

SORVALL® Tabletop Centrifuge Guide



SORVALL®



SORVALL[®] Pico[™] and Fresco[™] Ultra-Compact Microcentrifuges



SORVALL Pico (left)
and SORVALL Fresco (right).

- Non-refrigerated (Pico) and refrigerated (Fresco) microcentrifuges
- Compact 9" x 13" footprint (Pico) and 11" x 18" footprint (Fresco)

- Speeds to 13,000 rpm (16,060 x g)
- High capacity 24 x 1.5/2.0 ml biocontainment rotor with Easy-Twist-On lid
- PCR strip rotor (optional)
- Temperature control from -9°C to 40°C with Fresco
- EASYcontrol[™] microprocessor-based keypad control
- Whisper-quiet, maintenance-free brushless drive

Ordering Information

Product	Catalog no. 120 V (60 Hz)	Catalog no. 230 V (50/60 Hz)
SORVALL Pico with 24-place rotor and Easy-Twist-On biocontainment lid	75003238	75003237
SORVALL Fresco with 24-place rotor and Easy-Twist-On biocontainment lid	75005524	75005523

Product Specifications

		Pico and Fresco
Drive		Frequency-controlled brushless induction
Control		Microprocessor via EASYcontrol with previous run memory
Speed range	rpm	2,000 – 13,000 adjustable in 100 rpm increments
Max. RCF	x g	16,060
Max. capacity	ml	24 x 1.5/2.0
Dimensions (H x W x D)	inch (mm)	Pico: 8.1 x 9.0 x 13.2 (207 x 255 x 334) Fresco: 12.0 x 11.4 x 17.7 (305 x 290 x 450)
Weight (without rotor)	lb (kg)	Pico: 21.4 (9.7) Fresco: 59.5 (27.0)
Run time	min	1 - 99, continuous operation, quick run
Temperature range (Fresco)	°C	-9 to +40
Min. temp. at max. speed (Fresco)	°C	0°C (at room temp. = 25°C)
Safety		Lid locks and lid interlocks
Noise level at max. speed	dB (A)	< 55
Power consumption	W	150 (Pico), 270 (Fresco)
Electrical	V (Hz)	120 (60), 230 (50/60)

The Pico™ and Fresco™ are the smallest, quietest, quickest microcentrifuges going around. Their sleek, lightweight designs maximize your available benchspace, and deliver all the performance you will ever need for a host of separation tasks in the microliter sample range.

With a footprint measuring just 9 x 13 inches, the Pico features an ergonomically designed lid grip for easy access to the rotor. A whisper-quiet brushless induction drive accelerates samples to maximum speed in a few seconds.

The Pico's refrigerated counterpart is the compact and quiet Fresco, which also accommodates 1.5 or 2 ml tubes in a 24-place rotor. Standstill cooling ensures your samples are safe, while the CFC-free refrigeration system maintains constant temperatures even during extended centrifugation.

Microliter and PCR strip rotors for the Pico and Fresco are equipped with biocontainment lids for use with infectious or hazardous samples. The aerosol-tight, Easy-Twist-On lid is exceptionally easy to use. Adapter sets allow centrifugation of all commercially available microliter tubes, including 0.6 ml to 0.2 ml PCR tubes.

SORVALL® Pico™ and Fresco™ Ultra-Compact Microcentrifuges



Microliter rotor: adapter sets enable centrifugation of all commercially available microliter and PCR tubes.



PCR strip rotor: spin 4 PCR strips (8 tubes each) or 32 individual PCR tubes.

Rotors and accessories for the Pico and Fresco

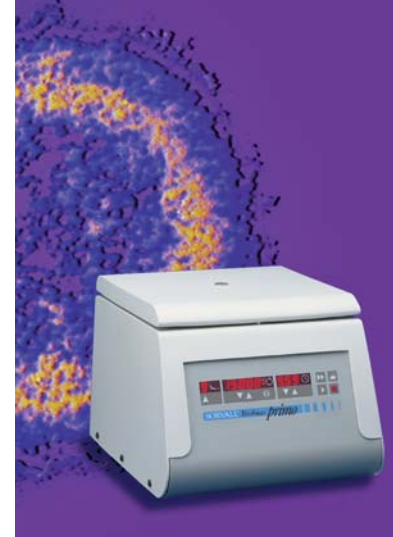
Microliter rotor 75003328 with Easy-Twist-On biocontainment lid ¹ (standard)			
		Pico	Fresco
Max. capacity	ml	24 x 1.5/2.0	24 x 1.5/2.0
Max. speed	rpm	13,000	13,000
Max. RCF	x g	16,060	16,060
Acceleration time	s	15	15
Braking time	s	12	16
Max. radius	mm	85	85

Adapter sets	Catalog number
(24) adapters for 0.6/0.5 ml microtubes	76003758
(24) adapters for 0.4/0.25 ml microtubes	76003759
(24) adapters for 0.2 ml microtubes	76003750

PCR strip rotor 75003327 (optional) with Easy-Twist-On biocontainment lid (standard)			
		Pico	Fresco
Max. capacity		(4) PCR strips or (32) 0.2 ml PCR tubes	(4) PCR strips or (32) 0.2 ml PCR tubes
Max. speed	rpm	13,000	13,000
Max. RCF	x g	12,846	12,846
Acceleration time	s	15	12
Braking time	s	15	16
Max. radius	mm	68	68

Pico and Fresco microcentrifuges come standard with 24 x 1.5/2.0 ml rotor 75003328.

SORVALL® Primo™ and Primo R Multi-Tasking Tabletop Centrifuges



SORVALL Primo (left) and SORVALL Primo R (right).

- Non-refrigerated (Primo) and refrigerated (Primo R) centrifuges
- 4 x 100 ml capacity

- Compact size, small footprints
- Microliter, high speed and general purpose applications
- Wide choice of rotors
- Electronic imbalance detection
- Automatic rotor recognition
- Microprocessor-based EASYcontrol™ II user programmability
- RCF selection and quick run function
- Dual lid-locking mechanism
- Whisper-quiet operation, maintenance-free brushless induction drive

Ordering Information

Product	Catalog no. 120 V (60 Hz)	Catalog no. 230 V (50/60 Hz)
SORVALL Primo	75005184	75005185
SORVALL Primo R	75005448	75005453

Product Specifications

		Primo and Primo R
Drive		Brushless induction
Control		Microprocessor via EASYcontrol II
Speed range	rpm	300 – 15,000 adjustable in 10 rpm increments
Max. RCF	x g	21,890
Max. capacity	ml	4 x 100
Decel./accel. profiles		9/2
Programmability		The most recent data remains in memory
Functions		RCF pre-selection, quick run, automatic rotor recognition, electronic imbalance detection
Dimensions (H x W x D)	inch (mm)	Primo: 12.4 x 15.0 x 18.7 (315 x 380 x 475) Primo R: 12.3 x 22.8 x 19.4 (313 x 580 x 493)
Weight	lb (kg)	Primo: 88.2 (40) Primo R: 153.2 (69.5)
Run time	hr/min	0 – 9 hrs 59 mins, continuous operation
Temperature range (Primo R)	°C	-9 to +40, CFC-free refrigerant
Noise level at max. speed	dB (A)	Primo: < 62, Primo R: < 60
Test standards		Designed and tested in accordance with EN 61 010-1, EN 61 010-2-020, EN 61326, EN 55011 B
Electrical	V (Hz)	120 (60), 230 (50/60)

The compact, space saving Primo™ and Primo R offer the capabilities of three different tabletop centrifuges in single instruments. With a wide choice of rotors and adapters for tubes from 0.2 - 100 ml and top speeds to 15,000 rpm (21,890 x g)¹, both the Primo and Primo R function as high-performance microcentrifuges, high speed and general purpose centrifuges.

