

Multi-purpose Centrifuge

T04B / T05R

- Multipurpose table-top centrifuge
- Usage of 10 x 50 mL conical tubes for fixed angle rotors and 8 x 50 mL conical tubes for swing-out rotors
- Process up to 32 vacutainer tubes
- Offers up to 7 optional rotors including 2 x 2 microplates
- Outstanding sample separations with 9 acceleration and 10 deceleration ramps
- Selectable time counting mode of "from starting" or "At set speed"
- Simplified operation with numeric key buttons
- Up to 100 different routine protocols can be stored in program memory and easily retrieved.
- Quiet performance promotes a safe and stress-free environment.
- Easy-to-clean stainless steel chamber and UV resistance exterior
- Outstanding safety and durability with two layers of steel lid
- Lid drop protection allows easiness and safety when loading or unloading samples.
- Low access height for easy loading and unloading of samples
- Selectable key lock function to prevent accidental parameter changes
- Fast cool function for fast pre-cooling (T05R only)



AO/A*-15-24 SO/S*-100-4 SO/S*-mw-2

**AO/SO are for T04B
A/S are for T05R



T04B

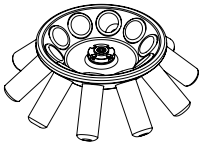
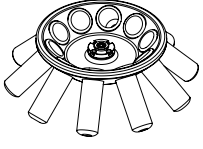


T05R

Technical Specifications

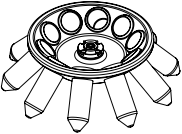
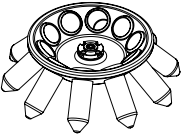
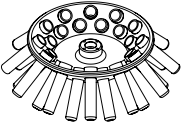
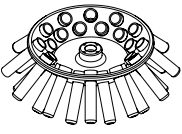
		T04B / T04B-md*	T05R / T05R-md*
Speed	Max. RPM (Fixed angle)	4,000 rpm	5,000 rpm
	Max. RCF (Fixed angle)	2,773 xg	3,983 xg
	Max. RPM (Swing-out)	4,000 rpm	5,000 rpm
	Max. RCF (Swing-out)	2,774 xg	4,218 xg
Max. capacity	Fixed angle	10 x 50 mL	10 x 50 mL
	Swing-out	4 x 100 mL	4 x 100 mL
ACC/DEC	ACC / DCC ramps	9 / 10 steps	9 / 10 steps
Temperature	Temperature range		-10 °C ~ 40 °C
	Fast cool	-	Yes
Time	Time control	< 10 hr, Pulse, or Continuous	< 100 hr, Pulse, or Continuous
	Time counting	Selectable, "at set speed" or "from starting"	Selectable, "at set speed" or "from starting"
Program memory		100	100
Noise level		< 60 dB	< 60 dB
Imbalance cutoff		Yes	Yes
Rotor identification		-	Automatic
Dimension (W x D x H, mm)		375 x 507 x 265	584 x 554 x 313
Weight		25.7 kg	65.7 kg
Power requirement		340 VA	900 VA
Power input (V,Hz)		210 V ~ 240 V, 50/60 Hz (110 V optional)	210 V ~ 240 V, 50/60 Hz (110 V optional)
Cat. No.		T04B / T04B-md	T05R / T05R-md

Fixed Angle Rotors for T Series (1)

Rotor	Sleeve	Adaptable Centrifuge	Tube Capacity Bottom Type	Required Adaptor	Bore Ø x L (mm) Radius (mm)	Max. RPM (rpm) Max. RCF (xg)
AO-50-10  Max. RPM : 4,000 rpm Hole angle : 45° Max. Capacity : 10 x 50 mL or 50 mL Conical Size (ø x H) : ø197 x 59 mm	B50-SS 	T04B	 50 mL Round/Skirt	-	30.2 x 94 142.5	4,000 2,549
			 50mL Conical	TR50c(50f)	29.5 x 17.5 142.5	4,000 2,549
			 30mL Round	TR30(50f)	26 x 86.5 135	4,000 2,415
			 25mL Conical	TR25c(50f)	28.8 x 14.1 115	4,000 2,057
			 15 mL Round/Conical	TR15(50f)	17.2 x 87 141.9	4,000 2,538
			 14mL Round	TR14(50f)	17.2 x 75 141.9	4,000 2,538
A-50-10  Max. RPM : 5,000 rpm Hole angle : 45° Max. Capacity : 10 x 50 mL or 50 mL Conical Size (ø x H) : ø197 x 66.5 mm	Hole dimension (Ø x L,mm) : 30.2 x 94 Max. height for tube fit : 130	T05R	 50 mL Round/Skirt	-	30.2 x 94 142.5	5,000 3,983
			 50mL Conical	TR50c(50f)	29.5 x 17.5 142.5	5,000 3,983
			 30mL Round	TR30(50f)	26 x 86.5 135	5,000 3,773
			 25mL Conical	TR25c(50f)	28.8 x 14.1 115	5,000 3,214
			 15 mL Round/Conical	TR15(50f)	17.2 x 87 141.9	5,000 3,966
			 14mL Round	TR14(50f)	17.2 x 75 141.9	5,000 3,966

