



Thermo Scientific™ General Purpose Centrifuge Series

To select the right centrifuge for your lab,
choose an option at the top of the screen,
or click below to see what's new.

Let's get started





Continuous innovation

New industrial design with improved ergonomics for ease of use and touch screen capabilities to help save you time.

**View
GUI**



State-of-the-art
touchscreen
interface

**View
safe operation**



Safety and
ergonomic
enhancements

**View
enhancements**



Enhancements
to make your day
in the lab easier



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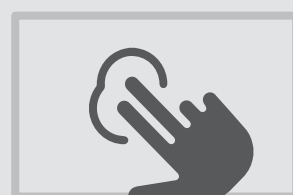
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Graphic User Interface (GUI)

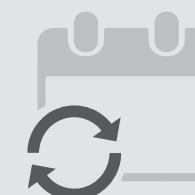
Modern, intuitive touchscreen interface



User-intuitive screen enables easy access and programming for faster results

[View](#)

New Lighthouse Mode provides run status visibility from across the lab, now with adjustable-volume alerts

[View](#)

Scheduling features and preventative maintenance queues to help reduce downtime

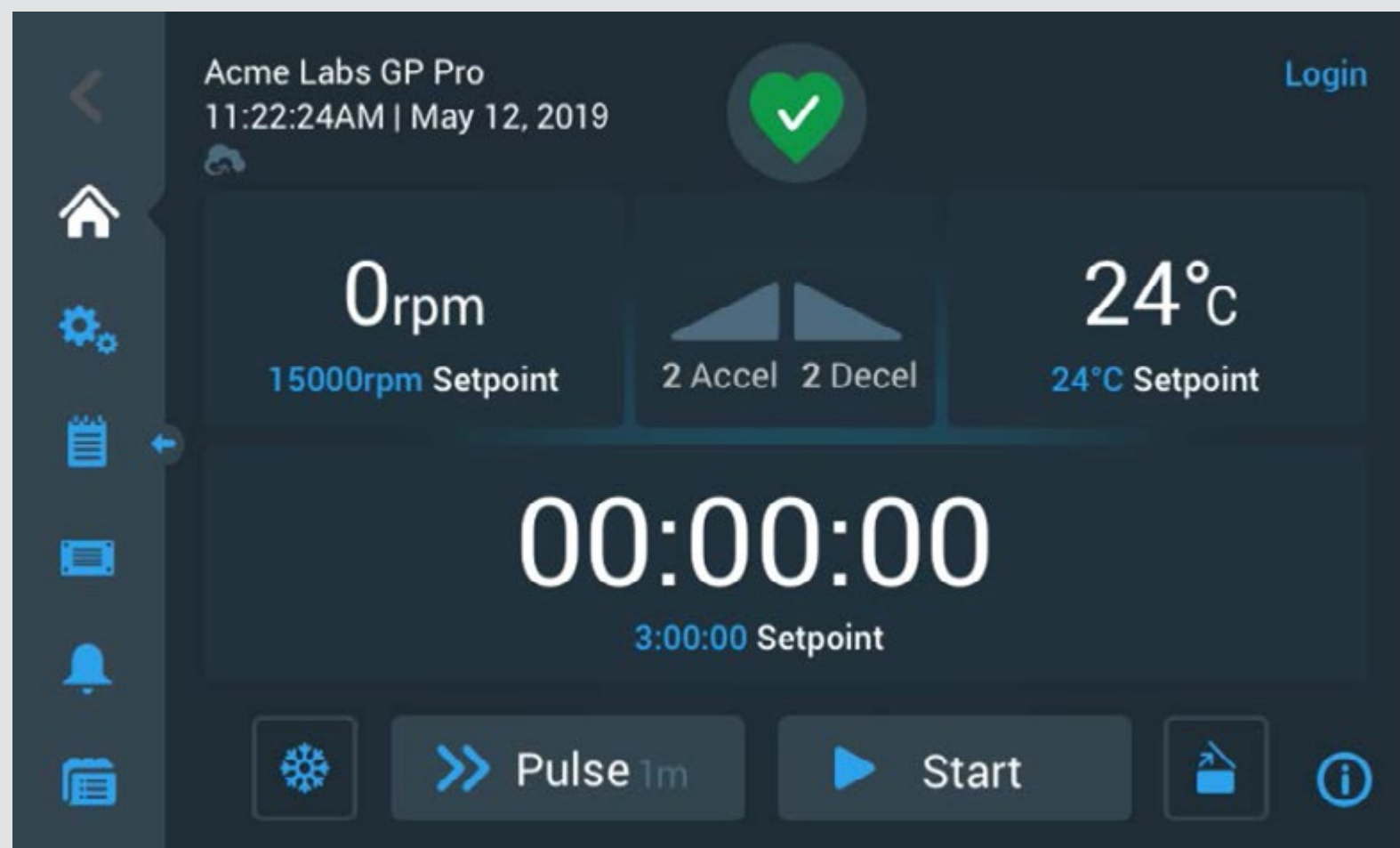
[View](#)



Simple touchscreen programming

Click below to discover the new touchscreen features

- Easily accessible menu bar >
- Keep an eye on centrifuge health >
- Time-saving pre-temp button >
- Customize quick spins >
- Access helpful info with one touch >