Primo centrifuges, with their applications-oriented accessories, are proven favorites in clinical, molecular biology, cell biology and small medical laboratories. Featuring an automatic rotor recognition system and electronic imbalance protection, whisper-quiet Primo instruments accept fixed-angle, swinging bucket and microliter rotors. The innovative Highconic® 6 x 50 ml fixed-angle rotor allows the centrifugation of conical cell culture vessels at up to 10,000 x g, while a high-performance 24-place microliter rotor rapidly accelerates 1.5 or 2 ml tubes to a maximum RCF of 21,885 x g. Both rotors are autoclavable to 121°C - and along with the accessory 4 x 100 ml swinging bucket rotor, are certified as providing biocontainment for biologically safe centrifugation.

¹ Speeds achieved with microliter rotor 75007593.

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Primo™ and Primo R

Multi-Tasking Tabletop Centrifuges

Process control is via the EASYcontrol™ II panel, clearly displaying all operational and run parameters. Time, speed and RCF values are set using a touch pad, with 2 acceleration and 9 braking curves available for sensitive samples. A quick-run key is also available for short spins.

Rotor Specifications



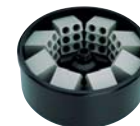
Fixed Angle/Swinging Bucket Rotors

Rotors		Highconic®	Swinging bucket	Microliter swinging bucket ¹
Catalog no.		75007588 ²	75007591 (rotor) 75007555 (bucket) <i>sold separately</i> 75007598 (lid) <i>sold separately</i>	75007592
Max. capacity	ml	6 x 50	4 x 100	12 x 1.5/2
Max. speed	rpm	8,500	4,000	13,000
Max. RCF	x g	10,015	2,590	16,438
Acceleration/deceleration time	s	41/30	22/20	–
Max. radius	mm	122	145	–
Angle	°	45	n/a	n/a
O-ring/gasket replacement		75003058	20290621	n/a
Autoclavable		yes	yes	no
Biocontainment		yes	yes	no

¹ Available for Primo R only.

² Quantity 6, catalog no. 75003103, included with rotor.

Microliter Rotors



Microliter rotors		24 x 1.5/2 ml	24 x 1.5/2 ml	Drum rotor ¹
Catalog no.		75007593	75007599	75007595
Max. capacity	ml	24 x 1.5/2	24 x 1.5	80 x 1.5/2
Max. speed	rpm	15,000	13,000	12,000
Max. RCF	x g	21,890	16,060	13,850
Acceleration/braking time	s	25/18	10/14	31/20
Max. radius	mm	87	85	86
Angle	°	45	40	60
O-ring/gasket replacement		75003404	n/a	n/a
Autoclavable		yes	yes	no
Biocontainment		yes	yes	no

¹ Optional racks available for a variety of volumes.

SORVALL[®] Primo™ and Primo R Multi-Tasking Tabletop Centrifuges



Adapters for Highconic[®] rotor 75007588

Tube description	Catalog no.	Max. tube size (mm)		Tubes per adapter	Tubes per rotor
		diameter	length		
1.5 ml micro tubes	76002905	11	46	4	24
3.5 ml	75003091	11	100	4	24
6.5 ml	75003092	13	113	2	12
12 ml or 5 ml blood sample	75003093	16	95	2	12
16 ml	76002906	18	122	1	6
38 ml	75003094	25	112	1	6
50 ml	75003102	29	122	1	6
15 ml Falcon [®]	75003095	16.5	120	1	6
50 ml Falcon	75003103 ¹	30	117	1	6

¹ Quantity 6, catalog no. 75003103, included with rotor 75007588.



Adapters for swinging bucket rotor 75007591 with bucket 75007555

Tube description	Catalog no.	Max. tube size (mm)		Tubes per adapter	Tubes per rotor
		diameter	length		
Round bucket 75007555					
1.5/2.0 ml micro tube ¹	75007547	11	42	10	40
7 ml standard ¹	75007545	13	102	5	20
5/7 ml blood collection tube ¹	75007546	13	105	3	12
15 ml standard/blood sample ¹	75007544	18	102	3	12
25 ml standard ¹	75007543	25	110	1	4
50 ml ¹	75007542	36	105	1	4
50 ml standard	75007556	29	105	1	4
100 ml ²	— ³	45	100	1	4
15 ml conical	75007557	16.5	120	1	4
50 ml conical	75007556 ²	30	117	1	4

¹ Must remove rubber insert inside buckets. ² Use rubber pad, supplied with buckets. ³ No adapter required.

SORVALL® Primo™ and Primo R Multi-Tasking Tabletop Centrifuges



Adapter sets for microliter rotors 75007593 / 75007599 / 75007592

Adapter set (24 pieces) for	Catalog no.	Color
0.5/0.6 ml microliter tubes	76003758	turquoise
0.25/0.4 ml microliter tubes	76003759	red
0.2 ml PCR tubes	76003750	gray



Racks for drum rotor 75007595

Rack for	Catalog no.	Number per adapter	Number per rotor	Color
PCR strips with (8) tubes	76001587	3	12	white
1.5 ml microliter tubes	76001499	10	80	yellow
1.5/2 ml microliter tubes	76001244	10	80	red
0.3 ml microcapillary tubes	76001246	8	64	blue
0.5/0.6 ml microliter tubes	76001247	15	120	green
0.25/0.4 ml microliter tubes	76001248	20	160	yellow
1.5/2 ml microliter tubes (60° angle)	75001498	6	48	gray

NEW SORVALL® Legend® Mach 1.6® Tabletop Centrifuges



Refrigerated and non-refrigerated models, plus choice of quick-setting QUIKset™ rotary knobs or easy-to-clean EASYset™ soft-touch keypad control.

