



NEW!
Thermo Scientific
Sorvall ST 40
Centrifuge Series



Unmatched capacity, ergonomics and value for routine processing needs

Global Leader in Quality and Reliability

Sorvall ST 40

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.



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 for quick cleaning, a healthier working environment and longer life of the unit

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

Thermo Scientific Sorvall ST 40 Centrifuge Series

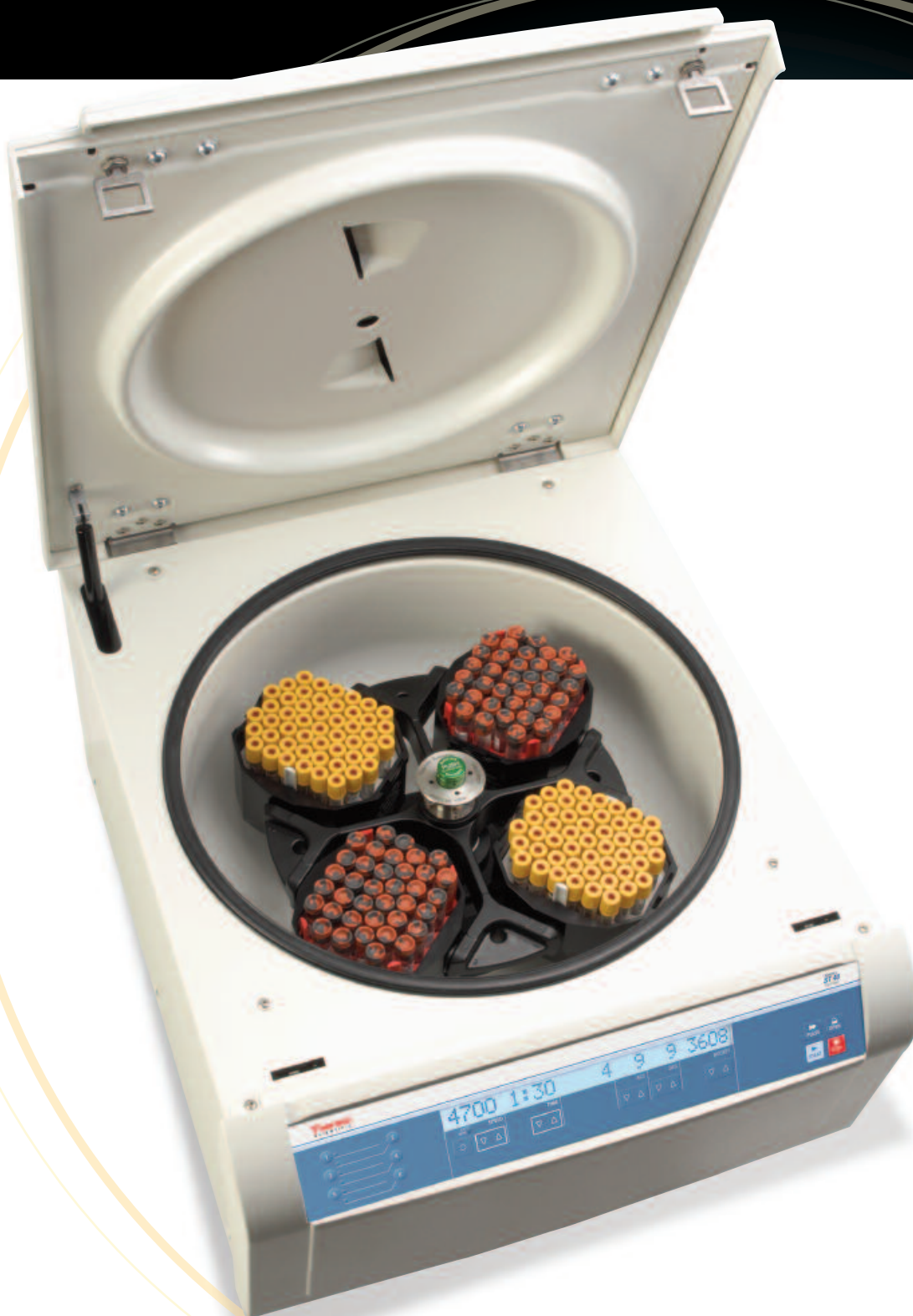
Introducing the new Thermo Scientific Sorvall ST 40 general purpose three-liter centrifuge series — providing industry-leading capacity and ergonomics at an exceptional value for everyday sample preparation, including clinical protocols, cell culture applications and microplate processing.

