

Thermo Scientific Sorvall ST 16 and ST 40 Centrifuge Series



Unmatched capacity, ergonomics and value for routine processing needs

Global Leader in Quality and Reliability

For more than 100 years, Thermo Scientific centrifuges have delivered outstanding performance and reliability in the lab. From basic benchtop instruments to advanced floor models, we take pride in manufacturing centrifuges that offer exceptional quality for consistent results — year after year.

Thermo Scientific Sorvall ST Series

The Thermo Scientific Sorvall ST general purpose centrifuge series, providing industry-leading capacity and ergonomics at an exceptional value for everyday sample preparation – clinical protocols, cell culture applications, microplate processing and a variety of separation needs.



4x400 ml
Sorvall ST **16**



4x750 ml
Sorvall ST **40**

Unparalleled Throughput

Accelerate productivity with unmatched capacity in minimum bench space

- 32 to 76 x 5/7 ml blood tubes with the TX-200 or TX-400 rotors
- Up to 108 x 5/7 ml blood tubes or 28 x 50 ml conical tubes with the TX-750 rotor
- Up to 16 x 50 ml conical tubes in our standard TX-400 swing-out rotor
- Up to 196 x 5/7 ml blood tubes or up to 40 x 50 ml conical tubes with the high capacity BIOLiner rotor

Exceptional Ergonomics

Achieve safe, simple and comfortable daily operation with our breakthrough innovations, while operating at a convenient working height of only 31 cm/ 12.4 in.



Exceptional Capacity Boosts Productivity

Our Sorvall® ST 16 and ST 40 centrifuge series are available in both ventilated and refrigerated units, ideal for a range of routine applications and temperature-sensitive sample processing with control between -10°C and +40°C.



Breakthrough Thermo Scientific Technologies



Auto-Lock® III Rotor System

Secure locking system delivers:

- Installation and exchange of rotors with just the push of a button for quick switch between applications
- Easy chamber access enables cleaning convenience, reducing contamination risk and leading to improved research and a healthier working environment

ClickSeal® Bucket Sealing System

Innovative biocontainment solution provides:

- Simple operation eliminating screw caps and complicated clips
- Glove-friendly, one-handed open/close capability
- Biocontainment certification by HPA, Porton Down, UK (formerly CAMR).
- Transparent and biocompatible polyetherimide (PEI) sealing covers have broad chemical resistance, excellent thermal properties and exceptional strength for durability

Fiberlite® Carbon Fiber Rotors

- Maximize centrifuge performance with increased capacity, faster speeds and higher g-force

Motorized Lid Latch

- One finger downward motion for easiest closing and locking – even on tall benches
- Optional automatic lid opening at end of run

Compact, Comfortable Design

- Exceptional capability in compact dimensions maximizes workspace
- Low profile and curved design ensure comfortable loading and unloading of samples and cleaning of the unit

SMARTSpin® Technology

- Dynamic technology improves safety and run results by considering chamber temperature, rotor and bucket combination and selected speed to auto-correct maximum rotor speed, calibrate the imbalance detector and optimize motor power during acceleration and braking

energy savings

Advanced Technology for Resource Efficiency

- > Less energy is consumed per tube – up to 40% fewer watts per tube than competing models - since larger capacity reduces number of runs required for a given batch of samples
- > 15% energy savings compared with standard stand-by power consumption with unique "powersave" feature, enabled by default, that turns off display when not in use
- > Reduce capital investment and eliminate unnecessary equipment disposal issues with longer lifetime of Fiberlite rotors – guaranteed 15 years
- > Compliance with RoHS (Restriction of Hazardous Substances Directive) and WEE (Waste Electrical and Electronic Equipment Directive)

Intuitive Controls Simplify Operation



The Sorvall ST centrifuge series features easy-to-use controls with detailed information on a wide range of operating parameters and processing status.

Dedicated Program Keys

Immediate storage and access to your most frequently used programs with unique writing area for naming programs

Accessible Programming

Easily adjust speed, time and temperature, even during the run

Easy to Read and Use

- Highly visible, backlit display for clear reading of parameters from across the lab
- Multilingual instructions, including English, German, French, Spanish, Russian, Italian and Dutch, on programming, run conditions, alerts and service messages
- Glove- and detergent-friendly panel



Program Keys

Direct access to 6 most frequently used programs with one keystroke save and recall.

Dataport Option

To transport data to a PC, a dataport kit is available (cat. no. 50124205 for Sorvall ST 16 Centrifuge series and 20190345 for Sorvall ST 40 Centrifuge series)

Speed Control:

Immediate toggle between RCF and speed control up to 25830 x g or 15200 rpm

Temp: (refrigerated unit)

Control temperatures between -10°C and +40°C

Pre-Temp: (refrigerated unit)

