

Thermo Scientific Sorvall RC 6 Plus Superspeed Centrifuge

Accelerating your productivity with superior functionality and proven reliability





geral@supplylab.pt

Cacém Park - Edifício 9 Estrada de Paço de Arcos nº88 2739-512 Agualva Cacém T +(351) 21 4278700 F +(351) 21 4278709



Thermo Scientific Sorvall RC 6 Plus Superspeed Centrifuge

Accelerating your productivity with superior functionality and proven reliability

The pursuit of scientific discoveries can be a demanding process. You need to process large quantities of samples quickly and efficiently and ensure that your results are accurate and consistent. Your centrifuge needs to keep pace with new separation and processing applications while providing reliability, ease of use and safe operation.

To cope with these demands, you need equipment that consistently delivers high-quality results, day in and day out.

The new Thermo Scientific Sorvall RC 6 Plus superspeed centrifuge

is the perfect choice for highthroughput sample processing, offering high speeds and RCFs that will increase your productivity, along with advanced functionality that will keep your research on track as needs, applications and separation protocols change.

And of course, our Sorvall® RC[™] 6 Plus superspeed centrifuge offers the time-tested reliability and safety that is synonymous with the Sorvall name, assuring you of dependable performance for many years to come.

Faster Separations for Greater Productivity

The Sorvall RC 6 Plus is designed for maximum productivity, offering 4 liters of capacity, speeds of up to 22,000 rpm, and RCFs to 55,200 x g. Class leading acceleration and deceleration rates deliver additional time savings, so not a minute is wasted.

Greater Applications Versatility

The Sorvall RC 6 Plus centrifuge is available with an unprecedented array of fixed-angle, swinging bucket/microplate and specialpurpose rotors. With choices spanning Thermo Scientific Fiberlite carbon fiber rotors, and continuousflow rotors, the Sorvall RC 6 Plus easily handles a wide variety of processing requirements.



Safer, by Design

Cutting-Edge Capabilities for Research

The Sorvall RC 6 Plus centrifuge provides an unmatched array of separation and set-up modes to meet the most diverse research needs:

- Delayed-start and stop function
- Step-run mode
- Password-controlled access
- ω^2 dt integrator function
- GMP/GLP data compliance
 management option

These innovative features and advanced options ensure precise separations while maximizing your efficiency in the lab. Unlike other floor model centrifuges, the Sorvall RC 6 Plus meets CE and CSA safety requirements without the need to bolt the instrument to the floor. In addition to providing unparalleled safety, the Sorvall RC 6 Plus provides easier installation and relocation within your facility.

Protect Valuable Samples

Retaining sample integrity is a top concern. The Sorvall RC 6 Plus is engineered for maximum sample protection. Unlike other centrifuges that require high-maintenance vacuum systems to achieve speed, the Sorvall RC 6 Plus spins samples at atmospheric pressure, without the need for a vacuum. This superior design minimizes maintenance and helps prevent sample leakage, rotor imbalance and run shut-downs.

Time-Tested Reliability

Our Sorvall centrifuges are renowned for their reliability and long life. The Sorvall RC 6 Plus is built to assure consistent results and maximum uptime, run after run, year after year.



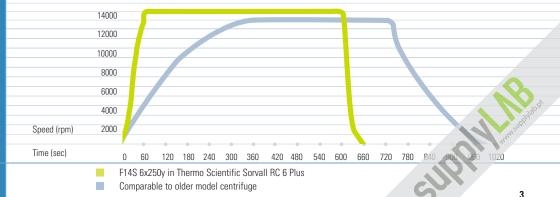
The Sorvall RC 6 Plus centrifuge supports a full range of lightweight, corrosion-resistant carbon fiber rotors from Fiberlite.



The Sorvall RC 6 Plus provides advanced functionality that allows you to adjust separation parameters – such as speed, force, run time, and start and stop times – to meet your precise needs.



Fast acceleration and deceleration rates in the Sorvall RC 6 Plus ensure that samples experience optimal RCFs within the shortest period of time, increasing your throughput.



Unrivalled Functionality for Research

In a busy, multi-user laboratory, you need a versatile superspeed centrifuge that can perform a wide range of separation protocols. The Sorvall RC 6 Plus provides a full range of set-up options that allow you to adjust the settings to meet your precise application requirements.

The Sorvall RC 6 Plus incorporates intuitive controls that make set-up and operation straightforward, even for inexperienced users. Access to powerful functionality requires just a few simple keystrokes, and the bright LCD screen allows you to monitor your set and run conditions at a glance.

Advanced controls make it easy to meet your diverse application requirements.

Perform Step-Runs

The step-run function provides greater applications flexibility and delivers better separations.

