



**NEW!**  
**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

# Sorvall ST Series

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.



Auto-Lock III

ClickSeal

## >> Thermo Scientific Sorvall ST 16 and ST 40 Centrifuge Series

Introducing the new Thermo Scientific Sorvall general purpose centrifuge series, including the 4x400 ml Sorvall® ST 16 and 4x750 ml Sorvall ST 40 centrifuges. Our centrifuge series provides industry-leading capacity and ergonomics at an exceptional value for everyday sample preparation, including clinical protocols, cell culture applications, microplate processing and a variety of separation needs.

**Unparalleled productivity and throughput:** Process from 4 to 40 x 50 ml conical tubes or from 32 to 196 blood tubes with our extensive selection of biocontainment rotor solutions, all requiring minimum bench space.

**Exceptional ergonomics:** With our patented innovations, achieve safe, simple and comfortable daily operation at a working height of only 31 cm/ 12.4 in.

### 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 CAMR\* in Porton Down, UK
- > Polyetherimide (PEI) sealing covers with high chemical resistance and excellent thermal properties

\* CAMR is now incorporated within the UK Health Protection Agency (HPA)

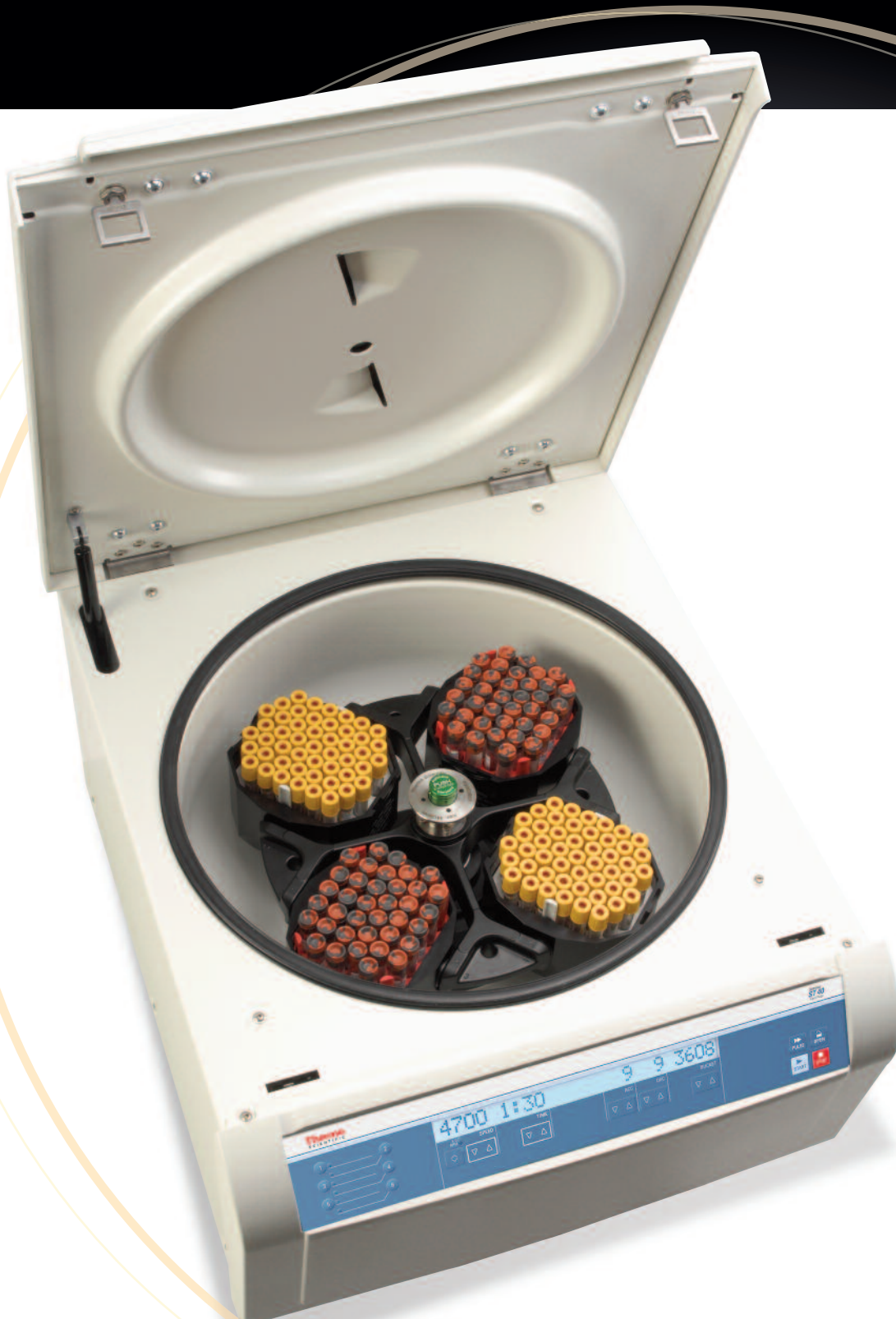
#### SMARTSpin® Technology

- > Advanced rotor management system optimizes acceleration, braking and residual load imbalance for each rotor and bucket option, maximizing safety and improving separation particularly in pelleting applications