Unparalleled productivity and throughput: Process over 40% more 50 ml conical tubes or 100% more blood tubes with biocontainment sealing than competitive models.

Exceptional ergonomics: With our patented innovations, achieve safe, simple and comfortable daily operation.

Exceptional Capacity Boosts Productivity

Featuring a convenient three-liter capacity, our Sorvall® ST 40 centrifuge series is 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



Incredible Capacity and Productivity

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



Thermo Scientific Fiberlite Rotors

Setting New Performance Standards for Benchtop Processing

Our carbon fiber rotors maximize the performance of Sorvall ST 40 centrifuges 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**
- Corrosion-resistant design protects against misuse and damage
 - Safe, continuous operation for lifetime use of rotor
 - Lightweight for easy handling and loading and improved safety within the laboratory



Outstanding Versatility

The standard Thermo Scientific TX-750 swinging bucket rotor delivers maximum flexibility at 4700 rpm and features a choice of round or rectangular buckets with multiple adapters as well as microplate carriers.

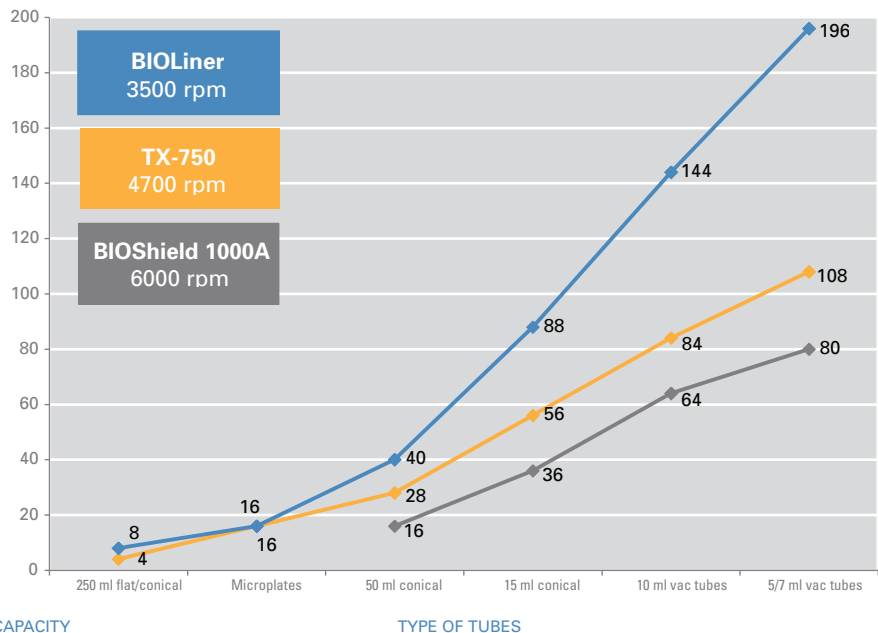
Exceptional Throughput

The high-capacity Thermo Scientific BIOLiner swinging bucket rotor significantly improves productivity with the ability to process over 40% more 50 ml conical tubes per run or 100% more 5 and 7 ml blood tubes with biocontainment than competitive models.

Excellent Performance

The Thermo Scientific BIOShield 1000A swinging bucket rotor allows you to run your frequently used tubes above 5500 x g, with the confidence and the simplicity of a single, certified biosafety lid.