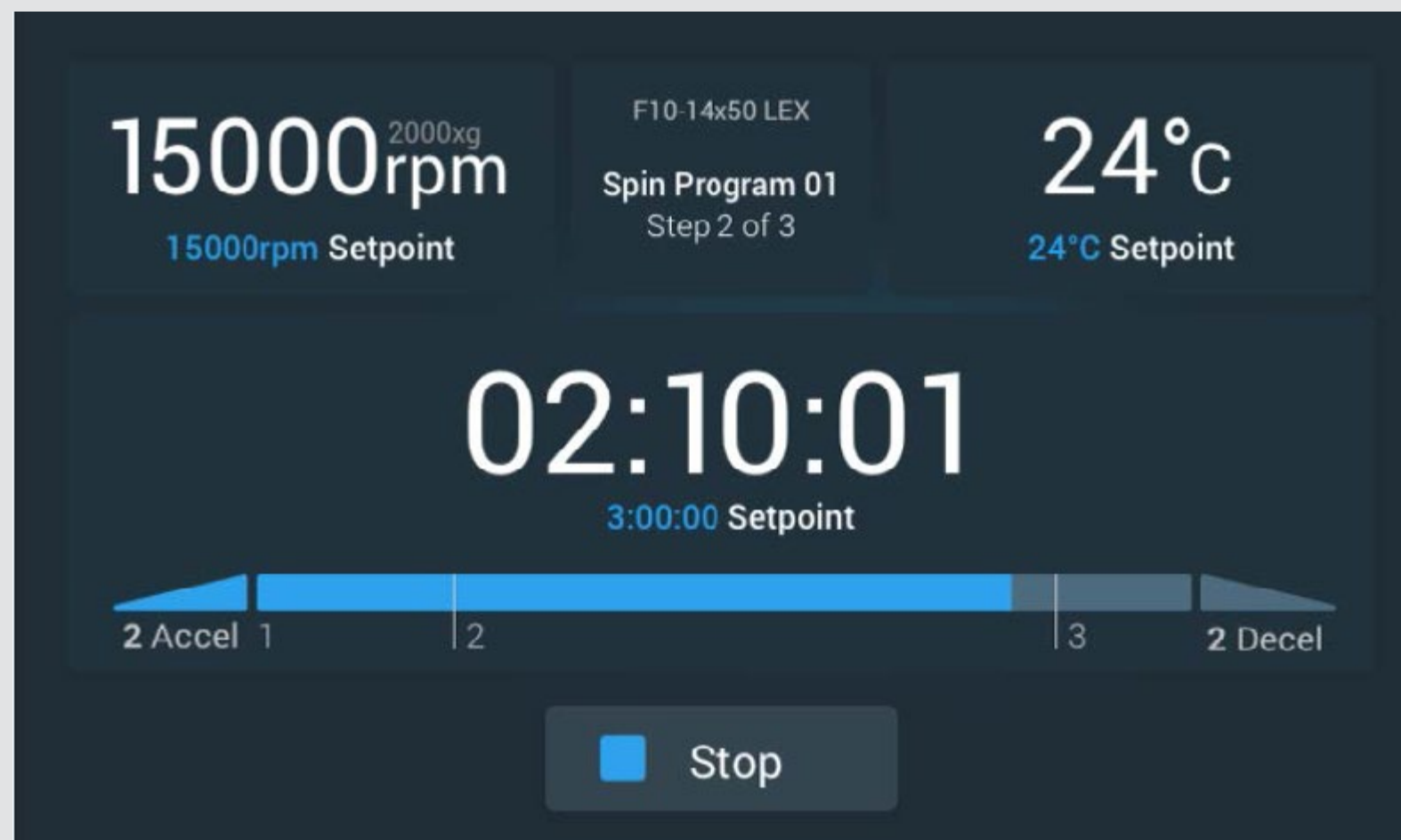




Lighthouse mode

Track progress without having to step away from your work.

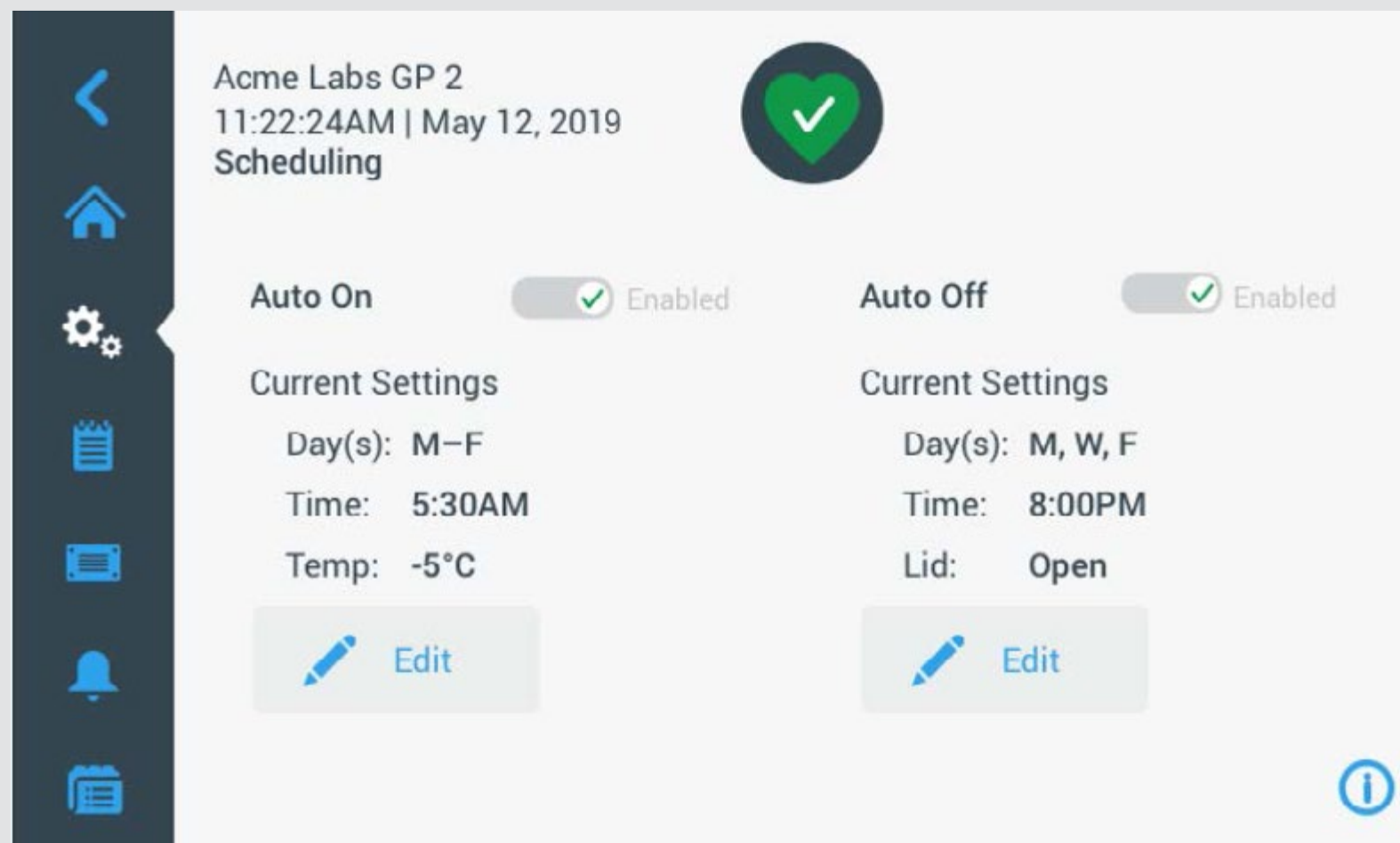
- Easily **monitor your run progress** from across the lab with enlarged time and tracker bar
- Plus, **end-of-run alerts** can be programmed with customized volume settings





Smart controls

- Pre-programmed start-up of compressor for temperature-ready centrifuge as soon as you arrive in the lab >
- Shut-down programming can extend compressor life and reduce energy costs >





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Safety features

Improved reach-in during rotor installation for safer loading and unloading

Hand grip cue on the lid indicates the easiest and best one-handed closure location

[View](#)

Reduced pinch-points designed to prevent accidental injury. Motorized lid latch with safety protection

[View](#)



Enhancements

Accessory tray holds tools or samples as you prepare for your run

[View](#)

Front USB port for easier plug in and data transfer

[View](#)

Other new benefits include:

- compliance with most-recent applicable regulatory and safety standards
- available energy-saving settings
- over 20 rotor options to choose from





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Consistent performance

Thermo Scientific technologies designed for solid performance and consistent results in a wide range of applications.

