



## **NEW Thermo Scientific Sorvall RC 12BP Plus Large Capacity Centrifuge**

**An integrated system for high-throughput,  
large volume blood-banking and  
bioprocessing applications**

# The Best Just Keeps Getting Better.

The Thermo Scientific Sorvall RC 12BP Plus offers a complete processing system for high-throughput, large volume blood banking and bioprocessing applications.



## An Integrated System Optimized for Your Success

- Sorvall® RC 12BP Plus centrifuge
- H-12000 Swinging Bucket rotor
- 2-liter True Fit Thermo Scientific Nalgene centrifuge bottles
- Array of adapters for process flexibility and convenience
- Thermo Scientific Centri-Log data collection software

## An Integrated System Optimized for Your Success

### Highest Throughput in a Single Step

- Process up to 12 blood bag systems in a single run – each with 500 mL
- Process up to 12 liters of volume per run

### Versatile Accessory System

Supports an array of blood banking and bioprocessing applications and conveniently accommodates a broad range of blood bags, tubes, and bottles.

### Simply Intuitive

- User-friendly interface makes set-up and operation intuitive and easy
- Enhanced display enables easy at-a-glance monitoring of set and run conditions
- 15-program memory provides one-touch recall of commonly used protocols

### Ensure Run-to-Run Reproducibility

The **Accumulated Centrifugal Effect™ (ACE)** function assures reproducible blood product yields, regardless of rotor loading. ACE automatically compensates for variations in acceleration due to full or partial rotor loading by adjusting the centrifuge run time.

### Maximize Blood Product Yields

In slow start/stop mode, select from 11 acceleration and deceleration profiles to customize results for maximum yields with minimal re-suspension.

### Secure & Compliant

Centri-Log™ data collection software with security capabilities ensures total process control and run parameter traceability for cGMP, GMP, and GLP compliance.

### Quiet & Comfortable

Quiet and compact with minimal heat output for comfortable, convenient in-laboratory placement. Low deck height facilitates loading and unloading of samples and cleaning of the unit. Support for standard electrical outlets provides added convenience.

### Safety Engineered

A robust automated lid-lock control system protects users and makes lid openings and closures effortless.

### 2-Liter Nalgene® Polypropylene Bottles and Sealing Caps

Spin 2-liter Nalgene centrifuge bottles for highest capacities. Bottles are designed for an exact fit with the Thermo Scientific H-12000 rotor for optimal processing performance. A graduated wide-mouth simplifies decanting, re-suspensions, and pellet removal. Ergonomic design facilitates loading, recovery, and sample storage.

- Leakproof up to 7,340 xg
- Autoclavable
- Available in sterile form
- USP Class VI, non-cytotoxic and non-hemolytic





# Thermo Scientific Sorvall centrifuges are the innovative choice for busy blood banks around the world.

Our large capacity centrifuges offer a unique set of benefits – dependability, maximum versatility, superior throughput and volume, along with simplicity, efficiency, and compliance.

## Accelerate

**your goals for performance and the bottom line.**

- Reduce manpower, time, and energy costs through powerfully-efficient processing
- Scale up productivity through intuitive controls and paperless data collection/process document management
- Lower maintenance costs through well-proven Sorvall system dependability

## Expand

**your processing power.**

- Process up to 12 x 450-500 mL blood bag systems simultaneously
- New adapters accommodate large numbers of blood tubes, allowing you to process up to 324 x 5/7 mL tubes at once
- A suite of proven accessories (swinging bucket rotor, 2 L bottles, and versatile adapter set) supports an array of blood banking and bioprocessing applications