Achieve 4°C from ambient 23°C in 15 minutes*

**with Thermo Scientific BLOLiner rotor*



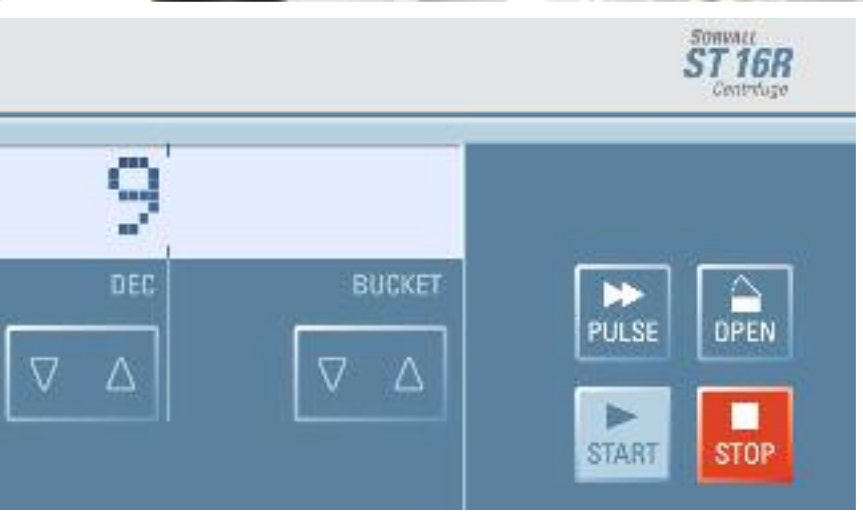


Looking for high-performance processing?

See our new Thermo Scientific Sorvall Legend Series

The one-liter Sorvall Legend X1 and three-liter Sorvall Legend XT general purpose centrifuges deliver exceptional, market-leading performance, capacity and throughput.

Advanced, intuitive controls with double temperature management system ensure the highest accuracy and maximum results of your sample processing.



Accel/Decel:
Choice of 9 acceleration and 10 deceleration rates

Bucket:
Quickly adjust rotor parameters for optimal RCF calculation and temperature management

Pulse:
Ideal for short runs

Open:
Motorized latch with optional automatic opening



Incredible Capacity and Productivity





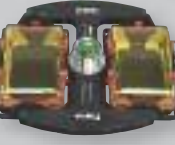



Our Sorvall ST 16 and ST 40 centrifuge series feature a wide range of Thermo Scientific rotors to meet your daily, routine processing requirements.

Swinging Bucket Rotors

Sorvall
ST 16

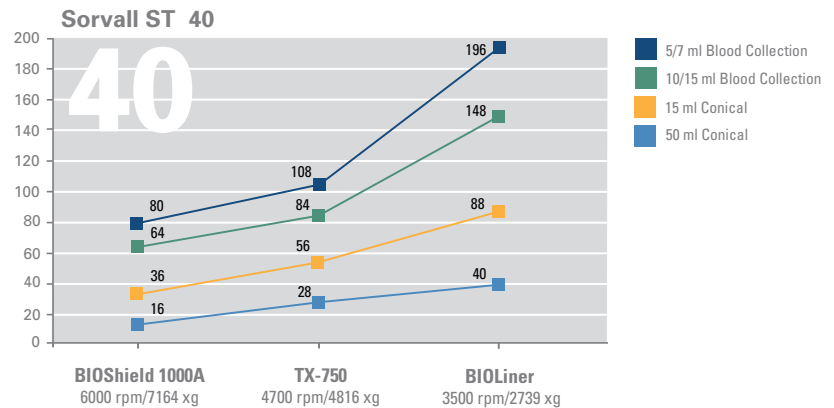
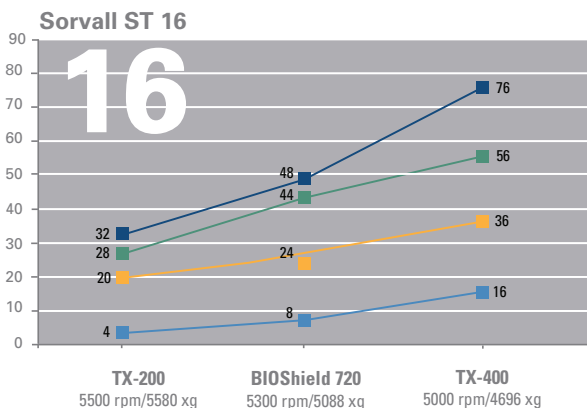
Sorvall
ST 40

	<p>TX-200 High speed productivity >> Serving primary swing-out processing needs, with a capacity of 32 blood tubes or 4 conical tubes per run in sealed conditions, achieve an impressive mix of speed and accelerating/braking power.</p>	<p>5500 rpm 5580 xg</p>	
	<p>TX-400 Maximum flexibility >> Designed for a broad range of laboratory throughput needs, with a capacity of 76 blood tubes and up to 16 conical tubes in a single run, for the highest configuration flexibility on the market.</p>	<p>5000 rpm 4696 xg</p>	
	<p>TX-750 Outstanding versatility >> Delivers maximum flexibility at 4700 rpm and features a choice of round or rectangular buckets with multiple adapters as well as microplate carriers</p>		<p>4700 rpm 4816 xg</p>
	<p>BIOLiner® Exceptional capacity >> Significantly improves productivity – process over 100% more 50 ml conical tubes or 100% more blood tubes with biocontainment sealing per run than with competitive models. Certified sealed microplate carriers expand application options.</p>		<p>3500 rpm 2739 xg</p>
	<p>M-20 Compact processing >> Centrifuges up to 6 microplates in certified sealed conditions with transportable carriers and the versatility of Auto-Lock rotor installation.</p>	<p>4000 rpm 2272 xg</p>	<p>4000 rpm 2272 xg</p>
	<p>BIOShield® 720 and BIOShield 1000A Excellent performance >> Runs frequently used tubes above 5500 xg with the confidence and simplicity of a single, certified biosafety lid.</p>	<p>5300 rpm 5088 xg BIOShield 720</p>	<p>5300 rpm 5590 xg BIOShield 1000A</p>



Biocontainment certified by HPA, Porton Down, UK (formerly CAMR).

