

thermo scientific



## Powerful at every turn

Thermo Scientific™ General Purpose Pro  
and Plus Centrifuge Series

**ThermoFisher**  
SCIENTIFIC

# Sorvall X Pro and ST Plus Centrifuge Series

Thermo Scientific™ Sorvall™ X Pro and ST Plus centrifuges are designed to offer improved performance, reliability, consistency and safety.

With fixed-angle rotor RCF (Relative Centrifugal Force) of over 25000 x g, and swinging bucket rotor RCF of over 7000 x g, even the toughest separations can be completed better and faster.

Scientists working across biopharmaceutical, academic research and clinical diagnostic applications can choose between ventilated or refrigerated 1.6L (4x400ml) and 4L (4x1000ml) floor and bench models.





## User interface



Sorvall X Pro touchscreen interface



Sorvall ST Plus user interface

### Simple touchscreen programming

Discover the Sorvall X Pro touchscreen features including:

- Easily accessible menu bar
- Centrifuge health icon for at-a-glance monitoring
- Time-saving pre-temp button
- Quick spins
- Useful information icon for additional support



## Rotor exchange

### Thermo Scientific™ Auto-Lock™ Rotor Exchange

Helps save time for faster results:

- Secure, ergonomic push-button rotor exchange in as little as three 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





## Carbon fiber rotors



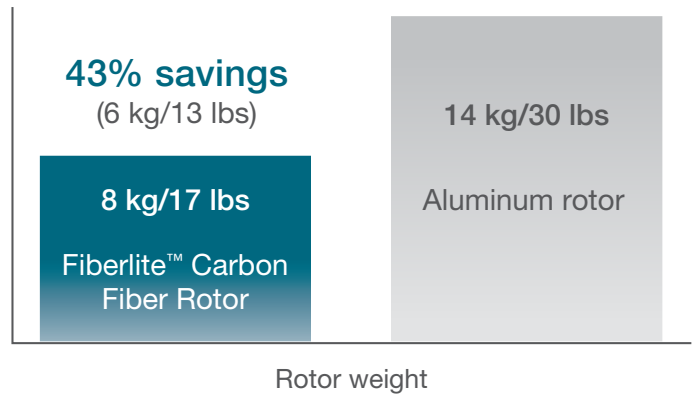
### Superior ergonomics with enhanced performance

- Thermo Scientific™ Fiberlite™ rotor/lid combinations offer protection to the user, the centrifuge and the samples during centrifugation\*
- Outstanding durability provided by carbon fiber construction is supported by a 15 year Fiberlite™ Rotor warranty
- Fiberlite™ Rotors can reach higher speeds than their metal counterparts, improving separations and results
- Superior ergonomics driven by lightweight construction, integrated handle design and Auto-Lock™ Rotor exchange

\*Biocontainment certified by National Institute for Health Protection, Porton Down, UK

Weight savings with carbon fiber rotors:

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



## Biocontainment lids

### Thermo Scientific™ 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 National Institute for Health Protection, Porton Down, UK



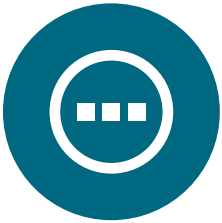


## Safety and ergonomics

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



**Improved safety with reduced pinch-points** designed to prevent accidental injury. Motorized gas springs with safety protection.



## Enhancements

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



**Front USB port** for easier plug in and data transfer





Thermo Scientific™ Sorvall™ X4R Pro



Thermo Scientific™ Sorvall™ ST4R Plus

## 4 L Benchtop Centrifuges: specifications and ordering information

Specifications	Sorvall X4 Pro		Sorvall X4R Pro		Sorvall ST4 Plus		Sorvall ST4R Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
<b>Swinging Buckets Rotors</b>								
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			
<b>Fixed Angle Rotors</b>								
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							
<b>Centrifuge Details</b>								
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 (2 years standard warranty + 3 additional years on motor and refrigeration)							
Includes	printed English user manual, USB stick with 28 languages of user manual, corrosion resistance oil (70009824), power cord, declaration of conformity							
Temperature Range	N/A		-10°C to +40°C		N/A		-10°C to +40°C	
Number of Compatible Rotors	17		17		12		12	
<b>Display Details</b>								
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			
<b>Dimensions, Weight</b>								
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	
<b>Certifications and Standards</b>								
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							
<b>Ordering Information</b>								
	Sorvall X4 Pro		Sorvall X4R Pro		Sorvall ST4 Plus		Sorvall ST4R Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
230V <sup>§</sup>	75009505	75009905	75009520* / 75009620* <sup>§</sup>	75009920 / 75009820 <sup>§</sup>	75009509*	75009909	75009524* / 750096248* <sup>§</sup>	75009924 / 75009824 <sup>§</sup>
120V	75009506	N/A	75009521*	N/A	75009510*	N/A	75009525*	N/A
100V	75009507*	75009907	75009522*	75009922	75009511*	75009911	75009526*	75009926

\*Indicates a centrifuge, rotor and/or adapter product approved for use in clinical applications; see user manual for details. <sup>§</sup> 220V / 60 Hz [Korea, etc.]