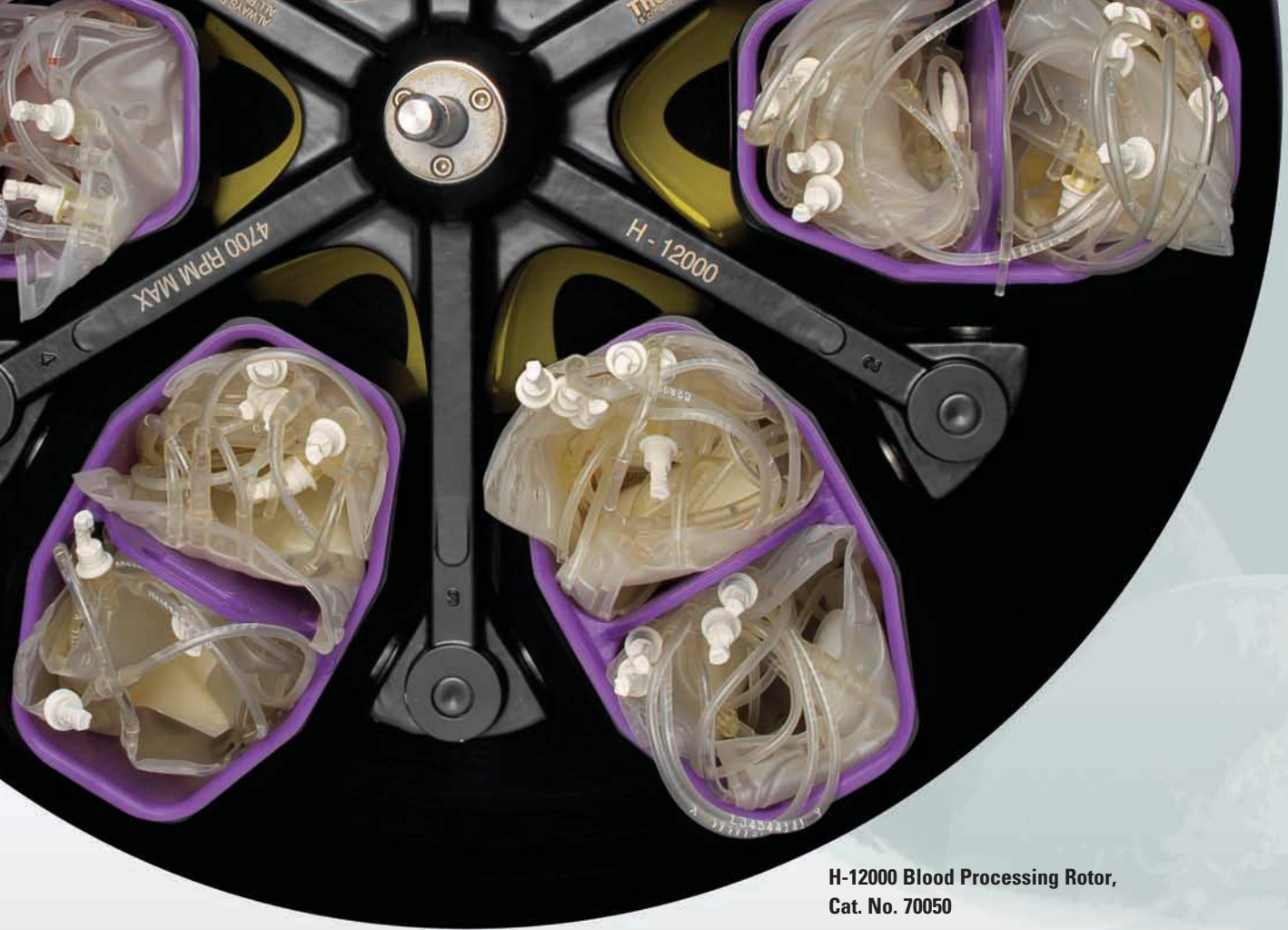
## Protect

**your precious samples and your process development.**

- Improve sample integrity through advanced capabilities – including Accumulated Centrifugal Effect (ACE) solutions
- Ensure cGMP compliance through easy-to-use Centri-Log data traceability software
- Reduce risk through well-proven Sorvall system dependability
- Security key restricts unauthorized access



**State-of-the-art capabilities are accessed through a familiar, easy-to-use control panel. Frequently-used protocols can be recalled at the touch of a button to minimize time between runs.**



**H-12000 Blood Processing Rotor,**  
Cat. No. 70050

## Proven Solutions, Optimized for Integrated Laboratory Workflows

The most reliable and versatile 12-liter low-speed centrifuge available. Compact and comfortable with operator-friendly controls, it is ideal for dependable, high-throughput sample processing of large volumes, at low speeds and constant temperatures.