# 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.



## 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
- > Ergonomic height and curved design ensure comfortable loading and unloading of samples and cleaning of the unit

## Industry-Leading Energy Efficiency

- > Up to 40% energy consumption savings\* on industry standard protocols, such as standard blood separation or conical tubes processing
- > Extended tubes capacity significantly reduces the number of runs in high throughput labs
- > Power saving option optimizes energy usage

\* Based on internal benchmark data

# 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

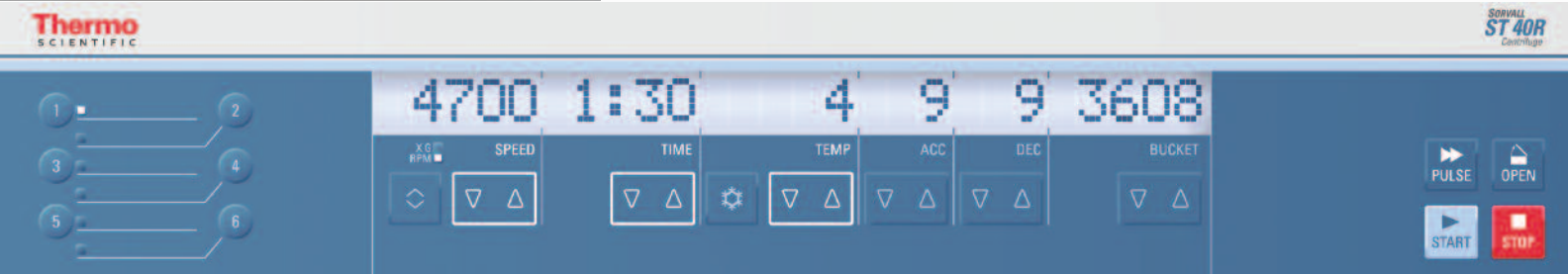
Immediate storage and access to your most frequently used programs with unique writing area for naming programs

## 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 and Italian, on programming, run conditions, alerts and service messages
- > Glove- and detergent-friendly panel



### Program Keys

### 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 BIoLiner rotor*

### Acce/Decei:

Choice of 9 acceleration and 10 deceleration rates

### Bucket:

Quickly adjust rotor parameters for accurate RCF calculation

### Pulse:

Ideal for short runs

### Open:

Motorized latch with optional automatic opening



## 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.

### *Thermo Scientific Cell Culture Excellence* *Essential products for the cell culture laboratory*








Our comprehensive portfolio includes advanced tools designed to help you achieve excellence at every stage of your cell culture process – from growth and passage to culture and experimentation through characterization, analysis and storage.