Tube Capacity Selector Guide








Rotors

Fixed Angle Rotors

Sorvall
ST 16

Sorvall
ST 40

	<p>Fiberlite F15-6x100y Durable design for general purpose pelleting of organelles, density gradients and various protocols requiring angle centrifugation of disposable conical tubes up to 18516 xg.</p>	<p>13000 rpm 18516 xg</p>	<p>13000 rpm 18516 xg</p>
	<p>CLINIConic® Spin 30 x 15 ml round or conical tubes and ensure acceleration and throughput for cell culture and blood separation applications.</p>	<p>5650 rpm 4997 xg</p>	
	<p>8x50 Sealed Ideal for TB sputum applications, centrifuge 8 conical tubes in individually sealed vessels, which can be prepared remotely, with rapid acceleration and processing times.</p>	<p>6700 rpm 7177 xg¹</p>	
	<p>HIGHConic II Process 6 x 94 ml tubes between 10000 and 15000 xg in certified sealed conditions.</p>	<p>8500 rpm 10178 xg</p>	<p>10350 rpm 15090 xg</p>
	<p>Micro-Volume Rotors Perfect blend of capabilities to support micro-volume protocols, such as nucleic acid or protein lysate preparation and PCR reaction set-up. With Auto-Lock rotor exchange, transform your general purpose unit into a powerful microcentrifuge in less than 3 seconds!</p>		
	<p>Fiberlite F21-48x2</p>		<p>15200 rpm 25055 xg</p>
	<p>Microliter 30x2</p>	<p>15200 rpm 25830 xg</p>	
	<p>Microliter 48x2</p>		<p>15200 rpm 25314 xg</p>

¹ Performance with 230 V centrifuge models.

Thermo Scientific Fiberlite Rotors

Setting new performance standards for benchtop processing

Our carbon fiber rotors maximize the performance of Sorvall ST centrifuges with versatility, speed and robust, corrosion-free design, now within your reach.

Unequaled durability and cleaning

convenience: Corrosion- and fatigue-resistance eliminate an ever-present hazard from the exposure of moisture, chemicals or alkaline solutions

Superior insulation: Naturally insulating properties ensure samples are kept at a constant temperature during centrifugation

Improved ergonomics and productivity:

Lightweight – design provides faster acceleration/deceleration rates for shorter run times, as well as a safer work environment

Exceptional value: A secure investment, backed by a 15-year warranty ensures dependable results over an extended lifetime



Rotor stand is now available to store your rotor when not in use, allowing rotors and buckets to be removed and kept simply and safely (cat. no. 75003711).



TX-200
Swinging Bucket Rotor¹

Thermo Scientific Rotors and Adapters

Sorvall
ST 16/16R

Sorvall
ST 40/40R

Cat. No	Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 16/16R		Sorvall ST 40/40R	
				Max Speed (rpm)	Max RCF (xg)	Max Speed (rpm)	Max RCF (xg)
75003658	TX-200 Swinging Bucket Rotor*						
75003659	Round Buckets (set of 4), 90°, R _{max} 165 mm	4 x 180 ml		5500	5580	n/a	n/a
				5250 ²	5084 ²		
75003660	ClickSeal Biocontainment Lids for Round Buckets (set of 4)						
75003687	Replacement O-rings for Lids (set of 4)						
	Adapters for Round Buckets (sets of 4)						
No adapter needed ①	180 ml Polypropylene Screw Cap Bottle (75003800, pkg of 12)	4 x 180 ml	56.5 x 123				
75003801	② 100 ml Round Bottom Open-Top Tube	4 x 100 ml	48 x 122				
75003802	③ 50 ml DIN Round Bottom Tube	4 x 50 ml	35 x 126				
75003815	④ 50 ml Round Bottom Tube	4 x 50 ml	32 x 126				
75003803	⑤ 50 ml Conical or Skirted Tube	4 x 50 ml	29.5 x 126				
75003804	⑥ 25 ml Universal Tube	4 x 25 ml	25.5 x 118				
75003805	⑦ 25 ml DIN Round/Flat Bottom Tube	8 x 25 ml	25 x 118				
75003806	⑧ 20 ml Round Bottom Tube	12 x 25 ml	22 x 125				
75003771	⑨ 15 ml Conical Tube	20 x 20 ml	17 x 121				
75003809	⑩ 15 ml Blood Collection Tube	16 x 15 ml	17 x 121				
75003807	⑪ 14 ml Conical Urine Tube	8 x 14 ml	17 x 114				
75003808	⑫ 10 ml Blood Collection or 15 ml Corex®/Kimble® Tube	28 x 10/15 ml	17 x 121				
75003785	⑬ 5/7 ml or 4.5/6 ml Blood Collection Tube	32 x 5/7 ml	13 x 122				
75003810	⑭ 5/7 ml Round Bottom Open-Top Tube	36 x 5/7 ml	13 x 118				
75003811	⑮ 3/5 ml RIA or Round Bottom Tube (without cap)	48 x 3/5 ml	12 x 124				
75003812	⑯ 1.5/2 ml Conical Microtube	48 x 2 ml	11 x 45				