- Maximum Speed: 4700 rpm
- Maximum RCF: 7340 xg
- Maximum Capacity: 12 L
- Spin 6 x 2000 mL Nalgene Bio-bottles
- Process 12 x 500 mL blood bag systems

### **Adapters and Carriers for Convenience & Versatility**

A broad selection of adapters and carriers accommodate a variety of blood bags, tubes, and bottles. Large capacity tube accommodation with select adapters.

### **Centri-Log Data Collection Software**

Electronic data capture software for the documentation (recording and monitoring) of centrifugation processes.

### **Step-Run Mode Automation**

Buffy coat protocols can be optimized using the step-run mode, which automatically increments run speed in pre-programmed stages. Customize results for maximum yields with minimum suspension and maximized blood product yields.

# Advanced Capabilities for Demanding Applications

## Centri-Log Data Collection Software

A paperless process tracking and compliance solution for large capacity, low-speed centrifuge systems.

This innovative software provides effective documentation of centrifugation processes, enabling lifecycle management of processed samples, equipment optimization, and compliance with standard operating procedures.

**Centri-Log Viewer:**  
Program File Evaluation

Centrifuge type  
RC12BP+

User loading   
User unloading   
Product

Blood bags

- 408732842
- 408732849
- 408732839
- 408732844

Run status

No monitoring error





20100623\_100959\_01.CCP

Help

Centrifuge identification

Production #1

Time of process

23.06.2010 10:09:00

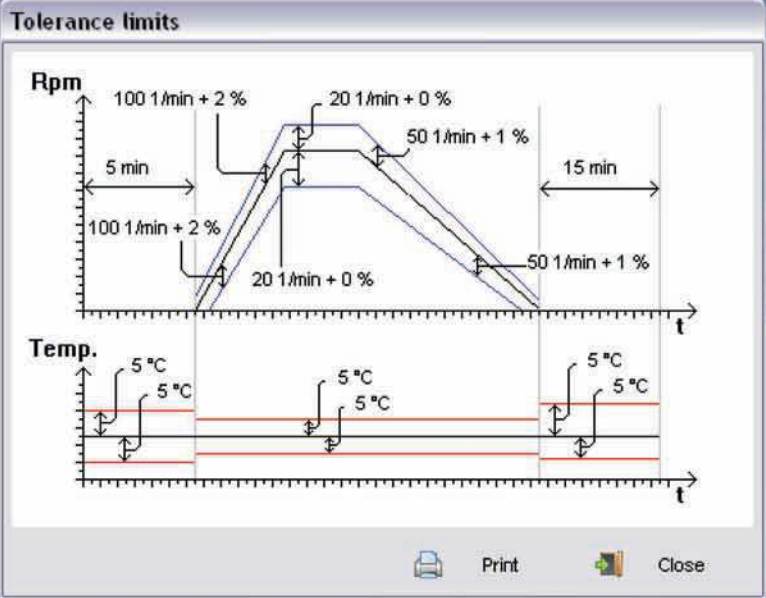
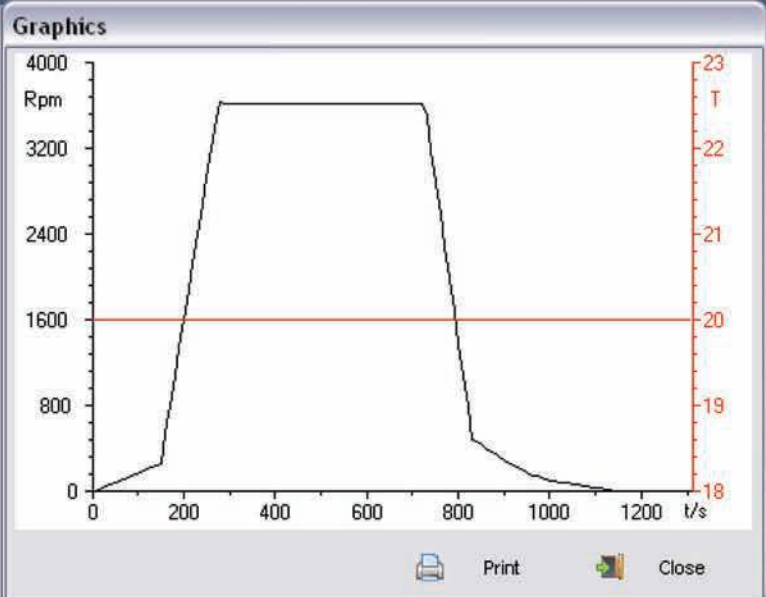
7842 Dr. Tansey