*To learn about our full array of cell culture products and services,  
go to: [www.thermo.com/cellculture](http://www.thermo.com/cellculture)*

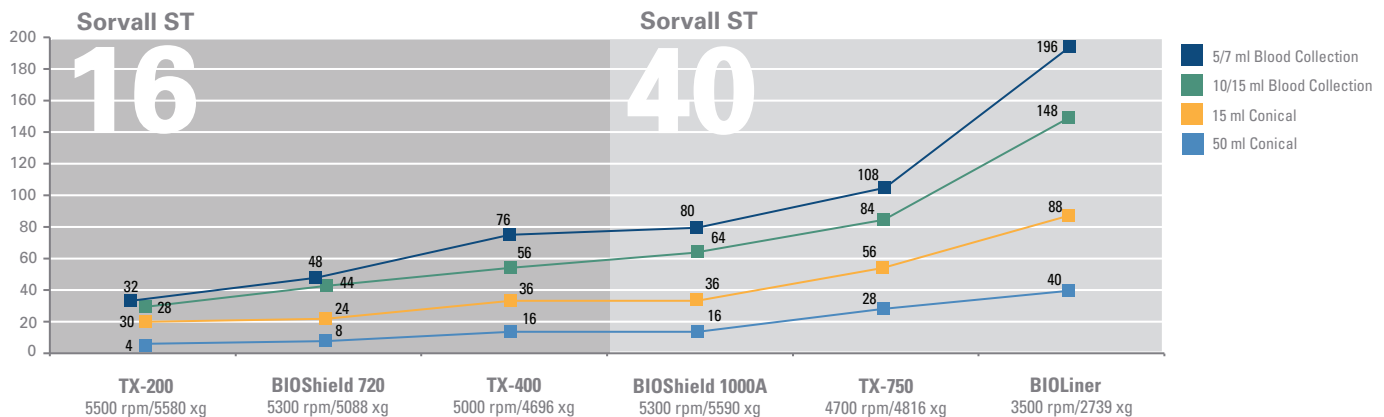
# Incredible Capacity and Productivity





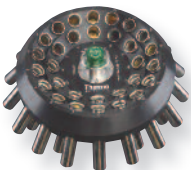


Our Sorvall ST 16 and ST 40 centrifuge series feature a wide range of rotors to meet your daily, routine processing requirements.

Swinging Bucket Rotors		Sorvall ST 16	Sorvall ST 40
	<p><b>TX-200 and TX-400</b> <i>Maximum flexibility</i></p> <p>Designed for a broad range of laboratory throughput needs, with a capacity range of 32 to 76 blood tubes and up to 16 conical tubes in a single run, for the highest configuration flexibility on the market.</p>	✓	
	<p><b>TX-750</b> <i>Outstanding versatility</i></p> <p>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><b>BIOLiner®</b> <i>Exceptional capacity</i></p> <p>Significantly improves productivity – process over 40% 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><b>M-20</b> <i>Compact processing</i></p> <p>Centrifuges up to 6 microplates in certified sealed conditions with transportable carriers and the versatility of Auto-Lock rotor installation.</p>	✓	
	<p><b>BIOShield® 720 and BIOShield 1000A</b> <i>Excellent performance</i></p> <p>Runs frequently used tubes above 7000 x g with the confidence and simplicity of a single, certified biosafety lid.</p>	✓ BIOShield 720	✓ BIOShield 1000A

## Swinging Bucket Rotors Capacity





Fixed Angle Rotors		Sorvall ST 16	Sorvall ST 40
	<b>Fiberlite™ F15-6x100</b> Durable design for general purpose pelleting of organelles, density gradients and various protocols requiring angle centrifugation of disposable conical tubes up to 18516 x g.	✓	✓
	<b>HIGHConic® II</b> Process 6 x 94 ml tubes at up to 10178 x g in certified sealed conditions.	✓	✓
	<b>CLINIConic®</b> Spin 30 x 15 ml round or conical tubes up to 5000 x g and ensure acceleration and throughput for cell culture and blood separation applications.	✓	
	<b>8x50 Sealed</b> Ideal for TB sputum applications, and other high risk samples, centrifuge 8 conical tubes up to 6700 rpm in individually sealed vessels, which can be prepared remotely, with rapid acceleration and processing times.	✓	
	<b>Micro-Volume Rotors</b> <i>Fiberlite F21-48x2, Microliter 30x2, Microliter 48x2</i> Perfect blend of capabilities to support micro-volume protocols, such as nucleic acid or protein lysate preparation and PCR reaction set-up. With relative centrifugal forces up to 25700 x g and Auto-Lock rotor exchange, transform your general purpose unit into a microcentrifuge in less than 3 seconds!	✓ 30x2	✓ F21-48x2 48x2

\*Microliter 30x2 and Microliter 48x2 only

## Thermo Scientific Fiberlite Rotors

### Setting New Performance Standards for Benchtop Processing

Our carbon fiber rotors maximize the performance of the Sorvall ST centrifuge series with versatility, speed and robust, corrosion-free design.

