Thermo Scientific Sorvall Legend and ST General Purpose Centrifuge Series

Fits in.
Stands out.

Thermo SCIENTIFIC

Thermo Scientific™ Sorvall™ Legend™ and ST general purpose centrifuge series

Fits in.

- with **compact designs** – spin 4 liters in a traditional 3-liter footprint with the Thermo Scientific™ TX-1000 rotor
- to **many applications**, with a wide range of rotors and accessories

Stands out.

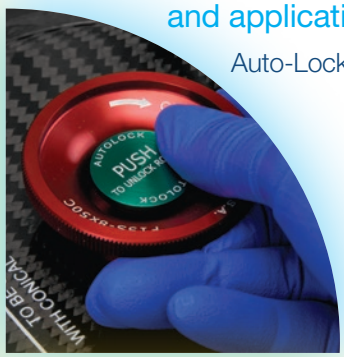
- designed for **solid performance and consistent results**
- featuring innovative **Thermo Scientific™ technologies**

Outstanding ergonomics and performance

Fiberlite™ carbon fiber rotors

Push-button security and application flexibility

Auto-Lock™ rotor exchange



4-liter capacity in a 3-liter footprint

TX-1000 rotor

One-handed certified[1] sample protection

ClickSeal™ biocontainment lids

[1] Biocontainment certification by Public Health England, Porton Down, UK.

Sorvall Legend XF/XFR

- 4-liter capacity (4 x 1000 mL)
- Floor-standing, portable with lockable casters
- Space-saving design
- Advanced research interface
- High-performance drive
- 17 optional rotors

Sorvall Legend XT/XTR

- 4-liter capacity (4 x 1000 mL)
- Advanced research operating interface
- High-performance drive
- 17 optional rotors

Refrigerated model shown

Sorvall ST 40/40R

- 4-liter capacity (4 x 1000 mL)
- Simplified routine operating interface
- Mid-performance drive
- 10 optional rotors

Ventilated model shown

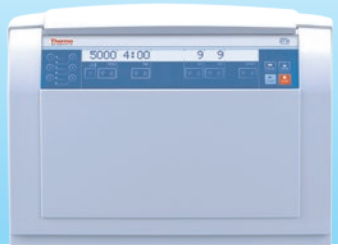
Sorvall Legend X1/X1R

- 1.6-liter capacity (4 x 400 mL)
- Advanced research operating interface
- High-performance drive
- 14 optional rotors

Refrigerated model shown

Sorvall ST 16/16R

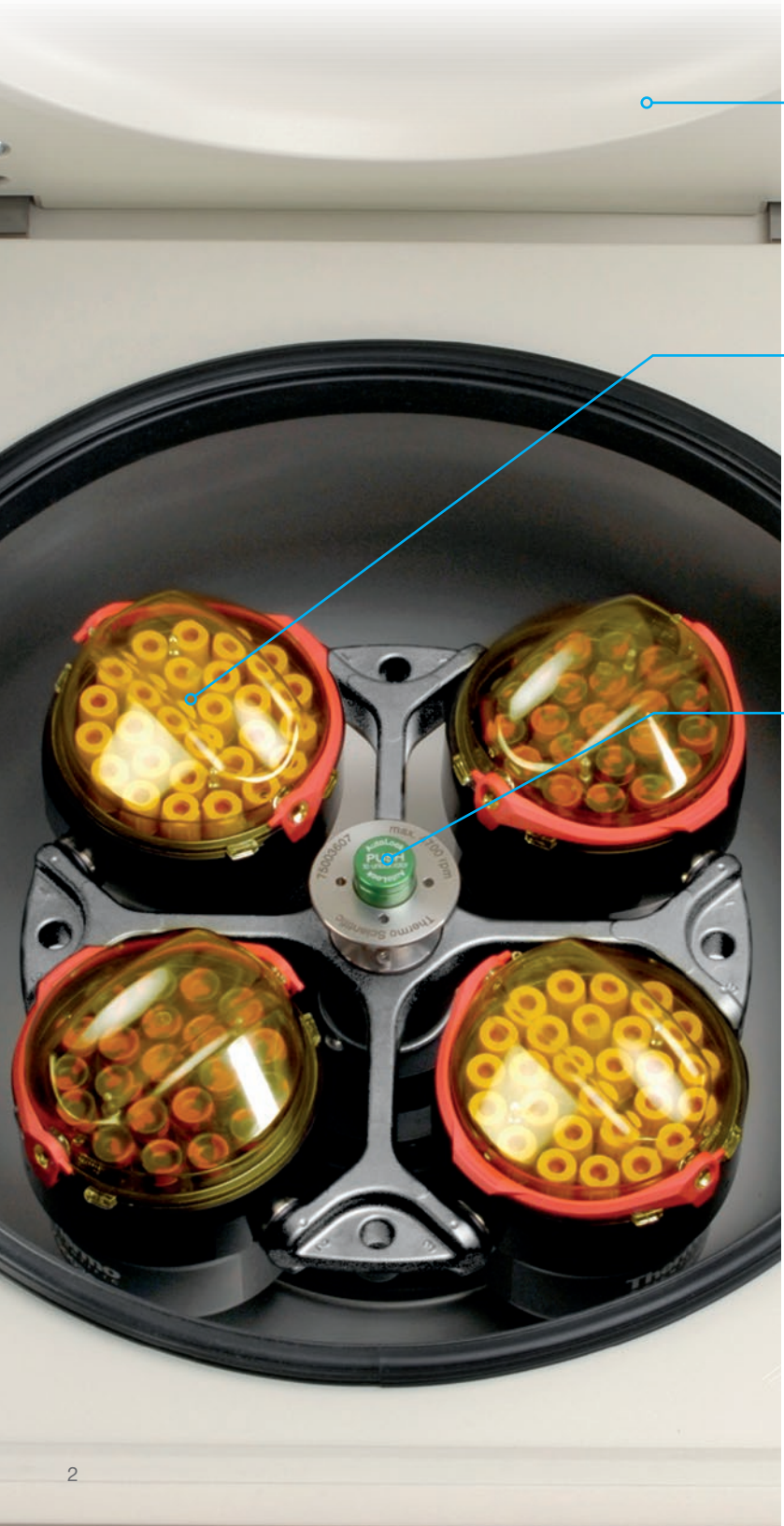
- 1.6-liter capacity (4 x 400 mL)
- Simplified routine operating interface
- Mid-performance drive
- 12 optional rotors



Ventilated model shown

Fits in.

Thermo Scientific Sorvall Legend and ST general purpose centrifuges fit in to a wide range of applications, delivering innovative technologies designed to improve performance and endurance.



Motorized lid latch

Reduced closure time and wear

- One finger downward motion for easy closing and locking – even on tall benches
- Optional automatic lid opening at end of run for rapid retrieval of samples during routine operation

ClickSeal biocontainment lids

One-handed sample protection

- Simple operation for all laboratory users, eliminating multi-turn screw caps and complicated high pressure clips
- Glove-friendly, one-handed open/close capability, ergonomically designed for both right- and left-handed operation
- Biocontainment certification by Public Health England, Porton Down, UK

Auto-Lock rotor exchange

Secure, push-button rotor exchange in as little as 3 seconds

- Trouble-free rotor installation and removal
  - No tools required
  - No complicated rotor changing procedures
- Full chamber access for cleaning convenience
- Quick switch between applications, and the flexibility to evolve with the changing needs of your laboratory

Fiberlite carbon fiber rotors

Outstanding ergonomics and performance

- Lightweight carbon fiber and innovative construction allow unique rotor designs not possible with metal
- Corrosion- and fatigue-resistance secures the rotor's structural integrity for outstanding durability
- Backed by a 15-year limited warranty[2]

[2] Subject to Thermo Fisher Scientific's standard limited warranty. See thermoscientific.com or your sales representative for details. Subject to country and dealer participation.

Stands out.