- Non-refrigerated (Mach 1.6) and refrigerated (Mach 1.6 R) centrifuges
- 1.6 liter capacity for high volume processing
- EASYset™ soft-touch keypad or QUIKset™ rotary knob control
- Wide choice of biocontainment approved rotors, with adapters for all popular tubes
- SMARTspin® Imbalance Detection System
- Automatic rotor recognition
- User-defined programs with EASYset models
- Ergonomic low profile and space-saving design
- Soft-Touch lid closure mechanism
- Quiet, maintenance-free brushless drive
- Accessory carts allow operation away from, or under the bench

Ordering Information

Product	Control	Catalog no. 120 V (60 Hz)	Catalog no. 230 V (50/60 Hz)
SORVALL Legend Mach 1.6	EASYset	75004317	75004313
SORVALL Legend Mach 1.6 R	EASYset	75004337	75004333
SORVALL Legend Mach 1.6	QUIKset	75004316	75004312
SORVALL Legend Mach 1.6 R	QUIKset	75004336	75004332
Accessory carts	Dimensions, H x W x D, inch (mm)	Catalog no.	
Benchtop (Mach 1.6)	24 x 22 x 26 (600 x 550 x 665)	76000077	
Benchtop (Mach 1.6 R)	24 x 30 x 26 (600 x 750 x 665)	75000075	
Underbench (Mach 1.6)	11 x 22 x 26 (290 x 550 x 665)	76000078	
Underbench (Mach 1.6 R)	11 x 30 x 26 (290 x 750 x 665)	76000076	

Product Specifications

Legend Mach 1.6 and Mach 1.6 R		
Drive		Brushless induction
Control		Microprocessor via EASYset (Soft-Touch Keypad) or QUIKset (Rotary Knob Control)
Speed range	rpm	300 – 15,000 adjustable in 10 rpm increments
Max. RCF	x g	24,652
Max. capacity	ml	4 x 400 (or 2 x 4 microplates)
Decel/accel profiles		9/9 (EASYset) or brake on/off and soft brake (QUIKset)
Programmability		4 user programs (EASYset only)
Pre-cooling function		1 pre-temp program (EASYset only)
Functions		RCF pre-selection, quick run, automatic rotor recognition and imbalance detection
Dimensions (H x W x D)	inch (mm)	Legend Mach 1.6: 14.3 x 19.6 x 24.2 (365 x 500 x 615) Legend Mach 1.6 R: 14.3 x 27.0 x 26.2 (365 x 686 x 665)
Weight	lb (kg)	Legend Mach 1.6: 203 (92) Legend Mach 1.6 R: 259 (118)
Maximum noise level	db(A)	< 54 (Mach 1.6 R), < 64 (Mach 1.6)
Run time	hr/min	0 – 9 hrs 59 mins, continuous operation
Temperature range (Mach 1.6 R)	°C	-9 to +40, CFC-free refrigerant
Design		Steel chassis with armored chamber
Safety		Lid lock and lid interlock (1 automatic lid lock)
Test standards		Designed and tested in accordance with IEC 61010-1/-2-20; cCSAus-mark resp. CE-mark
Electrical	V (Hz)	120 (60), 230 (50/60)

Available with quick-setting rotary knobs or soft-touch keypad control, the 1.6 liter capacity Legend® Mach 1.6® is the latest model in the acclaimed Legend Series of tabletop centrifuges from SORVALL®.

Refrigerated and non-refrigerated Legend Mach 1.6 centrifuges offer the processing versatility, sample capacity and sheer value that today's busy laboratories demand. They spin more tubes, at higher RCF's, more rapidly than competitive instruments – and with five interchangeable biocontainment rotors available for a host of applications, Mach 1.6 centrifuges are equally at home in clinical testing, microbiology, biotechnology, pharmaceutical and general laboratory environments.



Swinging bucket rotor body.

Rotors and accessories

Buckets for TTH-400 Swinging Bucket Rotor



Rotor body catalog no. 75002000

Bucket Type		Round Bucket	Rectangular Bucket	Multiple Bucket	Multiple Bucket
Catalog no.		75002002	75002001	75002027	75002028
Biocontainment lids (pair)	Catalog no.	75002004	75002003	n/a	n/a
Max. bucket capacity	ml	1 x 400	1 x 150	14 x 15	5 x 50
Max. rotor capacity	ml	4 x 400	4 x 150	56 x 15	20 x 50
Max. speed (1.6/1.6R, 120 V)	rpm	4,700/4,700	4,500/4,500	4,500/4,600	4,500/4,600
Max. RCF (1.6/1.6R, 120 V)	x g	4,618/4,618	4,234/4,234	4,256/4,447	4,210/4,400
Max. speed (1.6/1.6R, 230 V)	rpm	4,700/4,700	4,700/4,700	4,700/4,700	4,700/4,700
Max. RCF (1.6/1.6R, 230 V)	x g	4,618/4,618	4,618/4,618	4,642/4,642	4,593/4,593
Max. radius	mm	187	187	188	186
Min. temp at max. speed (Mach 1.6 R only)	°C	4	10 (230 V), 12 (120 V)	7	7
Adapters (Centri-Lab®)	type	E	A and A Plus	For conical tissue culture tubes only. No adapters required.	For conical tissue culture tubes only. No adapters required.
O-ring replacement		75002009	75002008	n/a	n/a
Max. carrier height or tube length/diameter	mm	see adapter table	see adapter table	120/17	120/29.5

Specifications for Windshielded, Fixed-Angle, Microplate and Microliter Rotors



Rotor		BIOshield® 600	FA 12.94 Highconic® ¹	MP 3300 Microplate	Microliter
Catalog no.		75002005	75002006	75002010	75003348
Max. rotor capacity	ml	4 x 150	6 x 94	2 x 4 microplates 2 x 1 deepwell plates	48 x 1.5/2
Max. speed (1.6/1.6 R, 120 and 230 V)	rpm	5,700/6,000	10,150/10,350	4,400/4,400	15,000/15,000
Max. RCF (1.6/1.6 R, 120 and 230 V)	x g	6,175/6,842	14,513/15,090	3,355/3,355	24,652/24,652
Max. radius	mm	170	126	155	98
Min. temp at max. speed (Mach 1.6 R only)	°C	5 (230 V), 8 (120 V)	4 (230 V), 6 (120 V)	< 0	0 (230 V), 4 (120 V)
Adapters (Centri-Lab®)	type	A	n/a	n/a	n/a
O-ring/gasket replacement		75002007	75003058	75002012	75002012
Metal plate handles (included)		n/a	n/a	75002013	n/a
Biocontainment		yes	yes	yes ²	yes

¹ Quantity 6, catalog no. 75003103, included with rotor.

² With optional lid 75002011 (part number is for a pair of lids).



Adapters for TTH-400 Swinging Bucket Rotor with Round Buckets (Centri-Lab® Type E)

Tube Volume	ml	1.5/2	7	7	15	15	25	25
Tubes per adapter		34	18	10	10	8	5	5
Tubes per rotor		136	72	40	40	32	20	20
Tube type ¹		ML	DIN	blood	DIN	conical	US	DIN
Max. tube length ²	mm	46	123	123	122	127	123	121
Max. tube diameter	mm	10.5	13	13	17.2	17	16.5	25.5
Max. cap diameter	mm	14	14	18.4	18.4	23	27.5	29
Adapter color		black	yellow	grey	red	brown	orange/red	orange
Adapter shape ³		F/C	F/R	F/R	F/R	C	C	F/R
Adapter cat. no.	(7500xxxx)	7578	7571	7579	7572	7621	7581	7573

Tube Volume	ml	50	50	50	100	250	400
Tubes per adapter		3	3	3	1	1	1
Tubes per rotor		12	12	12	4	4	4
Tube type ¹		universal	conical	DIN	DIN	B	B
Max. tube length ²	mm	120	119	120	134	135	135
Max. tube diameter	mm	25	29	34.5	45	62	80
Max. cap diameter	mm	32	37.5	36	59	–	–
Adapter color		green/yellow	green/yellow	green	blue	natural	–
Adapter shape ³		F/C	F/C	F/R	F/R	F	F
Adapter cat. no.	(7500xxxx)	7580	7577	7574	7575	7622	no adapter required
Bottle cat. no.	(7500xxxx)	–	–	–	–	–	7583

¹ Tube type: ML = microliter; DIN = Borosilicate glass with DIN dimensions; Blood = Blood collection; Conical = conical tissue culture; Universal = Universal container; US = Urine; B = Bottle. ² Max. tube length when aerosol-tight lid is used. ³ F = Flat; C = Conical; R = Round.