ROTOR CAPACITY



Intuitive Controls Simplify Operation

The Sorvall ST 40 centrifuges feature easy-to-use controls with detailed information on a wide range of operating parameters and processing status.



Dedicated Program Keys

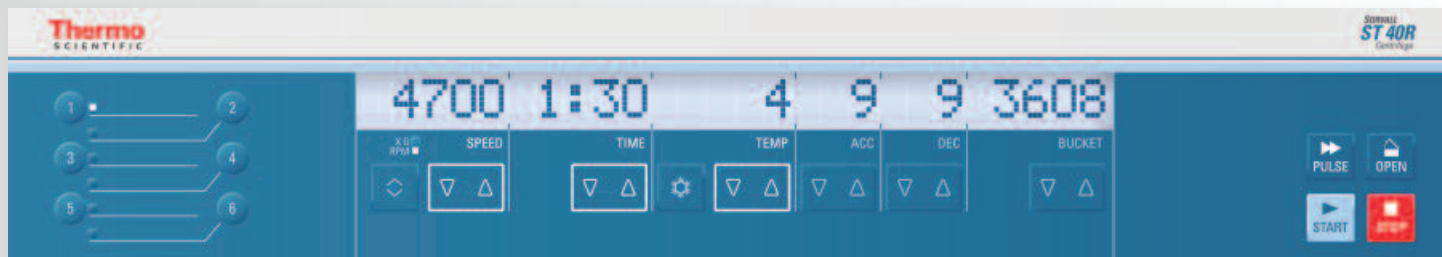
Immediate storage and access to your most frequently used programs with unique writing area for naming programs

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 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 25314 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 BIOLiner rotor

Accel/Decel:

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

Thermo Scientific Cell Culture Excellence

*Essential products for the
cell culture laboratory*

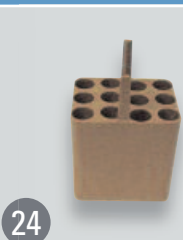
Our comprehensive portfolio includes advanced tools designed to help you achieve excellence at every stage of your cell culture process - from growth and passage to culture and experimentation through characterization, analysis and storage.

To learn about our full array of cell culture products and services, go to:
www.thermo.com/cellculture

OUTSTANDING VERSATILITY



*TX-750 High Versatility Swinging Bucket Rotor with round buckets and sealing caps**



Thermo Scientific Rotors and Adapters

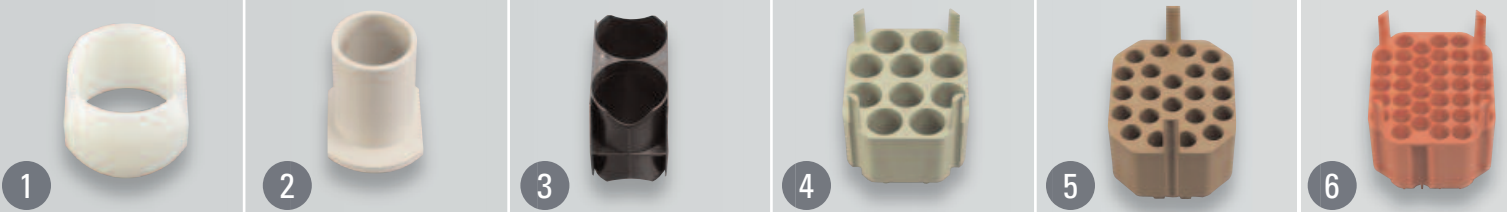
Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 40/40R (230V)		Sorvall ST 40/40R (120V)		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
TX-750 High Versatility Swinging Bucket Rotor*							75003607
Round Buckets (set of 4), 90°, R_{max} 195 mm	4 x 750 ml		4700	4816	4700	4816	75003608
Sealing Caps for Round Buckets (set of 2)							75003609
Replacement O-rings for Sealing Caps (set of 4)							75003610
Adapters for Round Buckets (sets of 4 unless otherwise noted)							
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
① 250 ml Nalgene® Oak Ridge Bottle	4 x 250 ml	62.5 x 139					75003710
① 250 ml Corning Conical Bottle	4 x 250 ml	62.5 x 139					75003710 + Corning no. 430236
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					75003719 (inner circle only)
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 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 adapters)	4 x T-75	-					75008383
⑭ T-25 Nunc Easy Flask (set of 2 adapters)	4 x T-25	-					75008384

