



**CENTRIFUGES**

|  |              |                   |
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*“Inspiration exists, but you can only find it by working for it”  
Pablo Picasso*



# Centrifuge comparison by model and tube capacity






|             |                   |                    |                   |                    |               |
|-------------|-------------------|--------------------|-------------------|--------------------|---------------|
| Description | Micro-haematocrit | Reaction vial      | Reaction vial     | Hemolysis          | Glass         |
| Capacity    |                   | 0.25/0.5 ml        | 1.5/2.2 ml        | 5 ml               | 7 ml          |
| Dimensions  | Ø 1.4 x 75 mm     | Ø 6,3/7 x 47/49 mm | Ø 10.7/13 x 42 mm | Ø 12.5 x 75 mm     | Ø 12 x 100 mm |
|             |                   |                    |                   |                    |               |
| Description |                   |                    | Tube RIA          | Tapval or VAC tube |               |
| Capacity    |                   |                    | 5 ml              | 5 ml               |               |
| Dimensions  |                   |                    | Ø 12 x 55/75 mm   | Ø 12 x 75/80 mm    |               |
|             |                   |                    |                   |                    |               |

## SUMMARY TABLE OF CENTRIFUGES BY MODEL IN RELATION TO VOLUME, CAPACITY SPEED AND MAXIMUM RCF (G). QUICK OVERVIEW

| Model              | Part No. | Max. Volume ml  | Max. Volume of tube ml | R.p.m. max. | R.c.f. max. (xg) |    |    |       |       |     |
|--------------------|----------|-----------------|------------------------|-------------|------------------|----|----|-------|-------|-----|
| Manual             | 7000014  | 30              | 15                     | 1500        | 360              |    |    |       |       |     |
|                    | 7000015  | 60              | 15                     | 1500        | 360              |    |    |       |       |     |
|                    | 7000016  | 2 x butyrometer | –                      | 1500        | 370              |    |    |       |       |     |
| Cencom I           | 7002239  | 12              | 1,5                    | 14500       | 14000            |    | 12 | 12    |       |     |
| Cencom II          | 7002240  | 90              | 15                     | 4000        | 1760             |    |    |       |       |     |
| Centro 4-BL        | 7002560  | 20              | 5                      | 5000        | 2907             |    |    |       | 4     |     |
| Centro 8-BL        | 7002356  | 120             | 15                     | 5000        | 2515             |    |    |       | 8     | 8   |
| Centrolit II-BL    | 7002357  | 40.5            | 2.2                    | 12000       | 14103            | 24 | 18 | 18    |       |     |
| Centromix II-BL    | 7002555  | 120             | 25                     | 4400        | 2601             |    |    |       | 8     | 4   |
| Mixtassel-BL       | 7002575  | 400             | 100                    | 4200        | 2901             |    |    |       | 20 16 | 20  |
| Centronic BL-II    | 7001668  | 400             | 100                    | 13500       | 19048            | 24 | 40 | 30    | 20 16 | 20  |
| Centrofriger BL-II | 7001669  | 400             | 100                    | 15300       | 23550            | 24 | 40 | 30    | 20 16 | 20  |
| Meditronic BL-S    | 7001376  | 800             | 200                    | 11000       | 12619            |    |    | 30 48 | 48 28 | 48  |
| Medifriger BL-S    | 7001377  |                 |                        | 15000       | 23470            |    |    |       |       |     |
| Macrotronic BL     | 7001385  | 2000            | 500                    | 10000       | 12296            |    |    | 80    | 80 48 | 96  |
| Macrofriger BL     | 7001386  |                 |                        | 12000       | 17706            |    |    |       |       |     |
| Macrofriger BL-B   | 7001390  | 9600            | 1000                   | 4070        | 5370             |    |    |       |       | 144 |

See page 127 for tubes and accessories. Tubes supplied as an accessory unless stated.