Adapters for TTH-400 Swinging Bucket Rotor with Rectangular Buckets and BIOshield® 600 (Centri-Lab Type A and A Plus)

Tube Volume	ml	7	15	15	1.5	7	15	25
Tubes per adapter		14	12	8	40	20	12	4
Tubes per rotor		56	48	32	160	80	48	16
Tube type ¹		blood	blood	conical	ML	DIN	DIN	universal
Max. tube length ²	mm	117	117	120	45	115	115	100
Max. tube diameter	mm	13	17	17	11	13	17	22.5
Max. cap diameter	mm	16.5	19.5	22	–	13	18.3	31
Adapter color		grey	white	brown	black	yellow	red	green
Adapter shape ²		F	F	C	C	F/R	F/R	F/R
Adapter cat. no.	(7500xxxx)	2022 ¹	2021 ¹	2020 ¹	5335	5321	5322	5391
Tube cat. no.	(7600xxxx)	–	–	–	1163 ³	–	–	–

Tube Volume	ml	25	50	50	50	50	100	150
Tubes per adapter		5	2	2	1	2	1	1
Tubes per rotor		20	8	8	4	8	4	4
Tube type ⁴		DIN	DIN	conical	Oil test	universal	DIN	DIN
Max. tube length ⁵	mm	115	120	120	–	120	120	110
Max. tube diameter	mm	25	34	29.5	–	29.5	44	50
Max. cap diameter	mm	25.9	35.6	37.5	–	37.5	48.1	–
Adapter color		orange	green	green/yellow	natural	green/yellow	blue	dark grey
Adapter shape ²		F/R	F/R	F/C	–	–	R	R
Adapter cat. no.	(7500xxxx)	5323	5324	5386	5339	5389	5325	5326

¹ Type A plus for use with TTH400 swinging bucket rotor with rectangular buckets only. ² F = Flat; C = Conical; R = Round. ³ Microtube.

⁴ Tube type: ML = microliter; DIN = Borosilicate glass with DIN dimensions; Blood = Blood collection; FL = Flange tube; Oil test = Oil test; Conical = conical tissue culture; Universal = Universal container. ⁵ Max. tube length when aerosol-tight lid is used.

NEW SORVALL® Legend® Mach 1.6® Tabletop Centrifuges



Adapters for Fixed Angle Rotors

Description	Catalog no.
Microliter Rotor 75003348	
24 reducer sleeves for 0.6/0.5 ml microliter tubes (set)	76003758
24 reducer sleeves for 0.4/0.25 ml microliter tubes (set)	76003759
24 reducer sleeves for 0.2 ml PCR tubes (set)	76003750
FA 12.94 Highconic® Rotor 75002006 (adapters for 94 ml cavities)	
Reducer insert for 1 x 15 ml conical tissue culture tubes	75003095
Reducer insert for 1 x 50 ml conical tissue culture tubes ¹	75003103
Reducer insert, from 94 ml to 4 x 1.5 ml	76002905
Reducer insert, from 94 ml to 4 x 3.5 ml	75003091
Reducer insert, from 94 ml to 2 x 6.5 ml	75003092
Reducer insert, from 94 ml to 2 x 12 ml	75003093
Reducer insert, from 94 ml to 1 x 16 ml	76002906
Reducer insert, from 94 ml to 1 x 38 ml	75003094
Reducer insert, from 94 ml to 1 x 50 ml	75003102
Adapters for 7 ml Vacutainer (1 Vacutainer per 94 ml cavity, total capacity 18 per run)	76002906 and 76003225
FA 12.94 Highconic Rotor 75002006 (adapters for 16 ml cavities)	
Reducer insert for 10 ml Vacutainer (16 x 100 mm, set of 12)	75003763
Reducer insert for 7 ml Vacutainer (13 x 100 mm, set of 12)	76003225
Reducer insert for 5 ml Vacutainer (13 x 75 mm, set of 12)	76003226

¹ Quantity 6, catalog no. 75003103, included with Highconic rotor 75002006.



Cyto Accessories

Description	Catalog no.
100 microtubes (0.75 ml with 0.5 mm opening in bottom)	75001153
100 microtubes (1.5 ml with 0.5 mm opening in bottom)	75001152
Lid (for working without microtubes)	76003422
Cyto container (with 2 cylindrical bores for approx. 1.5 ml sample volumes)	75003415
Cyto container (with 2 conical bores for approx. 3.0 ml sample volumes)	75003416
100 filter cards (for cyto container 75003415)	76003424
100 filter cards (for cyto container 75003416)	76003425
Clip carrier (for holding a cyto container and a slide)	75003414
Support insert (for using cyto accessories with buckets 75002001 or rotor 75002005)	75003417

SORVALL® Legend® T and RT General Purpose Tabletop Centrifuges



SORVALL Legend T (left) and Legend RT (right).

- Non-refrigerated (T) and refrigerated (RT) centrifuges
- Large 3 liter capacity
- EASYset™ soft-touch keypad or QUIKset™ rotary knob control
- Wide choice of biocontainment approved rotors, with adapters for tubes from 1.5 - 750 ml
- 16 standard microplate capacity with swinging bucket rotor
- SMARTspin® Imbalance Detection System
- Automatic rotor recognition
- User-defined programs
- Ergonomic low profile and space-saving design
- Soft-Touch lid closure mechanism
- Quiet, maintenance-free brushless drive
- Accessory carts allow operation away from, or under the bench

Ordering Information

Product	Control	Catalog no. 120 V (60 Hz)	Catalog no. 230 V (50/60 Hz)
SORVALL Legend T	EASYset	75004367	75004363
SORVALL Legend RT	EASYset	75004377	75004373
SORVALL Legend T	QUIKset	75004366	75004362
SORVALL Legend RT	QUIKset	75004376	75004372
Accessory carts	Dimensions, H x W x D, inch (mm)	Catalog no.	
Benchtop (T)	24 x 22 x 26 (600 x 550 x 665)	76000077	
Benchtop (RT)	24 x 30 x 26 (600 x 750 x 665)	75000075	
Underbench (T)	11 x 22 x 26 (290 x 550 x 665)	76000078	
Underbench (RT)	11 x 30 x 26 (290 x 750 x 665)	76000076	

Product Specifications

		Legend T and RT
Drive		Brushless induction
Control		Microprocessor via EASYset (Soft-Touch Keypad) or QUIKset (Rotary Knob Control)
Speed range	rpm	300 – 15,000 adjustable in 10 rpm increments (EASYset) or 100 rpm increments (QUIKset)
Max. RCF	x g	21,890
Max. capacity	ml	4 x 750 (or 4 x 4 microplates)
Decel/accel profiles		9/9 (EASYset) or brake on/off and soft brake (QUIKset)
Programmability		4 user programs (EASYset only)
Pre-cooling function		1 pre-temp program (EASYset only)
Functions		RCF pre-selection, quick run, automatic rotor recognition and imbalance detection
Dimensions (H x W x D)	inch (mm)	Legend T: 14.3 x 21.7 x 26.2 (362 x 551 x 666) Legend RT: 14.3 x 28.7 x 26.2 (362 x 733 x 666)
Weight	lb (kg)	Legend T: 196 (89) Legend RT: 288 (131)
Maximum noise level	db(A)	< 55 (Legend RT), < 66 (Legend T)
Run time	hr/min	0 – 9 hrs 59 mins, continuous operation
Temperature range (Legend RT)	°C	-9 to +40, CFC-free refrigerant
Design		Steel chassis with armored chamber
Safety		Lid lock and lid interlock (2 automatic lid locks)
Test standards		Designed and tested in accordance with EN 61 010-1, EN 61 010-2-020, EN 61326-1:1998
Electrical	V (Hz)	120 (60), 230 (50/60)

There's a good reason why Legend® centrifuges have become the laboratory standard in general purpose tabletop centrifugation: they spin more tubes, at higher RCFs and can process up to 3 liters of sample in a single run.