Thermo Scientific rotor innovations

New TX-1000 Rotor

Increased capacity

- New 4-liter capacity in a traditional 3-liter footprint using the TX-1000 rotor with Sorvall Legend XT and ST 40 centrifuges
- Up to 40 x 50 mL conical tubes, 196 blood tubes or 24 microplates
- High capacities process more tubes in less runs, saving time while reducing energy and wear
- Advanced lubricant and corrosion resistant coating
- Dual-purpose large bucket design accepts adapters for tubes or microplates
  - Save time – no need to swap buckets
  - Save space – no additional buckets to store
  - Save money – no additional metal carriers to purchase

New MicroClick 30 x 2 Rotor

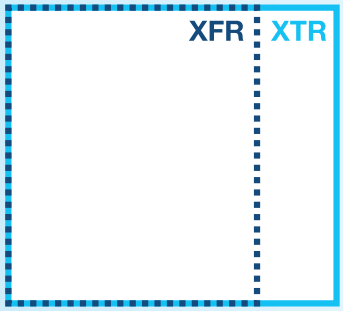
Increased flexibility

- New flexible microliter rotor
- High 30-place capacity for 1.5/2.0 mL microtube and nucleic acid spin columns
- ClickSeal biocontainment lid allows quick and easy access to your samples

Minimized footprints, maximized ergonomics

Sorvall Legend XF/XFR

- Floor models conserve valuable bench space, and have a footprint that is 24% smaller than the footprint of refrigerated benchtop models*
- Low working height of 79 cm provides outstanding ergonomics when removing tubes and exchanging rotors
- Fully portable with secure lockable castors— ideal for moving around the lab and easy cleaning, helping to prevent contamination



* Comparison of Sorvall XTR and Sorvall XFR footprints, showing 24% footprint savings with floor model.

Capacity, efficiency and sustainability

Thermo Scientific rotors offer energy-efficient designs.

Maximized volumes

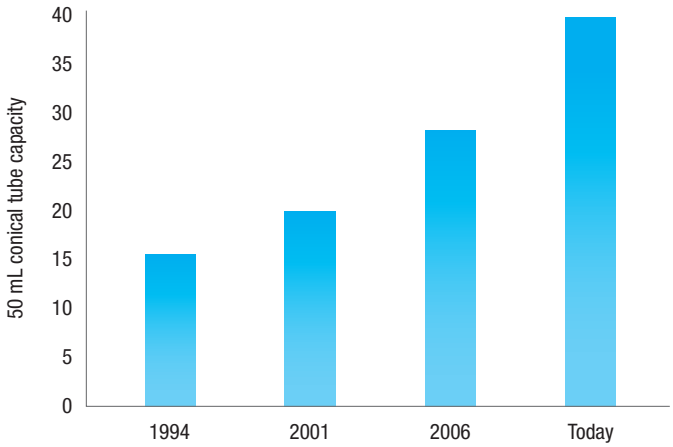
Our continuously improving rotor designs have increased the capacities available on the same size centrifuge, resulting in outstanding efficiency and throughput across the range.

Discover more

Clinical customers have seen maximum capacities more than double in the last 2 decades. Today, 196 standard 13 mm x 100 mm BD Vacutainer™ tubes can be spun, improving laboratory throughput and patient diagnosis speed.

Furthermore, spinning the high capacity Thermo Scientific TX-1000 rotor can help to reduce energy used per tube by up to 28%.*

* based on internal data



Evolution of maximum capacities on Thermo Scientific benchtop centrifuges with standard biocontained swinging bucket rotors from 1994 to 2013.

Thermo Scientific BIOShield rotor

Diamond-cut technology on the Thermo Scientific TX-1000 rotor

Improved aerodynamics

Our rotors are designed to reduce drag, enabling higher top speed performance and low noise levels. With enhanced aerodynamics there is also less friction, reducing energy required for the motor to turn and the refrigeration system to cool.

- **Thermo Scientific™ BIOShield™ rotors:** Our most aerodynamic offering – the entire rotor is encased in an aerodynamic biocontained shield designed to reduce energy use and noise levels.
- **Round buckets:** Excellent aerodynamic design helps ensure outstanding performance, offering a great balance of performance and capacity.
- **Diamond-cut bucket technology:** The Thermo Scientific TX-1000, our largest capacity rotor, is designed to be as aerodynamic as possible. With diamond-cut technology, each bucket has 45 facets on the outside to reduce the weight, improving the aerodynamics compared to previous generations.

Lighter weight carbon fiber

Carbon fiber's lightweight properties coupled with innovative construction allows for unique rotor designs not possible with metal. As a result, Fiberlite carbon fiber rotors are lighter than traditional aluminum rotors, allowing for less energy to be used.

Long carbon fiber rotor life

Corrosion- and fatigue-resistance secures the rotor's structural integrity for outstanding durability. Due to the high strength properties of carbon fiber, Fiberlite rotors are backed by a 15-year limited warranty[2] – more than double that of typical aluminum rotors – reducing the need for rotor replacement, reducing whole life costs.

Slide Coat anti-friction finish

Thermo Scientific TX-1000, TX-750 and TX-400 rotors benefit from Slide Coat anti-friction finish, designed to eliminate the need for lubrication at the contact point between the rotor cross and bucket. This helps to ensure smooth runs with minimal vibration and reduce regular maintenance steps. Its corrosion-resistant properties help promote longer rotor life and enhanced safety.

Outstanding centrifuge insulation

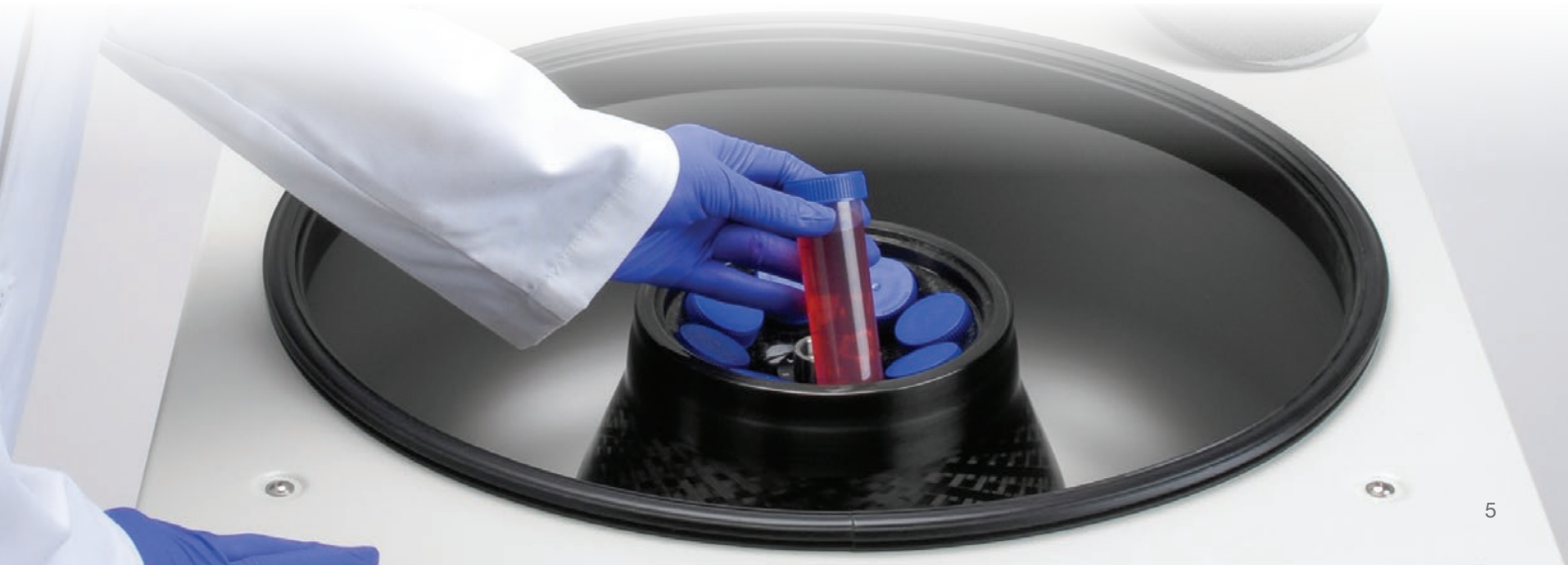
High levels of insulation around the chamber and the lid provide optimal thermal and audio insulation, which help to reduce energy usage and noise in refrigerated models.

Highly-efficient seals around the lid and motor prevent warm moist lab air from entering the chamber, which reduces energy use and moisture build-up, and eliminates the need for drain tubes, which can be a source of contamination and require regular cleaning.

Fuse-less technology

Fuse-less technology features special regenerative protection, designed to eliminate the hassle of blown fuses that require spare parts or service.