**View
performance**



Broad choice of
speed, capacity
and application

**View
Auto-Lock™**



Simple, fast
rotor exchange

**View
Fiberlite™**

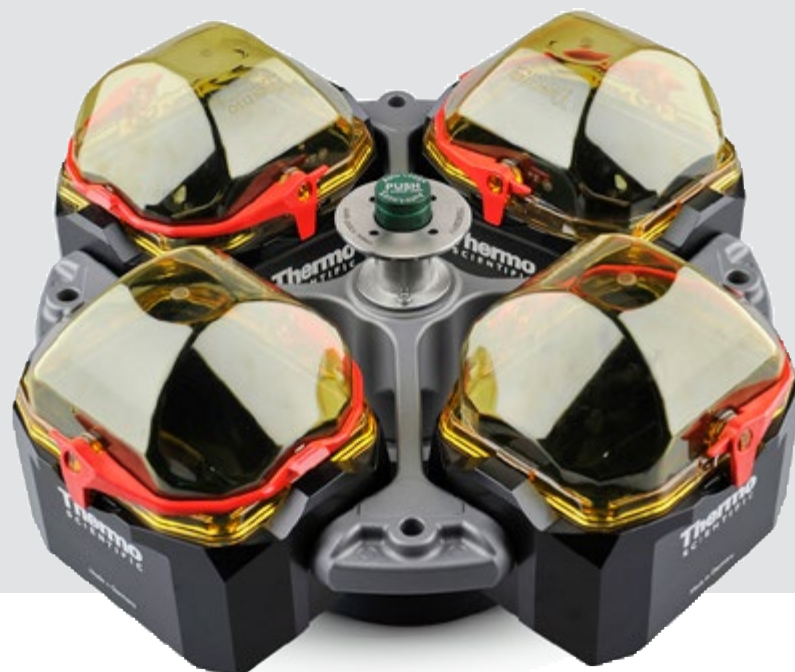


Outstanding
rotor ergonomics
and performance

**View
ClickSeal™**



One-handed
biocontainment
closures



Find efficiency with more than 20 rotor options

Achieve faster results with the ability to hold up to 196 blood tubes, 40 x 50 mL conical tubes, or 24 microplates in one run.

- With fixed-angle **rotor speeds over 25,000 x g**, and swinging buckets rotor speeds over 6,000 x g, even the toughest separations can be completed better and faster >
- **Motorized lid latch** reduces closure time and easy to operate/handle >
- **Slide-coat finish** on swinging buckets rotors reduces the need for lubrication, for more consistent separations and less chance of grease contamination >



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Auto-Lock™ Rotor Exchange

Helps save time. Faster answers.

- Secure, ergonomic push-button rotor exchange in as little as 3 seconds
- Trouble-free installation and removal with **no tools required**
- **Full chamber access** for cleaning convenience and minimizes risk of drip tray contamination
- **Flexibility to quickly switch between applications** and evolve with the changing needs of your laboratory



Click below to learn how Fiberlite Rotors let researchers focus on their work – worry-free

1

Biocontainment



2

Design



3

Performance



4

Ergonomics



5

Value



Fiberlite™ Carbon Fiber Rotors

Outstanding ergonomics and performance

Lighter materials, advanced designs and industry experience all contribute to the development of superior rotor products with better performance, efficiency and built-in safety features.



5 Ways

Fiberlite™ Rotors let researchers focus on their work – worry-free

1**2****3****4****5**

1 Biocontainment

- Fiberlite Rotor / lid combinations, and liquid containment annulus offer features that protect the user, the centrifuge and the samples from hazardous contamination
- Biocontainment certified by Public Health England, Porton Down, UK



5 Ways

Fiberlite™ Rotors let researchers focus on their work – worry-free

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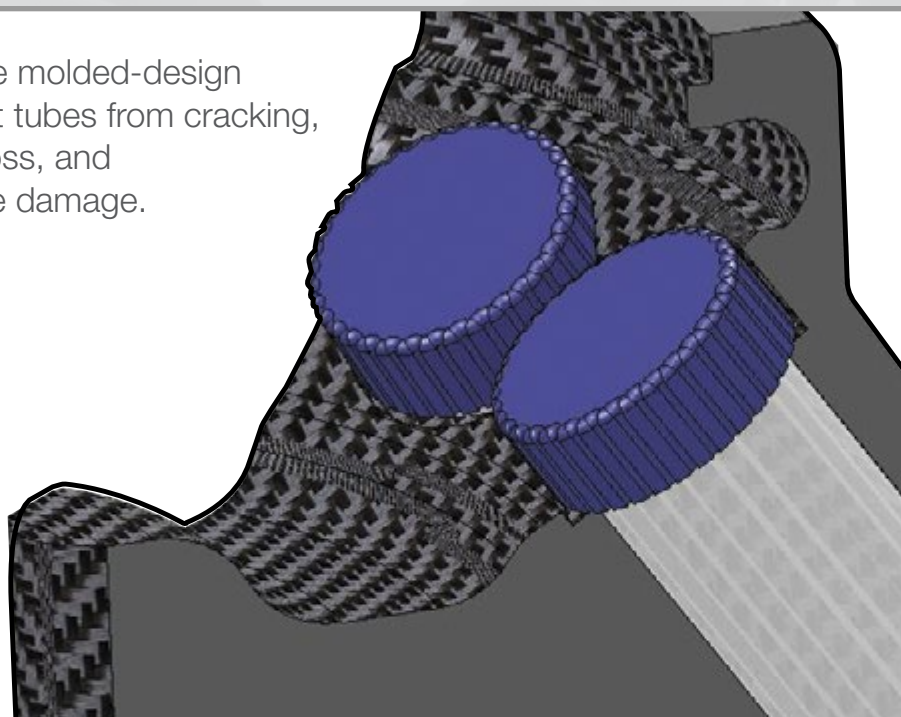
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Innovative molded-design to protect tubes from cracking, sample loss, and centrifuge damage.