7842 Dr. Tansey

WHBD Blood processing step #1

Prepared for RC12BP+

| Definition | Set values |
|------------|------------|
| 8          | 8          |
| 4          | 4          |
| 3620       | 3620       |
| 4354       | 4354       |
| 12:00      | 12:00      |
| 20         |            |
| H12000     |            |

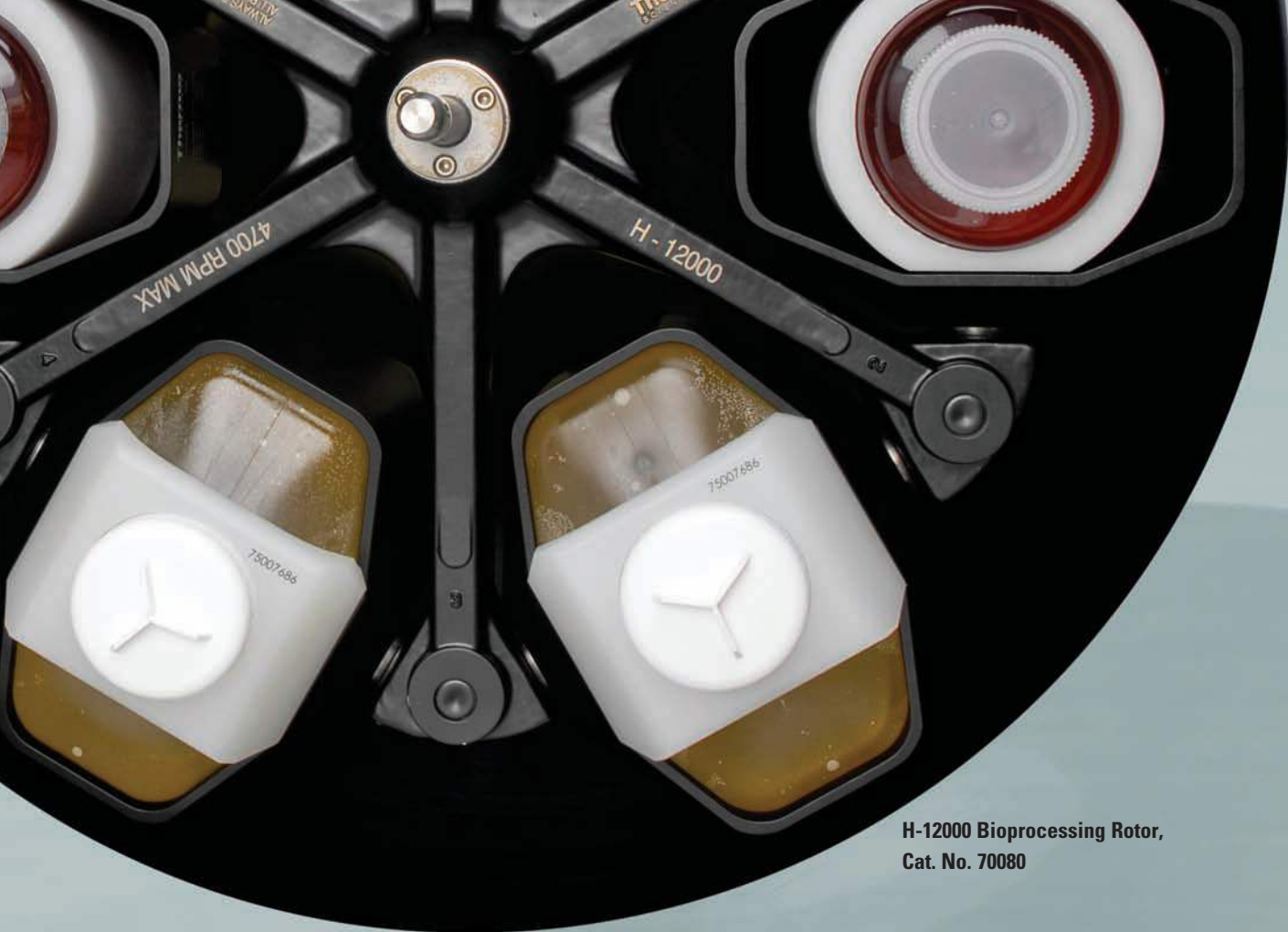


- Quick, easy, secure, and accurate data collection and document management
- Continual monitoring of speed, time, and temperature with alarm messages in case of deviation from protocol
- Ensured sample security and integrity
- Ability to check run parameters against procedures in PC database
- Connect to central database through customized export file
- Eliminate manual recording errors
- Reduce risk of equipment downtime and quality failures