| Plastic with cap  | Glass   | Glass   | Plastic with cap  | Glass   | Falcon  | Glass   | Bottle  | Glass  | Bottle  | Bottle  | Butyrometer   | ASTM  |
|---|---|---|---|---|---|---|---|--|---|---|---|---|
| 10 ml   | 15 ml   | 25 ml   | 30 ml   | 50 ml   | 50 ml   | 100 ml  | 200 ml  | 250 ml   | 500 ml  | 1000 ml   |   |   |
| Ø 16.1<br>x<br>81.1 mm  | Ø 16<br>x<br>100 mm   | Ø 24<br>x<br>100 mm   | Ø 25.3<br>x<br>92 mm  | Ø 34<br>x<br>100 mm   | Ø 29.5/35<br>x<br>117 mm  | Ø 44/45<br>x<br>100 mm  | Ø 56.5<br>x<br>104 mm   | Ø 56<br>x<br>147 mm  | Ø 69<br>x<br>159 mm   | Ø 98/100<br>x<br>160-175 mm   |   | Ø 58<br>x<br>158 mm   |
|    |    |  |  |  |    |  |  |  |    |    |  |    |
| Tapval or VAC tube  | Falcon  |   |   |   | Plastic with cap  |   |   |  | Blood bag   | Microtiter  |   | ASTM  |
| 10 ml   | 15 ml   |   |   |   | 80/85 ml  |   |   |  | 500/600 ml  | 6x96  |   | 100 ml  |
| Ø 16<br>x<br>100 mm   | Ø 16/23<br>x<br>120 mm  |   |   |   | Ø 38<br>x<br>112 mm   |   |   |  |   | Ø 85<br>x<br>130 mm   |   | Ø 37<br>x<br>200 mm   |
|  |  |   |   |   |  |   |   |  |  |  |   |  |
|   | 2   |   |   |   |   |   |   |  |   |   |   |   |
|   | 4   |   |   |   |   |   |   |  |   |   | 2   |   |
|   | 6   | 6   |   |   |   |   |   |  |   |   |   |   |
|   | 8   |   |   |   |   |   |   |  |   |   |   |   |
| 4   | 8   | 4   |   |   |   |   |   |  |   |   |   |   |
| 16  | 18 16   | 8   | 8   | 8   | 4   | 4   |   |  |   |   |   |   |
| 10 16   | 18 16   | 8   | 8   | 8   | 4   | 4   |   |  |   |   |   |   |
| 10 16   | 18 16   | 8   | 8   | 8   | 4   | 4   |   |  |   |   |   |   |
| 20 28   | 28 12   | 8   | 6   | 8   | 4 6   | 6   | 4   |  |   |   | 6x96  |   |
| 20 68   | 68 16   | 36  | 20  | 16  | 8 6   | 4   | 4   | 4  | 4   |   | 12x96   | 4 4   |
|   | 102   | 54  |   | 24  |   | 12  | 6   |  | 6 12  | 6   |   |   |



## Hand operated centrifuges

### FEATURES

For 15 ml and butyrometer tubes.  
Comes with a table holding clamp.  
Adaptable heads for 2 or 4 x 15 ml tubes or for 2 butyrometer tubes.

### MODELS

| Part No.       | Comes with head for   | Max. speed r.p.m. | Max. R.c.f. | Weight Kg  |
|----------------|-----------------------|-------------------|-------------|------------|
| <b>7000014</b> | <b>2 tubes</b>        | <b>1500</b>       | <b>360</b>  | <b>1.1</b> |
| <b>7000015</b> | <b>4 tubes</b>        | <b>1500</b>       | <b>360</b>  | <b>1.2</b> |
| <b>7000016</b> | <b>2 butyrometers</b> | <b>1500</b>       | <b>370</b>  | <b>1.2</b> |

Comes with head and metal buckets.



### ADDITIONAL ACCESSORIES

Head for two tubes.  
Part No. **7000017**  
Head for four tubes.  
Part No. **7001388**

Bucket for 15 ml tubes.  
Part No. **7001500**  
Head for two butyrometers.  
Part No. **7000018**



## Microcentrifuge "Cencom I"

FOR MICROTUBES OF 2,0 - 1,5 - 0,5 AND 0,2 ML.  
DIGITAL ELECTRONIC CONTROL OF SPEED AND TIME. ADJUSTABLE SPEED UP TO 14000 r.p.m.

### FEATURES

ABS external case.  
Maintenance free induction drive motor.  
Rubber suspended motor which reduces the vibrations.  
High speed microcentrifuge that minimizes the samples over temperature.  
Extremely quiet operation.  
For 12 microtubes with identification code.  
Polycarbonate upper lid.  
Peephole on the lid to visualize the centrifuge inside.

### CONTROL PANEL

Start switch.  
Push button Start/Stop.  
LCD display indicating time and speed.  
Time selector push button.  
Speed selector push button.  
Push button ▲ increase different parameters.  
Push button ▼ decrease different parameters.  
Push button motor drive rotation for quick acceleration Short/Spin.  
Push button open lid when cycle has ended.



### MODEL

| Part No.       | Tubes capacity | Height/ Width/ Depth (exterior) cm | Max. speed r.p.m. | R.c.f.(xg)   | Power W    | Time selected       | Weight Kg |
|----------------|----------------|------------------------------------|-------------------|--------------|------------|---------------------|-----------|
| <b>5059600</b> | <b>12</b>      | <b>15 21 25</b>                    | <b>14500</b>      | <b>14000</b> | <b>105</b> | <b>till 99' 99"</b> | <b>4</b>  |

Comes complete with 12 adapters of 1,5-0,5 and 0,2ml.