¹ Buckets and lids sold separately

² 120 V ventilated centrifuge

Swinging Bucket Rotors



TX-400
Swinging Bucket Rotor¹

Thermo Scientific Rotors and Adapters


Cat. No	Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 16/16R		Sorvall ST 40/40R	
				Max Speed (rpm)	Max RCF (xg)	Max Speed (rpm)	Max RCF (xg)
75003629	TX-400 Swinging Bucket Rotor						
75003655	Round Buckets (set of 4), 90°, R_{max} 168 mm	4 x 400 ml		5000	4696	n/a	n/a
75003656	ClickSeal Biocontainment Lids for Round Buckets (set of 4)						
75003657	Replacement O-rings for Lids (set of 4)						
	Adapters for Round Buckets (sets of 4)						
No adapter needed	17 400 ml Polypropylene Bio-Bottle (75007585, pkg of 12)	4 x 400 ml	80 x 125				
75003788	18 250 ml Thermo Scientific Nalgene Oak Ridge Bottle	4 x 250 ml	62 x 135				
75003788	18 200 ml Thermo Scientific Nunc Conical Bottle + Nunc no. 377585	4 x 200 ml	62 x 125				
75003788	18 225 ml and 175 ml BD Falcon™ Conical Bottle + BD no. 352090	4 x 175 ml	62 x 125				
75003708	19 100 ml Round Bottom Open-Top Tube	4 x 100 ml	45 x 117				
75003707	20 50 ml DIN Round Bottom Tube	12 x 50 ml	34.5 x 105				
75003799	21 50 ml Round Bottom Tube	16 x 50 ml	28.5 x 114				
75003683	22 50 ml Conical Tube	16 x 50 ml	29.5 x 116				
75003703	23 30/25 ml DIN Round/Flat Bottom Tube	20 x 30 ml	25.5 x 108				
75003706	24 25 ml Universal Tube	12 x 20 ml	25 x 110				
75003682	25 15 ml Conical Tube	36 x 15 ml	17 x 121				
75003794	26 15 ml Blood Collection Tube (17 x 125 mm)	16 x 15 ml	15.5 x 131				
75003704	27 15 ml Round Bottom Tube (Sarstedt®)	40 x 15 ml	17 x 105				
75003798	28 14 ml Conical Urine Tube	28 x 14 ml	17 x 112				
75003681	29 10 ml Blood Collection or 15 ml Corex/Kimble Tube	56 x 10/15 ml	17 x 113				
75003680	30 5/7 ml Blood Collection Tube (Vacutainer®)	76 x 5/7 ml	13 x 110				
75003825	4.5/6 ml Blood Collection Tube (Greiner®)	64 x 4.5/6 ml	13 x 110				
75003793	31 3 ml RIA or Round Bottom Tube (without cap)	76 x 3/5 ml	11 x 110				
75003700	32 1.5/2 ml Conical Microtube	136 x 2 ml	11 x 45				