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

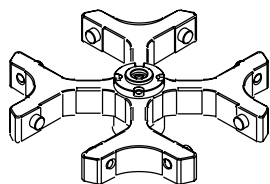
Fixed Angle Rotors for T Series (2)

Rotor	Sleeve	Adaptable Centrifuge	Tube Capacity Bottom Type	Required Adaptor	Bore Ø x L (mm) Radius (mm)	Max. RPM (rpm) Max. RCF (xg)
AO-50c-10  Max. RPM : 4,000 rpm Hole angle : $\angle 45^\circ$ Max. Capacity : 10 x 50 mL or 50 mL Conical Size (ø x H) : ø197 x 59 mm	B50c-SS  Hole dimension (Ø x L,mm) : 30.2 x 94 Max. height for tube fit : 130	T04B	 50 mL Conical	-	30.2 x 99 140	4,000 2,508
			 50mL Round	TR50(50c) 	29 x 11 136.1	4,000 2,435
			 30mL Round	TR30(50c) 	26 x 83.8 135.5	4,000 2,424
			 25mL Conical	TR25c(50c) 	28.8 x 14.1 115	4,000 2,057
			 15 mL Conical	TR15c(50c) 	17.2 x 105 139.6	4,000 2,497
A-50c-10  Max. RPM : 5,000 rpm Hole angle : $\angle 45^\circ$ Max. Capacity : 10 x 50 mL or 50 mL Conical Size (ø x H) : ø197 x 66.5 mm	B50c-SS  Hole dimension (Ø x L,mm) : 30.2 x 94 Max. height for tube fit : 130	T05R	 50 mL Conical	-	29 x 11 136.1	5,000 3,804
			 50mL Round	TR50(50c) 	26 x 83.8 135.5	5,000 3,787
			 30mL Round	TR30(50c) 	28.8 x 14.1 115	5,000 3,214
			 25mL Conical	TR25c(50c) 	17.2 x 105 139.6	5,000 3,902
			 15 mL Conical	TR15c(50c) 	17.2 x 105 139.6	4,000 2,497
AO-15-24  Max. RPM : 4,000 rpm Hole angle : $\angle 45^\circ$ Max. Capacity : 24 x 15 mL Size (ø x H) : ø223 x 59 mm	B15  Hole dimension (Ø x L,mm) : 18 x 87 Max. height for tube fit : 125(120 for conical / wider cap)	T04B	 15mL	-	18 x 87 155	4,000 2,773
			 14mL Round	TR14(15f) 	16.5 x 7 142.5	4,000 2,549
			 5mL conical	TR5c(15f) 	16 x 20 121.3	4,000 2,170
			 5mL Round	TR5(15f) 	13.5x85 152.8	4,000 2,733
			 3mL Round	TR3(15f) 	13.5 x 61 132.3	4000 2,367
A-15-24  Max. RPM : 4,500 rpm Hole angle : $\angle 45^\circ$ Max. Capacity : 24 x 15 mL Size (ø x H) : ø223 x 59 mm	B15  Hole dimension (Ø x L,mm) : 18 x 87 Max. height for tube fit : 125(120 for conical / wider cap)	T05R	 15mL	-	18 x 87 155	4,500 3,509
			 14mL Round	TR14(15f) 	16.5 x 7 142.5	4,500 3,226
			 5mL conical	TR5c(15f) 	16 x 20 121.3	4,500 2,746
			 5mL Round	TR5(15f) 	13.5x85 152.8	4,500 3,459
			 3mL Round	TR3(15f) 	13.5 x 61 132.3	4,500 2,995