## Centrifuge Angle rotor "Cencom II"

WITH ANGLE ROTOR FOR 6 X 15 ml TUBES AND 6 ADDITIONAL ADAPTERS FOR 15 ML FALCON TUBES.  
DIGITAL ELECTRONIC CONTROL OF SPEED AND TIME. ADJUSTABLE SPEED UP TO 4000 r.p.m. (1790 R.c.f.)

### SAFETY:

SAFETY ACCORDING TO EN. 61010.2.020 SAFETY MICRO-SWITCH THAT DISCONNECTS THE POWER TO THE MOTOR WHEN THE LID IS OPENED.  
PROTECTIVE FUSE LOCATED AT THE BACK OF THE INSTRUMENT.

### APPLICATIONS

General laboratory use and teaching.

### FEATURES

External case made from coated ABS plastic.  
Rubber suspended motor, reduces any motor vibrations.  
Fixed angle 6 place rotor with identification code.  
Transparent polycarbonate lid that allows the user to see inside the centrifuge.  
Speed selection from 1000 to 4000 r.p.m. in 500 r.p.m. steps.  
Time selection from 1' to 60' in steps of 1'.

### CONTROL PANEL

Digital display of speed and time.  
Push button Start-Stop.  
Push button selector for speed and time.  
Push button increase value.  
Push button decrease value.

*Cross section view of the angle rotor showing bucket and bucket support.*



### MODEL

| Part No.       | Tube capacity ml | Height/ Ø (exterior) cm | Max. speed r.p.m. | Max. R.c.f. | Power W   | Weight Kg  |
|----------------|------------------|-------------------------|-------------------|-------------|-----------|------------|
| <b>7002240</b> | <b>6 x 15</b>    | <b>28 26</b>            | <b>4000</b>       | <b>1760</b> | <b>80</b> | <b>4.5</b> |

Supplied complete with 6 x 15 ml tubes with adapters and 6 adapters for 15 ml Falcon tubes.

### ACCESSORY

Adapter. Suitable for 12 Ø x 75 mm VAC tubes.  
Rotor capacity, 6 adapters.  
Part No. **1001556**



# Digital microprocessor controlled Centrifuges, Series BL



- INDUCTION DRIVE, MAINTENANCE FREE (NO CARBON BRUSHES).
- SPEED CONTROL BY VARIABLE FREQUENCY SYSTEM.
- RELIABLE FUNCTIONS AND REPEATABILITY.
- LOGICAL EASY TO USE CONTROL PANEL.
- SUSPENDED, DAMPENED VIBRATION FREE MOTOR DRIVE, GUARANTEES SMOOTH OPERATION.
- QUIET OPERATION, INTERNAL INSULATION WHICH ABSORBS NOISE AND VIBRATIONS.
- SUCTION SUPPORT FEET THAT PREVENTS BENCH CREEP.

**SAFETY:**  
 AUTOMATICALLY STOPS IF OUT OF BALANCE.  
 LID CANNOT BE OPENED IF THE MOTOR IS RUNNING.  
 SYSTEM CANNOT BE STARTED IF THE LID IS OPEN.  
 SPEED LIMITED BY EACH ROTOR.

THREE DIFFERENT CONTROL SYSTEMS: **A** Digital, **B** and **C**, by microprocessor.



CENTROLIT II-BL - CENTRO 4-BL - CENTRO 8-BL  
 CENTROMIX II-BL - MIXTASEL-BL



CENTRONIC BL-II - CENTROFRIGER BL-II



MEDITRONIC BL-S - MEDIFRIGER BL-S - MACROTRONIC BL - MACROFRIGER BL - MACROFRIGER BL-BLOOD





## CENTRIFUGES

### Marked as diagnostic Medical Devices (Directive 93/42/CE) and for “In vitro” I V D (Directive 98/79/CE)



## MEDICAL CENTRIFUGES

J.P. SELECTA, S.A. is certified by TÜV Rheinland, according to the ISO 13485, for the design and manufacture of centrifuges used to obtain autologous extract of blood tissue, adipose and bone marrow.

These centrifuges models are used in the sanitary, cosmetic and plastic surgery fields. They are an important help for serious injuries treatment and for damages tissues regeneration.