TX-750 Swinging Bucket Rotor¹

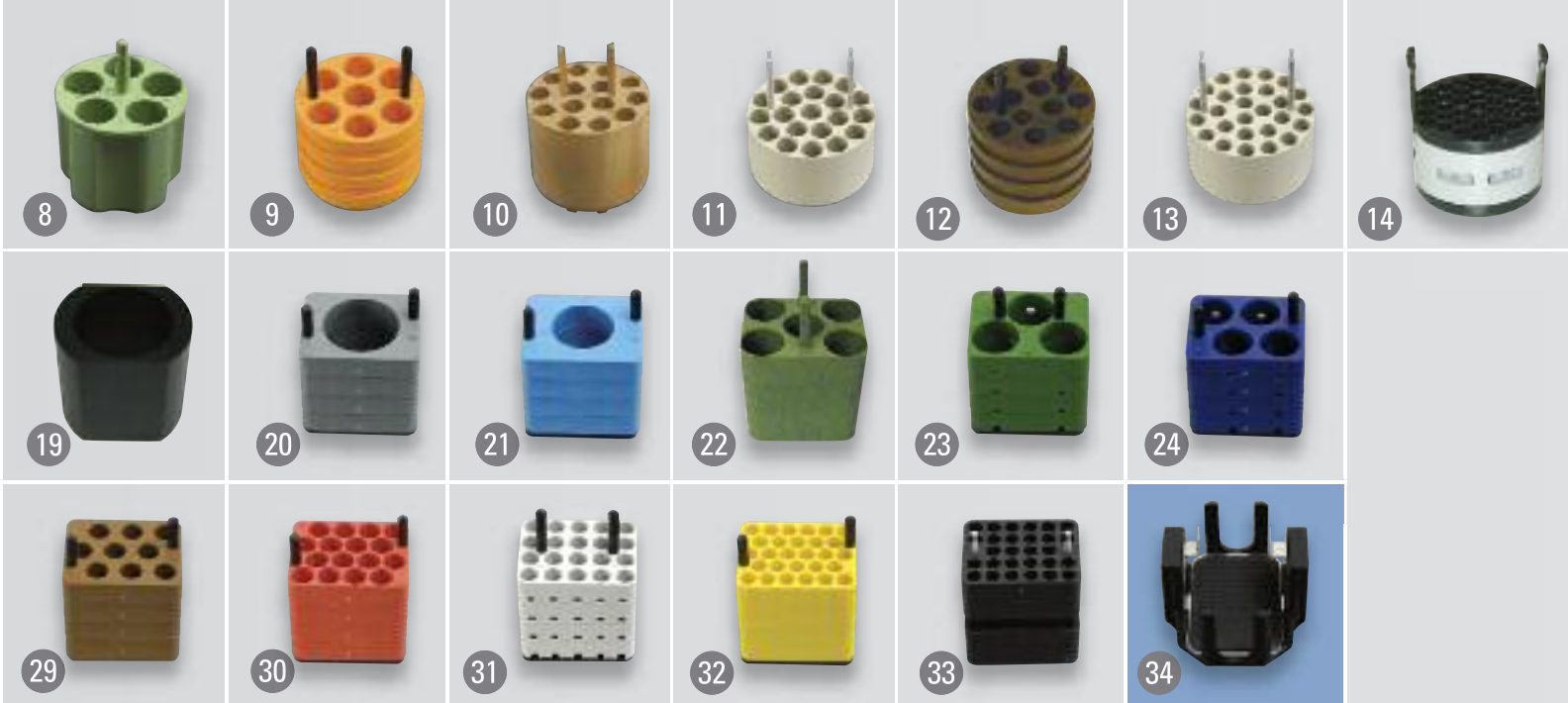
Thermo Scientific Rotors and Adapters

Cat. No	Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 16/16R		Sorvall ST 40/40R	
				Max Speed (rpm)	Max RCF (xg)	Max Speed (rpm)	Max RCF (xg)
75003607	TX-750 Swinging Bucket Rotor						
75003608	Round Buckets (set of 4), 90°, R_{max} 195 mm	4 x 750 ml		n/a	n/a	4700	4816
 75003609	ClickSeal Biocontainment Lids for Round Buckets (set of 4)						
75003610	Replacement O-rings for Lids (set of 4)						
	Adapters for Round Buckets (sets of 4 unless otherwise noted)						
No adapter needed 1	750 ml Polypropylene Bio-Bottle (75003699, pkg of 12)	4 x 750 ml	98 x 133				
Corning no. 431124	500 ml Corning® Conical Bottle	4 x 500 ml	98 x 133				
75003792	2 250 ml Corning Conical Bottle (in open buckets only)	4 x 250 ml	62.5 x 139				
75003710	3 250 ml Nalgene® Oak Ridge Bottle	4 x 250 ml	62.5 x 139				
75003710	3 225 ml and 175 ml BD Falcon Conical Bottle +BD no. 352090	4 x 225 ml	62.5 x 139				
75003710	3 200 ml Nunc™ Conical Bottle + Nunc no. 377585	4 x 200 ml	62.5 x 139				
75003710	3 175 ml Nalgene Bottle + Nalgene no. DS3126-0175	4 x 175 ml	62.5 x 139				
75003713	4 100 ml Round Bottom Open-Top Tube	8 x 100 ml	45 x 123				
75003714	5 50 ml Conical Tube (includes sealing vessel)*	12 x 50 ml	29.5 x 120				
75003638	6 50 ml Conical Tube	28 x 50 ml	29.5 x 120				
75003715	7 50 ml Round Bottom Tube	28 x 50 ml	29.5 x 120				
75003824	8 50 ml Conical or Skirted Tube	20 x 50 ml	29.5 x 120				
75003716	9 25 ml Universal Conical or Skirted Tube	28 x 25 ml	25.5 x 120				
75003639	10 15 ml Conical Tube	56 x 15 ml	17 x 122				
75003719	11 15 ml Blood Collection Tube (17 x 125 mm) (inner circle only)	32 x 15 ml	17 x 134				
75003718	12 14 ml Conical Urine Tube	48 x 14 ml	18 x 124				
75003719	11 10 ml Blood Collection or 15 ml Corex/Kimble Tube	84 x 10/15 ml	17 x 117				
75003723	13 5/7 ml or 4.5/6 ml Blood Collection Tube Blood	108 x 5/7 ml	13 x 116				
75003724	14 5 ml RIA or Round Bottom Tube (without cap)	148 x 5 ml	13 x 111				
75003732	14 5/7 ml Round Bottom Tube (without cap) with Decanting Aid	148 x 5/7 ml	13 x 111				
75003733	15 1.5/2 ml Conical Microtube	192 x 2 ml	11 x 50				
75008383	16 T-75 Nunc Easy Flask (set of 2)	4 x T-75	-				
75008384	17 T-25 Nunc Easy Flask (set of 2)	8 x T-25	-				

¹ Buckets and lids sold separately

*Sealed vessels can also be used with certified ClickSeal lids for double biocontainment protection.