* Buckets and sealing caps sold separately

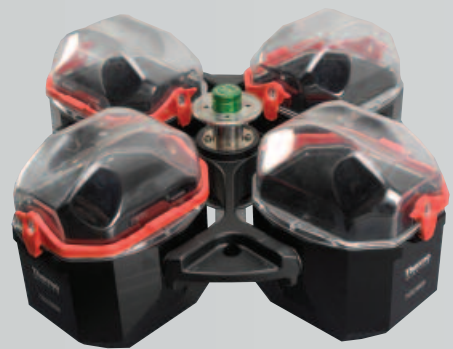


Thermo Scientific Rotors and Adapters

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 40/40R (230V)		Sorvall ST 40/40R (120V)		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
<i>TX-750 High Versatility Swinging Bucket Rotor (continued)</i>							
15 Rectangular Buckets (set of 4), 90°, R _{max} 195 mm	4 x 250 ml		4500/ 4700R	4415/ 4816R	4300	4031	75003614
Sealing Caps for Rectangular Buckets (set of 4)							75003615
Replacement O-rings for Sealing Caps (set of 4)							75003616
Adapters for Rectangular Buckets (sets of 4)							
16 250 ml Flat Bottom Bottle	4 x 250 ml	63 x 130					75003737
17 150 ml Round Bottom Open-Top Tube	4 x 150 ml	56 x 124					75003738
18 100 ml Round Bottom Open-Top Tube	4 x 100 ml	46 x 124					75003742
19 50 ml Conical Tube	20 x 50 ml	30 x 121					75003685
20 50 ml Round Bottom Tube	12 x 50 ml	35 x 121					75003749
21 45 ml Flat/Round Tube	16 x 45 ml	30 x 121					75003750
22 25 ml Universal Tube	16 x 25 ml	26 x 121					75003755
23 25 ml DIN Round Bottom Tube	24 x 25 ml	26 x 121					75003756
24 15 ml Conical Tube	48 x 15 ml	17 x 120					75003684
25 14 ml Flanged Round Bottom Tube	36 x 14 ml	18 x 121					75003758
26 15 ml Conical Urine Tube	36 x 15 ml	17 x 124					75003759
27 15 ml DIN/Blood Collection Tube	64 x 15 ml	17 x 118					75003767
28 5/7 ml Blood Collection Tube	80 x 7 ml	14 x 118					75003768
29 5/7 ml Round Bottom Tube	112 x 5/7 ml	13 x 119					75003769
30 1.5/2 ml Conical Microtube	224 x 2 ml	11 x 50					75003770
31 Carriers for microplates and T-75 Horizontal Flasks, including plate trays and neoprene pad (set of 4), 90° R _{max} 155 mm	4 x 4 Standard or 4 x 1 Deepwell	H _{max} : 60 mm	4700	3828	4700	3828	75003617



EXCEPTIONAL CAPACITY



*BIOLiner High Capacity Rotor with BIOLiner buckets and lids**



Thermo Scientific Rotors and Adapters

Sorvall ST 40/40R
(230V)

Sorvall ST 40/40R
(120V)