From the models:

|                            |                         |
|----------------------------|-------------------------|
| CENTROMIX II-BL CENTRIFUGE | Part No. <b>7002555</b> |
| CENTRO-4-BL CENTRIFUGE     | Part No. <b>7002560</b> |
| CENTRO-8-BL CENTRIFUGE     | Part No. <b>7002356</b> |

and from different rotors and adapters configurations, we offer the possibility of manufacturing an OEM centrifuge which complies with your demands and marked as sanitary products.

## “IN VITRO” MEDICAL CENTRIFUGES

J.P. SELECTA S.A. has the manufacture's license on the following models, issued by the Spanish Agency for the Regulation of Medicines and Sanitary Products (5733-PS), for manufacture centrifuges of medical use and “in vitro” analysis.

|                               |                         |
|-------------------------------|-------------------------|
| MEDITRONIC-BL-S CENTRIFUGE    | Part No. <b>7001376</b> |
| MEDIFRIGER-BL-S CENTRIFUGE    | Part No. <b>7001377</b> |
| CENTRONIC-BL-II CENTRIFUGE    | Part No. <b>7001668</b> |
| CENTROFRIGER-BL-II CENTRIFUGE | Part No. <b>7001669</b> |
| CENTROLIT II-BL CENTRIFUGE    | Part No. <b>7002357</b> |
| MIXTASEL-BL CENTRIFUGE        | Part No. <b>7002575</b> |

# CENTRIFUGES ELECTRONIC DIGITAL CONTROL

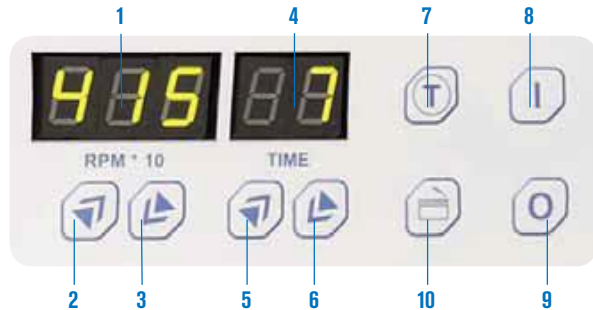
## “Centrolit II-BL”, “Centro-4-BL”, “Centro-8-BL”, “Centromix II-BL” and “Mixtasel-BL” with induction drive maintenance free motor.



**SAFETY:**  
 UNE-EN 61010.2.020. ELECTROMAGNETIC LID LOCK, PREVENTS THE OPENING OF THE CENTRIFUGE IF THE ROTOR IS IN MOTION.  
 PREVENTS THE STARTING OF THE MOTOR IF THE LID IS OPEN. ROTOR AND BUCKETS ARE IDENTIFIED BY LASER SIGNAL.  
 AUTOCLAVABLE.

### COMMON FEATURES

- Electronic control with digital display of speed and time, with acceleration and brake ramp.
- Timer controllable from 1' to 60' or continuous operation.
- Rubber suspended motor that guarantees a smooth operation.
- Digital speed display.
- Pulse button, that drives the motor while pressed.
- Automatic stop if out of balance, with indicator light.
- Suction base supports that adhere to the work bench surface.
- Quiet operation, insulated interior that absorbs noise and vibrations.
- In the case of mains failure, manual open override aperture.
- Noise level 50-60dBA.
- Rotors and buckets with laser identification.**
- Autoclavable.**



### CONTROL PANEL

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1. Speed display.</li> <li>2. Push button increase speed.</li> <li>3. Push button reduce speed.</li> <li>4. Run Time display.</li> <li>5. Push button increase run time.</li> </ul> | <ul style="list-style-type: none"> <li>6. Push Button decrease run time.</li> <li>7. Push button pulse start ( RUN/STOP).</li> <li>8. Push button start.</li> <li>9. Push button stop.</li> <li>10. Push button open lid.</li> </ul> |
|--|--|



## Centrifuge “Centrolit II-BL”

SUITABLE FOR HAEMATOCRIT AND SMALL VIALS OF 0.25/0.5 ml AND TUBES OF 1.5/2.2 ml.  
**FREE MAINTENANCE INDUCTION DRIVE MOTOR.**

“in vitro” diagnostic medical devices I V T



ABS plastic moulded external case.