#### Industry-Leading Performance

Increase performance, with higher G-force and faster speeds, at benchtop value.

#### Exceptional Security and Value for Improved Safety


- Resistance to corrosion protects against misuse and damage
- Safe, continuous operation for lifetime use of rotor
- Lightweight for easy handling and loading within the laboratory





TX-200  
Swinging Bucket Rotor<sup>1</sup>

### 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		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
<b>TX-200 Swinging Bucket Rotor</b>							<b>75003658</b>
<b>Round Buckets (set of 4), 90°, R<sub>max</sub> 165 mm</b>	<b>4 x 180 ml</b>		<b>5500</b>	<b>5580</b>	<b>n/a</b>	<b>n/a</b>	<b>75003659</b>
			<b>5250<sup>2</sup></b>	<b>5084<sup>2</sup></b>			
 <b>ClickSeal Biocontainment Lids for Round Buckets (set of 4)</b>							<b>75003660</b>
Replacement O-rings for Lids (set of 4)							75003687
<b>Adapters for Round Buckets (sets of 4)</b>							
180 ml Polypropylene Screw Cap Bottle (75003800, pkg of 12)	4 x 180 ml	56.5 x 123					No adapter needed
<b>1</b> 100 ml Round Bottom Open-Top Tube	4 x 100 ml	48 x 122					75003801
<b>2</b> 50 ml DIN Round Bottom Tube	4 x 50 ml	35 x 126					75003802
<b>3</b> 50 ml Round Bottom Tube	4 x 50 ml	32 x 126					75003815
<b>4</b> 50 ml Conical Tube	4 x 50 ml	29.5 x 126					75003803
<b>5</b> 25 ml Universal Tube	4 x 25 ml	25.5 x 118					75003804
<b>6</b> 25 ml DIN Round/Flat Bottom Tube	8 x 25 ml	25 x 118					75003805
<b>7</b> 20 ml Round Bottom Tube	12 x 25 ml	22 x 125					75003806
<b>8</b> 15 ml Conical Tube	20 x 15 ml	16.5 x 121					75003771
<b>9</b> 15 ml Blood Collection Tube	16 x 15 ml	17 x 121					75003809
<b>10</b> 14 ml Conical Urine Tube	8 x 14 ml	17 x 114					75003807
<b>11</b> 10 ml Blood Collection or 15 ml Corex®/Kimble® Tube	28 x 10/15 ml	17 x 121					75003808
<b>12</b> 5/7 ml Blood Collection Tube	32 x 5/7 ml	13 x 122					75003785
<b>13</b> 5/7 ml Round Bottom Open-Top Tube	36 x 5/7 ml	13 x 118					75003810
<b>14</b> 3/5 ml RIA or Round Bottom Tube (without cap)	48 x 3/5 ml	12 x 124					75003811
<b>15</b> 1.5/2 ml Conical Microtube	48 x 2 ml	11 x 45					75003812