2 Design

- Corrosion-resistance and fatigue-resistance maintain the rotor's structural integrity for outstanding durability
- Fiberlite Rotors are designed to “unwind” rather than split or break, so your centrifuge is protected from damage in the unlikely event of a rotor failure
- Carbon fiber offers a unique ability to mold each cavity to perfectly fit tubes, bottles and other consumables, enabling faster spins for tougher separations



5 Ways

Fiberlite™ Rotors let researchers focus on their work – worry-free

1

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5



Time savings with carbon fiber rotors

Acceleration and deceleration rate comparison of 6 x 250 mL capacity floor model rotors*

Fiberlite Carbon
Fiber Rotor

1:35/1:15

Savings
(2:55 minutes)

Aluminum rotor

3:45/2:00

Accel/decel rates

3 Performance

- Thermo Scientific™ Fiberlite Rotors are each balanced and tested before they leave the factory for precision performance
- Automatic rotor recognition eliminates the need for manual input**
- Fiberlite Rotors can reach higher speeds than metal equivalents, improving separations in tubes such as 15 or 50 mL conicals

* Based on a comparison with manufacturers' published specifications.

** After reaching speeds of 200 rpm; please see manual for details.



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5 Ways

Fiberlite™ Rotors let researchers focus on their work – worry-free

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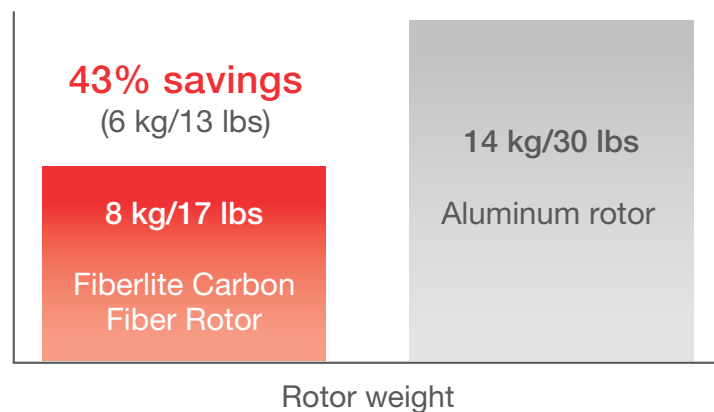
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Weight savings with carbon fiber rotors

Weight comparison of fully loaded 6 x 250 mL capacity floor model rotors*



4 Ergonomics

- Auto-Lock™ allows push-button rotor exchange in as little as 3 seconds with no tools or complicated procedures required
- Carbon fiber is lighter in weight allowing for easier lifting in and out of the centrifuge
- Unique integrated handle design allows for easy gripping to exchange rotors for a variety of applications
- Easy rotor exchange simplifies cleaning and disinfecting procedures

* Based on a comparison with manufacturers' published specifications.



5 Ways

Fiberlite™ Rotors let researchers focus on their work – worry-free

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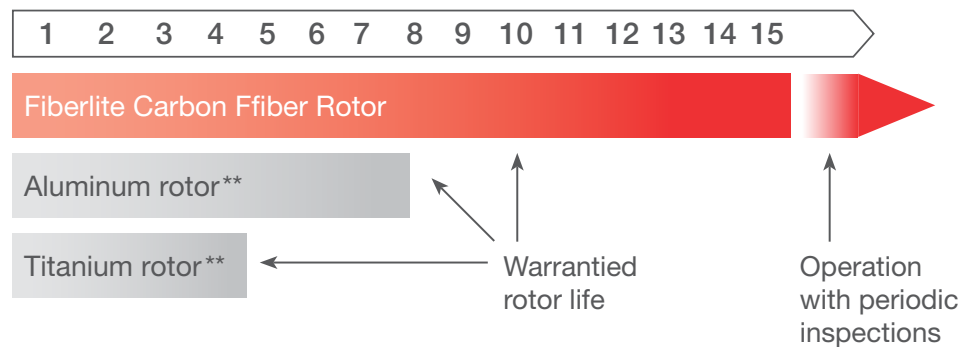
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Warranty with carbon fiber rotors

Average warranty periods for metal rotors compared with Fiberlite Carbon Fiber Rotors*



5 Value

- On-site clinics and maintenance are available to ensure proper use and care, extending the life of your rotors
- Our continuously improving rotor designs have increased the capacities available on the same size centrifuge, resulting in outstanding efficiency and throughput across the range
- Warranty to support fewer replacements

* Average warranty periods were calculated based on industry average of years an aluminum or titanium rotor may be covered under warranty per manufacturers' published specifications.

**Warranty coverage may vary by rotor. Please refer to manufacturer for specific warranty coverage for each rotor.



ClickSeal™ Biocontainment Lids

One-handed sample protection

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



Meet our family of centrifuges

Click on the sizing tool below to explore the best options for your lab space and applications.