### MODEL

| Part No.       | Max. Volume ml | Max. Number of tubes | Height / Width / Depth (exterior) cm | Power W | Weight Kg |
|----------------|----------------|----------------------|--------------------------------------|---------|-----------|
| <b>7002357</b> | 27             | 18 x 1.5 / 2.2 ml    | 20 28 34                             | 200     | 6.5       |

**SPARES. Tubes** (see page 127).

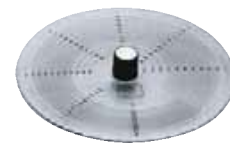
### ACCESSORIES

**Interchangeable rotors** made of hardened anodised aluminium. Autoclavable.

| Part No. head  | Rotor type        | Volume rotor | Tube capacity maximum                 | Max. R.p.m. | Max. R.c.f. (xg) |
|----------------|-------------------|--------------|---------------------------------------|-------------|------------------|
| <b>7001704</b> | Micro-haematocrit | -            | 24 x 1.4 mm Ø                         | 12000       | 13143            |
| <b>7001703</b> | Angle+lid         | 40.5 ml      | 18 x 0.25/0.5 ml<br>+ 18 x 1.5/2.2 ml | 12000       | 14103            |

Angle rotors supplied without tubes.

Micro-haematocrit rotor supplied with one box of 100 tubes.



**Micro-haematocrit reader.**  
 Suitable for micro-haematocrit rotor 7001704.  
 Part No. **7000929**



## Centrifuge "Centro-4-BL"

WITH SWINGOUT HEAD FOR 4 TUBES OF 75 X 13 mm VAC.  
FREE MAINTENANCE INDUCTION DRIVE MOTOR.

This model can be marked as medical device



Control panel features (see page 111).  
Centrifuge kit for separating plasma rich platelets from whole blood.



### MODEL

| Part No.       | Height / Width / Depth (exterior) cm | Power W | Max. R.p.m. | Max. R.c.f. (xg) | Weight Kg |
|----------------|--------------------------------------|---------|-------------|------------------|-----------|
| <b>7002560</b> | 20 28 34                             | 170     | 5000        | 2907             | 6         |

Rotor comes without tubes.

ABS plastic moulded external case.



## Centrifuge "Centro-8-BL"

WITH ANGLE ROTOR FOR 7-15 ml TUBES AND 75 X 13 mm VAC (WITH ADAPTERS).  
FREE MAINTENANCE INDUCTION DRIVE MOTOR.

This model can be marked as medical device



Control panel features (see page 111).



ABS plastic moulded external case

### MODEL

| Part No.       | Max. Volume ml. | Tube capacity | Height / Width / Depth (exterior) cm | Power W | Max. R.p.m. | Max. R.c.f. (xg) | Weight Kg |
|----------------|-----------------|---------------|--------------------------------------|---------|-------------|------------------|-----------|
| <b>7002356</b> | 120             | 8 x 15 ml     | 20 28 34                             | 170     | 5000        | 2515             | 6.5       |

Supplied complete with 8 x 15 ml glass tubes.

### ACCESSORIES

Bucket adapter for 7 ml tubes.  
Rotor capacity: 8 adapters.  
Part No. **7000700**

Bucket adapter for 75 x 13 mm VAC. tubes.  
Rotor capacity: 8 adapters.  
Part No. **1001557**

**SPARES.** Tubes (see page 127).





## Centrifuge "Centromix II-BL"

WITH A CHOICE OF ROTORS AND INTERCHANGEABLE ADAPTERS.  
FREE MAINTENANCE INDUCTION DRIVE MOTOR.

This model can be marked as  
medical device



Control panel features (see page 111).



### MODEL

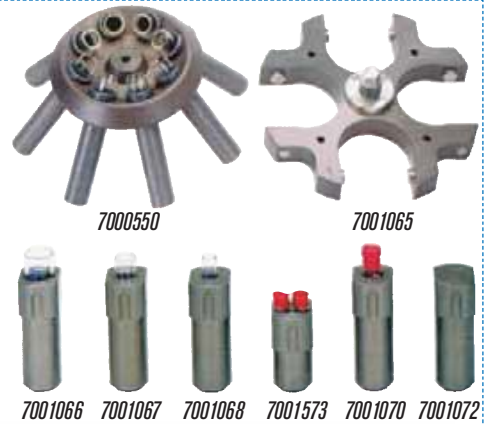
| Part No.       | Max. Volume ml | Max. Number of tubes | Height / Width / Depth (exterior) cm | Power W | Weight Kg |
|----------------|----------------|----------------------|--------------------------------------|---------|-----------|
| <b>7002555</b> | 120            | 4 x 25 ml            | 23 30 35                             | 180     | 12        |

External DUR-AL case, with AISI 304 stainless steel bowl.