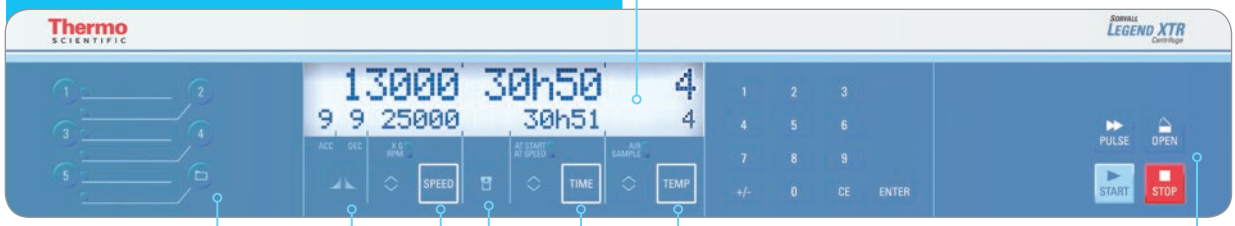
[2] Subject to Thermo Fisher Scientific's standard limited warranty. See thermoscientific.com or your sales representative for details. Subject to country and dealer participation.



Advanced controls optimize performance

The Sorvall Legend XT/XF and X1 centrifuges feature an enhanced interface designed for maximum protocol versatility, complementing the numerous rotor configurations available.

Sorvall Legend XT/XF and X1 centrifuges control panel



Display
Large, bright display is easy to read – even across the lab.

Program Keys
5 direct access and folder with storage up to 99 programs including labelling area.

Acc/Dec
Choice of 9 acceleration and 10 deceleration rates.

Speed Control
Immediate toggle between RCF and RPM, up to 25830 x g or 15200 rpm.

Bucket Select
Required only on multi-bucket rotors for accurate RCF calculations and optimized temperature control.

Time
Set time in hrs:min, min:sec or continuous mode.

Dual Timing Mode

At-Start *(Standard timing down from pushing "Start" button)*

At-Speed *(For ultimate replication of result)*
Improves reproducibility with variable loads or spin columns requiring timed runs at speed.

Temperature

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

Pre-Temp (refrigerated versions)
Achieve 4°C in 15 minutes from ambient 23°C.*

Dual Temperature Mode

Air/Chamber Temperature
Measures air chamber temperature only.

Sample Temperature
Calculated bucket core temperature, ensuring your samples are going into the correct specified temperature.

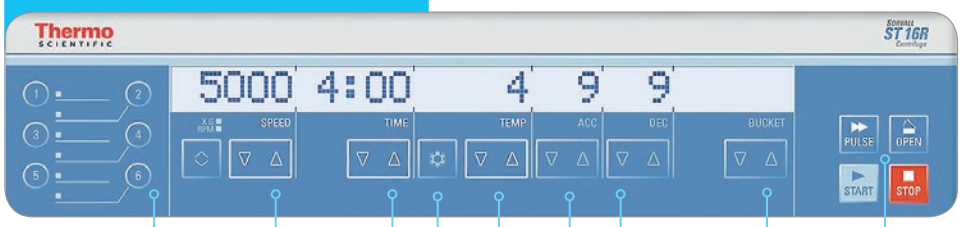
* *with Thermo Scientific™ TX-1000 rotor*

Control Quadrant
Start, Stop, Pulse and Open Lid.

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.

Sorvall ST centrifuges control panel



Program Keys
6 direct access.

Speed

Time

Pre-Temp
For optimized temperature pull down.

Temperature

Acceleration
Choice of 9 rates.

Deceleration
Choice of 10 rates.

Bucket Select
Required only on multi-bucket rotors for accurate RCF calculations and optimized temperature control.

Control Quadrant
Start, Stop, Pulse and Open Lid.

Sorvall General Purpose Centrifuge Displays and Controls at a Glance

	Sorvall Legend XT/XF and X1	Sorvall ST 40 and 16
	Advanced display and controls, ideal for research or controlled environments, where accuracy and performance are important	Intuitive display and control, ideal for routine and repetitive environments
Panel	Glove- and detergent-friendly	Glove- and detergent-friendly
Display Size	Large 50 cm^2	Large 50 cm^2
Display Technology	Bright advanced LCD	Bright advanced LCD
Display Unit	Set and Current	Set
Programs (Direct Button Access)	5	6
Programs (Additional)	94	–
Acceleration/Deceleration	9/10	9/10
Speed Setting	Numerical keypad	Scrolling arrow keys
Speed Accuracy	1 rpm or 1 x g	100 rpm or 100 x g
Time Accuracy	hrs/min or min/sec	hrs/min
Time Setting	Countdown from start or countdown from set speed	Countdown from start
Time Range	< 99h, 59min + continuous	< 9h, 59min + continuous
Temperature Setting	Sample temperature or chamber air	Chamber air
Password Protection	For program protection and lid openings	–
RCF calculation	Maximum radius or user defined by rMax input	Maximum radius
Languages	English, German, French, Spanish, Italian, Dutch and Russian	English, German, French, Spanish, Italian, Dutch and Russian

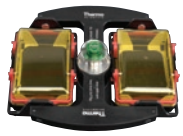
Swinging bucket rotors

Thermo Scientific Rotor Name		TX-1000	TX-750	BIOShield 1000A	TX-400
Maximum Capacity (mL)		4 x 1000 mL	4 x 750 mL	4 x 250 mL	4 x 400 mL
Maximum Speed (rpm[1])		4,200 rpm	4,700 rpm	6,000 rpm	5,000 rpm
Maximum RCF (x g[1])		4,122 x g	4,816 x g	7,164 x g	4,696 x g
Biocontainment		✓ (Optional)	✓ (Optional)	✓ (Integrated)	✓ (Optional)
Sorvall Legend XT/XF		✓	✓	✓	
Sorvall ST 40		✓	✓	✓	
Sorvall Legend X1					✓
Sorvall ST 16					✓
Maximum Capacity	1000 mL Bio-Bottle	4	–	–	–
	750 mL Bio-Bottle	4	4	–	–
	500 mL Nalgene™ Bottle	4	–	–	–
	500 mL Corning™ Bottle	4	4	–	–
	250 mL Nalgene Bottle	8	4	4	4
	250 mL Corning Bottle	4	4	–	–
	225 mL - 175 mL Conical Bottle	8	4	–	4
	50 mL Conical Tube	40	28	16	16
	50 mL Skirted Conical Tube	20	20	16	–
	50 mL Nalgene Oak Ridge Tube	48	28	–	16
	30 mL Sterilin™ Universal Tube	28	28	16	12
	15 mL Conical Tube	96	56	36	36
	10 mL Blood Collection Tube (16 x 100 mm)	148	84	64	56
	5/7 mL Blood Collection Tube (13 x 75-100 mm)	196	108	80	76
	4.5/6 mL Blood Collection Tube	164	108	–	64
	1.5/2 mL Microtube	192	192	224	136
	Microplate	24	16	–	–

Biocontainment certification by Public Health England, Porton Down, UK.

[1]Maximum speed based on top performance models.

Labware not shown to scale.



Thermo Scientific Rotor Name		BIOShield 720	TX-200	HIGHPlate 6000	Fiberlite H3-LV	M-20
Maximum Capacity (mL)		4 x 180 mL	4 x 180 mL	10 Microplates	28 Microplates	6 Microplates
Maximum Speed (rpm[1])		6,300 rpm	5,500 rpm	6,300 rpm	3,600 rpm	4,000 rpm
Maximum RCF (x g[1])		7,188 x g	5,580 x g	6,168 x g	2,738 x g	2,272 x g
Biocontainment		✓ (Integrated)	✓ (Optional)	✓ (Integrated)		✓ (Optional)
Sorvall Legend XT/XF				✓	✓	✓
Sorvall ST 40						✓
Sorvall Legend X1		✓	✓			✓
Sorvall ST 16		✓	✓			✓
Maximum Capacity	1000 mL Bio-Bottle	–	–	–	–	–
	750 mL Bio-Bottle	–	–	–	–	–
	500 mL Nalgene Bottle	–	–	–	–	–
	500 mL Corning Bottle	–	–	–	–	–
	250 mL Nalgene Bottle	–	–	–	–	–
	250 mL Corning Bottle	–	–	–	–	–
	225 mL - 175 mL Conical Bottle	–	–	–	–	–
	50 mL Conical Tube	8	4	–	–	–
	50 mL Skirted Conical Tube	–	4	–	–	–
	50 mL Nalgene Oak Ridge Tube	–	–	–	–	–
	30 mL Sterilin Universal Tube	16	4	–	–	–
	15 mL Conical Tube	24	20	–	–	–
	10 mL Blood Collection Tube (16 x 100 mm)	48	28	–	–	–
	5/7 mL Blood Collection Tube (13 x 75-100 mm)	48	32	–	–	–
	4.5/6 mL Blood Collection Tube	–	32	–	–	–
	1.5/2 mL Microtube	160	48	–	–	–
	Microplate	–	–	10	28	6

Biocontainment certification by Public Health England, Porton Down, UK.