<sup>1</sup> Buckets and lids sold separately

<sup>2</sup> 120 V ventilated centrifuge





TX-400  
Swinging Bucket Rotor<sup>1</sup>

**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		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
<b>TX-400 Swinging Bucket Rotor</b>							<b>75003629</b>
<b>Round Buckets (set of 4), 90°, R<sub>max</sub> 168 mm</b>	<b>4 x 400 ml</b>		<b>5000</b>	<b>4696</b>	<b>n/a</b>	<b>n/a</b>	<b>75003655</b>
<b>ClickSeal Biocontainment Lids for Round Buckets (set of 4)</b>							<b>75003656</b>
Replacement O-rings for Lids (set of 4)							75003657
<b>Adapters for Round Buckets (sets of 4)</b>							
400 ml Polypropylene Bio-Bottle (75007585, pkg of 12)	4 x 400 ml	80 x 125					No adapter needed
<b>16</b> 250 ml Thermo Scientific Nalgene Oak Ridge Bottle	4 x 250 ml	62 x 125					75003788
<b>16</b> 200 ml Thermo Scientific Nunc Conical Bottle	4 x 200 ml	62 x 125					75003788
							+ Nunc no. 377585
<b>16</b> 225 ml and 175 ml BD Falcon™ Conical Bottle	4 x 175 ml	62 x 125					75003788
							+ BD no. 352090
<b>17</b> 100 ml Round Bottom Open-Top Tube	4 x 100 ml	45 x 117					75003708
<b>18</b> 50 ml DIN Round Bottom Tube	12 x 50 ml	34.5 x 105					75003707
<b>19</b> 50 ml Round Bottom Tube	16 x 50 ml	28.5 x 114					75003799
<b>20</b> 50 ml Conical Tube	16 x 50 ml	29.5 x 116					75003683
<b>21</b> 30/25 ml DIN Round/Flat Bottom Tube	20 x 30 ml	25.5 x 108					75003703
<b>22</b> 25 ml Universal Tube	12 x 25 ml	25 x 110					75003706
<b>23</b> 15 ml Conical Tube	36 x 15 ml	16.5 x 121					75003682
<b>24</b> 15 ml Blood Collection Tube (17 x 125 mm)	16 x 15 ml	15.5 x 131					75003794
<b>25</b> 15 ml Round Bottom Tube (Sarstedt®)	40 x 15 ml	17 x 105					75003704
<b>26</b> 14 ml Conical Urine Tube	28 x 14 ml	17 x 112					75003798
<b>27</b> 10 ml Blood Collection or 15 ml Corex/Kimble Tube	56 x 10/15 ml	15 x 113					75003681
<b>28</b> 5/7 ml Blood Collection Tube	76 x 5/7 ml	12 x 110					75003680
<b>29</b> 3 ml RIA or Round Bottom Tube (without cap)	76 x 3/5 ml	11 x 110					75003793
<b>30</b> 1.5/2 ml Conical Microtube	136 x 2 ml	11 x 45					75003700



TX-750 Swinging Bucket Rotor<sup>1</sup>


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

<sup>1</sup> Buckets and lids sold separately



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

<sup>3</sup> 230 V refrigerated centrifuge

<sup>4</sup> 120 V ventilated and refrigerated centrifuge



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

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

<sup>1</sup> Buckets and lids sold separately  
<sup>5</sup> In open buckets only