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST 40/40R (230V)		Sorvall ST 40/40R (120V)		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
BIOLiner High Capacity Rotor*	4 x 750 ml		3500	2739	3500	2739	75003667
BIOLiner Bucket Set (set of 4), 90°, R_{max} 200 mm	4 x 750 ml		3500	2739	3500	2739	75003668
ClickSeal Biocontainment Lid for BIOLiner Buckets (set of 4)							75003669
Replacement O-rings for BIOLiner Buckets							75003688
Adapters for BIOLiner Buckets (sets of 4)							
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	4 x 500 ml	98 x 124					75003692 + Corning no. 431124
2 250 ml Corning Conical Bottle	4 x 250 ml	62 x 145					75003691
3 250 ml Nalgene Oak Ridge Bottle	8 x 250 ml	62 x 130					75003675
3 225 ml and 175 ml Falcon BD Conical Bottle	8 x 225 ml	62 x 130					75003675 + BD no. 352090
3 200 ml Nunc Conical Bottle	8 x 175 ml	62 x 130					75003675 + Nunc no. 377585
4 50 ml Conical Tube	40 x 50 ml	30 x 120					75003674
5 15 ml Conical Tube	88 x 15 ml	17.5 x 121					75003673
6 10 ml Blood Collection Tube	148 x 10 ml	17 x 110					75003672
7 5/7 ml Blood Collection Tube	196 x 7 ml	14 x 110					75003671
8 Microplate Carriers for BIOLiner Rotor (set of 4), 90°, R_{max} 179 mm	4 x 4 Standard or 4 x 1 Deepwell	H_{max}: 60 mm	3500	2451	3500	2451	75003670
9 Sealing Lids for BIOLiner Microplate Carriers (set of 4)							75003689
Replacement O-rings for Microplate Carrier Lids (set of 4)							75003626

* Buckets and lids sold separately

EXCELLENT PERFORMANCE



Thermo Scientific Rotors and Adapters

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Sorvall ST ST 40/40R (230V)		Sorvall ST 40/40R (120V)		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
BIOShield 1000A High Speed Swinging Bucket Rotor, 90°, R _{max} 178 mm	4 x 250 ml		5300	5590	5300	5590	75003603
Adapters for BIOShield 1000A Rotor (sets of 4)							
10 250 ml Nalgene Flat Bottom Bottle	4 x 250 ml	62.5 x 124					75003737
11 150 ml Round Bottom Open-Top Tube	4 x 150 ml	56.5 x 119					75003738
12 100 ml Round Bottom Open-Top Tube	4 x 100 ml	45.5 x 120					75003742
13 50 ml Conical Tube	16 x 50 ml	29.5 x 117					75003643
14 50 ml Round Bottom Tube	12 x 50 ml	35 x 113					75003749
15 45 ml Flat/Round Tube	16 x 45 ml	30 x 113					75003750
16 25 ml Universal Tube	16 x 25 ml	26 x 113					75003755
17 25 ml DIN Round Bottom Tube	24 x 25 ml	25.5 x 113					75003756
18 15 ml Conical Tube	36 x 15 ml	17 x 121					75003642
19 14 ml Flanged Round Bottom Tube	36 x 14 ml	18 x 113					75003758
20 15 ml Conical Urine Tube	36 x 15 ml	17 x 115					75003759
21 15 ml DIN/Blood Collection Tube	64 x 15 ml	17 x 109					75003767
22 5/7 ml Blood Collection Tube	80 x 7 ml	14 x 109					75003768
23 5/7 ml Round Bottom Tube	112 x 5/7 ml	13 x 110					75003769
24 1.5/2 ml Conical Microtube	224 x 2 ml	11 x 50					75003770
HIGHConic II Fixed Angle Aluminum Rotor, 45°, R _{max} 126 mm	6 x 94 ml	38x105	8500	10178	8500	10178	75003620
Replacement Sealing O-rings (2 sets + grease tube)							75003058
Adapters for HIGHConic II Rotor (sold separately)							
94 ml Round Bottom Tube	6 x 94 ml	38 x 105					Direct
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					75002905