[1]Maximum speed based on top performance models.
Labware not shown to scale.

Fixed angle rotors

Thermo Scientific Rotor Name		Fiberlite F14-6x250 LE	Fiberlite F15-6x100y	Fiberlite F13-14x50cy	Fiberlite F15-8x50cy	CLINIConic
Maximum Capacity (mL)		6 x 250 mL	6 x 100 mL	14 x 50 mL	8 x 50 mL	30 x 15 mL
Maximum Speed (rpm[1])		11,000 rpm	15,000 rpm	10,000 rpm	14,500 rpm	5,650 rpm
Maximum RCF (x g[1])		18,533 x g	24,652 x g	17,105 x g	24,446 x g	4,997 x g
Biocontainment		✓	✓	✓	✓	
Sorvall Legend XT/XF		✓	✓	✓	✓	
Sorvall ST 40			✓			
Sorvall Legend X1			✓	✓	✓	✓
Sorvall ST 16			✓			✓
Maximum Capacity	250 mL Nalgene Bottle	6	–	–	–	–
	85 mL Nalgene Oak Ridge Tube	6	6	–	–	–
	50 mL Nalgene Oak Ridge Tube	6	6	14	8	–
	50 mL Conical Tube	6	6	14	8	–
	30 mL Nalgene Oak Ridge Tube	12	6	14	8	–
	16 mL Nalgene Oak Ridge Tube	30	6	14	8	–
	15 mL Conical Tube	30	6	14	8	30
	10 mL Nalgene Oak Ridge Tube	42	12	14	8	–
	10 mL Blood Collection Tube (16 x 100 mm)	–	–	–	–	30
	5/7 mL Blood Collection Tube (13 x 75-100 mm)	–	–	–	–	30
	6.5 mL Round Tube	–	12	–	–	–
	1.5/2 mL Microtube	–	24	–	–	–

Biocontainment certification by Public Health England, Porton Down, UK.

[1]Maximum speed based on top performance models.

Labware not shown to scale.

Thermo Scientific Rotor Name			8 x 50 Sealed	HIGHConic II	Fiberlite F21-48x2	Microliter 48 x 2	MicroClick 30 x 2	Microliter 30 x 2
Maximum Capacity (mL)			8 x 50 mL	6 x 100 mL	48 x 2 mL	48 x 2 mL	30 x 2 mL	30 x 2 mL
Maximum Speed (rpm[1])			6,700 rpm	10,350 rpm	15,200 rpm	15,200 rpm	14,000 rpm	15,200 rpm
Maximum RCF (x g[1])			7,177 x g	15,090 x g	25,055 x g	25,314 x g	21,693 x g	25,830 x g
Biocontainment			✓ (Individual)	✓	✓	✓	✓	✓
Sorvall Legend XT/XF				✓	✓	✓	✓	✓
Sorvall ST 40				✓	✓	✓	✓	✓
Sorvall Legend X1			✓	✓	✓	✓	✓	✓
Sorvall ST 16			✓	✓	✓	✓	✓	✓
Maximum Capacity		250 mL Nalgene Bottle	–	–	–	–	–	–
		85 mL Nalgene Oak Ridge Tube	–	6	–	–	–	–
		50 mL Nalgene Oak Ridge Tube	–	6	–	–	–	–
		50 mL Conical Tube	8	6	–	–	–	–
		30 mL Nalgene Oak Ridge Tube	–	6	–	–	–	–
		16 mL Nalgene Oak Ridge Tube	–	6	–	–	–	–
		15 mL Conical Tube	8	6	–	–	–	–
		10 mL Nalgene Oak Ridge Tube	–	12	–	–	–	–
		10 mL Blood Collection Tube (16 x 100 mm)	8	–	–	–	–	–
		5/7 mL Blood Collection Tube (13 x 75-100 mm)	8	–	–	–	–	–
		6.5 mL Round Tube	–	12	–	–	–	–
		1.5/2 mL Microtube	–	24	48	48	30 (Including spin columns)	30

Biocontainment certification by Public Health England, Porton Down, UK.

[1]Maximum speed based on top performance models.

Labware not shown to scale.

Rotors and adapters
for swinging bucket rotors

TX-1000 Swinging Bucket Rotor[1], 90°, R_{max} 209 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF Refrigerated	4,200	4,122
Sorvall Legend XT/XF Ventilated	3,800	3,374
Sorvall ST 40 Refrigerated	4,200	4,122
Sorvall ST 40 Ventilated	3,800	3,374
Sorvall Legend X1	n/a	n/a
Sorvall ST 16	n/a	n/a

[1]Rotor, buckets and lids sold separately

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003017		TX-1000 Rotor Cross	4 x 1,000 mL or 24 microplate	
75003001		TX-1000 Buckets (Set of 4)		
75007309		TX-1000 ClickSeal Biocontainment Lids (Set of 4)		
75007001		Replacement O-rings		
75007300		1000 mL Bio-Bottle - Polypropylene (Set of 4)		
Adapters for TX-1000 Rotor (Sets of 4)				
75007301	1	1000 mL Bio-Bottle	4 x 1,000 mL	126 x 140
75007304	2	750 mL Polypropylene Bio-Bottle and any TX-750 Round adapter	4 x 750 mL	98 x 133
75004253	3	500 mL Nalgene Bottle	4 x 500 mL	70 x 160
75007302	4	500 mL Corning Bottle (requires Corning #431124)	4 x 500 mL	98 x 133
75005392	5	250 mL Corning Conical Bottle or 200 mL Nunc™ Bottle or 175 mL Nalgene Conical Bottle	4 x 250 mL	62 x 145
75007305	6	250 mL Nalgene Bottle	8 x 250 mL	62 x 145
75007305	6	225 mL BD Falcon™ (requires BD #352090)	8 x 225 mL	62 x 130
75007305	6	200 mL Nunc Conical Bottle (requires Nunc #377585)	8 x 200 mL	62.5 x 139
75007305	6	175 mL Nalgene Conical Bottle (requires Nalgene #DS3126-0175)	8 x 175 mL	62 x 130
75003674	7	50 mL Conical Tube	40 x 50 mL	30 x 120
75004255	8	50 mL Double Biocontainment Vessel for 50 mL Conical Tube (can be combined with ClickSeal lids)	20 x 50 mL	30 x 120
75004252	9	50 mL Nalgene Oak Ridge Tube	48 x 50 mL	29.5 x 120
75007306	10	15 mL Conical Tube	96 x 15 mL	17.5 x 121
75003672	11	10 mL Blood Collection Tube (16 x 100 mm) or Corex™/Kimble™ Tubes	148 x 10 mL	17 x 110
75003697	12	9/10 mL Blood Collection Tube (Sarstedt™)	100 x 9/10 mL	17 x 110
75003671	13	5/7 mL Blood Collection Tube (13 x 75-100 mm)	196 x 5/7 mL	14 x 110
75003709	14	4.5/6 mL Blood Collection Tube (Greiner™)	164 x 4.5/6 mL	14 x 110
75007303	15	Microplate Carriers	4 x 6 Standard or 4 x 2 Deep-Well	Height < 88 mm
75003829	16	Small Bag/Cell Culture Bags 4 x 2 Bags (< 350 mL)	4 x 2 Bags	

Biocontainment certification by Public Health England, Porton Down, UK.