Swinging Bucket Rotors



Thermo Scientific Rotors and Adapters

Sorvall
ST 16/16R

Sorvall
ST 40/40R

Cat. No	Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Max Speed (rpm)	Max RCF (xg)	Max Speed (rpm)	Max RCF (xg)
TX-750 Swinging Bucket Rotor (continued)							
75003614	18 Rectangular Buckets (set of 4), 90°, R _{max} 195 mm	4 x 250 ml		n/a	n/a	4500	4415
						4700 ³	4816 ³
						4300 ⁴	4031 ⁴
 75003615	ClickSeal Biocontainment Lids for Rectangular Buckets (set of 4)						
75003616	Replacement O-rings for Lids (set of 4)						
Adapters for Rectangular Buckets (sets of 4)							
75003737	19 250 ml Flat Bottom Bottle	4 x 250 ml	63 x 130				
75003738	20 150 ml Round Bottom Open-Top Tube	4 x 150 ml	56 x 124				
75003742	21 100 ml Round Bottom Open-Top Tube	4 x 100 ml	46 x 124				
75003685	22 50 ml Conical Tube	20 x 50 ml	30 x 121				
75003749	23 50 ml Round Bottom Tube	12 x 50 ml	35 x 121				
75003750	24 45 ml Flat/Round Tube	16 x 45 ml	30 x 121				
75003755	25 25 ml Universal Tube	16 x 25 ml	26 x 121				
75003756	26 25 ml DIN Round Bottom Tube	24 x 25 ml	26 x 121				
75003684	27 15 ml Conical Tube	48 x 15 ml	17 x 120				
75003758	28 14 ml Flanged Round Bottom Tube	36 x 14 ml	18 x 121				
75003759	29 15 ml Conical Urine Tube	36 x 15 ml	17 x 124				
75003767	30 10 ml Blood Collection or 15 ml DIN Tube	64 x 10/15 ml	17 x 118				
75003768	31 5/7 ml or 4.5/6 ml Blood Collection Tube	80 x 5/7 ml	14 x 118				
75003769	32 5/7 ml Round Bottom Tube	112 x 5/7 ml	13 x 119				
75003770	33 1.5/2 ml Conical Microtube	224 x 2 ml	11 x 50				
75003795 (set of 2)	Carriers for microplates and T-75 Horizontal Flasks, 4 x 4 Standard or including plate trays and neoprene pad, 90° R_{max} 155 mm	4 x 4 Standard or 4 x 1 Deepwell	H _{max} : 60 mm	n/a	n/a	4700	3828
75003617 (set of 4)	34						





³ 230 V refrigerated centrifuge

⁴ 120 V ventilated and refrigerated centrifuge



BIOliner¹ (top) and M-20 Microplate (right) Rotors

Thermo Scientific Rotors and Adapters

Cat. No	Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 16/16R		Sorvall ST 40/40R	
				Max Speed (rpm)	Max RCF (xg)	Max Speed (rpm)	Max RCF (xg)
75003667	BIOliner High Capacity Rotor						
75003668	BIOliner Buckets (set of 4), 90°, R_{max} 200 mm	4 x 750 ml		n/a	n/a	3500	2739
 75003669	ClickSeal Biocontainment Lids for BIOliner Buckets (set of 4)						
75003688	Replacement O-rings for Lids						
	Adapters for BIOliner Buckets (sets of 4)						
75003692	1 750 ml Flat Bottom Bottle with all round adapters listed for TX-750 round bucket	4 x 750 ml	98 x 124				
75003692	1 500 ml Corning Conical Bottle + Corning cushion no. 431124	4 x 500 ml	98 x 124				
75003691	2 250 ml Corning Conical Bottle ⁵	4 x 250 ml	62 x 145				
75003675	3 250 ml Nalgene Oak Ridge Bottle	8 x 250 ml	62 x 130				
75003675	3 225 ml and 175 ml BD Falcon Conical Bottle + BD no. 352090	8 x 225 ml	62 x 130				
75003675	3 200 ml Nunc Conical Bottle + Nunc cushion no. 377585	8 x 175 ml	62 x 130				
75003674	4 50 ml Conical Tube	40 x 50 ml	30 x 120				
75003673	5 15 ml Conical Tube	88 x 15 ml	17.5 x 121				
75003697	9/10 ml Blood Collection Tube (Sarstedt)	100 x 9/10 ml	17 x 110				
75003672	6 10 ml Blood Collection Tube	148 x 10 ml	17 x 110				
75003671	7 5/7 ml Blood Collection Tube (Vacutainer)	196 x 5/7 ml	14 x 110				
75003709	4.5/6 ml Blood Collection Tube (Greiner)	164 x 4.5/6 ml	14 x 110				
75003796 (set of 2)	Microplate Carriers for BIOliner Rotor, R_{max} 179 mm	4 x 4 Standard or	H _{max} : 60 mm				
75003670 (set of 4)		4 x 1 Deepwell		n/a	n/a	3500	2451
 75003689	Sealing Lids for BIOliner Microplate Carriers (set of 4)						
75003626	Replacement O-rings for Microplate Carrier Lids (set of 4)						
75003624	M-20 Microplate Rotor, 90°, R_{max} 127 mm, includes 2 buckets and 2 adapters	2 x 3 Standard or 2 x 1 Deepwell	H _{max} : 65 mm	4000	2272	4000	2272
 75003625	Sealed Carriers, includes trays and lids (set of 2)		H _{max} : 45 mm				
 75002011	Replacement Sealing Lids (set of 2)						
75002012	Replacement O-rings (set of 4 with grease)						