General Purpose

1.6 L Ventilated >

General Purpose

1.6 L Refrigerated >

General Purpose

4 L Floor Model
Ventilated &
Refrigerated >

General Purpose

4 L Ventilated >

General Purpose

4 L Refrigerated >

View All >

width x depth x height



Specifications and ordering information

Specifications	Sorvall X4 Pro		Sorvall X4R Pro		Sorvall ST4 Plus		Sorvall ST4R Plus	
	IVD/MD	General Use Only	IVD/MD	General Use Only	IVD/MD	General Use Only	IVD/MD	General Use Only
Swinging Buckets 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 F14-6x250LE rotor				6 x 100 mL with F15-6x100 or F10-6x100 rotor			
Maximum Speed	15200 rpm with F21-48x2, Microliter 48x2 or Microliter 30x2							
Maximum RCF	25830 x g with Microliter 30x2							
Centrifuge Details								
Control System	Microprocessor							
Drive System	Direct, Brushless induction low profile motor							
Accel/Decel Profiles	Choices of 9 Accel / 10 Decel Rates							
Material	front, top, sides: PC-ABS plastic painted with 2K PUR-based lacquer; metal housing: cold rolled steel with powder paint; centrifuge bowl: stainless steel; centrifuge feet: rubber							
Safety Features	SMARTSpin Imbalance detection, finger-pinch prevention, crash-proof construction							
Warranty	5 Year Limited							
Includes	printed English user manual, USB stick with 28 languages of user manual, corrosion resistance oil (70009824), power cord, declaration of conformity							
Noise Level	<64 dB for refrigerated and <68 dB for ventilated							
Temperature Range	N/A		-10°C to +40°C		N/A		-10°C to +40°C	
Number of Compatible Rotors	17		17		12		12	
Display Details								
Display	Full color touch screen interface				Push button and high contrast LCD interface			
Run Time	max 99h, 59min, 59sec; also with continuous and customizable pulse				max 9h, 59min; also with continuous and pulse modes			
Timer	count up or down				count down only			
Program Storage	up to 100 run programs				up to 6 run programs			
Programmability	via easy access touch screen menu				via 6 direct access buttons			
Dimensions, Weight								
Width (inches) Exterior	22.3		29.4		22.3		29.4	
Width (cm) Exterior	56.6		74.6		56.6		74.6	
Depth (inches) Exterior	27.2		27.2		27.2		27.2	
Depth (cm) Exterior	69.0		69.0		69.0		69.0	
Height (inches) Exterior	14.3		14.2		14.3		14.2	
Height (cm) Exterior	36.2		36.1		36.2		36.1	
Height (inches) Open Cover	33.9		33.9		33.9		33.9	
Height (cm) Open Cover	86.1		86.0		86.1		86.0	
Footprint Dimensions (inches)	22.3 x 23.1		29.4 x 23.0		22.3 x 23.1		29.4 x 23.0	
Footprint Dimensions (cm)	56.6 x 58.8		74.6 x 58.4		56.6 x 58.8		74.6 x 58.4	
Net Weight (lbs)	196		265		196		265	
Net Weight (kgs)	89		120		89		120	
Certifications and Standards								
IVD/MD	X		X		X		X	
Certifications	EN/UL/IEC 61010-1, EN/UL/IEC 61010-2-020 and 61010-2-101, EN/UL/IEC 61326-1, EN/UL/IEC 61326-2-6, FCC part 15							
Standards	ISO 14971, ISO 13485, ISO 9001							
Ordering Information	Sorvall X4 Pro		Sorvall X4R Pro		Sorvall ST4 Plus		Sorvall ST4R Plus	
	IVD/MD	General Use Only	IVD/MD	General Use Only	IVD/MD	General Use Only	IVD/MD	General Use Only
230V***	75009505*	75009905	75009520* / 75009620†*	75009920 / 75009820†	75009509*	75009909	75009524* / 75009624†*	75009924 / 75009824†
120V	75009506*	N/A	75009521*	N/A	75009510*	N/A	75009525*	N/A
100V	75009507*	75009907	75009522*	75009922	75009511*	75009911	75009526*	75009926

*** 220V / 60 Hz [Korea, etc.]

*Indicates a centrifuge, rotor and/or adapter product approved for use in clinical applications; see user manual for details.

**Legacy model.



One part number. The complete package.

Order your centrifuge, rotor and accessories with a single part number designed for your application.

View

Packages with swinging buckets rotors developed for 50 and 15 mL conical tubes. Excellent for cell culture and general life science applications with up to 96 x 15 mL conical tube capacities.

View

With up to 196 standard 5/7 mL blood tube capacities in a benchtop footprint, process more samples for faster patient or study results.





Cell culture packages

Centrifuge	Package PN	Package Includes
4L High Performance including Touch Screen User Interface		
40 x 50 mL conical tubes up to 4200 rpm/4122 x g (R) or 3800 rpm/3374 x g (V)		
Sorvall X4R Pro-MD, 120V	75016052*	TX-1000 rotor with Auto-Lock™ Buckets (set/4) ClickSeal™ biocontainment lids (set/4) 50 mL conical tube adapters (set/4, 40 tube capacity) 15 mL conical tube adapters (set/4, 96 tube capacity)
Sorvall X4R Pro, 208-240V	75016071	
Sorvall X4 Pro-MD, 120V	75016053*	
Sorvall X4 Pro, 208-240V	75016072	

Centrifuge	Package PN	Package Includes
4L High Performance including Touch Screen User Interface		
28 x 50 mL conical tubes up to 4700 rpm/4816 x g		
Sorvall X4R Pro, 208-240V	75016084	TX-750 rotor with Auto-Lock Round Buckets (set/4) ClickSeal biocontainment lids (set/4) 50 mL conical tube adapters (set/4, 28 tube capacity) 15 mL conical tube adapters (set/4, 56 tube capacity)
Sorvall X4 Pro, 208-240V	75016078	

Centrifuge	Package PN	Package Includes
4L Standard Performance		
40 x 50 mL conical tubes up to 4200 rpm/4122 x g (R) or 3800 rpm/3374 x g (V)		
Sorvall ST4R Plus-MD, 120V	75016055*	TX-1000 rotor with Auto-Lock Buckets (set/4) ClickSeal biocontainment lids (set/4) 50 mL conical tube adapters (set/4, 40 tube capacity) 15 mL conical tube adapters (set/4, 96 tube capacity)
Sorvall ST4R Plus, 208-240V	75016073	
Sorvall ST4 Plus-MD, 120V	75016056*	
Sorvall ST4 Plus, 208-240V	75016074	

Centrifuge	Package PN	Package Includes
4L Standard Performance		
28 x 50 mL conical tubes up to 4700 rpm/4816 x g		
Sorvall ST4R Plus, 208-240V	75016085	TX-750 rotor with Auto-Lock Round Buckets (set/4) ClickSeal biocontainment lids (set/4) 50 mL conical tube adapters (set/4, 28 tube capacity) 15 mL conical tube adapters (set/4, 56 tube capacity)

*Indicates a centrifuge, rotor and/or adapter product approved for use in clinical applications; see user manual for details.

Rotor-only cell culture packages

Rotor	Package PN	Package Includes
TX-1000 Conical Tube Package		
TX-1000 Swinging Buckets Rotor	75016105*	TX-1000 rotor cross with Auto-Lock™ Buckets (set/4) ClickSeal™ biocontainment lids (set/4) 50 mL conical tube adapters (set/4, 40 tube capacity) 15 mL conical tube adapters (set/4, 96 tube capacity)

Rotor	Package PN	Package Includes
TX-1000 Microplate Package		
TX-1000 Swinging Buckets Rotor	75016104*	TX-1000 rotor cross with Auto-Lock Buckets (set/4) ClickSeal biocontainment lids (set/4) Microplate adapters (set/4; 24 plate capacity, 8 deepwell capacity)

Rotor	Package PN	Package Includes
TX-750 Conical Tube Package		
TX-750 Swinging Buckets Rotor	75016110*	TX-750 rotor cross with Auto-Lock Round Buckets (set/4) ClickSeal biocontainment lids (set/4) 50 mL conical tube adapters (set/4, 28 tube capacity) 15 mL conical tube adapters (set/4, 56 tube capacity)

Rotor	Package PN	Package Includes
TX-400 Conical Tube Package		
TX-400 Swinging Buckets Rotor	75016108*	TX-400 rotor cross with Auto-Lock Buckets (set/4) ClickSeal biocontainment lids (set/4) 50 mL conical tube adapters (set/4, 16 tube capacity) 15 mL conical tube adapters (set/4, 36 tube capacity)

Rotor	Package PN	Package Includes
TX-200 Conical Tube Package		
TX-200 Swinging Buckets Rotor	75016106*	TX-200 rotor cross with Auto-Lock Buckets (set/4) ClickSeal biocontainment lids (set/4) 50 mL conical tube adapters (set/4, 4 tube capacity) 15 mL conical tube adapters (set/4, 20 tube capacity)

*Indicates a centrifuge, rotor and/or adapter product approved for use in clinical applications; see user manual for details.