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

Swing-out Rotors for T series

SO/S-100-4

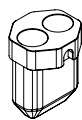


∠ 90°
Max.RPM : 4,000rpm
Size (Ø x H) : 206.3x 46 mm

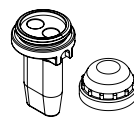
Bucket for SO/S-100-4



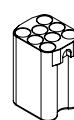
Round Bucket
BB100b-100
cap included



Conical Bucket
Bd50c-100

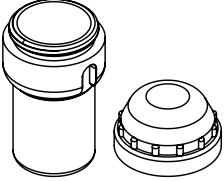


Conical Bucket
BBd15cb-100
cap included



Bucket
B15-8-100

Buckets and Tube Racks of SO/S-100-4

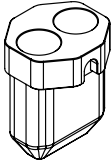
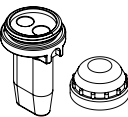
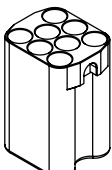
Bucket	Required Adaptor	Tube Capacity Bottom Type	Tube per Adaptor / Rotor	Bore (Ø x L, mm)	Max. height for tube fit (mm)	T04B Max. RPM (rpm) Max. RCF (xg)	T05R Max. RPM (rpm) Max. RCF (xg)
BB100b-100 	TR100(100)	 100mL Round	1 / 4	44.2 x 93	125(w/o cap)	4,000 2,685	4,500 3,398
	TR85(100)	 85mL Round	1 / 4	38.5 x 106	118	4,000 2,739	4,500 3,466
	TR50sc(100)	 50mL Skirt	1 / 4	29.8 x 100	117	4,000 2,721	4,500 3,443
	TR50c(100)	 50mL Conical	1 / 4	30 x 103	117	4,000 2,721	4,500 3,443
	TR50(100)	 50mL Round	1 / 4	29.5 x 95.9	118	4,000 2,739	4,500 3,466
	TR30(100)	 30mL Round	1 / 4	26 x 86	118	4,000 2,739	4,500 3,466
	TR25c(100)	 25mL Conical	1 / 4	29.8 x 62	118	4,000 2,739	4,500 3,466
	TR15c(100)	 15mL Conical	1 / 4	17.2 x 108	120	4,000 2,774	4,500 3,511
	TR15c-3(100)		3 / 12	17.2 x 108	130(w/o cap)	4,000 2,774	4,500 3,511
	TR15-3(100)	 15mL Round	3 / 12	17.5 x 105	127(w/o cap)	4,000 2,721	4,500 3,443
	TR10-5(100)	 10mL	5 / 20	16.1 x 60	115	4,000 2,685	4,500 3,398
	TR7-5(100)	 7mL	5 / 20	13.5 x 60	115	4,000 2,685	4,500 3,398
	TR5c-3(100)	 5mL Conical	3/12	17.2 x 52	75	4,000 1,965	4,500 2,493
	TR2-6(100)	 1.5mL/ 2mL	6 / 24	11.1 x 39	115	4,000 2,685	4,500 3,398

Radius : 155.1mm
Bucket bore(Ø x L, mm) : 47 x 99
Max.height for tube fit : 120(w/
cap) / 130(w/o cap)

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

Multi-purpose Centrifuges

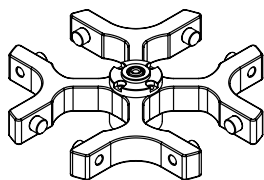
T04B / T05R / Combi 508 / Combi R515

Bucket	Required Adaptor	Tube Capacity Bottom Type	Tube per Adaptor / Rotor	Bore (Ø x L, mm)	Max. height for tube fit (mm)	T04B Max. RPM (rpm) Max. RCF (xg)	T05R Max. RPM (rpm) Max. RCF (xg)
Bd50c-100  Radius : 155.1mm Bucket bore(Ø x L, mm) : 47 x 99 Max.height for tube fit : 120(w/ cap) / 130(w/o cap)	-	 50mL Conical	2/8		125	4,000 2,774	4,500 3,511
	TR50(50c) 	 50mL Round		29 x 11	114.5	4,000 2,588	4,500 3,276
	TR30(50c) 	 30mL Round		26 x 83.8	114.5	4,000 2,592	4,500 3,280
	TR25c(50c) 	 25mL Conical		28.8 x 14.1	87	4,000 2,102	4,500 2,660
	TR15c(50c) 	 15mL Conical		17.2 x 105	125	4,000 2,774	4,500 3,511
BBd15cb-100  Radius : 155.1mm Bucket bore(Ø x L, mm) : 17 x 97.5 Max.height for tube fit : 120 (w/ cap) / 125 (w/o cap)	-	 15mL Conical	2/8		120	4,000 2,774	4,500 3,511
	TR14(15c) 	 14mL Round		16 x 7.8	96	4,000 2,352	4,500 2,977
	TR5c(15c) 	 5mL Conical		16 x 20	62.4	4,000 1,746	4,500 2,210
B15-8-100  Radius : 152mm Bucket bore(Ø x L, mm) : 17 x 86 Max.height for tube fit : 125	-	 15mL/ 10mL VT	2/8	17 x 86	115	4,000 2,719	4,500 3,441
	TR14(15f) 	 14mL Round	4/16	16.5 x 7	103.5	4,000 2,513	4,500 3,181
	TR5c(15f) 	 5mL Conical	4/16	16 x 20	75	4,000 2,003	4,500 2,536
	TR5(15f) 	 5mL	8/32	13.5 x 85	115	4,000 2,719	4,500 3,545
	TR3(15f) 	 3mL	8/32	13.5 x 61	88	4,000 2,236	4,500 2,830