¹ Buckets and lids sold separately

⁵ In open buckets only

Swinging Bucket Rotors



BIOShield 720 (top) and
BIOShield 1000A (right)
Swinging Bucket Rotors

Thermo Scientific Rotors and Adapters

Cat. No	Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 16/16R		Sorvall ST 40/40R	
				Max Speed (rpm)	Max RCF (xg)	Max Speed (rpm)	Max RCF (xg)
75003621	BIOShield 720 High Speed Swinging Bucket Rotor, 90°, R_{max} 162 mm	4 x 180 ml		5300	5088	n/a	n/a
	Adapters for BIOShield 720 Rotor (sets of 4)						
75003693	180 ml Polypropylene Screw Cap Bottle (75003800, pkg of 12)	4 x 180 ml	56 x 123				
75003813	150 ml Round Bottom Open-Top Tube	4 x 150 ml	50 x 122				
75003814	100 ml Round Bottom Open-Top Tube	4 x 100 ml	44 x 120				
75003677	50 ml Conical Tube	8 x 50 ml	34.5 x 116				
75003816	50 ml DIN Round Bottom Tube	8 x 50 ml	34 x 109				
75003818	25 ml Universal Tube	16 x 25 ml	22.5 x 105				
75003817	25 ml DIN Round Bottom Tube	20 x 25 ml	25 x 107				
75003678	15 ml Conical Tube	24 x 15 ml	17 x 120				
75003820	15 ml Sarstedt Tube	44 x 15 ml	17 x 103				
75003701	10 ml Blood Collection Tube	48 x 10 ml	17 x 105				
75003821	5/7ml Blood Collection Tube	48 x 5/7 ml	13 x 106				
75003822	5/7ml Round Bottom Open-Top Tube	80 x 5/7 ml	13 x 104				
75003823	1.5/2ml Conical Microtube	160 x 2 ml	11 x 45				
75003603	BIOShield 1000A High Speed Swinging Bucket Rotor, 90°, R_{max} 178 mm	4 x 250 ml		n/a	n/a	5300	5590
	Adapters for BIOShield 1000A Rotor (sets of 4)						
75003737	250 ml Nalgene Flat Bottom Bottle	4 x 250 ml	62.5 x 124				
75003738	150 ml Round Bottom Open-Top Tube	4 x 150 ml	56.5 x 119				
75003742	100 ml Round Bottom Open-Top Tube	4 x 100 ml	45.5 x 120				
75003643	50 ml Conical Tube	16 x 50 ml	29.5 x 117				
75003749	50 ml Round Bottom Tube	12 x 50 ml	35 x 113				
75003750	45 ml Flat/Round Tube	16 x 45 ml	30 x 113				
75003755	25 ml Universal Tube	16 x 25 ml	26 x 113				
75003756	25 ml DIN Round Bottom Tube	24 x 25 ml	25.5 x 113				
75003642	15 ml Conical Tube	36 x 15 ml	17 x 121				
75003758	14 ml Flanged Round Bottom Tube	36 x 14 ml	18 x 113				
75003759	15 ml Conical Urine Tube	36 x 15 ml	17 x 115				
75003767	10 ml Blood Collection or 15 ml DIN Tube	64 x 10/15 ml	17 x 109				
75003768	5/7 ml Blood Collection Tube	80 x 5/7 ml	14 x 109				
75003769	5/7 ml Round Bottom Tube	112 x 5/7 ml	13 x 110				
75003770	1.5/2 ml Conical Microtube	224 x 2 ml	11 x 50				

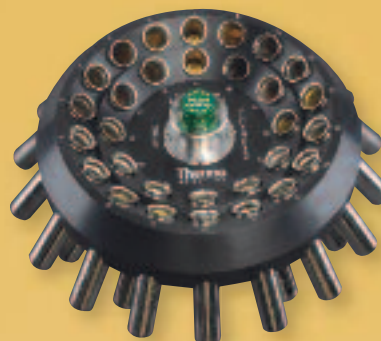
Fixed Angle Rotors



**Fiberlite F15-6x100y
Fixed Angle Rotor**



**HIGHConic II Fixed Angle
Aluminum Rotor**



CLINIConic Fixed Angle Rotor

Thermo Scientific Rotors and Adapters

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 16/16R		Sorvall ST 40/40R	
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)
75003698 Fiberlite F15-6x100y Fixed Angle Rotor, 25°, R_{max} 98 mm 021-069031 O-ring Refresher Kit Adapters for F15-6x100y Rotor (sold separately) No adapter needed 94 ml Nalgene Tube 75003103 50 ml Conical Tube 75003095 15 ml Conical Tube 75003102 50 ml Round Bottom Tube 75003094 38 ml Round Bottom Tube 76002906 16 ml Round Bottom Tube 75003093 12 ml Round Bottom Tube 75003092 6.5 ml Round Bottom Tube 75003091 3.5 ml Round Bottom Tube 76002905 1.5/2 ml Conical Microtube	6 x 100 ml	38 x 105	13000	18516	13000	18516
75003620 HIGHConic II Aluminum Fixed Angle Rotor, 45°, R_{max} 126 mm 75003058 Replacement Sealing O-rings (set of 2 with grease) Adapters for HIGHConic II Rotor (sold separately) No adapter needed 94 ml Round Bottom Tube 75003103 50 ml Conical Tube 75003095 15 ml Conical Tube 75003102 50 ml Round Bottom Tube 75003094 38 ml Round Bottom Tube 76002906 16 ml Round Bottom Tube 75003093 12 ml Round Bottom Tube 75003092 6.5 ml Round Bottom Tube 75003091 3.5 ml Round Bottom Tube 76002905 1.5/2 ml Conical Microtube	6 x 94 ml	38 x 105	8500	10178	10350	15090
75003623 CLINIConic Fixed Angle Rotor, 37°, R_{max} 140 mm Adapters for CLINIConic Rotor No adapter needed 15 ml Round/Conical Bottom Tube 75003702 10 ml Round Bottom Tube 11172596 7 ml Round Bottom or Blood Collection Tube (each) 11172595 5 ml Round Bottom or Blood Collection Tube (each)	30 x 15 ml	30 x 15 ml	5650	4997	n/a	n/a