Clinical packages

Centrifuge	Package PN	Package Includes
4L High Performance including Touch Screen User Interface		
196 x 5/7 mL tubes up to 4200 rpm/4122 x g (R) or 3800 rpm/3374 x g (V)		
Sorvall X4R Pro-MD, 120V	75016040*	TX-1000 rotor with Auto-Lock™ Buckets (set/4) ClickSeal™ biocontainment lids (set/4) 5/7 mL blood tube adapters (set/4, 196 tube capacity) 10 mL blood tube adapters (set/4, 148 tube capacity)
Sorvall X4R Pro-MD, 208-240V	75016061*	
Sorvall X4 Pro-MD, 120V	75016041*	
Sorvall X4 Pro-MD, 208-240V	75016062*	

Centrifuge	Package PN	Package Includes
4L High Performance including Touch Screen User Interface		
148 x 5/7 mL tubes up to 4700 rpm/4816 x g		
Sorvall X4R Pro-MD, 208-240V	75016082*	TX-750 rotor with Auto-Lock Round Buckets (set/4) ClickSeal biocontainment lids (set/4) 5/7 mL blood tube adapters (set/4, 148 tube capacity) 10 mL blood tube adapters (set/4, 84 tube capacity)



Centrifuge	Package PN	Package Includes
4L Standard Performance		
196 x 5/7 mL tubes up to 4200 rpm/4122 x g (R) or 3800 rpm/3374 x g (V)		
Sorvall ST4R Plus-MD, 120V	75016043*	TX-1000 rotor with Auto-Lock Buckets (set/4) ClickSeal biocontainment lids (set/4) 5/7 mL blood tube adapters (set/4, 196 tube capacity) 10 mL blood tube adapters (set/4, 148 tube capacity)
Sorvall ST4R Plus-MD, 208-240V	75016063*	
Sorvall ST4 Plus-MD, 120V	75016044*	

Centrifuge	Package PN	Package Includes
4L Standard Performance		
148 x 5/7 mL tubes up to 4700 rpm/4816 x g		
Sorvall ST4R Plus-MD, 208-240V	75016080*	TX-750 rotor with Auto-Lock Round Buckets (set/4) ClickSeal biocontainment lids (set/4) 5/7 mL blood tube adapters (set/4, 148 tube capacity) 10 mL blood tube adapters (set/4, 84 tube capacity)

*Indicates a centrifuge, rotor and/or adapter product approved for use in clinical applications; see user manual for details.

Rotor-only clinical packages

Rotor	Package PN	Package Includes
TX-1000 Blood Tube Package		
TX-1000 Swinging Buckets Rotor	75016103*	TX-1000 rotor cross with Auto-Lock™ Buckets (set/4) ClickSeal™ biocontainment lids (set/4) 5/7 mL blood tube adapters (set/4, 148 tube capacity) 10 mL blood tube adapters (set/4, 84 tube capacity)

Rotor	Package PN	Package Includes
TX-750 Blood Tube Package		
TX-750 Swinging Buckets Rotor	75016109*	TX-750 rotor cross with Auto-Lock Round Buckets (set/4) ClickSeal biocontainment lids (set/4) 5/7 mL blood tube adapters (set/4, 148 tube capacity) 10 mL blood tube adapters (set/4, 84 tube capacity)

Rotor	Package PN	Package Includes
TX-400 Blood Tube Package		
TX-400 Swinging Buckets Rotor	75016107*	TX-400 rotor cross with Auto-Lock Buckets (set/4) ClickSeal biocontainment lids (set/4) 5/7 mL blood tube adapters (set/4, 76 tube capacity) 10 mL blood tube adapters (set/4, 56 tube capacity)

Rotor	Package PN	Package Includes
TX-200 Blood Tube Package		
TX-200 Swinging Buckets Rotor	75016111*	TX-200 rotor cross with Auto-Lock Buckets (set/4) ClickSeal biocontainment lids (set/4) 5/7 mL blood tube adapters (set/4, 36 tube capacity) 10 mL blood tube adapters (set/4, 28 tube capacity)



*Indicates a centrifuge, rotor and/or adapter product approved for use in clinical applications; see user manual for details.



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Maximize capacity. Higher quality pellets.

There is a rotor available for nearly every application to solve your swinging buckets and fixed angle needs.



Swinging buckets

Find your [consumable](#) >

View [rotor details](#) >

Explore [rotor packages](#) >

Review rotor [warranty](#) >



Fixed angle

Find your [consumable](#) >

View [rotor details](#) >

Review rotor [warranty](#) >



Swinging buckets 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		4200 rpm	4700 rpm	6000 rpm	5000 rpm
Maximum RCF (x g) ¹		4122 x g	4816 x g	7164 x g	4696 x g
Biocontainment		✓ (Optional)	✓ (Optional)	✓ (Integrated)	✓ (Optional)
Sorvall X4 Pro/Legend XF*		✓	✓	✓	
Sorvall ST4 Plus		✓	✓	✓	
Sorvall X1					✓
Sorvall ST16					✓
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
		250 mL Corning Bottle	4	4	—
		225 mL - 175 mL Conical Bottle	8	4	4
		50 mL Conical Tube	40	28	16
		50 mL Skirted Conical Tube	20	20	—
		50 mL Nalgene Oak Ridge Tube	48	28	16
		30 mL Sterilin Universal Tube	28	28	12
		15 mL Conical Tube	96	56	36
		10 mL Blood Collection Tube (16 x 100 mm)	148	84	56
		5/7 mL Blood Collection Tube (13 x 75-100 mm)	196	108	76
		4.5/6 mL Blood Collection Tube	164	108	64
		1.5/2 mL Microtube	192	192	224
		Microplate	24	16	—

Biocontainment certification by Public Health England, Porton Down, UK.
¹Maximum 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		6300 rpm	5500 rpm	6300 rpm	3600 rpm	4000 rpm
Maximum RCF (x g) ¹		7188 x g	5580 x g	6168 x g	2738 x g	2272 x g
Biocontainment		✓ (Integrated)	✓ (Optional)	✓ (Integrated)		✓ (Optional)
Sorvall X4 Pro/Legend XF*				✓	✓	
Sorvall ST4 Plus						✓
Sorvall X1		✓	✓			✓
Sorvall ST16		✓	✓			✓
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

Biocontainment certification by Public Health England, Porton Down, UK.
¹Maximum speed based on top performance models.
Labware not shown to scale.