Adapters

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TX-750 Swinging Bucket Rotor[1], 90°, R_{max} 195 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	4,700	4,816
Sorvall ST 40	4,700	4,816
Sorvall Legend X1	n/a	n/a
Sorvall ST 16	n/a	n/a

[1]Rotor, buckets and lids sold separately

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003180		TX-750 Rotor Cross		
75003608		TX-750 Round Buckets (Set of 4)	4 x 750 mL	
75003609		TX-750 Round ClickSeal Biocontainment Lids (Set of 4)		
75003610		Replacement TX-750 Round O-rings for lids (Set of 4)		
75003699		750 mL Bio-Bottle - Polypropylene (Set of 12)		
75003795	1	Microplate Carriers and T-75 Flask (includes tray and pads) (Set of 2)	4 Standard Microplate or 1 Deep well plate per carrier	Maximum height 60 mm
75003617	1	Microplate Carriers and T-75 Flask (includes tray and pads) (Set of 4)		
Adapters for TX-750 Rotor (Sets of 4, unless stated otherwise)				
Direct		750 mL Bio-Bottle	4 x 750 mL	98 x 133
Direct		500 mL Corning Conical Bottle (requires Corning #431124)	4 x 500 mL	98 x 133
75003792	2	250 mL Corning Conical Bottle (unsealed buckets only)	4 x 250 mL	62.5 x 139
75003710	3	250 mL Nalgene Bottle	4 x 250 mL	62.5 x 139
75003710	3	225 mL/175 mL BD Falcon Conical Bottle (requires BD #352090) (Open buckets only)	4 x 225 mL	62.5 x 139
75003710	3	200 mL Nunc Conical Bottle (requires Nunc #377585) (Open buckets only)	4 x 200 mL	62.5 x 139
75003710	3	175 mL Nalgene Conical Bottle (requires Nalgene #DS3126-0175) (Open buckets only)	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) can be combined with ClickSeal lids	12 x 50 mL	30 x 120
75003638	6	50 mL Conical Tube	28 x 50 mL	30 x 120
75003824	7	50 mL Conical or Skirted Tube	20 x 50 mL	30 x 120
75003715	8	50 mL Nalgene Oak Ridge Tube	28 x 50 mL	29.5 x 120
75003716	9	30 mL Sterilin Universal Tube	28 x 30 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
75003719	11	10 mL Blood Collection (16 x 100 mm) or 15 mL Corex/Kimble Tube	84 x 10/15 mL	17 x 117
75003718	12	14 mL Round or Conical Urine Tube	48 x 14 mL	18 x 124
75003723	13	5/7 mL or 4.5/6 mL Blood Collection Tube (13 x 75-100 mm)	108 x 5/7 mL	13 x 116
75003724	14	5 mL RIA or Round Bottom Tube (with out 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 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	–

Biocontainment certification by Public Health England, Porton Down, UK.

Adapters

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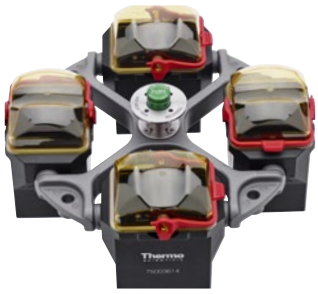
Rotors and adapters
for swinging bucket rotors



TX-750 Swinging Bucket Rotor, 90°, R_{max} 195 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF, ST 40 230V Refrigerated	4,700	4,816
Sorvall Legend XT/XF, ST 40 230V Ventilated	4,500	4,415
Sorvall Legend XT/XF, ST 40 120V All models	4,300	4,031
Sorvall Legend X1 or ST 16	n/a	n/a

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003180		TX-750 Rotor Cross		
75003614		TX-750 Rectangular Buckets (Set of 4)	4 x 250 mL	
75003615		TX-750 Rectangular Click Seal Biocontainment Lids (Set of 4)		
75003616		Replacement TX-750 Rectangular O-rings for lids (Set of 4)		
Adapters for TX-750 Rotor (Sets of 4)				
75003737	1	250 mL Flat Bottom Bottle	4 x 250 mL	63 x 130
75003738	2	150 mL Round Bottom Open-Top Tube	4 x 150 mL	56 x 124
75003742	3	100 mL Round Bottom Open-Top Tube	4 x 100 mL	46 x 124
75003685	4	50 mL Conical Tube	20 x 50 mL	30 x 121
75003749	5	50 mL Round Bottom Tube	12 x 50 mL	35 x 121
75003750	6	45 mL Flat/Round Tube	16 x 45 mL	30 x 121
75003755	7	30 mL Sterilin Universal Tube	16 x 30 mL	26 x 121
75003756	8	25 mL DIN Round Bottom Tube	24 x 25 mL	26 x 121
75003684	9	15 mL Conical Tube	48 x 15 mL	17 x 120
75003758	10	14 mL Flanged Round Bottom Tube	36 x 14 mL	18 x 121
75003759	11	14 mL Round or Conical Urine Tube	36 x 15 mL	17 x 124
75003767	12	10 mL Blood Collection (16 x 100 mm) or 15 mL DIN Tube	64 x 10/15 mL	17 x 118
75003768	13	5/7 mL or 4.5/6 mL Blood Collection Tube	80 x 5/7 mL	14 x 118
75003769	14	5/7 mL Round Bottom Tube (13 x 75-100 mm)	112 x 5/7 mL	13 x 119
75003770	15	1.5/2 mL Microtube	224 x 2 mL	11 x 50

Adapters

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BIOShield 1000A Swinging Bucket Rotor, 90°, R_{max} 178 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	6,000	7,164
Sorvall ST 40	5,300	5,590
Sorvall Legend X1	n/a	n/a
Sorvall ST 16	n/a	n/a

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003182		BIOShield 1000A	4 x 250 mL	
Adapters for BIOShield 1000A Rotor (Sets of 4)				
75003737	1	250 mL Flat Bottom Bottle	4 x 250 mL	63 x 130
75003738	2	150 mL Round Bottom Open-Top Tube	4 x 150 mL	56 x 124
75003742	3	100 mL Round Bottom Open-Top Tube	4 x 100 mL	46 x 124
75003749	5	50 mL Round Bottom Tube	12 x 50 mL	35 x 121
75003750	6	45 mL Flat/Round Tube	16 x 45 mL	30 x 121
75003755	7	30 mL Sterilin Universal Tube	16 x 30 mL	30 x 121
75003756	8	25 mL DIN Round Bottom Tube	24 x 25 mL	26 x 121
75003758	10	14 mL Flanged Round Bottom Tube	36 x 14 mL	18 x 121
75003759	11	14 mL Round or Conical Urine Tube	36 x 15 mL	17 x 124
75003767	12	10 mL Blood Collection (16 x 100 mm) or 15 mL DIN Tube	64 x 10/15 mL	17 x 118
75003768	13	5/7 mL or 4.5/6 mL Blood Collection Tube	80 x 5/7 mL	14 x 118
75003769	14	5/7 mL Round Bottom Tube (13 x 75-100 mm)	112 x 5/7 mL	13 x 119
75003770	15	1.5/2 mL Microtube	224 x 2 mL	11 x 50
75003643	16	50 mL Conical Tube	12 x 50 mL	30 x 121
75003642	17	15 mL Conical Tube	36 x 15 mL	17 x 120

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Biocontainment certification by Public Health England, Porton Down, UK.

TX-400 Swinging Bucket Rotor[1], 90°, R_{max} 168 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	n/a	n/a
Sorvall ST 40	n/a	n/a
Sorvall Legend X1	5,000	4,696
Sorvall ST 16	5,000	4,696

[1]Rotor, buckets and lids sold separately

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003181		TX-400 Rotor Cross		
75003655		TX-400 Round Buckets (Set of 4)	4 x 400 mL	
75003656		TX-400 Round ClickSeal Biocontainment Lids (Set of 4) ☣		
75003657		Replacement TX-400 O-rings for lids (Set of 4)		
75007585		400 mL Bio-Bottle - Polypropylene (Set of 12)		
Adapters for TX-400 Rotor (Sets of 4)				
Direct		400 mL Bio-Bottle	4 x 400 mL	80 x 125
75003788	1	250 mL Thermo Scientific Nalgene™ Bottle	4 x 250 mL	62 x 135
75003788	1	200 mL Thermo Scientific Nunc Conical Bottle (requires Nunc #377585)	4 x 200 mL	62 x 125
75003788	1	225 mL/175 mL BD Falcon Conical Bottle (requires BD #352090)	4 x 175 mL	62 x 125
75003708	2	100 mL Round Bottom Open-Top Tube	4 x 100 mL	45 x 117
75003707	3	50 mL DIN Round Bottom Tube	12 x 50 mL	34.5 x 105
75003799	4	50 mL Nalgene™ Oak Ridge Tube	16 x 50 mL	29.5 x 114
75003683	5	50 mL Conical Tube	16 x 50 mL	30 x 116
75003703	6	30/25 mL DIN Round/Flat Bottom Tube	20 x 30 mL	25.5 x 108
75003706	7	30 mL Sterilin Universal Tube	12 x 30 mL	25 x 110
75003682	8	15 mL Conical Tube	36 x 15 mL	17 x 121
75003794	9	15 mL Blood Collection Tube (17 x 125 mm)	16 x 15 mL	17 x 131
75003704	10	15 mL Round Bottom Tube (Sarstedt)	40 x 15 mL	17 x 105
75003798	11	14 mL Round or Conical UrineTube	28 x 14 mL	17 x 112
75003681	12	10 mL Blood Collection (16 x 100 mm)	56 x 10/15 mL	16 x 113
75003680	13	5/7 mL Blood Collection Tube (13 x 75-100 mm)	76 x 5/7 mL	13 x 110
75003825	14	4.5/6 mL Blood Collection Tube (Greiner)	64 x 4.5/6 mL	13 x 110
75003793	15	3 mL RIA or Round Bottom Tube (without cap)	76 x 3/5 mL	11 x 110
75003700	16	1.5/2 mL Microtube	136 x 2 mL	11 x 45

☣ Biocontainment certification by Public Health England, Porton Down, UK.