Legend centrifuges provide versatility for your processing needs today and tomorrow, through their ability to accommodate a wide range of interchangeable biocontainment rotors for a variety of applications. Microliter, microplate, swinging bucket and fixed-angle rotor varieties make a Legend the only centrifuge your lab may ever need.

Achieve improved separations with the enhanced processing power of a brushless induction drive system which delivers RCFs to 6,960 x g (5,850 rpm) with the optional BIOShield® rotor and 21,890 x g (15,000 rpm) with the optional microliter rotor.

Designed for simplicity of operation, a Legend has a low profile for ease of sample loading/unloading, easy to read digital displays and convenient user-defined programmability to store up to 4 run profiles, 9 acceleration and 9 braking profiles.

The Legend allows you to work safely by providing automatic rotor recognition to protect against use of improper operating parameters. The technologically advanced SMARTspin® imbalance detection system allows eye balancing of samples with automatic termination of a run if excessive imbalance occurs, protecting both you and your samples.



Swinging bucket rotor body.

Rotors and accessories

Buckets and Carriers for Swinging Bucket Rotor 75006445/75006434



Rotor body catalog no. 75006445 (with tool), catalog no. 75006434 (without tool)

Bucket Type		Round Bucket	Rectangular Bucket	Tissue Culture/ Microplate Carrier	Microplate Carrier	250 ml Tissue Culture Bucket
Catalog no.		75006441	75006446	75006451	75006449	75006497
Biocontainment lids (pair)	Cat no.	75006421	75006448	n/a	n/a	n/a
Max. bucket capacity	ml	1 x 750	1 x 250	1 x T-75 or 4 plates	4 plates	1 x 250 (conical)
Max. rotor capacity	ml	4 x 750	4 x 250	4 x T-75 or 16 plates	4 x 4 plates	4 x 250 (conical)
Max. speed (T/RT, 120 V)	rpm	4,150/4,150	3,750/3,750	4150*/4150*	4,150/4,150	3,750/3,750
Max. RCF (T/RT, 120 V)	x g	3,700/3,700	2,990/2,990	3060*/3060*	3,060/3,060	3,350/3,350
Max. speed (T/RT, 230 V)	rpm	4,350/4,600	4,350/4,600	4150*/4150*	4,350/4,600	4,350/4,600
Max. RCF (T/RT, 230 V)	x g	4,080/4,570	4,020/4,490	3060*/3060*	3,360/3,760	4,510/5,040
Max. radius	mm	192	190	159	159	213
Min. temp at max. speed (RT only)	°C	2	2	0	0	< 0
Adapters (Centri-Lab®)	type	C	D	n/a	n/a	For conical tissue culture tubes only. No adapters required.
O-ring/gasket replacement		20290657	20290656	n/a	n/a	n/a
Max. carrier height or tube length/dia.	mm	n/a	n/a	60/127 x 85 for plates/ Corning or Nunclflasks	60/127 x 85	70/61

* For tissue culture flasks, maximum RCF depends on flask style and manufacturer. Carriers compatible with T-75 Nunc EasyFlask™ and Greiner CellStar™ and CellCoat™ flasks.

Buckets and Carriers for Swinging Bucket Rotor 75006445/75006434



Rotor body catalog no. 75006445 (with tool), catalog no. 75006434 (without tool)

Bucket Type		Multiple Bucket	Multiple Bucket	Multiple Bucket	Multiple Bucket
Catalog no.		75006470	75006471	75002023	75002024
Biocontainment lids (pair)	Catalog no.	n/a	n/a	n/a	n/a
Max. bucket capacity	ml	25 x 5/7	20 x 10/15	17 x 15	7 x 50
Max. rotor capacity	ml	100 x 5/7	80 x 10/15	68 x 15	28 x 50
Max. speed (T/RT, 120 V)	rpm	3,750/3,750	3,750/3,750	4,350/4,600	4,350/4,600
Max. RCF (T/RT, 120 V)	x g	2,810/2,810	3,020/3,020	4,083/4,566	4,083/4,566
Max. speed (T/RT, 230 V)	rpm	4,350/4,600	4,350/4,600	4,350/4,600	4,350/4,600
Max. RCF (T/RT, 230 V)	x g	3,790/4,220	4,060/4,540	4,083/4,566	4,083/4,566
Max. radius	mm	179	192	193	190
Min. temp at max. speed (RT only)	°C	< 0	< 0	2	2
Adapters (Centri-Lab®)	type	For high capacity blood collection tubes (Vacutainer tubes). No adapters required.		For 15 ml conical tubes no adapters required.	For 50 ml conical tubes no adapters required.
Max. carrier height or tube length/diameter	mm	120/14	140/17	120/17	120/29.5

Specifications for Windshielded Rotors

Rotor		BIOshield® windshielded swinging bucket rotor	HIGHplate® microplate rotor
Catalog no.		75006435	75006444
Max. rotor capacity	ml	4 x 250	2 x 1 filter plates or 2 x 5 microplates
Max. speed (T/RT, 120 V)	rpm	5,350/5,350	5,250/5,250
Max. RCF (T/RT, 120 V)	x g	5,820/5,820	5,084/5,084
Max. speed (T/RT, 230 V)	rpm	5,350/5,850	5,250/5,650
Max. RCF (T/RT, 230 V)	x g	5,820/6,960	5,085/5,890
Max. radius	mm	182	163
Min. temp at max. speed (RT only)	°C	4	4
Adapters (Centri-Lab®)	type	D	n/a
O-ring/gasket replacement		20056853	20056853
Biocontainment		yes	yes

Adapters for Swinging Bucket Rotor with Round Buckets (Centri-Lab Type C)