Ensure Run-to-Run Reproducibility

The ω^2 dt integrator function applies the same total centrifugal effect to ensure reproducible separations. It automatically compensates for variations in acceleration due to full or partial rotor loading, or voltage fluctuations, or even weather changes, by adjusting the run time.

Control Runs by Speed or g Force

In automatic RCF/RPM mode, you can set runs to a maximum speed or to a desired g-force. No protocol conversion is necessary.

Control Access

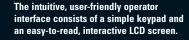
The user lockout feature limits centrifuge access to authorized users in a multi-user environment. A password is required before the centrifuge will operate.

Program Convenient Start and Stop Times

The real-time control mode lets you set up a delayed start/stop run. Schedule runs so that your samples are ready when needed.

Set-Up and Recall Runs

Save time, steps, and reduce protocol entry errors by creating and storing up to 30 programs into memory, in RPM or RCF mode.





In automatic RCF/RPM mode, you can set runs to a desired speed or g-force.



Key rotors are stored in memory and can be conveniently recalled and viewed on the LCD screen.



Thermo Scientific Sorvall RC 6 Plus – Dependable Performance for Your Lab

The Sorvall RC 6 Plus superspeed centrifuge combines advanced functionality, unparalleled safety and proven reliability in a compact, user-friendly design.

User-Friendly Controls

An easy-to-use operator keypad makes setting protocol parameters simple and straightforward. All set and run conditions can be monitored on the bright LCD panel.



The small footprint of the Sorvall RC 6 Plus makes it ideal for labs where space is limited. The low deck height makes rotor loading and unloading effortless.

High Speed, High Capacity Processing

Offering 4 liters of capacity and processing speeds of up to 22,000 (55,200 x g), the Sorvall RC 6 Plus enables extremely fast processing of your samples.

Vacuum-Free Processing

The Sorvall RC 6 Plus spins samples at atmospheric pressure, so there are no vacuum seals or filters to maintain, and there is less risk of tube or bottle leakage.

Built for Reliability

RC 6 PLUS

A comprehensive 1 year warranty and special 5 year warranty on the refrigeration system is standard.

Optimized for Safety

The Sorvall RC 6 Plus meets CE and CSA safety standards without the need to anchor the unit to the floor. A wide array of Bioseal tested rotors improves lab safety with added levels of micobiological containment.

Maximum Versatility

With its diverse range of Fiberlite carbon fiber rotors, swinging bucket rotors, and special purpose rotors, the Sorvall RC 6 Plus can perform a wide array of high throughput sample processing applications.



nermo

A Range of Rotors to Expand your Options

The Sorvall RC 6 Plus centrifuge accommodates an extensive range of rotors for unprecedented application versatility. You can support multiple users and evolving research needs from a rotor set that includes the widest range of lightweight, corrosion resistant Fiberlite carbon fiber rotors.

Sorvall RC 6 Plus rotors and accessories indicated with Bioseal are approved for biocontainment with independent certifications by CAMR, Prorton Down, UK.

The Sorvall RC 6 Plus is compatible with all RC 6 and most Sorvall RC 5 series centrifuge rotors, making it a cost-effective addition for labs currently utilizing Sorvall Superspeed centrifuges. Sample formats supported range from 0.25 mL microtubes up to 1-liter bottles.

NEW

NEW! More Fiberlite Carbon Fiber Rotors

- High performance Fiberlite carbon fiber rotors deliver a whole new level of performance, reliability and efficiency. When used with industry-leading high-speed disposable conical tubes, you can perform separations at higher g-forces to reduce your sample processing steps and achieve significant time-savings.
- High-capacity rotors from 1 4 L support high-throughput pelleting.
- High g-force rotors support small-volume processing applications such as cell and tissue homogenate clarification, subcellular fractionation, DNA maxipreps, RNA separation, protein preciptation and virus concentration.

Swinging Bucket Rotors

- Select from four swinging-bucket rotors with capacities of up to 3000 mL for gentle sedimentations.
- The versatile SH-3000 rotor can process microplates, PCR plates/tube strips, and many commonly-used centrifugal filtration and purification devices.

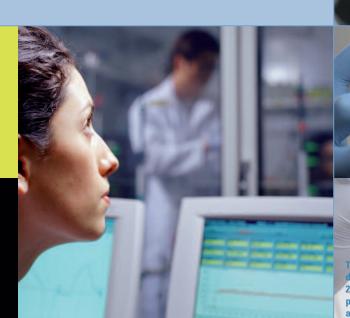
Continuous Flow Rotors

• TZ-28/GK and SS-34/KSB-R rotors are designed for multi-liter cell culture harvesting or the collection of cell-free growth media containing secreted products such as proteins, hormones and vitamins.

GMP/GLP Data Compliance and Management

The GMP/GLP-compatible data management option for the Sorvall RC 6 Plus offers traceability and quality control for biopharmaceutical processing needs.