*Refers to the Legacy model.



Rotors and adapters for swinging buckets rotors

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TX-1000 Swinging Buckets Rotor¹, 90°, R_{max} 209 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4R Pro/Legend XFR*	4200	4122
Sorvall X4 Pro/Legend XF*	3800	3374
Sorvall ST4R Plus	4200	4122
Sorvall ST4 Plus	3800	3374
Sorvall X1	n/a	n/a
Sorvall ST16	n/a	n/a

¹Rotor, buckets and lids sold separately

Adapters



TX-750 Swinging Buckets Rotor¹, 90°, R_{max} 195 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	4700	4816
Sorvall ST4 Plus	4700	4816
Sorvall X1	n/a	n/a
Sorvall ST16	n/a	n/a

¹Rotor, buckets and lids sold separately

Adapters



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 1000 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 1000 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.

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)		
75006443		750 mL Bio-Bottle - Polypropylene (1 each)		
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 (without cap)	148 x 5 mL	13 x 111
75003732	14	5/7 mL Round Bottom Tube (without cap) with Decanting Aid	148 x 5/7 mL	13 x 111
75003733	15	1.5/2 mL 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.

*Refers to the Legacy model.



Rotors and adapters for swinging buckets rotors

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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4R Pro/Legend XFR*, ST4R Plus, 230V	4700	4816
Sorvall X4 Pro/Legend XF*, ST4 Plus, 230V	4500	4415
Sorvall X4 Pro Series/Legend XF*, ST4 Plus Series, 120V	4300	4031
Sorvall X1 or ST16	n/a	n/a

Adapters



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

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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	6000	7164
Sorvall ST4 Plus	5300	5590
Sorvall X1	n/a	n/a
Sorvall ST16	n/a	n/a

Adapters



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

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

TX-400 Swinging Buckets Rotor¹,
90°, R_{max} 168 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	n/a	n/a
Sorvall ST4 Plus	n/a	n/a
Sorvall X1	5000	4696
Sorvall ST16	5000	4696

¹Rotor, buckets and lids sold separately

Adapters



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				
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 Urine Tube	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.

more

¹Refers to the Legacy model.



Rotors and adapters for swinging buckets rotors

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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	n/a	n/a
Sorvall ST4 Plus	n/a	n/a
Sorvall X1	6300	7188
Sorvall ST16	5300	5088

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		150 mL Round Bottom Open-Top Tube	4 x 150 mL	50 x 122
75003814		100 mL Round Bottom Open-Top Tube	4 x 100 mL	44 x 120
75003677		50 mL Conical Tube	8 x 50 mL	30 x 116
75003816		50 mL DIN Round Bottom Tube	8 x 50 mL	34 x 109
75003818		30 mL Sterilin Universal Tube	16 x 30 mL	26 x 105
75003817		25 mL DIN Round Bottom Tube	20 x 25 mL	25 x 107
75003678		15 mL Conical Tube	24 x 15 mL	17 x 120
75003820		15 mL Sarstedt Tube	44 x 15 mL	17 x 103
75003701		10 mL Blood Collection Tube (16 x 100 mm)	48 x 10 mL	17 x 105
75003821		5/7 mL Blood Collection Tube (13 x 75-100 mm)	48 x 5/7 mL	13 x 106
75003822		5/7 mL Round Bottom Open-Top Tube	80 x 5/7 mL	13 x 104
75003823		1.5/2 mL Conical Microtube	160 x 2 mL	11 x 45

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

Adapters



TX-200 Swinging Buckets Rotor¹, 90°, R_{max} 165 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	n/a	n/a
Sorvall ST4 Plus	n/a	n/a
Sorvall X1R 230V and 120V	5500	5580
Sorvall X1 120V	5250	5084
Sorvall ST16 R 230V and 120V	5500	5580
Sorvall ST16 120V	5250	5084

¹Rotor, 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		100 mL Round Bottom Open-Top Tube	4 x 100 mL	48 x 122
75003802		50 mL DIN Round Bottom Tube	4 x 50 mL	35 x 126
75003815		50 mL Round Bottom Tube	4 x 50 mL	32 x 126
75003803		50 mL Conical or Skirted Tube	4 x 50 mL	30 x 126
75003804		30 mL Sterilin Universal Tube	4 x 30 mL	26 x 118
75003805		25 mL DIN Round/Flat Bottom Tube	8 x 25 mL	25 x 118
75003806		20 mL Round Bottom Tube	12 x 25 mL	22 x 125
75003771		15 mL Conical Tube	20 x 20 mL	17 x 121
75003809		15 mL Blood Collection Tube	16 x 15 mL	17 x 121
75003807		14 mL Conical Urine Tube	8 x 14 mL	17 x 114
75003808		10 mL Blood Collection (16 x 100 mm) or 15 mL Cores/Kimble Tube	28 x 10/15 mL	17 x 121
75003785		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		5/7 mL Round Bottom Open-Top Tube	36 x 5/7 mL	13 x 118
75003811		3/5 mL RIA or Round Bottom Tube (without cap)	48 x 3/5 mL	12 x 124
75003812		1.5/2 mL Microtube	48 x 2 mL	11 x 45

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

Adapters



more

*Refers to the Legacy model.



Rotors and adapters for swinging buckets rotors

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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	6300	6168
Sorvall ST4 Plus	n/a	n/a
Sorvall X1	n/a	n/a
Sorvall ST16	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 Buckets Rotor, 90°, R_{max} 189 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	3600	2738
Sorvall ST4 Plus	n/a	n/a
Sorvall X1	n/a	n/a
Sorvall ST16	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 Buckets Rotor¹, 90°, R_{max} 127 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	4000	2272
Sorvall ST4 Plus	4000	2272
Sorvall X1	4000	2272
Sorvall ST16	4000	2272

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	< 65 mm
75003625	ClickSeal Carriers including Carrier and lids	2 x 1 Deepwell	< 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.

*Refers to the Legacy model.