- Centri-Log data collection software network can be customized to fit the needs of your laboratory
- Support for standard technologies: Windows® compatible with RS-232 port/USB: Windows XP and earlier versions: (Windows NT, Windows 98, Windows ME, and Windows 2000)

The Sorvall RC 12BP Plus Centrifuge System is the ideal solution for large-batch bioprocessing applications in biotechnology and pharmaceutical laboratories.







**H-12000 Bioprocessing Rotor,**  
Cat. No. 70080

## Powering the most demanding processing applications

### **Process Bacterial and Yeast Cultures and Clarify Broths**

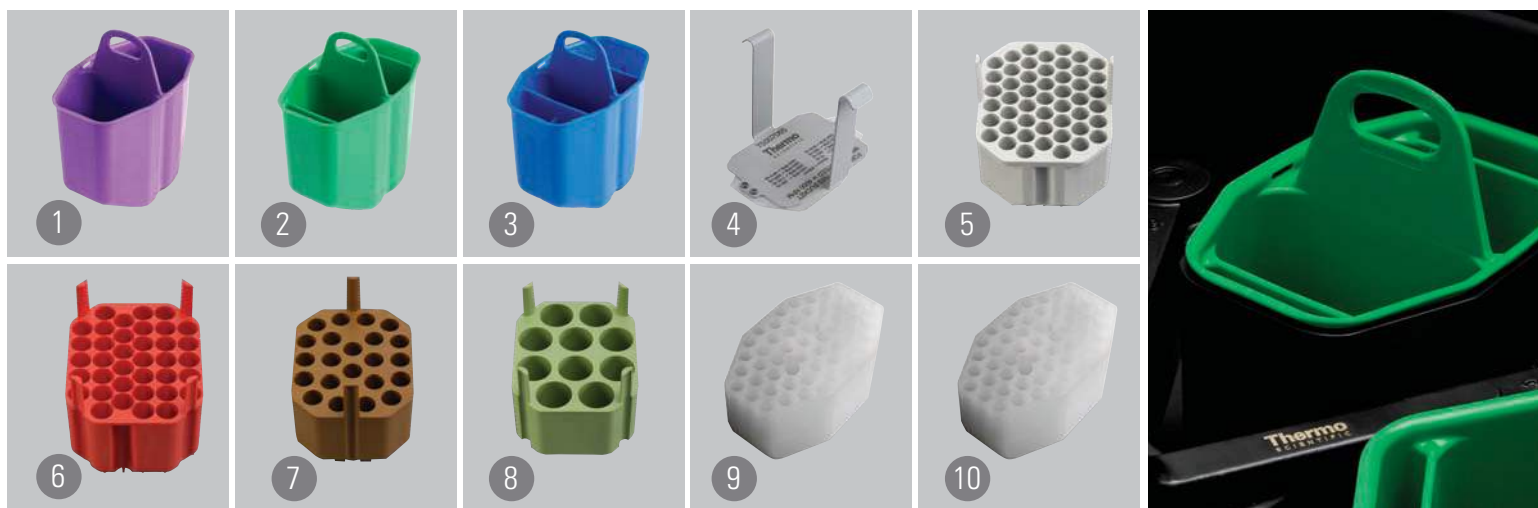
A 6 x 2000 mL bottle capacity allows you to process a 12-liter bioreactor harvest in a single run. The ACE function and slow start/stop modes maximize yields and reproducibility when processing multiple batches.