### ACCESSORIES

Rotors and interchangeable buckets and adapters.

| Part No. head  | Rotor type | Part No. bucket | Total max. Volume (4 adapters) | Bucket/Adapter capacity | Ø x Length mm | Max. R.p.m. | Max. R.c.f. (xg) |
|----------------|------------|-----------------|--------------------------------|-------------------------|---------------|-------------|------------------|
| <b>7000550</b> | Angle      | -               | 120 ml                         | 8 x 15 ml               | 16.5 x 100    | 4400        | 2063             |
| <b>7001065</b> | Swing out  | -               | -                              | -                       | -             | -           | -                |
|                | Swing out  | <b>7001066</b>  | 100 ml                         | 1 x 25 ml               | 24 x 100      | 4400        | 2601             |
|                | Swing out  | <b>7001067</b>  | 60 ml                          | 1 x 15 ml               | 16.5 x 100    | 4400        | 2601             |
| <b>7001065</b> | Swing out  | <b>7001068</b>  | 28 ml                          | 1 x 7 ml                | 12 x 100      | 4400        | 2601             |
|                | Swing out  | <b>7001573</b>  | 40 ml                          | 2 x 5 ml VAC            | 13 x 75       | 4400        | 2163             |
|                | Swing out  | <b>7001070</b>  | 60 ml                          | VAC                     | 16 x 100      | 4400        | 2601             |
|                | Swing out  | <b>7001072</b>  | -                              | undrilled               | -             | 4400        | 2601             |



Note: All buckets and adapters come without tubes unless stated, see page 127 for tubes and accessories.



## Centrifuge "Mixtasel-BL"

MAINTENANCE FREE INDUCTION DRIVE MOTOR.



**Polyvalent with rotors and interchangeable adapters**

Control panel features (see page 111).



NEW DESIGN

External case of DUR-AL alloy with ABS plastic coated front AISI 304 stainless steel bowl.

### MODEL

| Part No.       | Max. Volume ml | Max. Number of tubes | Height / Width / Depth (exterior) cm | Power W | Weight Kg |
|----------------|----------------|----------------------|--------------------------------------|---------|-----------|
| <b>7002575</b> | 400            | 4 x 100 ml           | 29 39 44                             | 210     | 22        |

## ACCESSORIES

Interchangeable angle rotors with lids, made of hardened anodised aluminium. Rotors come with identification system. Autoclavable rotors and buckets.

| Part No. head  | Rotor type       | Max. volume | Tube capacity | Ø x Length mm | Max. R.p.m. | Max. R.c.f. (xg) |
|----------------|------------------|-------------|---------------|---------------|-------------|------------------|
| <b>7001705</b> | <b>Angle+lid</b> | 270 ml      | 18 x 15 ml    | 16.5 x 100    | 4200        | 2669             |
| <b>7001711</b> | <b>Angle+lid</b> | 400 ml      | 8 x 50 ml     | 34 x 100      | 4200        | 1921             |



7001705



7001711

Tube adapters for rotor Part No. 7001711

Part No.

**7001707** for 50 ml plastic tubes (29 Ø x 103 mm).

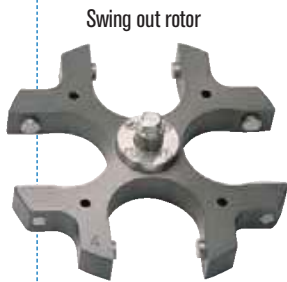
**7001708** for 25 ml glass tubes (24 Ø x 100 mm).

**7001709** for 30 ml plastic tubes (25 Ø x 92 mm).

**7001710** for 15 ml glass tubes (16.5 Ø x 100 mm).

Swing out rotor, interchangeable buckets and adapters each with identification code. Autoclavable.

### BUCKETS



Swing out rotor

7001326



7001700

7000793

7000794

7000795

7000796

7000797

7000930

7000931

7001073

7001074

7000798



7001315

Sealed bucket with hermetically sealed lid.