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

## Thermo Scientific Rotors and Adapters

Sorvall ST  
16/16R

Sorvall ST  
40/40R

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	Cat. No.
 <b>BIOShield 720 High Speed Swinging Bucket Rotor,</b> <b>90° R<sub>max</sub> 162 mm</b>	4 x 180 ml		5300	5088	n/a	n/a	75003621
<b>Adapters for BIOShield 720 Rotor (sets of 4)</b>							
180 ml Polypropylene Screw Cap Bottle (75003800, pkg of 12)	4 x 180 ml	56 x 123					75003693
<b>8</b> 150 ml Round Bottom Open-Top Tube	4 x 150 ml	50 x 122					75003813
<b>9</b> 100 ml Round Bottom Open-Top Tube	4 x 100 ml	44 x 120					75003814
<b>10</b> 50 ml Conical Tube	8 x 50 ml	34.5 x 116					75003677
<b>11</b> 50 ml DIN Round Bottom Tube	8 x 50 ml	34 x 109					75003816
<b>12</b> 25 ml Universal Tube	16 x 25 ml	22.5 x 105					75003818
<b>13</b> 25 ml DIN Round Bottom Tube	20 x 25 ml	25 x 107					75003817
<b>14</b> 15 ml Conical Tube	24 x 15 ml	17 x 120					75003678
<b>15</b> 15 ml Sarstedt Tube	44 x 15 ml	17 x 103					75003820
<b>16</b> 10 ml Blood Collection Tube	48 x 10 ml	17 x 105					75003701
<b>17</b> 5/7ml Blood Collection Tube	48 x 5/7 ml	13 x 106					75003821
<b>18</b> 5/7ml Round Bottom Open-Top Tube	80 x 5/7 ml	13 x 104					75003822
<b>19</b> 1.5/2ml Conical Microtube	160 x 2 ml	11 x 45					75003823
 <b>BIOShield 1000A High Speed Swinging Bucket Rotor,</b> <b>90° R<sub>max</sub> 178 mm</b>	4 x 250 ml		n/a	n/a	5300	5590	75003603
<b>Adapters for BIOShield 1000A Rotor (sets of 4)</b>							
<b>20</b> 250 ml Nalgene Flat Bottom Bottle	4 x 250 ml	62.5 x 124					75003737
<b>21</b> 150 ml Round Bottom Open-Top Tube	4 x 150 ml	56.5 x 119					75003738
<b>22</b> 100 ml Round Bottom Open-Top Tube	4 x 100 ml	45.5 x 120					75003742
<b>23</b> 50 ml Conical Tube	16 x 50 ml	29.5 x 117					75003643
<b>24</b> 50 ml Round Bottom Tube	12 x 50 ml	35 x 113					75003749
<b>25</b> 45 ml Flat/Round Tube	16 x 45 ml	30 x 113					75003750
<b>26</b> 25 ml Universal Tube	16 x 25 ml	26 x 113					75003755
<b>27</b> 25 ml DIN Round Bottom Tube	24 x 25 ml	25.5 x 113					75003756
<b>28</b> 15 ml Conical Tube	36 x 15 ml	17 x 121					75003642
<b>29</b> 14 ml Flanged Round Bottom Tube	36 x 14 ml	18 x 113					75003758
<b>30</b> 15 ml Conical Urine Tube	36 x 15 ml	17 x 115					75003759
<b>31</b> 10 ml Blood Collection or 15 ml DIN Tube	64 x 10/15 ml	17 x 109					75003767
<b>32</b> 5/7 ml Blood Collection Tube	80 x 5/7 ml	14 x 109					75003768
<b>33</b> 5/7 ml Round Bottom Tube	112 x 5/7 ml	13 x 110					75003769
<b>34</b> 1.5/2 ml Conical Microtube	224 x 2 ml	11 x 50					75003770

# Fixed Angle Rotors



**Fiberlite F15-6x100**



**HIGHConic II**



**CLINIConic**

## 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		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
<b>Fiberlite F15-6x100 Fixed Angle Rotor, 25°, R<sub>max</sub> 98 mm</b>	<b>6 x 100 ml</b>	<b>38 x 105</b>	<b>13000</b>	<b>18516</b>	<b>13000</b>	<b>18516</b>	<b>75003698</b>
O-ring Refresher Kit							021-069031
<b>Adapters for F15-6x100 Rotor (sold separately)</b>							
94 ml Nalgene Tube	6 x 94 ml	38 x 105					No adapter needed
50 ml Conical Tube	6 x 50 ml	30 x 121					75003103
15 ml Conical Tube	6 x 15 ml	17 x 123					75003095
50 ml Round Bottom Tube	6 x 50 ml	30 x 117					75003102
38 ml Round Bottom Tube	6 x 38 ml	26 x 110					75003094
16 ml Round Bottom Tube	6 x 16 ml	18 x 123					76002906
12 ml Round Bottom Tube	12 x 12 ml	16 x 95					75003093
6.5 ml Round Bottom Tube	12 x 6.5 ml	13 x 114					75003092
3.5 ml Round Bottom Tube	24 x 3.5 ml	11 x 100					75003091
1.5/2 ml Conical Microtube	24 x 2 ml	11 x 40					76002905
<b>HIGHConic II Aluminum Fixed Angle Rotor, 45°, R<sub>max</sub> 126 mm</b>	<b>6 x 94 ml</b>	<b>38 x 105</b>	<b>8500</b>	<b>10178</b>	<b>10350</b>	<b>15090</b>	<b>75003620</b>
Replacement Sealing O-rings (set of 2 with grease)							75003058
<b>Adapters for HIGHConic II Rotor (sold separately)</b>							
94 ml Round Bottom Tube	6 x 94 ml	38 x 105					No adapter needed
50 ml Conical Tube	6 x 50 ml	29.5 x 117					75003103
15 ml Conical Tube	6 x 15 ml	17 x 123					75003095
50 ml Round Bottom Tube	6 x 50 ml	29.4 x 117					75003102
38 ml Round Bottom Tube	6 x 38 ml	26 x 110					75003094
16 ml Round Bottom Tube	6 x 16 ml	18 x 123					76002906
12 ml Round Bottom Tube	12 x 12 ml	16 x 95					75003093
6.5 ml Round Bottom Tube	12 x 6.5 ml	13.5 x 114					75003092
3.5 ml Round Bottom Tube	24 x 3.5 ml	11 x 100					75003091
1.5/2 ml Conical Microtube	24 x 2 ml	11 x 40					76002905
<b>CLINIConic Fixed Angle Rotor, 37°, R<sub>max</sub> 140 mm</b>	<b>30 x 15 ml</b>		<b>5650</b>	<b>4997</b>	<b>n/a</b>	<b>n/a</b>	<b>75003623</b>
<b>Adapters for CLINIConic Rotor</b>							
15 ml Round/Conical Bottom Tube	30 x 15 ml	16.5 x 131					No adapter needed
10 ml Round Bottom Tube	30 x 10 ml	16.5 x 95					75003702
7 ml Round Bottom or Blood Collection Tube (each)	30 x 7 ml	16.5 x 131					11172596
5 ml Round Bottom or Blood Collection Tube (each)	30 x 5 ml	13 x 95					11172595