The Fiberlite F13S-14x50cy rotor s disposable 50 and 15 ml conical 28,000 x g allowing you to reprocessing steps and achiev and cost savings.

Thermo Scientific Sorvall RC 6 Plus Superspeed Centrifuge Rotor Selection Guide



| | Capacity | Max. Speed | Max. RCF | Tube Size | Sample | Catalog |
|---------------------------------|--------------|------------|----------|-----------------|------------------------------|------------|
| Rotor | (place x ml) | (rpm) | (x g) | (range, ml) | Containment | Number |
| Fiberlite Carbon Fiber Rotors | | | | | | |
| F9S-4x1000y | 4 x 1,000 | 8,000 | 12,042 | 3 - 1,000 | Enhanced Liquid Containment | 76981 |
| F10S-6x500y | 6 x 500 | 10,000 | 17,696 | 3 - 500 | Enhanced Liquid Containment | 78510 |
| F13S-14x50cy | 14 x 50 | 13,000 | 28,960 | 10 – 50 conical | Enhanced Liquid Containment | 46922 |
| F14S-6x250y | 6 x 250 | 14,000 | 30,074 | 3 - 250 | Enhanced Liquid Containment | 78500 |
| F18S-12x50 | 12 x 50 | 16,500 | 38,725 | 1 - 50 | Bioseal* | 096-124022 |
| F20S-6x100 | 6x100 | 20,000 | 43,904 | 1 - 100 | | 096-064025 |
| F21S-8x50y | 8 x 50 | 20,000 | 47,488 | 1 - 50 | Bioseal | 46923 |
| F21S-48x1.5 | 48 x 1.5/2.0 | 20,000 | 43,456 | 1.5 - 2.0 | | 096-484020 |
| Fixed Angle Rotors – Aluminum | | | | | | |
| SLA-3000 | 6 x 500 | 11,000 | 20,450 | 35 - 500 | Bioseal | 07149 |
| SLA-1500 | 6 x 250 | 14,500 | 31,916 | 3 - 250 | Bioseal | 08142 |
| SLA-1000 | 4 x 250 | 16,500 | 35,793 | 3 - 250 | Bioseal | 74200 |
| SA-800 | 8 x 100 | 19,500 | 42,138 | 1.5 - 100 | Bioseal | 76940 |
| SA-600 | 12 x 50 | 16,500 | 39,412 | 1 - 50 | Bioseal | 28500 |
| SS-34 | 8 x 50 | 20,000 | 47,808 | 1 - 50 | Bioseal | 28020 |
| F-28/50 | 10 x 50 | 19,000 | 46,293 | 1 - 50 | Bioseal | 11885 |
| SA-300 | 6 x 50 | 22,000 | 52,326 | 1 - 50 | Bioseal | 18100 |
| SA-512 | 32 x 16 | 18,500 | 44,040 | 1.5 - 16 | | 76950 |
| SM-24 | 24 x 16 | 20,000 | 49,461 | 1.5 - 16 | Bioseal | 29017 |
| SE-12 | 12 x 14 | 22,000 | 50,486 | 1.5 - 14 | Bioseal | 27004 |
| F-20/MICRO | 32 x 1.5 | 20,000 | 51,427 | 0.25 - 1.5 | Bioseal | 27038 |
| F22/MICRO | 30 x 1.5/2 | 22,000 | 55,193 | 0.25 – 2 | | 46921 |
| Continuous Flow Rotors | | | | | | |
| SS-34/KSB | 8 x 50 | 20,000 | 47,808 | - | | 14008 |
| TZ-28/GK | 1 x 1350 | 19,000 | 38,463 | - | | 52358 |
| Swinging Bucket Rotors | | | | | | |
| SH-3000 | 4 x 750 | 4,700 | 4,579 | 1.5 – 750 | Bioseal, rotor w/buckets | 11796 |
| | 3 standard | 4,700 | 3,709 | - | Bioseal, microplate carriers | 11779 |
| | microplates | | | | | |
| HS-4 | 4 x 250 | 7,500 | 10,836 | 1 - 250 | | 38018 |
| HB-6 | 6 x 50 | 13,000 | 27,617 | 1 - 50 | Bioseal | 11860 |
| SH-80 | 8 x 10 | 20,000 | 45,395 | 10 | | 08296 |
| Nalgene Tubes and Bottles | | | | | | |
| Polycarbonate Superspeed Bottle | 1,000 | 8,000 | 12,006 | | | 3140-1002 |
| Polypropylene Superspeed Bottle | 1,000 | 8,000 | 12,006 | | | 3141-1002 |

* Rotors featuring Bioseal technology have been rigidly tested for microbiological containment by the Public Health Laboratory Service, Centre for Applied Microbiological Research, Porton Down, UK, and shown to be suitable for use with materials up to ACDP Category 3 as categorized by the Advisory Committee on Dangerous Pathogens.