Adapters

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Rotors and adapters
for swinging bucket rotors

BIOShield 720 Swinging Bucket Rotor, 90°, R_{max} 162 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	n/a	n/a
Sorvall ST40	n/a	n/a
Sorvall Legend X1	6,300	7,188
Sorvall ST16	5,300	5,088

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003183		BIOShield 720	4 x 180 mL	n/a
75003693		180 mL Bio-Bottle - Polypropylene (Set of 12)		
BIOShield 720A Adapters (Sets of 4)				
75003813	1	150 mL Round Bottom Open-Top Tube	4 x 150 mL	50 x 122
75003814	2	100 mL Round Bottom Open-Top Tube	4 x 100 mL	44 x 120
75003677	3	50 mL Conical Tube	8 x 50 mL	30 x 116
75003816	4	50 mL DIN Round Bottom Tube	8 x 50 mL	34 x 109
75003818	5	30 mL Sterilin Universal Tube	16 x 30 mL	26 x 105
75003817	6	25 mL DIN Round Bottom Tube	20 x 25 mL	25 x 107
75003678	7	15 mL Conical Tube	24 x 15 mL	17 x 120
75003820	8	15 mL Sarstedt Tube	44 x 15 mL	17 x 103
75003701	9	10 mL Blood Collection Tube (16 x 100 mm)	48 x 10 mL	17 x 105
75003821	10	5/7 mL Blood Collection Tube (13 x 75-100 mm)	48 x 5/7 mL	13 x 106
75003822	11	5/7 mL Round Bottom Open-Top Tube	80 x 5/7 mL	13 x 104
75003823	12	1.5/2 mL Conical Microtube	160 x 2 mL	11 x 45

Biocontainment certification by Public Health England, Porton Down, UK.

Adapters

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TX-200 Swinging Bucket Rotor[1], 90°, R_{max} 165 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	n/a	n/a
Sorvall ST 40	n/a	n/a
Sorvall Legend X1 230V and 120V Refrigerated	5,500	5,580
Sorvall Legend X1 120V Ventilated	5,250	5,084
Sorvall ST 16 230V and 120V Refrigerated	5,500	5,580
Sorvall ST 16 120V Ventilated	5,250	5,084

[1]Rotor, buckets and lids sold separately

Cat. No.	Adapter Image	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories				
75003658		TX-200 Rotor Cross		
75003659		TX-200 Round Buckets (Set of 4)	4 x 180 mL	
75003660		TX-200 Round ClickSeal Biocontainment Lids (Set of 4)		
75003687		Replacement TX-200 O-rings for lids (Set of 4)		
75003800		180 mL Bio-Bottle - Polypropylene (Set of 12)		
Adapters for TX-200 Rotor (Sets of 4)				
Direct		180 mL Bio-Bottle	4 x 180 mL	56.5 x 123
75003801	1	100 mL Round Bottom Open-Top Tube	4 x 100 mL	48 x 122
75003802	2	50 mL DIN Round Bottom Tube	4 x 50 mL	35 x 126
75003815	3	50 mL Round Bottom Tube	4 x 50 mL	32 x 126
75003803	4	50 mL Conical or Skirted Tube	4 x 50 mL	30 x 126
75003804	5	30 mL Sterilin™ Universal Tube	4 x 30 mL	26 x 118
75003805	6	25 mL DIN Round/Flat Bottom Tube	8 x 25 mL	25 x 118
75003806	7	20 mL Round Bottom Tube	12 x 25 mL	22 x 125
75003771	8	15 mL Conical Tube	20 x 20 mL	17 x 121
75003809	9	15 mL Blood Collection Tube	16 x 15 mL	17 x 121
75003807	10	14 mL Conical Urine Tube	8 x 14 mL	17 x 114
75003808	11	10 mL Blood Collection (16 x 100 mm) or 15 mL Corex/Kimble Tube	28 x 10/15 mL	17 x 121
75003785	12	5/7 mL or 4.5/6 mL Blood Collection Tube (13 x 75-100 mm)	32 x 5/7 mL	13 x 122
75003810	13	5/7 mL Round Bottom Open-Top Tube	36 x 5/7 mL	13 x 118
75003811	14	3/5 mL RIA or Round Bottom Tube (without cap)	48 x 3/5 mL	12 x 124
75003812	15	1.5/2 mL Microtube	48 x 2 mL	11 x 45

Biocontainment certification by Public Health England, Porton Down, UK.

Adapters

Rotors and adapters
for swinging bucket rotors

HIGHPlate 6000 Swinging Bucket Rotor, 90°, R_{max} 139 mm

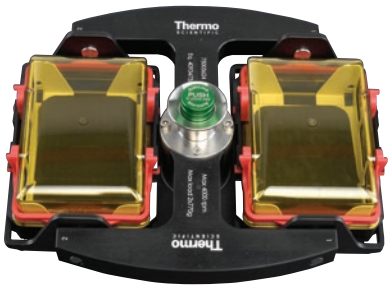
Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	6,300	6,168
Sorvall ST 40	n/a	n/a
Sorvall Legend X1	n/a	n/a
Sorvall ST 16	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Height
Rotor			
75003606	HIGHPlate 6000 Rotor	2 x 5 Standard Microplate or 2 x 1 Filter plates	< 80 mm

Fiberlite H3-LV Swinging Bucket Rotor, 90°, R_{max} 189 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	3,600	2,738
Sorvall ST 40	n/a	n/a
Sorvall Legend X1	n/a	n/a
Sorvall ST 16	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Height
Rotor			
75003665	Fiberlite H3-LV Rotor	4 x 7 Standard Microplate or 2 x 4 Deepwell	< 100 mm



M-20 Swinging Bucket Rotor[1], 90°, R_{max} 127 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	4,000	2,272
Sorvall ST 40	4,000	2,272
Sorvall Legend X1	4,000	2,272
Sorvall ST 16	4,000	2,272

[1] Biocontainment system sold separately

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Height
Rotor and Accessories			
75003624	M-20 Microplate Rotor including standard open carriers	2 x 3 Standard Microplate 2 x 1 Deepwell	< 65 mm
75003625	ClickSeal Carriers including Carrier and lids		< 45 mm
75002011	ClickSeal Replacement lids (Set of 2)		
75002012	Replacement M-20 O-rings for lids		

Biocontainment certification by Public Health England, Porton Down, UK.