Tube Volume (ml)	1.5/2	7	5/7	14/15	15	10/15	15	25	45/50	50	50	100	150/180	175/200/225	250	500 ¹	750	custom
Adapter catalog no. (7500xxxx)	8132	8133	8134	6494	8137	8136	8135	8138	6493	6533	8140	8142	6498	8144 ¹	8144	— ⁵	— ⁵	on request
Tubes per adapter	48	35	19	12	12	17	19	7	7	5	4	2	1	1	1	1	1	n/a
Tubes per rotor	192	140	76	48	48	68	76	28	28	20	16	8	4	4	4	4	4	n/a
Tube type ²	ML	DIN	BL	FL	CON	BL	DIN	DIN	PYR	CON	DIN	DIN	DIN/Misc.	CON	Misc.	Misc.	Bottle	Misc.
Max. length of tube (mm) [*]	42	122	122	125	120	122	122	125	123	120	125	125	132	140	140	136	136	136
Max. tube diameter (mm)	11	12.8	13.5	18.3	17	17	17	25	29.5	29.5	34.5	45	56.5	62	62	100	100	85
Max. cap diameter (mm)	13	14	18.5	21.5	23.5	20	18.5	31	31	35.5	39	47.5	56.5	75	75	100	100	100
Adapter color ³	BL	Y	LG	BR	OB	W	R	OR	UB	LG	G	B	GR	W	W	n/a	n/a	W
Adapter shape ⁴	F/C	F/R	F/R	F/R	F/C	F/R	F/R	F/R	F/R	F/C	F/C	F/C	F/C	F	F	F	F	n/a

¹ If conical tubes are used, an additional conical adapter pad should be purchased from the tube manufacturer. ² ML = microliter tube; DIN = borosilicate glass with DIN dimensions; BL = blood collection tube; FL = flanged tube; CON = conical tissue culture tube; PYR = round bottom Pyrex glass. ³ BL = black; Y = yellow; LGY = light gray; BR = brown; OB = olive brown; W = white; R = red; OR = orange; UB = ultramarine blue; LG = light green; G = green; B = blue; GR = gray. ⁴ F = flat; C = conical; R = round. ⁵ No adapter required; 500 ml bottle catalog no. 75008148, 750 ml bottle catalog no. 75008149. * Max. tube length when biocontainment lid is used.

Culture Flask Adapter Pairs for Round Buckets (Centri-Lab Type C)

Flask size	T-75	T-25
Catalog no.	75008383 (pair)	75008384 (pair)
Compatible flask types	Nunc EasYFlask™	Nunc EasYFlask
Maximum RCF	x g	2300



Adapters for Tubes and Bottles for Swinging Bucket Rotor and BIOshield® Rotor with Rectangular Buckets (Centri-Lab Type D)

Volume (ml)	1.5/2	7	5/7	14/15	15	10/15	25	25/50	45/50	50	50	100	155/180	250
Adapter catalog no. (7500xxxx)	6452	6453	6454	6492	6456	6455	6457	6459	6491	6461	6460	6462	6463	6465
Tubes per adapter	56	28	20	9	9	16	6	4	4	4	3	1	1	1
Tubes per rotor	224	112	80	36	36	64	24	16	16	16	12	4	4	4
Type of tube ¹	ML	DIN	BL	FL	CON	DIN/BL	DIN	UNI	PYR	CON	DIN	DIN	DIN/Misc.	Bottle
Max. length of tube (mm) ⁴	42	113	113	115	120	112	114	115	115	117	113	118	115	120
Max. tube diameter (mm)	11	12.8	14	18.3	16.5	17	25	25.5	29.5	29.5	34.5	45	56.5	62
Max. cap diameter (mm)	13	14	17.5	25	24	19	28	32	35	35.5	38	66	66	63
Adapter color ²	BL	Y	LG	BR	OB	R	OR	BG	UB	LG	G	B	GB	BL
Adapter shape ³	F/C	F/R	F/R	F/R	F/C	F/R	F/R	F/R	F/R	F/C	F/R	F/R	F/R	F

¹ ML = microliter tube; DIN = borosilicate glass with DIN dimensions; BL = blood collection tube; FL = flanged tube; CON = conical tissue culture tube; PYR = round bottom Pyrex glass; UNI = universal container. ² BL = black; Y = yellow; LGY = light gray; BR = brown; OB = olive brown; W = white; R = red; OR = orange; UB = ultramarine blue; LG = light green; G = green; B = blue; GR = gray; BG = blue-green; GB = gray-blue. ³ F = flat; C = conical; R = round. ⁴ Max. tube length when biocontainment lid is used. Note: Adapter type D, catalog no. 76006467 is required to use Centri-Lab®-Adapter type A (from Megafuge line) in rectangular bucket 75006446 or BIOshield rotor (75006435).



Fixed Angle Rotor Specifications

Fixed angle rotor		24 x 1.5/2 ml microliter rotor	6 x 94 ml fixed angle rotor	Highconic® rotor
Catalog no.		75003332	75003334	75003057 ¹
Max. capacity	ml	24 x 1.5/2	6 x 94	6 x 50
Max. speed (T/RT)	rpm	15,000 (RT only)	10,500/12,000	8,500/8,500
Max. RCF (T/RT)	x g	21,890 (RT only)	12,450/16,260	10,020/10,020
Angle	°	45	26	45
Max/min. radius	mm	87/59	101/63	124/60
Min. temp at max. speed	°C	4	4	4
O-ring/gasket replacement		75003404	75003404	75003423
Autoclavable		yes	no	yes
Biocontainment		yes	yes	yes

¹ Quantity 6, catalog no. 75003103, included with rotor.

Adapter Sets for Microliter Rotor 75003332

Adapter set (24 pieces) for	Catalog no.	No. per package	Color
0.5/0.6 ml microliter tubes	76003758	24	turquoise
0.25/0.4 ml microliter tubes	76003759	24	red
0.2 ml PCR tubes	76003750	24	gray

Adapters for 6 x 94 ml Fixed Angle Rotor 75003334

Tube Volume	Catalog no. adapter	Quantity	Max. tube size (mm)		Tubes per rotor
			diameter	length	
4 x 1.5 ml	76002905	1	11	51	24
4 x 3.5 ml	75003091	1	11	91	24
2 x 6.5 ml	75003092	1	13	108	12
2 x 12 ml	75003093	1	16	89	12
1 x 16 ml	76002906	1	18	114	6
1 x 38 ml	75003094	1	25	104	6
1 x 50 ml	75003102	1	29	114	6
1 x 94 ml	w/o adapter	1	38	114	6

Adapters for Highconic® Rotor 75003057

Tube Volume	Catalog no. adapter	Quantity	Max. tube size (mm)		Tubes per rotor
			diameter	length	
4 x 1.5 ml	76002905	1	11	58	24
4 x 3.5 ml	75003091	1	11	103	24
2 x 6.5 ml	75003092	1	13	115	12
2 x 12 ml	75003093	1	16	96	12
1 x 16 ml	76002906	1	18	124	6
1 x 38 ml	75003094	1	25	112	6
1 x 50 ml	75003102	1	29	118	6
1 x 15 ml conical tissue culture	75003095	1	16.5	120	6
1 x 50 ml conical tissue culture	75003103 ¹	1	30	117	6

¹ Included with rotor.

Cyto Accessories

Description	Catalog no.
100 microtubes (0.75 ml with 0.5 mm opening in bottom)	75001153
100 microtubes (1.5 ml with 0.5 mm opening in bottom)	75001152
Lid (for working without microtubes)	76003422
Cyto container (with 2 cylindrical bores for approx. 1.5 ml sample volumes)	75003415
Cyto container (with 2 conical bores for approx. 3.0 ml sample volumes)	75003416
100 filter cards (for cyto container 75003415)	76003424
100 filter cards (for cyto container 75003416)	76003425
Clip carrier (for holding a cyto container and a slide)	75003414
Support insert (for using cyto accessories with buckets 75002001)	76006466

SORVALL® Stratos® Refrigerated High Speed Tabletop Centrifuge



SORVALL Stratos.