Microliter 30x2 Sealed Aluminum

## 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		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
<b>8x50 ml Individually Sealed Fixed Angle Rotor, 45°, R<sub>max</sub> 143 mm</b>	<b>8 x 50 ml</b>		<b>6700</b>	<b>7177</b>	<b>n/a</b>	<b>n/a</b>	<b>75003694</b>
Replacement O-rings (set of 12)							75003689
<b>Adapters for 8x50 ml Sealed Rotor</b>							
50 ml Conical Tube	8 x 50 ml	29.5 x 116					No adapter needed
<b>Fiberlite F21-48x2 Fixed Angle Rotor, 45°, R<sub>max</sub> 97 mm</b>	<b>48 x 2 ml</b>	<b>11 x 50</b>	<b>n/a</b>	<b>n/a</b>	<b>15200</b>	<b>25055</b>	<b>75003664</b>
O-ring Refresher Kit							021-489021
<b>Adapters for F21-48x2 Rotor (sets of 24)</b>							
0.2 ml PCR Tube	48 x 0.25 ml	6 x 20					76003750
0.5 ml Microtube	48 x 0.5 ml	8 x 44					76003758
0.25 ml Microtube	48 x 0.25 ml	6 x 46					76003759
<b>Microliter 30x2 Sealed Aluminum Fixed Angle Rotor, 45°, R<sub>max</sub> 100 mm</b>	<b>30 x 2 ml</b>	<b>11 x 50</b>	<b>15200</b>	<b>25830</b>	<b>n/a</b>	<b>n/a</b>	<b>75003652</b>
<b>Adapters for Microliter 30x2 Rotor (sets of 24)</b>							
0.2 ml PCR Tube	30 x 0.25 ml	6.5 x 20					76003750
0.5 ml Microtube	30 x 0.5 ml	8 x 44					76003758
0.25 ml Microtube	30 x 0.25 ml	6 x 46					76003759
<b>Microliter 48x2 Sealed Aluminum Fixed Angle Rotor, 45°, R<sub>max</sub> 98 mm</b>	<b>48 x 2 ml</b>	<b>11 x 50</b>	<b>n/a</b>	<b>n/a</b>	<b>15200</b>	<b>25314</b>	<b>75003602</b>
<b>Adapters for Microliter 48x2 Rotor (sets of 24)</b>							
0.2 ml PCR Tube	48 x 0.25 ml	6.5 x 20					76003750
0.5 ml Microtube	48 x 0.5 ml	8 x 44					76003758
0.25 ml Microtube	48 x 0.25 ml	6 x 46					76003759

<sup>4</sup> 120 V ventilated and refrigerated centrifuge

## Thermo Scientific Sorvall ST 16 and ST 40 Centrifuge Series



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