### ADAPTERS



7001316

7001317

7001318

7001319

7001320

7001321

7001322

| Part No. Rotor | Rotor type | Part No. bucket | Sealed bucket  | Part No. adapter    | Total max. Volume (4 adapters) | Bucket/Adapter capacity | Ø x Length mm | Max. R.p.m. | Max. R.c.f. (xg) |      |
|----------------|------------|-----------------|----------------|---------------------|--------------------------------|-------------------------|---------------|-------------|------------------|------|
| <b>7001326</b> | Swing out  | <b>7001700</b>  | -              | -                   | 400 ml                         | 1 x 100 ml              | 44 x 104      | 4200        | 2901             |      |
|                | Swing out  | <b>7000793</b>  | -              | -                   | 200 ml                         | 1 x 50 ml               | 34 x 100      | 4200        | 2901             |      |
|                | Swing out  | <b>7000794</b>  | -              | -                   | 100 ml                         | 1 x 25 ml               | 24 x 100      | 4200        | 2901             |      |
|                | Swing out  | <b>7000795</b>  | -              | -                   | 240 ml                         | 4 x 15 ml               | 16.5 x 100    | 4200        | 2901             |      |
|                | Swing out  | <b>7000796</b>  | -              | -                   | 140 ml                         | 5 x 7 ml                | 12 x 100      | 4200        | 2901             |      |
|                | Swing out  | <b>7000797</b>  | -              | -                   | 100 ml                         | 5 x 5 ml                | 12.5 x 75     | 4200        | 2441             |      |
|                | Swing out  | <b>7000930</b>  | -              | -                   | 240 ml                         | 4 x 15 ml Falcon        | 16.5 x 120    | 4200        | 3030             |      |
|                | Swing out  | <b>7000931</b>  | -              | -                   | 200 ml                         | 1 x 50 ml Falcon        | 30 x 117      | 4200        | 3030             |      |
|                | Swing out  | <b>7001073</b>  | -              | -                   | 16 VAC                         | 4 VAC*                  | 16 x 100      | 4200        | 2901             |      |
|                | Swing out  | <b>7001074</b>  | -              | -                   | 16 VAC                         | 4 VAC*                  | 13 x 75       | 4200        | 2441             |      |
|                | Swing out  | <b>7000798</b>  | -              | -                   | undrilled                      | -                       | -             | 4200        | 2901             |      |
|                | Swing out  | -               | <b>7001315</b> | 100 ml glass tube** | -                              | 400 ml                  | 1 x 100 ml    | 44 x 104    | 4200             | 2901 |
|                | Swing out  | -               | <b>7001315</b> | <b>7001316</b>      | -                              | 200 ml                  | 1 x 50 ml     | 34 x 100    | 4200             | 2901 |
|                | Swing out  | -               | <b>7001315</b> | <b>7001317</b>      | -                              | 100 ml                  | 1 x 25 ml     | 24 x 100    | 4200             | 2901 |
|                | Swing out  | -               | <b>7001315</b> | <b>7001318</b>      | -                              | 240 ml                  | 4 x 15 ml     | 16.5 x 100  | 4200             | 2901 |
|                | Swing out  | -               | <b>7001315</b> | <b>7001319</b>      | -                              | 140 ml                  | 5 x 7 ml      | 12 x 100    | 4200             | 2901 |
|                | Swing out  | -               | <b>7001315</b> | <b>7001320</b>      | -                              | 100 ml                  | 5 x 5 ml      | 12.5 x 75   | 4200             | 2901 |
|                | Swing out  | -               | <b>7001315</b> | <b>7001321</b>      | -                              | 64 ml                   | 4 VAC*        | 13 x 75     | 4200             | 2901 |
|                | Swing out  | -               | <b>7001315</b> | <b>7001322</b>      | -                              | undrilled               | -             | -           | 4200             | 2901 |

\*VAC(r): Blood tube with cap (bung).

\*\*Sealed bucket part no. 7001315 accommodates a 100 ml glass tube without the need of an adapter.

Note: All buckets and adapters come without tubes unless stated, see page 127 for tubes and accessories.