- Speeds to 23,300 rpm (50,377 x g)
- Max. capacity of 4 x 180 ml
- Unique spindle drive technology for short acceleration/deceleration times



- Wide choice of high speed, high capacity rotors with biocontainment
- Electronic imbalance detection
- Automatic rotor recognition
- EASYcontrol™ II user programmability
- RCF selection and quick run function
- Dual lid-locking mechanism
- Whisper-quiet operation

Ordering Information

Product	Catalog no. 120 V (60 Hz)	Catalog no. 200/208 V (50/60 Hz)	Catalog no. 230 V (50/60 Hz)
SORVALL Stratos	75005293	75005294	75005289

Product Specifications

		Stratos
Drive		Brushless induction
Control		Microprocessor via EASYcontrol II
Speed range	rpm	300 - 23,300 adjustable in increments of 10
Max. RCF	x g	44,910 (120 V unit), 50,377 (200/208/230 V units)
Max. capacity	ml	4 x 180
Decel/accel profiles		9/9
Programmability		9 + 1 pre-cooling program
Functions		RCF pre-selection, quick run, automatic rotor recognition and imbalance detection
Dimensions (H x W x D)	inch (mm)	15.6 x 25.2 x 23.4 (395 x 640 x 595)
Weight (without rotor)	lb (kg)	295 (134)
Run time	hr/min	0 - 9 hrs 59 mins, continuous operation, alternatively 0 - 99 hrs
Temperature range	°C	- 9 to + 40
Safety		Lid lock and interlock
Noise level at max. speed	dB (A)	< 60
Power consumption	W	1400 (cooling system 900)
Construction		Steel chassis with armored rotor chamber
Electrical	V (Hz)	120 (60), 200/208 (50/60), 230 (50/60)

The compact SORVALL® Stratos® is a versatile refrigerated high speed tabletop centrifuge that incorporates advanced drive technology usually found only in expensive floor model centrifuges.

The Stratos features a whisper-quiet spindle drive - *unique* for a tabletop centrifuge - that allows 9 different fixed-angle, microliter, swinging bucket and microplate rotor types to be spun at speeds to 23,300 rpm (50,377 x g). Spindle drive technology enables very short acceleration and braking times for faster sample throughput, and significantly extends instrument life. Imbalance sensitivity is reduced to the point where tubes can be balanced by eye alone, and sample disturbance under breaking is kept to a minimum.

Sample capacity ranges from 4 x 180 ml (or four microplates) in the instrument's swinging bucket rotors to a maximum of 24 x 1.5 or 2 ml tubes in microliter rotors. The rotor inventory of the Stratos also spans four different biocontained fixed-angle varieties. A wide range of adapters is available for popular tube sizes down to 0.2 ml.

SORVALL® Stratos® Refrigerated High Speed Tabletop Centrifuge

Rotor Specifications

Fixed Angle Rotors



Fixed angle rotors		6 x 94 ml	8 x 50 ml	16 x 16 ml	Highconic®
Catalog no.		75003334	75003335	75003336	75003057 ³
Max. capacity	ml	6 x 94	8 x 50	16 x 16	6 x 50
Max. speed	rpm	13,000 ¹ /15,000 ²	13,000 ¹ /15,000 ²	14,000 ¹ /17,000 ²	8,500
Max. RCF	x g	19,080 ¹ /25,410 ²	22,220 ¹ /26,920 ²	21,475 ¹ /31,660 ²	10,015
Acceleration/deceleration time	s	70/60	75/60	60/55	35/40
Angle	°	26	34	23	45
Max. speed at 4°C	rpm	15,000	15,000	17,000	8,500
Max./min. radius	mm	101/63	107/56	98/64	124/60
Min. temp. at max. speed	°C	-5	-1	2	-18
k-factor		707 ¹ /531 ²	971 ¹ /729 ²	550 ¹ /373 ²	2,545
O-ring/gasket replacement		75003404	75003404	75003404	75003423
Autoclavable		no	no	no	yes
Biocontainment		yes	yes	yes	yes

¹ 120 V unit. ² 200/208/230 V units. ³ Quantity 6, catalog no. 75003103, included with rotor.

Adapters for Fixed Angle Rotors

Tube Volume	Rotor 75003334		Rotor 75003335		Rotor 75003336			
	Max. tube size (mm) diameter	length	Tubes per rotor	Catalog no. adapter	Tubes per rotor	Catalog no. adapter		
1.5 ml	11	51	24	76002905	24	76002902	16	76002900
3.5 ml	11	91	24	75003091	24	76002903	16	76002901
6.5 ml	13	108	12	75003092	8	75003097	16	75003079
12 ml	16	89	12	75003093	8	75003098	16	- ¹
16 ml	18	114	6	76002906	8	76002904	16	- ¹
38 ml	25	104	6	75003094	8	75003099	n/a	n/a
50 ml	29	114	6	75003102	8	- ¹	n/a	n/a
94 ml	38	114	6	- ¹	n/a	n/a	n/a	n/a

¹ No adapter required.

Adapters for Highconic® Rotor 75003057

Tube Volume	Catalog no. adapter	Quantity	Max. tube size (mm)		Tubes per rotor
			diameter	length	
4 x 1.5 ml	76002905	1	11	58	24
4 x 3.5 ml	75003091	1	11	103	24
2 x 6.5 ml	75003092	1	13	115	12
2 x 12 ml	75003093	1	16	96	12
1 x 16 ml	76002906	1	18	124	6
1 x 38 ml	75003094	1	25	112	6
1 x 50 ml	75003102	1	29	118	6
1 x 15 ml conical tissue culture	75003095	1	16.5	120	6
1 x 50 ml conical tissue culture	75003096 ¹	1	30	117	6

¹ Included with rotor.

SORVALL® Stratos® Refrigerated High Speed Tabletop Centrifuge



Swinging Bucket Rotors

Swinging bucket rotors		4 x 180 ml ¹	microplate carrier ²
Catalog no.		75003047	75003048
Catalog no. round bucket		75008172	–
Catalog no. aerosol tight cap		75008173	–
Catalog no. O-ring gasket replacement		20290543	n/a
Max. capacity	ml	4 x 180	4 standard/2 deepwell
Max. speed	rpm	5,000	3,000
Max. RCF	x g	4,863	1,370
Acceleration/deceleration time	s	45/55	30/35
Max./min. radius	mm	174/94	136/–
Min. temp. at n _{max}	°C	-15	-19
Biocontainment		yes	no

¹ Rotor body only. ² Includes carriers.

