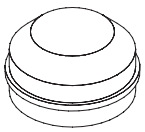
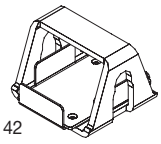


Adaptor
TR10-21 (750)



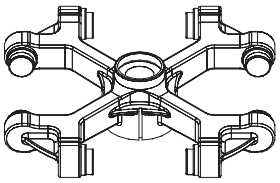
Adaptor
TR5-24 (750)

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)
					w/ cap	w/o cap	
B750S / B750 	-	750 mL Flat	1 / 4	99 x 103	142	158.5	4,000 3,515
	TR500(750) 	500 mL Flat	1 / 4	75.5 x 98.7	137	151.9	4,000 3,476
	TR500c(750) 	500 mL conical Conical	1 / 4	99 x 58	140	155.4	4,000 3,497
BL750 	**TR250(750)** 	250 mL Flat	1 / 4	62.3 x 87	137	152.5	4,000 3,481
	TR250c(750) 	250 mL conical Conical	1 / 4	61.5 x 124.4	137.5	148.6	4,000 3,470
	TR50-7N(750) 	50 mL Round	7 / 28	29.2 x 97	116.7	123,8	4,000 3,497
	TR50c-5N(750) 	50 mL conical Conical	5 / 20	29 x 91	122	126	4,000 3,470
	TR15-19(750) 	15 mL Round	19 / 76	17.2 x 87	129.1	136.2	4,000 3,461
	TR15c-14(750) 	15 mL conical Conical	14 / 56	17 x 89	132.7	153.8	4,000 3,461
Radius : 196.5 mm Bucket bore (ø x L, mm) : 99 x 103 Max. height for tube fit : 142 mm (w/ cap), 158.5 mm (w/o cap)	**TR10-21(750)** 	10 mL Round	21 / 84	16 x 87	127.7	134.8	4,000 3,461
	TR5-24(750) 	3 mL / 5 mL Round	24 / 96	13.2 x 60 (3 mL) 13.2 x 87 (5 mL)	123.2	129.3	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 : 60 mm		 MTP	1 / 4	88 x 128.5 x 42	60		4,000 2,925

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

S500-4



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

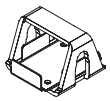
Bucket/Adaptor for S500-4



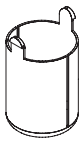
Round Bucket
B500
Capacity : 500 mL
* Cap included



Cap
BL500



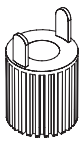
MicroTiter Plate Rack
TM96 (500-4)



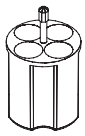
Adaptor
TR500 (500)



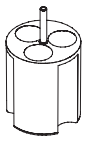
Adaptor
TR250 (500)



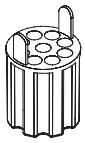
Adaptor
TR100 (500)



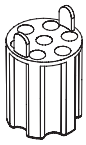
Adaptor
TR50-4 (500)



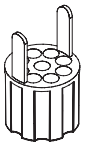
Adaptor
TR50c-3 (500)



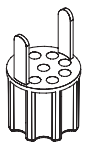
Adaptor
TR15-9 (500)



Adaptor
TR15c-7 (500)

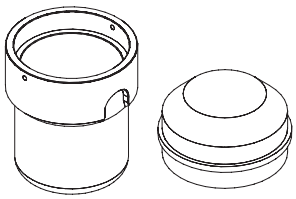
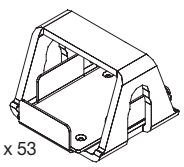


Adaptor
TR10-9 (500)



Adaptor
TR5-9 (500)

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)	
					w/ cap	w/o cap	R515	508
B500  Radius : 194 mm Bucket bore (ø x L, mm) : 80 x 111 Max. height for tube fit : 144mm (w/ cap), 154 mm (w/o cap) **Incl. a cap** **Combi R515** Max. RPM : 4,500 Max. RCF : 4,347 xg **Combi 508** Max. RPM : 4,000 Max. RCF : 3,435 xg	**TR500(500)** 	 500 mL Flat	1 / 4	73 x 125	132.6	144.1	4,500 4,392	4,000 3,470
	TR250(500) 	 250 mL Flat	1 / 4	62 x 100	135.5	147.1	4,500 4,290	4,000 3,390
	TR100(500) 	 100 mL (85 mL) Round	1 / 4	38.5 x 84.5	139.5	151.4	4,500 4,290	4,000 3,390
	TR50-4(500) 	 50 mL Round	4 / 16	29.5 x 85.5	129.5	141.1	4,500 4,290	4,000 3,390
	TR50c-3(500) 	 50 mL Conical	3 / 12	30 x 90	131.5	143.1	4,500 4,302	4,000 3,399
	TR15-9(500) 	 15 mL Round	9 / 36	16.5 x 85	135.6	153.2	4,500 4,290	4,000 3,390
	TR15c-7(500) 	 15 mL Conical	7 / 28	17 x 95.5	135.5	154	4,500 4,313	4,000 3,408
	TR10-9(500) 	10 mL Round	9 / 36	17 x 64	134.3	151.7	4,500 4,256	4,000 3,363
	TR5-9(500) 	 5 mL Round	9 / 36	13 x 64	136.3	151.6	4,500 4,256	4,000 3,363
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 : 55 mm		 MTP	1 / 4	87 x 128.5	55		4,000 2,755	

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