### **Harvest Mammalian Cell and Tissue Cultures**

Adapters for the H-12000 rotor simplify cell and tissue culture harvests, letting you spin sample vessels ranging from 2 L bottles down to 50/15 mL conical tubes.

### **Protect Valuable Samples**

With the Sorvall RC 12BP Plus Centrifuge System, you can control acceleration and deceleration rates for delicate low-speed pelleting applications.



## Thermo Scientific Rotors and Adapters

| Cat. No.  | Description  | Rotor Capacity<br>(Places x<br>Volume) | Max<br>Speed<br>(rpm) | Max<br>RCF<br>(xg) |
|-----------|--|--|-----------------------|--------------------|
| 70050     | <b>H-12000 Blood Processing<br/>Swinging Bucket Rotor (includes 6 buckets)</b> | 12 x 500 mL                            |                       |                    |
|           | <b>Adapters and Accessories for Blood Processing Rotor</b>                     |  |                       |                    |
| 77030     | ① 450-500 mL quads with additive   | 12 x 500 mL                            | 4,700                 | 7,340              |
| 77032     | ② 450-500 mL quads without additive  | 12 x 500 mL                            | 4,700                 | 7,340              |
| 77031     | ③ 200-250 mL platelet rich plasma or buffy coat                                | 12 x 300 mL                            | 4,700                 | 7,340              |
| 77033     | Covers for adapters  |  |                       |                    |
| 77065     | Adapter rack (6 place)   |  |                       |                    |
| 77064     | Adapter rack (single)  |  |                       |                    |
| 75007065  | ④ BIOLink Adapter for H-12000  |  | 4,000                 | 4,613              |
| 75007058  | ⑤ 5/7 mL tube*   | 6 x 49 = 294 mL                        | 4,000                 | 4,613              |
| 75007057  | ⑥ 10 mL tube*  | 6 x 37 = 222 mL                        | 4,000                 | 4,613              |
| 75007056  | ⑦ 15 mL conical tube*  | 6 x 22 = 132 mL                        | 4,000                 | 4,613              |
| 75007055  | ⑧ 50 mL conical tube*  | 6 x 10 = 60 mL                         | 4,000                 | 4,613              |
| ME060001  | ⑨ 5/7 mL blood collection tube (Greiner®)                                      | 6 x 54 = 324 mL                        | 4,000                 | 4,613              |
| ME080001  | ⑩ 5/7 mL blood collection tube (BD®)   | 6 x 54 = 324 mL                        | 4,000                 | 4,613              |
|           | *Note: Adapters in lines 5 through 8 require the BIOLink Adapter.              |  |                       |                    |
| 70080     | <b>H-12000 Bioprocessing<br/>Swinging Bucket Rotor (includes 6 buckets)</b>    | 6 x 2000 mL                            |                       |                    |
|           | <b>Adapters for Bioprocessing Rotor</b>  |  |                       |                    |
| 3120-2002 | 2 Liter Nalgene Bio-bottle   | 6 x 2000 mL                            | 4,700                 | 7,340              |
| 3120-1000 | 1 Liter polypropylene bottle   | 6 x 1000 mL                            | 4,700                 | 7,340              |
| 3122-1000 | 1 Liter polycarbonate bottle   | 6 x 1000 mL                            | 4,700                 | 7,340              |
| 77074 1   | Liter bottle adapter   | 6 x 1000 mL                            | 4,700                 | 7,340              |