**Fiberlite F21-48x2
Fixed Angle Rotor**



**Microliter 48x2 Sealed Aluminum
Fixed Angle Rotor**



**8x50 ml Individually
Sealed Fixed Angle Rotor**



**Microliter 30x2 Sealed Aluminum
Fixed Angle Rotor**

Thermo Scientific Rotors and Adapters

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 16/16R		Sorvall ST 40/40R	
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)
75003694 8x50 ml Individually Sealed Fixed Angle Rotor, 45°, R_{max} 143 mm 75003689 Replacement O-rings (set of 12) Adapters for 8x50 ml Sealed Rotor No adapter needed 50 ml Conical Tube	8 x 50 ml		6700 6500 ⁴	7177 6755 ⁴	n/a n/a	n/a n/a
75003664 Fiberlite F21-48x2 Fixed Angle Rotor, 45°, R_{max} 97 mm 021-489021 O-ring Refresher Kit Adapters for F21-48x2 Rotor (sets of 24) 76003750 0.2 ml PCR Tube 76003758 0.5 ml Microtube 76003759 0.25 ml Microtube	48 x 2 ml	11 x 50	n/a	n/a	15200	25055
75003652 Microliter 30x2 Sealed Aluminum Fixed Angle Rotor, 45°, R_{max} 100 mm Adapters for Microliter 30x2 Rotor (sets of 24) 76003750 0.2 ml PCR Tube 76003758 0.5 ml Microtube 76003759 0.25 ml Microtube	30 x 2 ml	11 x 50	15200	25830	n/a	n/a
75003602 Microliter 48x2 Sealed Aluminum Fixed Angle Rotor, 45°, R_{max} 98 mm Adapters for Microliter 48x2 Rotor (sets of 24) 76003750 0.2 ml PCR Tube 76003758 0.5 ml Microtube 76003759 0.25 ml Microtube	48 x 2 ml	11 x 50	n/a	n/a	15200	25314

⁴120 V ventilated and refrigerated centrifuge

Thermo Scientific
Sorvall ST Centrifuge Series



Specifications	Sorvall ST 16/16R	Sorvall ST 40/40R	
Swinging Bucket Rotors			
Max Capacity	4 x 400 ml (with TX-400 rotor)	4 x 750 ml (with TX-750 and BIOLiner rotors)	
Max Speed	5500 rpm (with TX-200 rotor)	5300 rpm (with BIOShield 1000A rotor)	
Max RCF	5580 x g (with TX-200 rotor)	5590 x g (with BIOShield 1000A rotor)	
Fixed Angle Rotors			
Max Capacity	6 x 100 ml (with F15-6x100 rotor)	6 x 100 ml (with F15-6x100 rotor)	
Max Speed	15200 rpm (with 30x2 ml rotor)	15200 rpm (with 48x2 ml rotor)	
Max RCF	25830 x g (with 30x2 ml rotor)	25314 x g (with 48x2 ml rotor)	
Control System	Microprocessor		
Drive System	Direct, brushless induction low profile motor		
Rotor Locking System	Auto-Lock III		
Imbalance Detection System	SMARTSpin		
Programs	6, direct access		
Temperature Set Range*	-10 °C to +40 °C		
Pre-Cooling Function*	Yes, with direct button		
Refrigeration System*	CFC free		
Pulse (Short) Run	Yes		
Acceleration/ Deceleration Rates	9/ 10		
Centrifugation Chamber	Stainless Steel		
Max Timer Range	9h, 99min + continuous		
Sound Level (dBA), with swinging bucket rotor at top speed	< 61/< 55* dB (TX-400)	< 61/< 57* (TX-750)	
Other Features	Certified ClickSeal biocontainment system, language selection, motorized lid latch		
Max Power Consumption (W)	120V	850/ 1200*	1400
	230V	1010/ 1400*	1700/1950*
Max Heat Output (BTU/h)	120V	2900/ 4096*	4776
	230V	3447/ 4776*	5800/ 6653*
Dimensions			
Height (lid open)	87 cm/ 34.3 in	90 cm/ 35.4 in	
Height (lid closed)	36 cm/ 14.2 in	36 cm/ 14.2 in	
Width	44 cm/ 17.3 in	56.5 cm/ 22.2 in	
	62.3 cm*/ 24.5 in*	74.5 cm*/ 29.3 in*	
Depth	60.5 cm/ 23.8 in	67 cm/ 26.4 in	
Weight	57.5 kg/ 126.8 lb	86 kg/ 189.6 lb	
	91.5 kg*/ 201.7 lb*	116 kg*/ 255.7 lb*	
Technical Standards	IEC 61010-1, IEC 61010-202, IEC 61010-2-101 230 V only: EN 292, EN 61326, EN 55011B		
Certifications	UL listed / CSA certified / CE marked / IVD compliant / Certified Biosafety, RoHS compliant, WEE compliant		
Ordering Information			
	Sorvall ST 16/16R	Sorvall ST 40/40R	
Sorvall ST, ventilated, 120 V, 60 Hz	75004241	75004510	
Sorvall ST, ventilated, 230 V, 50/60 Hz	75004240	75004509	
Sorvall ST, ventilated, 100 V, 50/60 Hz	75004243	75004511	
Sorvall ST, refrigerated, 120 V, 60 Hz	75004381	75004525	
Sorvall ST, refrigerated, 230 V, 50/60 Hz	75004380	75004524	
Sorvall ST, refrigerated, 100 V, 50/60 Hz	75004383	75004526	

*Refrigerated models



The quality of the procedures used to design, manufacture, sell and service the Sorvall ST 16 and ST 40 centrifuge series is certified and maintained in accordance to the ISO 13485 international standard. Our effort to continuously improve our formalized business processes is certified and regularly audited in conformance with ISO 9000 family of Quality Standards.

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