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

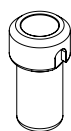
Swing-out Rotors for T series

SO/S-50-4



∠ 90°
Max.RPM : 4,000rpm
Size (Ø x H) : 206.3x 46 mm

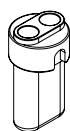
Bucket for SO/S-50-4



Round Bucket
B50-50



Conical Bucket
B50c-50



Conical Bucket
Bd15c-50

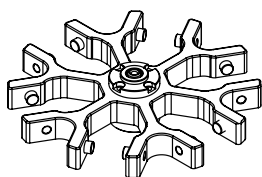
Buckets and Tube Racks of SO/S-100-4

Bucket	Required Adaptor	Tube Capacity Bottom Type	Bore (Ø x L, mm)	Max. height for tube fit (mm)	T04B Max. RPM (rpm) Max. RCF (xg)	T05R Max. RPM (rpm) Max. RCF (xg)
B50-50  Radius : 150.9mm Bucket bore(Ø x L, mm) : 30.5 x 86 Max.height for tube fit : 125		 50mL Round/Skirt	30.5 x 86	125	4,000 2,700	5,000 4,218
	TR50c(50f) 	 50mL Conical	29.5 x 15.6	125	4,000 2,700	5,000 4,218
	TR30(50f) 	 30mL Round	26 x 86.5	118.5	4,000 2,583	5,000 4,036
	TR25c(50f) 	 25mL Conical	26.8 x 14.1	91.5	4,000 2,107	5,000 3,293
	TR15(50f) 	 15mL Round/Conical	17.2 x 87	125	4,000 2,700	5,000 4,218
	TR14(50f) 	 14mL Round	17.2 x 75	125	4,000 2,700	5,000 4,218
B50c-50  Radius : 150.9mm Bucket bore(Ø x L, mm) : 29.5 x 91.5 Max.height for tube fit : 125		 50mL Conical	29.5 x 91.5	125	4,000 2,700	5,000 4,218
	TR50(50c) 	 50mL Round	29 x 11	114.5	4,000 2,513	5,000 3,927
	TR30(50c) 	 30mL Round	26 x 83.8	114.5	4,000 2,517	5,000 3,933
	TR25c(50c) 	 25mL Conical	28.8 x 14.1	87	4,000 2,027	5,000 3,167
	TR15c(50c) 	 15mL Round/Conical	17.2 x 105	125	4,000 2,700	5,000 4,218
Bd15c-50  Radius : 150.9mm Bucket bore(Ø x L, mm) : 17 x 91.5 Max.height for tube fit : 120		 15mL Conical	17 x 91.5	120	4,000 2,700	5,000 4,218
	TR14(15c) 	 14mL Round	16 x 7.8	96	4,000 2,277	5,000 3,558
	TR5c(15c) 	 5mL Conical	16 x 20	62.5	4,000 1,671	5,000 2,611

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

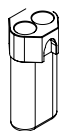
Swing-out Rotors for T series

SO/S-15-6



$\angle 90^\circ$
 Max.RPM : 4,000rpm
 Size (Ø x H) : 198.2x 44 mm

Bucket for SO/S-15-6



Round Bucket
Bd15-15

Buckets and Tube Racks of SO/S-15-6

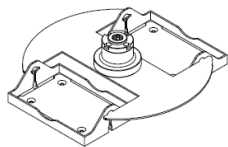
Bucket	Required Adaptor	Tube Capacity Bottom Type	Tube per Adaptor / Rotor	Bore (Ø x L, mm)	Max. height for tube fit (mm)	T04B Max. RPM (rpm) Max. RCF (xg)	T05R Max. RPM (rpm) Max. RCF (xg)
Bd15-15 	-	 10mL/ 15mL	2/12	17 x 88	123	4,000 2,737	4,400 3,312
	TR5(15f)	 5mL	2/12	13.5 x 85	123	4,000 2,737	4,400 3,312
	TR3(15f)	 3mL	2/12	13.5 x 61	95	4,000 2,164	4,400 2,727

Radius : 153mm
 Bucket bore(Ø x L, mm) : 17 x 88
 Max.height for tube fit : 122

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

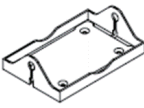
Swing-out Rotors for T series

SO/S-mw-2



$\angle 90^\circ$
 Max.RPM : 4,000rpm
 Size (Ø x H) : 240x 46mm

Buckets and Tube Racks of SO/S-mw-2

Bucket	Tube Capacity	Tube per Adaptor / Rotor	Max. RPM (rpm) Max. RCF (xg)
P-mw 	MTP/WP	1/2	4,000 2,000

Radius : 111.8
 size (w x d ,mm) : 86.5 x 128.5
 Max. height for tube fit (mm) : 6

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