Thermo Scientific™ Sorvall™ X4R  
Pro Floor Model



Thermo Scientific™ Sorvall™ ST4R  
Plus Floor Model

## 4 L Floor Model Centrifuges: specifications and ordering information

Specifications	Sorvall X4F Pro		Sorvall X4RF Pro		Sorvall ST4F Plus		Sorvall ST4RF Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
<b>Swinging Buckets Rotors</b>								
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			
<b>Fixed Angle Rotors</b>								
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							
<b>Centrifuge Details</b>								
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 (2 years standard warranty + 3 additional years on motor and refrigeration)							
Includes	printed English user manual, USB stick with 28 languages of user manual, corrosion resistance oil (70009824), power cord, declaration of conformity							
Temperature Range	N/A		-10°C to +40°C		N/A		-10°C to +40°C	
Number of Compatible Rotors	17		17		12		12	
<b>Display Details</b>								
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			
<b>Dimensions, Weight</b>								
Width (inches) Exterior	22.3		22.3		22.3		22.3	
Width (cm) Exterior	56.6		56.6		56.6		56.6	
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	32.8		32.8		32.8		32.8	
Height (cm) Exterior	83.5		83.5		83.5		83.5	
Height (inches) Open Cover	54.1		54.1		54.1		54.1	
Height (cm) Open Cover	135		135		135		135	
Footprint Dimensions (inches)	22.3 x 23.1		22.3 x 23.0		22.3 x 23.1		22.3 x 23.0	
Footprint Dimensions (cm)	56.6 x 58.8		56.6 x 58.4		56.6 x 58.8		56.6 x 58.4	
Net Weight (lbs)	335		319		335		319	
Net Weight (kgs)	152		145		152		145	
<b>Certifications and Standards</b>								
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 X4F Pro		Sorvall X4RF Pro		Sorvall ST4F Plus		Sorvall ST4RF Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
230V <sup>§</sup>	75009532*	75009932	75009541* / 75009026* <sup>§</sup>	75009941 / 75009027 <sup>§</sup>	75009982*	75009956	75009985* / 75009024* <sup>§</sup>	75009959 / 75009025 <sup>§</sup>
120V	75009533*	N/A	75009539*	N/A	75009981*	N/A	75009984*	N/A
100V	75009534*	75009934	75009940	75009980	75009954	75009983*	75009957	

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

<sup>§</sup> 220V / 60 Hz [Korea, etc.]



Thermo Scientific™ Sorvall™ X1 and X1R Pro



Thermo Scientific™ Sorvall™ ST1 and ST1R Plus

## 1.6 L Benchtop Centrifuges: specifications and ordering information

Specifications	Sorvall X1 Pro		Sorvall X1R Pro		Sorvall ST1 Plus		Sorvall ST1R Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
<b>Swinging Buckets Rotors</b>								
Maximum Capacity	4 x 400 mL with TX-400 rotor							
Maximum Speed	6300 rpm with BIOShield 720 rotor				5300 rpm with BIOShield 720 rotor			
Maximum RCF	7188 x g with BIOShield 720 rotor				5088 x g with BIOShield 720 rotor			
<b>Fixed Angle Rotors</b>								
Maximum Capacity	6x100 mL with F15 6x100y				6x100 mL with F15 6x100y			
Maximum Speed	15200 rpm with F21-48x2, Microliter 48x2 or Microliter 30x2							
Maximum RCF	25830 x g with Microliter 30x2							
<b>Centrifuge Details</b>								
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 (2 years standard warranty + 3 additional years on motor and refrigeration)							
Includes	printed English user manual, USB stick with 28 languages of user manual, corrosion resistance oil (70009824), power cord, declaration of conformity							
Temperature Range	N/A		-10°C to +40°C		N/A		-10°C to +40°C	
Number of Compatible Rotors	16		16		14		14	
<b>Display Details</b>								
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			
<b>Dimensions, Weight</b>								
Width (inches) Exterior	17.5		24.6		17.5		24.6	
Width (cm) Exterior	44.5		62.5		44.5		62.5	
Depth (inches) Exterior	26		26		26		26	
Depth (cm) Exterior	66		66		66		66	
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	33.6		33.6		33.6		33.6	
Height (cm) Open Cover	85.5		85.5		85.5		85.5	
Footprint Dimensions (inches)	17.5 x 23.1		24.6 x 23.0		17.5 x 23.1		24.6 x 23.0	
Footprint Dimensions (cm)	44.5 x 58.8		62.5 x 58.4		44.5 x 58.8		62.5 x 58.4	
Net Weight (lbs)	134		207		134		207	
Net Weight (kgs)	61		94		61		94	
<b>Certifications and Standards</b>								
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 X1 Pro		Sorvall X1R Pro		Sorvall ST1 Plus		Sorvall ST1R Plus	
	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only	IVD	General Use Only
230V <sup>§</sup>	75009220*	75009720	75009260*	75009760	75009240*	75009740	75009380*	75009880
120V	75009220*	N/A	75009261*	N/A	75009240*	N/A	75009381*	N/A
100V	75009220*	75009720	75009263*	75009763	75009240*	75009740	75009383*	75009883

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

§ 220V / 60 Hz [Korea, etc.]

Find out more at [thermofisher.com/gp-pro-centrifuge](https://thermofisher.com/gp-pro-centrifuge)