Rotors and adapters
for fixed angle rotors

Fiberlite F14-6x250 LE Fixed Angle Rotor, 23°, R_{max} 137 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF 230V	11,000	18,533
Sorvall Legend XT/XF 120V	10,000	15,317
Sorvall ST 40	n/a	n/a
Sorvall Legend X1	n/a	n/a
Sorvall ST 16	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003662	Fiberlite F14-6 x 250LE Rotor for 250 mL Nalgene Bottles	6 x 250 mL	62 x 125
021-062153	Replacement O-ring Kit		
3141-0250	250 mL Nalgene Polypropylene Bottle (Set of 36)		
3140-0251	250 mL Nalgene Polycarbonate Bottle (Set of 36)		
Adapters for F14-6 X 250LE Rotor (Sets of 2, unless stated otherwise)			
010-1119	85 mL Nalgene Oak Ridge Tube	6 x 85 mL	38 x 109
010-0138	50 mL Nalgene Oak Ridge Tube	6 x 50 mL	29.5 x 121
75100136	50 mL Conical Tube	6 x 50 mL	30 x 121
010-1072	30 mL Nalgene Oak Ridge Tube / 38 mL Round Tube	12 x 30 mL	26 x 105
010-1074	16 mL Nalgene Oak Ridge Tube	30 x 16 mL	18 x 107
010-1410	15 mL Conical Tube	30 x 15 mL	17 x 121
00389	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube (each)	42 x 10 mL	17 x 110

Fiberlite F15-6x100y Fixed Angle Rotor, 25°, R_{max} 98 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	15,000	24,652
Sorvall ST 40	13,000	18,516
Sorvall Legend X1	15,000	24,652
Sorvall ST 16	13,000	18,516

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003698	Fiberlite F15-6 x 100y Rotor for 100 mL/85 mL Nalgene	6 x 100 mL	38 x 106
021-069031	Replacement O-ring Kit		
3118-0085	85 mL Nalgene Oak Ridge Tube (Set of 50)	6 x 85 mL	38 x 106
Adapters for F15-6 x 100y Rotor (Each, unless stated otherwise)			
75003102	50 mL Nalgene Oak Ridge Tube	6 x 50 mL	29.5 x 117
75003103	50 mL Conical Tube	6 x 50 mL	30 x 121
75003094	30 mL Nalgene™ Oak Ridge Tube / 38 mL Round Tube	6 x 30 mL	26 x 110
76002906	16 mL Nalgene Oak Ridge Tube	6 x 16 mL	18 x 123
75003095	15 mL Conical Tube	6 x 15 mL	17 x 123
75003093	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube	12 x 12 mL	17 x 95
75003092	6.5 mL Round Bottom Tube	12 x 6.5 mL	13 x 114
75003091	1.5/2 mL Microtube	24 x 2 mL	11 x 40

Biocontainment certification by Public Health England, Porton Down, UK.

Rotors and adapters
for fixed angle rotors

Fiberlite F13-14x50cy Fixed Angle Rotor, 34°, R_{max} 153 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF 230V	10,000	17,105
Sorvall Legend XT/XF 120V	9,250	14,636
Sorvall ST 40	n/a	n/a
Sorvall Legend X1	8,500	12,359
Sorvall ST 16	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003661	Fiberlite F13-14x50cy for 50 mL Conical Tubes	14 x 50 mL	30 x 121
021-149027	Replacement O-ring Kit		
Adapters for F13-14x50cy Rotor (Set of 2, unless otherwise stated)			
010-0377	50 mL Nalgene Oak Ridge Tube	14 x 50 mL	29.5 x 108
010-1147	30 mL Nalgene Oak Ridge Tube	14 x 30 mL	26 x 102
010-0376	16 mL Nalgene Oak Ridge Tube	14 x 16 mL	18 x 123
75100378	15 mL Conical Tube	14 x 15 mL	17 x 121
010-1340	15 mL Nunc Conical Tube and Filtration Devices	14 x 15 mL	17 x 121
010-1311	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube	28 x 12 mL	17 x 95

Fiberlite F15-8x50cy Fixed Angle Rotor, 25°, R_{max} 104 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	14,500	24,446
Sorvall ST 40	n/a	n/a
Sorvall Legend X1 230V	14,500	24,446
Sorvall Legend X1 120V	14,000	22,789
Sorvall ST 16	n/a	n/a

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003663	Fiberlite F15-8 x 50cy for 50 mL Conical Tubes	8 x 50 mL	30 x 121
021-149027	Replacement O-ring Kit		
Adapters for F15-8x50cy Rotor (Set of 2, unless otherwise stated)			
010-0377	50 mL Nalgene Oak Ridge Tube	8 x 50 mL	29 x 108
010-1147	30 mL Nalgene Oak Ridge Tube	8 x 30 mL	26 x 102
010-0376	16 mL Nalgene Oak Ridge Tube	8 x 16 mL	18 x 123
75100378	15 mL Conical Tube	8 x 15 mL	17 x 121
010-1340	15 mL Nunc Conical Tube and Filtration Devices	8 x 15 mL	17 x 121
010-1311	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube	8 x 12 mL	17 x 95

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CLINIConic Fixed Angle Rotor, 37°, R_{max} 140 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	n/a	n/a
Sorvall ST 40	n/a	n/a
Sorvall Legend X1	5,650	4,997
Sorvall ST 16	5,650	4,997

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor			
75003623	CLINIConic Fixed Angle Rotor for 15 mL Round and Conical Tubes	30 x 15 mL	17 x 121
Adapters for CLINIConic Rotor (Each)			
75003702	10 mL Round Bottom Tube	30 x 10 mL	17 x 131
11172596	7 mL Blood Collection Tubes (13 x 100 mm)	30 x 7 mL	17 x 131
11172595	5 mL Blood Collection Tubes (13 x 75 mm)	30 x 5 mL	13 x 95

8 x 50 Individually Sealed Fixed Angle Rotor, 45°, R_{max} 143 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	n/a	n/a
Sorvall ST 40	n/a	n/a
Sorvall Legend X1 230V	6,700	7,177
Sorvall Legend X1 120V	6,500	6,755
Sorvall ST 16 230V	6,700	7,177
Sorvall ST 16 120V	6,500	6,755

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003694	8 x 50 Individually Sealed for 50 mL Conical Tubes	8 x 50 mL	30 x 121
75003689	Replacement O-ring Kit		
Adapters for 8 x 50 Sealed Rotor (Set of 6)			
75005755	15 mL Conical Tube	8 x 50 mL	17 x 121
75005747	10 mL Blood Collection Tube (16 x 100 mm)	8 x 10 mL	16 x 110
75005748	7 mL Blood Collection Tube (13 x 100 mm)	8 x 7 mL	13 x 110
75005749	3.5 mL Blood Collection Tube	16 x 3.5 mL	11 x 75

Biocontainment certification by Public Health England, Porton Down, UK.

Rotors and adapters
for fixed angle rotors

HIGHConic II Aluminium Fixed Angle Rotor, 45°, R_{max} 126 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	10,350	15,090
Sorvall ST 40	10,350	15,090
Sorvall Legend X1	10,350	15,090
Sorvall ST 16	10,350	15,090

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003620	HIGHConic Fixed Angle Rotor for 100 mL/85 mL Nalgene Oak Ridge Tube	6 x 100 mL	38 x 123
75003058	Replacement O-ring Kit		
3118-0085	85 mL Nalgene Oak Ridge Tube (Set of 50)	6 x 85 mL	38 x 106
Adapters for HIGHConic Rotor (Each, unless stated)			
75003102	50 mL Nalgene Oak Ridge Tube	6 x 50 mL	30 x 117
75003103	50 mL Conical Tube	6 x 50 mL	30 x 121
75003094	30 mL Nalgene Oak Ridge Tube / 38 mL Round Tube	6 x 30 mL	26 x 110
76002906	16 mL Nalgene Oak Ridge Tube	6 x 16 mL	18 x 123
75003095	15 mL Conical Tube	6 x 15 mL	17 x 123
75003093	10 mL Nalgene Oak Ridge Tube / 12 mL Round Tube	12 x 12 mL	17 x 95
75003092	6.5 mL Round Bottom Tube	12 x 6.5 mL	13 x 114
75003091	1.5/2 mL Microtube	24 x 2 mL	11 x 40

Fiberlite F21-48x2 Fixed Angle Rotor, 45°, R_{max} 97 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	15,200	25,055
Sorvall ST 40	15,200	25,055
Sorvall Legend X1	15,200	25,055
Sorvall ST 16	15,200	25,055

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003664	Fiberlite F21-48 x 2 for 1.5/2 mL Microtubes	48 x 2 mL	11 x 50
021-489021	Replacement O-ring Kit		

Microliter 48 x 2 Aluminum Fixed Angle Rotor, 45°, R_{max} 98 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	15,200	25,314
Sorvall ST 40	15,200	25,314
Sorvall Legend X1	15,200	25,314
Sorvall ST 16	15,200	25,314

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003602	48 x 2 Aluminum for 1.5/2 mL Microtubes	48 x 2 mL	11 x 50
75003349	Replacement O-ring Kit		

Biocontainment certification by Public Health England, Porton Down, UK.