Fixed angle rotors



Thermo Scientific Rotor Name	Fiberlite F14-6x250 LE	Fiberlite F15-6x100y	Fiberlite F10-6x100 LEX	Fiberlite F13-14x50cy	Fiberlite F15-8x50cy	CLINIConic
Maximum Capacity (mL)	6 x 250 mL	6 x 100 mL	6 x 100 mL	14 x 50 mL	8 x 50 mL	30 x 15 mL
Maximum Speed (rpm*)	11000 rpm	15000 rpm	10000 rpm	10500 rpm	14500 rpm	5650 rpm
Maximum RCF (x g)	18533 x g	24652 x g	17105 x g	15038 x g	24446 x g	4997 x g
Biocontainment	✓	✓	✓	✓	✓	
Sorvall X4 Pro/Legend XF*	✓	✓	✓	✓	✓	
Sorvall ST4 Plus		✓				
Sorvall X1		✓	✓	✓	✓	✓
Sorvall ST16		✓				✓
Maximum Capacity	250 mL Nalgene Bottle	6	—	—	—	—
	85 mL Nalgene Oak Ridge Tube	6	6	6	—	—
	50 mL Nalgene Oak Ridge Tube	6	6	6	14	8
	50 mL Conical Tube	6	6	6	14	8
	30 mL Nalgene Oak Ridge Tube	12	6	6	14	8
	16 mL Nalgene Oak Ridge Tube	30	6	6	14	8
	15 mL Conical Tube	30	6	6	14	8
	10 mL Nalgene Oak Ridge Tube	42	12	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	12	—	—
	1.5/2 mL Microtube	—	24	24	—	—

Biocontainment certification by Public Health England, Porton Down, UK.
*Maximum speed based on top performance models.
Labware not shown to scale.



Thermo Scientific Rotor Name	8 x 50 Sealed	HIGHConic II	MicroClick 18 x 5	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	18 x 5 mL	48 x 2 mL	48 x 2 mL	30 x 2 mL	30 x 2 mL
Maximum Speed (rpm*)	6700 rpm	10350 rpm	15000 rpm	15200 rpm	15200 rpm	14000 rpm	15200 rpm
Maximum RCF (x g)	7177 x g	15090 x g	24652 x g	25055 x g	25314 x g	21693 x g	25830 x g
Biocontainment	✓ (Individual)	✓	✓	✓	✓	✓	✓
Sorvall X4 Pro/Legend XF*		✓	✓	✓	✓	✓	✓
Sorvall ST4 Plus		✓	✓	✓	✓	✓	✓
Sorvall X1	✓	✓	✓	✓	✓	✓	✓
Sorvall ST16	✓	✓	✓	✓	✓	✓	✓
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	—	—	—	—
	5 mL microtube/conical	—	—	18	—	—	—
	1.5/2 mL Microtube	—	24	18	48	48	30 (Including spin columns)

Biocontainment certification by Public Health England, Porton Down, UK.
*Maximum speed based on top performance models.
Labware not shown to scale.

*Refers to the Legacy model.



Rotors and adapters for fixed angle rotors

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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF* 230V	11000	18533
Sorvall X4 Pro/Legend XF* 120V	10000	15317
Sorvall ST4 Plus	n/a	n/a
Sorvall X1	n/a	n/a
Sorvall ST16	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 F10-6x100 LEX Fixed Angle Rotor, 45°, R_{max} 122 mm

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

Centrifuge	F10 Maximum Speed (rpm)	F10 Maximum RCF (x g)	F15 Maximum Speed (rpm)	F15 Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	10500	15038	15000	24652
Sorvall ST4 Plus	10500	15038	13000	18516
Sorvall X1	10500	15038	15000	24652
Sorvall ST16	10500	15038	13000	18516

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
75003340	Fiberlite F10-6 x 100 LEX Rotor for 100mL/85mL 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.



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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF* 230V	10000	17105
Sorvall X4 Pro/Legend XF* 120V	9250	14636
Sorvall ST4 Plus	n/a	n/a
Sorvall X1	8500	12359
Sorvall ST16	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 X4 Pro/Legend XF*	14500	24446
Sorvall ST4 Plus	n/a	n/a
Sorvall X1 230V	14500	24446
Sorvall X1 120V	14000	22789
Sorvall ST16	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
021-085077	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

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

*Refers to the Legacy model.



Rotors and adapters for fixed angle rotors

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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	n/a	n/a
Sorvall ST4 Plus	n/a	n/a
Sorvall X1	5650	4997
Sorvall ST16	5650	4997

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 X4 Pro/Legend XF*	n/a	n/a
Sorvall ST4 Plus	n/a	n/a
Sorvall X1 230V	6700	7177
Sorvall X1 120V	6500	6755
Sorvall ST16 230V	6700	7177
Sorvall ST16 120V	6500	6755

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

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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	10350	15090
Sorvall ST4 Plus	10350	15090
Sorvall X1	10350	15090
Sorvall ST16	10350	15090

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



MicroClick 18 x 5 Aluminum Fixed Angle Rotor, 45°, R_{max} 102 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	15000	24652
Sorvall ST4 Plus	15000	24652
Sorvall X1	15000	24652
Sorvall ST16	15000	24,52

Cat. No.	Description	Rotor Capacity (places x volume, mL)	Maximum Tube Dimensions (Ø x L, mm)
Rotor and Accessories			
75005765	18 x 5 MicroClick Rotor for 5mL Conical and Flip Top Tubes	18 x 5 mL	17 x 6
20059119	ClickSeal	n/a	n/a
75005726	O-Ring Set	n/a	n/a
75003500	O-Ring Grease	n/a	n/a
Adapters for MicroClick Rotor			
75005756	1.5/2 mL Microtube	18 x 5	11 x 45



Fiberlite F21-48 x 2 Fixed Angle Rotor, 45°, R_{max} 97 mm

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	15200	25055
Sorvall ST4 Plus	15200	25055
Sorvall X1	15200	25055
Sorvall ST16	15200	25055

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		

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*Refers to the Legacy model.

Rotors and adapters for fixed angle rotors

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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	15200	25314
Sorvall ST4 Plus	15200	25314
Sorvall X1	15200	25314
Sorvall ST16	15200	25314

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		



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

Centrifuge	Maximum Speed (rpm)	Maximum RCF (x g)
Sorvall X4 Pro/Legend XF*	14000	21693
Sorvall ST4 Plus	14000	21693
Sorvall X1	14000	21693
Sorvall ST16	14000	21693

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 X4 Pro/Legend XF*	15200	25830
Sorvall ST4 Plus	15200	25830
Sorvall X1	15200	25830
Sorvall ST16	15200	25830

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		

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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

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