A History of Performance and Reliability

For nearly 60 years Sorvall centrifuges have stood for outstanding performance and reliability in the lab. That tradition continues today.

From basic benchtop instruments to advanced floor models, we take pride in manufacturing centrifuges that deliver reliable operation and consistent results year after year. Trust Nalgene® and Nunc™ brand centrifuge bottles and tubes to deliver quality and performance. These products are in conformance with ISO 13485: 2003, cGMP and USP Class VI; you'll find updated speed ratings and lot specific product certificates online. Available in a variety of resins, with capacities from 10mL to 2L, Nalgene and Nunc are guaranteed a perfect fit to Fiberlite rotors and Thermo Scientific centrifuges.

Thermo Scientific Sorvall RC 6 Plus Superspeed Centrifuge Specifications and Ordering Information



Thermo

| Technical Specifications | | | | |
|------------------------------------|---|--|--|--|
| Maximum speed (rpm) | 22,000 | | | |
| Maximum RCF (x g) | 55,200 | | | |
| Maximum capacity (mL) | 4 x 1,000 | | | |
| Drive | Brushless high frequency motor | | | |
| Accel/decel rates | 9/10 | | | |
| Speed range (rpm) | 300 – 22,000 | | | |
| Speed control accuracy (rpm) | ± 25 | | | |
| Temperature set range (°C) | -20 to +40 in 1°C increments | | | |
| Temperature control (°C) | +2 to +40 | | | |
| Temperature accuracy (°C) | <u>+2</u> | | | |
| Ambient temperature range (°C) | +15 to +40 | | | |
| Dimensions (H x W x D) mm (inches) | 1132 x 752 x 835 (44.5 x 29.6 x 32.8) | | | |
| | 685 (26.9) depth without rear duct; 850 (33.4) height to top of deck | | | |
| Weight kg (lb) | 350 (770) | | | |
| Control | Microprocessor | | | |
| Programmability | 30 programs | | | |
| Functions | Automatic RCF; ω^2 dt Integrator; Real Time Control; Step-Mode Runs; Controlled Access; Pre-Cool | | | |
| Run time (hr/min) | 99/59; Hold | | | |
| Electrical V (Hz) | 200/208/220/230/240 (50/60), 30 A, single phase; 400/230V (50/60), 25 A, 3 phase | | | |
| Certification | CE and cCSAus certified | | | |

| Ordering Information | | | | | | | |
|---|---|----------------------------------|----------|--|--|--|--|
| Model | Electrical Configuration | Plug | Cat. No. | | | | |
| Sorvall RC 6 Plus Superspeed Centrifuge | 200-240 V, 30 A, single phase, 50/60 Hz | NEMA 6-30P and IEC60309 CEE plug | 46910 | | | | |
| | | 32A-6h 2P+PE included | | | | | |
| Sorvall RC 6 Plus Superspeed Centrifuge | 400/230V V, 25 A, 3 phase, 50/60 Hz | IEC60309 CEE 32 A-6h 3P+N+PE | 46915 | | | | |
| | | | | | | | |

Comprehensive Centrifuge Solutions

We offer a wide range of Sorvall highperformance superspeed and ultraspeed centrifuges for the pursuit of scientific discoveries. Models include the Sorvall Evolution[®] RC superspeed for fast, highvolume processing, and the Sorvall WX Ultra Series for sample processing at speeds to 100,000 rpm.

As the world leader in serving science, we also offer a full range of high-quality solutions for your laboratory. Visit www.thermo.com for more information.

Worldwide Service and Support

We are committed to keeping your lab equipment working at peak performance levels. Our goal is to help you lower ownership costs, manage labs more effectively, and increase productivity.

Contact your Thermo Scientific product representative to learn more about our service offerings, including service agreements, preventative maintenance, onsite field repair, depot repair, compliance services and educational services.

© 2009 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

www.thermo.com/centrifuge

North America: USA/Canada +1 866 984 3776 (866-9-THERMO)

Europe: Austria +43 1 801 40 0, Belgium +32 2 482 30 30, France +33 2 2803 2180, Germany national toll free 08001-536 376, Germany international +49 6184 90 6940, Italy +39 02 02 95059 434-254-375, Netherlands +31 76 571 4440, Nordic/Baltic countries +358 9 329 100, Russia/CIS +7 (812) 703 42 15, Spain/Portugal +34 93 223 09 18, Switzerland +41 44 454 12 12, UK/Ireland +44 870 609 9203 Asia: China +86 21 6865 4588 or +86 10 8419 3588, India toll free 1800 22 8374, India +91 22 6716 2200, Japan +81 45 453 9220, Other Asian countries +852 2885 4613 Countries not listed: +49 6184 90 6940 or +33 2 2803 2180