HIGH PERFORMANCE

Fiberlite F20-6x100
Fixed Angle Rotor

Fiberlite F21-48x2
Fixed Angle Rotor

Microliter 48x2 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 40/40R (230V)		Sorvall ST 40/40R (120V)		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
Fiberlite F20-6x100 Fixed Angle Rotor, 25°, R_{max} 98 mm	6 x 100 ml	38 x 105	13000	18516	13000	18516	75003698
O-ring Refresher Kit							021-069031
Adapters for F20-6x100 Rotor (sold separately)							
94 ml Round Bottom Tube	6 x 94 ml	38 x 105					Direct
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					75002905
Microliter 48x2 Sealed Aluminum Fixed Angle Rotor, 45°, R_{max} 98 mm	48 x 2 ml	11 x 50	15200	25314	15200	25314	75003602
Adapters for Microliter 48x2 Rotor (sets of 24)							
0.2 ml PCR Tubes	48 x 0.25 ml	6.5 x 20					76003750
0.5 ml Microtubes	48 x 0.5 ml	8 x 44					76003758
0.25 ml Microtubes	48 x 0.25 ml	6 x 46					76003759
Fiberlite F21-48x2 Fixed Angle Rotor, 45°, R_{max} 97 mm	48 x 2 ml	11 x 50	15200	25055	15200	25055	75003664
O-ring Refresher Kit							021-489021
Adapters for F21-48x2 Rotor (sets of 24)							
0.2 ml PCR Tubes	48 x 0.25 ml	6 x 20					76003750
0.5 ml Microtubes	48 x 0.5 ml	8 x 44					76003758
0.25 ml Microtubes	48 x 0.25 ml	6 x 46					76003759



Looking for high-performance processing? See our new Thermo Scientific Sorvall Legend XT Series

The Sorvall Legend XT general purpose three-liter centrifuge series delivers 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 Sorvall ST 40 Centrifuge Series



Specifications	Sorvall ST 40	Sorvall ST 40R
Swinging Bucket Rotors		
Max Capacity	4 x 750 ml (with TX-750 and BIOLiner rotors)	
Max Speed (rpm)	5300 (with BIOShield 1000A rotor)	
Max RCF (x g)	5590 (with BIOShield 1000A rotor)	
Fixed Angle Rotors		
Max Capacity	6 x 100 ml (with F20-6x100 rotor)	
Max Speed (rpm)	15200 (with 48x2 ml rotor)	
Max RCF (x g)	25314 (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	n/a	-10 °C to +40 °C
Pre-Cooling Function	n/a	Yes, with direct button
Refrigeration System	n/a	CFC free
Pulse (Short) Run		Yes
Acceleration Rates		9
Deceleration Rates		10
Max Timer Range	9h, 99min + continuous	
Sound Level (dBA)		
with TX-750 rotor and round buckets, at 4700 rpm	< 61	< 57
Other Features	Certified ClickSeal biocontainment system, language selection, motorized lid latch	
Max Power Consumption (W)		
120 V	1400	1400
230 V	1700	1950
Max Heat Output (BTU/h)		
120 V	4776	4776
230 V	5800	6653
Dimensions:		
Height (lid open)	90 cm/ 35.4 in	90 cm/ 35.4 in
Height (lid closed)	36 cm/ 14.2 in	36 cm/ 14.2 in
Width	56.5 cm/ 22.2 in	74.5 cm/ 29.3 in
Depth	67 cm/ 26.4 in	67 cm/ 26.4 in
Weight	86 kg/ 189.6 lb	116 kg/ 255.7 lb
Technical Standards	IEC 61010-1, IEC 61010-2-020, IEC 61010-2-101	
230 V only:	EN 292, EN 61326, EN 55011B	
Certifications	UL listed/ CSA certified/ CE marked/ IVD compliant/ Certified Biosafety	



Ordering Information

Description	Cat. No.
Sorvall ST 40, 120 V, 60 Hz	75004510
Sorvall ST 40, 230 V, 50/60 Hz	75004509
Sorvall ST 40R, 120 V, 60 Hz	75004525
Sorvall ST 40R, 230 V, 50/60 Hz	75004524

The quality of the procedures used to design, manufacture, sell and service the 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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