MicroClick 30 x 2 Aluminum Fixed Angle Rotor, 45°, R_{max} 99 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	14,000	21,693
Sorvall ST 40	14,000	21,693
Sorvall Legend X1	14,000	21,693
Sorvall ST 16	14,000	21,693

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75005719	30 x 2 MicroClick for 1.5/2 mL Microtubes and Spin Columns	30 x 2 mL	11 x 50
75005726	Replacement O-ring Kit		

Microliter 30 x 2 Aluminum Fixed Angle Rotor, 45°, R_{max} 100 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall Legend XT/XF	15,200	25,830
Sorvall ST 40	15,200	25,830
Sorvall Legend X1	15,200	25,830
Sorvall ST 16	15,200	25,830

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75003652	30 x 2 Aluminum for 1.5/2 mL Microtubes	30 x 2 mL	11 x 50
75003349	Replacement O-ring Kit		

Biocontainment certification by Public Health England, Porton Down, UK.

Microliter Rotor Adapters

Cat. No.	Description	Maximum Tube Dimensions (Ø x L, mm)
Adapters for all Microliter Rotors (Set of 30)		
75005753	0.5 mL Microtube	8 x 44
75005754	0.25 mL Microtube	6 x 46
75005752	0.2 mL PCR Tube	5 x 20

Specifications and ordering information

Thermo Scientific Sorvall 4-liter Centrifuges

Specifications	Sorvall Legend XF/XFR	Sorvall Legend XT/XTR	Sorvall ST 40/40R
Swinging Bucket Rotors			
Maximum Capacity	4 x 1000 mL (with TX-1000 rotor)		
Maximum Speed	6000 rpm (with BIOShield 1000A rotor)		5300 rpm (with BIOShield 1000A rotor)
Maximum RCF	7164 x g (with BIOShield 1000A rotor)		5590 x g (with BIOShield 1000A rotor)
Fixed Angle Rotors			
Maximum Capacity	6 x 250 mL (with F14-6 x 250LE rotor)		6 x 100 mL (with F15-6 x 100 rotor)
Maximum Speed	15200 rpm (with microvolume rotors)		
Maximum RCF	25830 x g (with 30 x 2 mL rotor)		
Control System	Microprocessor		
Drive System	Direct, brushless induction low profile motor		
Rotor Locking System	Push-button Auto-Lock		
Imbalance Detection System	SMARTSpin		
Programs	99 (5 with direct access key)		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	Corrosion-resistant, high-thermal conductivity, 304 grade stainless steel		
Maximum Timer Range	99h, 59min + continuous		9h, 59min + continuous
Sound Level (dBA) with swinging bucket rotor at top speed	< 64 / < 58* (TX-750)	< 61 / < 57* (TX-750)	
with F15-8 x 50 rotor at top speed	< 55 / < 57*	< 64	–
Other Features	Certified[1] ClickSeal biocontainment system, language selection, motorized lid latch		
Maximum Power Consumption (W) 120 V	1400		
230 V	1700 / 1950*		
Maximum Heat Output (BTU/h) 120 V	4776		
230 V	5800 / 6653*		
Dimensions			
Height (lid closed)	84 cm / 33.2 in	36 cm / 14.2 in	
Width	56.5 cm / 22.2 in	56.5 cm / 22.2 in 74.5 cm* / 29.3 in*	
Depth	67 cm / 26.4 in	67 cm / 26.4 in	
Weight	152.5 kg / 336.2 lb 142.5 kg* / 314.2 lb*	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 61326, EN 55011B		
Certifications	UL listed, CSA certified, CE marked, IVD compliant, Certified Biosafety, RoHS compliant, WEEE compliant		
Ordering Information	**Sorvall Legend XF/XFR**	**Sorvall Legend XT/XTR**	**Sorvall ST 40/40R**
Sorvall Legend, ventilated, 230 V, 50/60 Hz	75004532	75004505	–
Sorvall Legend, ventilated, 230 V (US and Canada)**	75004535	75004508	–
Sorvall Legend, ventilated, 120 V, 60 Hz	75004533	75004506	–
Sorvall Legend, ventilated 100 V, 50/60 Hz	75004534	75004507	
Sorvall Legend, refrigerated, 230 V, 50/60 Hz	75004538	75004520	–
Sorvall Legend, refrigerated, 230 V (US and Canada)**	75004541	75004523	–
Sorvall Legend, refrigerated, 120 V, 60 Hz	75004539	75004521	–
Sorvall Legend, refrigerated 100 V, 50/60 Hz	75004540	75004522	
Sorvall ST, ventilated, 230 V, 50/60 Hz	–	–	75004509
Sorvall ST, ventilated, 120 V, 60 Hz	–	–	75004510
Sorvall ST, ventilated, 100 V, 50/60 Hz	–	–	75004511
Sorvall ST, refrigerated, 230 V, 50/60 Hz	–	–	75004524
Sorvall ST, refrigerated, 120 V, 60 Hz	–	–	75004525
Sorvall ST, refrigerated, 100 V, 50/60 Hz	–	–	75004526

Refrigerated models
*** Includes NEMA Plug 6-15*

The quality of the procedures used to design, manufacture, sell and service the Sorvall Legend XT/XF and X1, and Sorvall ST 40 and 16 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.

[1] Biocontainment certification by Public Health England, Porton Down, UK.

Thermo Scientific Sorvall 1.6-liter Centrifuges

Specifications	Sorvall Legend X1/X1R	Sorvall ST 16/16R
Swinging Bucket Rotors		
Maximum Capacity	4 x 400 mL (with TX-400 rotor)	
Maximum Speed	6300 rpm (with BIOShield 720 rotor)	5500 rpm (with TX-200 rotor)
Maximum RCF	7188 x g (with BIOShield 720 rotor)	5580 x g (with TX-200 rotor)
Fixed Angle Rotors		
Maximum Capacity	6 x 100 mL (with F15-6 x 100 rotor)	
Maximum Speed	15200 rpm (with microvolume rotors)	
Maximum RCF	25830 x g (with 30 x 2 mL rotor)	
Control System	Microprocessor	
Drive System	Direct, brushless induction low profile motor	
Rotor Locking System	Push-button Auto-Lock	
Imbalance Detection System	SMARTSpin	
Programs	99 (5 with direct access key)	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	Corrosion-resistant, high-thermal conductivity, 304 grade stainless steel	
Maximum Timer Range	99h, 59min + continuous	9h, 59min + continuous
Sound Level (dBA), with swinging bucket rotor at top speed	< 61 / < 55* (TX-400)	< 61 / < 55* dB (TX-400)
with F15-8x50 rotor at top speed	< 65	–
Other Features	Certified[1] ClickSeal biocontainment system, language selection, motorized lid latch	
Maximum Power Consumption (W) 120V	850 / 1200*	
230V	1010 / 1400*	
Maximum Heat Output (BTU/h) 120V	2901/4096*	
230V	3447 / 4776*	
Dimensions		
Height (lid closed)	36 cm / 14.2 in	
Width	44 cm / 17.3 in 62.3 cm* / 24.5 in*	
Depth	60.5 cm / 23.8 in	
Weight	57.5 kg / 126.8 lb 91.5 kg* / 201.7 lb*	
Technical Standards	IEC 61010-1, IEC 61010-2-020, IEC 61010-2-101, 230 V only: EN 61326, EN 55011B	
Certifications	UL listed, CSA certified, CE marked, IVD compliant, Certified Biosafety, RoHS compliant, WEEE compliant	

Ordering Information	Sorvall Legend X1/X1R	Sorvall ST 16/16R
Sorvall Legend, ventilated, 230 V, 50/60 Hz	75004220	–
Sorvall Legend, ventilated, 120 V, 60 Hz	75004221	–
Sorvall Legend, ventilated, 100 V, 50/60 Hz	75004223	–
Sorvall Legend, refrigerated, 230 V, 50/60 Hz	75004260	–
Sorvall Legend, refrigerated, 120 V, 60 Hz	75004261	–
Sorvall Legend, refrigerated, 100 V, 50/60 Hz	75004263	–
Sorvall ST, ventilated, 230 V, 50/60 Hz	–	75004240
Sorvall ST, ventilated, 120 V, 60 Hz	–	75004241
Sorvall ST, ventilated, 100 V, 50/60 Hz	–	75004243
Sorvall ST, refrigerated, 230 V, 50/60 Hz	–	75004380
Sorvall ST, refrigerated, 120 V, 60 Hz	–	75004381
Sorvall ST, refrigerated, 100 V, 50/60 Hz	–	75004383

**Refrigerated models*
*** Includes NEMA Plug 6-15*

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[1] Biocontainment certification by Public Health England, Porton Down, UK.

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