**New adapter capabilities for the H-12000 rotor maximize process performance and application versatility.**

### Conical Tube

- 10 x 50 mL conical or 60 per run

### Blood Collection Tube

- 54 x 5/7 mL blood collection tubes or 324 per run



# Specifications and Ordering Information

## Sorvall RC 12BP Plus Centrifuge System

### Centrifuge Specifications

|                           |  |
|---------------------------|--|
| Maximum speed             | 4,700 rpm  |
| Maximum RCF               | 7,340 xg   |
| Maximum capacity          | 12 L, 6 x 2000 mL Nalgene Bio-bottles, 12-500 mL quad blood bags                 |
| Drive                     | High-performance induction   |
| Imbalance detector        | 50 gram tolerance  |
| Accel/decel profiles      | 11   |
| Run time                  | 1 min. - 99 min 59 sec., continuous operation                                    |
| Temperature control range | -10 to +40 °C  |
| Dimensions (H x W x D)    | 1178 x 800 x 905 mm (46.3 x 31.5 x 35.6 in)                                      |
| Weight                    | 470 kg (1,036 lbs)   |
| Control                   | Microprocessor   |
| Programmability           | 15 programs  |
| Functions                 | Centri-Log traceability software, ACE, Step-mode runs, slow start/stop           |
| Safety features           | Automatic lid lock, imbalance detection, armored guard ring, security key switch |
| Certification             | cULus approved and CE marked   |

### Ordering Information

| Description   | Cat. No. |
|---|----------|
| Sorvall RC 12BP Plus, Single Phase, 208-220V, 60Hz  | 75007030 |
| Sorvall RC 12BP Plus, Single Phase, 230V, 60Hz      | 75007031 |
| Sorvall RC 12BP Plus, Single Phase, 220V-230V, 50Hz | 75007032 |
| Sorvall RC 12BP Plus, 3Phase, 400V, 50Hz            | 75007033 |

### Centri-Log Data Collection Software

Windows compatible with RS-232 port/USB: Windows XP and earlier versions: (Windows NT, Windows 98, Windows ME, and Windows 2000)  
Computer not included with software. Customer to provide PC.

| Description  | Cat. No. |
|--|----------|
| Basic kit for PC w/USB (required for system setup)                                       | 75007535 |
| Networking kit, includes bar code reader<br>(kit required for each centrifuge networked) | 75007802 |
| Installation kit for first centrifuge (includes power supply)                            | 75007516 |
| Installation kit for each additional centrifuge  | 75007517 |

Contact your sales representative to discuss the right Centri-Log networking solution for your laboratory.

### Comprehensive Centrifuge Solutions

We offer a wide range of Sorvall centrifuges for the pursuit of scientific discoveries. As the world leader in serving science, we also offer a full range of high-quality solutions for your laboratory. Visit [www.thermoscientific.com](http://www.thermoscientific.com) for more information. To learn about our full range of Thermo Scientific centrifuge solutions, including benchtop models and microcentrifuges, visit [www.thermoscientific.com/centrifuge](http://www.thermoscientific.com/centrifuge).

### 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.





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## Validation Services for Peace of Mind

Our certified validation engineers will ensure that your Sorvall RC 12BP Plus Centrifuge System meets designated compliance criteria at the time of installation and throughout its long operational life. Our validation services also include documentation support to address today's stringent regulatory requirements. We offer a suite of packages that ensure compliance with applicable Installation, Operational and Performance Qualification standards (IQ/OQ/PQ), and can develop customized plans to meet your specific laboratory needs.

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