Adapter for Round Bucket 75008172 in Swinging Bucket Rotor 75003047



Adapter for	Catalog no. adapter	diameter	Max. tube size (mm) length ¹	lid diameter	Tubes per rotor	Color
12 x 1.5/2 ml	75008190	11	42	13.6	48	black
9 x 7 ml DIN	75008189	13	125/135	15.2	36	yellow
7 x 7 ml blood collection	75008188	13	126/135	18.5	28	gray
7 x 15 ml DIN	75008186	18	126/135	18.5	28	red
4 x 15 ml blood collection	75008185	18	129/135	20	16	white
3 x 15 ml Falcon®	75008187	17	133/135	23.7	12	brown
1 x 25 ml DIN	75008184	25	126/135	27	4	orange
1 x 25 ml universal container	75008196	26	121/130	53	4	green
1 x 50 ml Falcon	75008183	30	133/138	39	4	green/yellow
1 x 50 ml DIN	75008182	36	132/138	39	4	green
1 x 100 ml	75008181	45	128/133	47.5	4	blue
2 x U.S. urine tube	75008195	17	–	–	8	brown/red

¹ Length with/without aerosol tight cap.

Centrifuge Tube for Swinging Bucket Rotor

180 ml centrifuge tube for the swinging bucket rotor Catalog no. 75003047
with swinging bucket Catalog no. 75008172

Capacity	Catalog no.	Type use without adapter	Quantity
180 ml	76003026	bottle incl. screw lid, PP	1

SORVALL® Stratos® Refrigerated High Speed Tabletop Centrifuge



Microliter Rotors

Microliter rotors		24 x 1.5/2 ml	24 x 1.5 ml	drum rotor
Catalog no.		75003332	75003331	75003044
Max. capacity	ml	24 x 1.5/2	24 x 1.5	80 x 2
Max. speed	rpm	17,000	22,000 ¹ /23,300 ²	13,000
Max. RCF	x g	28,110	44,910 ¹ /50,377 ²	16,438
Acceleration/deceleration time	s	27/35	30/40	30/35
Max./min. radius	mm	87/59	83/59	87/38
Angle	°	45	45	60/90 (w/adapter)
Min. temp. at max. speed	°C	-13	8	-15
Max. speed at 4°C	rpm	17,000	20,500 ¹ /22,000 ²	13,000
k-factor		340	178 ¹ /159 ²	1242
O-ring/gasket replacement		75003404	75003404	n/a
Biocontainment		yes	yes	no
Autoclavable		yes	no	no

¹ 120 V unit. ² 200/208/230 V units.

Adapter Sets for Microliter Rotors 75003332 and 75003331

Adapter set (24 pieces) for	Catalog no.	No. per package	Color
0.5/0.6 ml microliter tubes	76003758	24	turquoise
0.25/0.4 ml microliter tubes	76003759	24	red
0.2 ml PCR tubes	76003750	24	gray



Racks for Drum Rotor 75003044

Rack for	Catalog no.	Number per adapter	Number per rotor	Color
PCR strips with (8) tubes	76001587	3	12	white
1.5 ml microliter tubes	76001499	10	80	yellow
1.5/2 ml microliter tubes	76001244	10	80	red
0.3 ml microcapillary tubes	76001246	8	64	blue
0.5/0.6 ml microliter tubes	76001247	15	120	green
0.25/0.4 ml microliter tubes	76001248	20	160	yellow
1.5/2 ml microliter tubes (60° angle)	75001498	6	48	white

SORVALL[®] Contifuge[®] Continuous Flow Centifuge

- Capable of running the entire rotor inventory of the SORVALL Stratos[®] and autoclavable continuous flow rotor
- 17,000 rpm (25,040 x g) in continuous flow mode
- Ideal for bacterial, yeast, algae and animal cell separations
- Flow rate up to 54 L/hr
- Sediment capacity of 400 ml



SORVALL Contifuge mounted on accessory cart.

Ordering Information

Product	Catalog no. 200/208 V (50/60 Hz)	Catalog no. 230 V (50/60 Hz)
SORVALL Contifuge	75005296	75005297
High performance polypropylene insert		75015339
Accessory cart (H x W x D, inch/mm = 30 x 28 x 23/764 x 715 x 590)		76000083
Peristaltic pump (230 V/50 Hz, max. pump volume 1820 ml x rpm) (can be switched to 120 V/60 Hz)		75003503

Product Specifications

		Contifuge
Drive		Brushless induction
Control		Microprocessor via EASYcontrol II
Speed range	rpm	300 – 17,000
Max. RCF	x g	25,040
Max. capacity	ml	300 (sediment)
Max. flow rate	L/hr	36
Decel./accel. profiles		9/9
Programmability		9 + 1 pre-cooling program
Functions		RCF pre-selection, quick run, automatic rotor recognition, electronic imbalance detection
Dimensions (H x W x D)	inch (mm)	15.6 x 25.2 x 23.4 (395 x 640 x 595)
Weight	lb (kg)	295 (134)
Run time	hr/min	0 – 9 hrs 59 mins, continuous operation
Temperature range	°C	-9 to +40, CFC-free refrigerant
Noise level at max. speed	dB (A)	< 60
Power consumption	W	1400 (cooling system 900)
Construction		Steel chassis with armored rotor chamber
Safety		Lid lock and interlock
Electrical	V (Hz)	200/208 (50/60), 230 (50/60)



SORVALL® Contifuge® Continuous Flow Centrifuge

The SORVALL® Contifuge® is capable of processing very large sample volumes – typically, from bioreactors and fermentors – in just a single run. The centrifuge allows rapid, reliable separations of large volumes of suspension with a low solid matter content, and with the help of an accessory cart, can be used almost anywhere. Compared with discontinuous centrifugation, time savings of up to 80% are possible.

The Contifuge can be used with a high speed titanium continuous flow rotor, ideal for harvesting bacterial cultures and human or animal cells. The rotor is easy to assemble and clean, fully autoclavable, and sediment cells gently without lysis.

A polypropylene insert improves sedimentation capability, particularly for small or low density particles. The insert, developed for the separation of suspensions with a low solids content, reduces sediment capacity from 300 ml to 50 ml.

To maintain precise, reproducible flow rates, the use of a peristaltic pump with a pump range of 100 to 900 ml/min is recommended. An optional peristaltic pump, which is controlled via the centrifuge, is available.

A movable centrifuge cart, on which the pump, sample containers and a magnetic stirrer can be placed, makes the entire system portable. Reinforced metal construction makes the cart virtually vibration-free.

The Contifuge operates reliably, even when complex samples are processed. Even the introduction of air/lather does not affect system operation.

- Harvesting of plant and animal cell cultures
- Harvesting of bacteria and virus lysates
- Precipitation of protein complexes
- Cell enrichment
- Separation of immunoglobulins
- Vaccine production

- Preparation of macrophages
- Separation of yeasts
- Concentration of metal and plastic particles
- Sediment extraction from water samples
- Plankton enrichment



Rotor Specifications

Rotor		Titanium continuous flow
Catalog no.		75003049
Max. sediment volume	ml	300
Max. sediment volume with high performance insert	ml	50
Optimal flow rate	ml x rpm	200 – 600
Max. speed	rpm	17,000
Max. RCF	x g	25,040
Acceleration/deceleration time	s	80/60
Max./min. radius	mm	77.5/50.0
Max./min. radius with high performance insert	mm	77.5/72.5
Autoclavable		yes



Kendro Laboratory Products manufactures a wide range of **SORVALL**[®] and **Heraeus**[®] brand equipment, including floor model and tabletop centrifuges, safety cabinets and automated incubators. For more information, contact your local Sales Representative.

EasYFlask[™] is a trademark of Nalge Nunc International. *CellStar*[™] and *CellCoat*[™] are trademarks of Greiner Bio-One, Inc.

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