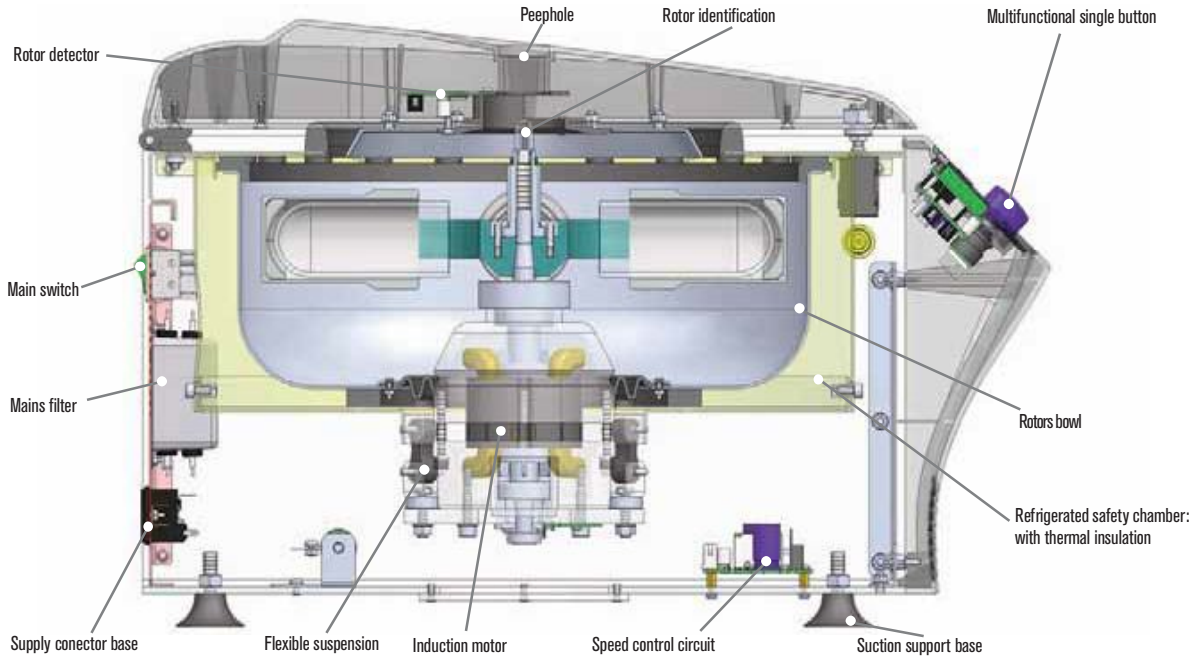


# MICROPROCESSOR CONTROLLED CENTRIFUGES

## “Centronic BL-II” and “Centrofriger BL-II”



### TECHNICAL SCHEMATICS OF DIFFERENT COMPONENTS



### COMMON FEATURES

**Induction drive maintenance free motor.**

**Low noise level 50-60 dBa.**

**Robust all metal construction:**

- External case made from DUR-Al alloy.
- Internal bowl and top plate all stainless steel
- Internal steel safety chamber within the case.

**Electronic circuits,** microprocessor digital control of all parameters and functions: speed, acceleration, brake, RCF, temperature, timer, 10 program storage, automatic rotor recognition and alarm system.



**Rotor identification head,** when the centrifuge lid is closed the rotor communicates all the data of the functions of it. This prevents, before use, any risk of failure of using the wrong rotor in a program or exceeding the rotors running parameters. The advantage of this system is that we can add additional rotors to the range without changing the centrifuge model.

**All Rotors, buckets and adapters** are identified with an inalterable engraved laser code.

**Air circulation system,** to limit any excessive rise in temperature within the centrifuge, all air circulated within the chamber is channelled out of the back and is not re-circulated, this means that the centrifuges internal temperature will remain low and constant.

**Hermetically sealed compressor,** mounted on anti-vibration mounts with re-circulating evaporator around the centrifuge chamber. (only applies to refrigerated centrifuges).

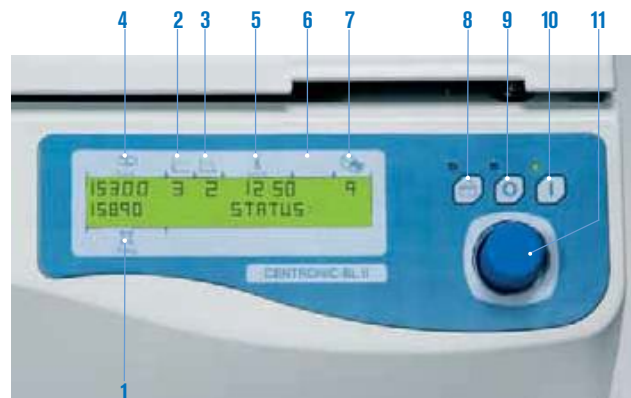
**MONO single button** programming:

- Speed
- Deceleration ramp (brake)
- Configuration °C/°F
- RCF
- Time
- Temperature calibration.
- Acceleration ramp
- Temperature

### ALARM

- Informs of a fault:
- POWER FAIL** Power failure during the run.
  - ROTOR FAIL** Fault in reading the rotor identification.
  - DOOR OPEN** Lid open- not closed properly.
  - UNBALANCED** Out of balance, adjust distribution of tubes.
  - EEPROM FAIL** Set parameters failed to be recognised.
  - CONTROL FAIL** Speed detector indicator failure.
  - OVER TEMP** Over set temperature value.

### CONTROL PANEL



1. R.c.f.
2. Acceleration ramp.
3. Brake ramp.
4. Speed.
5. Timer from 1' to 59' 59".
6. Temperature (Refrigeration model only).
7. Memory.
8. Open lid.
9. Stop.
10. Start.
11. Single button control.

**CONTROL PANEL INFORMATION** LCD display of 2 x 20 characters that permanently show the running conditions of the machine.

|                     |  |
|---------------------|--|
| <b>STATUS</b>       | Status.  |
| <b>STOP</b>         | Stop.  |
| <b>START</b>        | Starts the run.  |
| <b>STANDBY</b>      | Wait, standby.   |
| <b>STORED</b>       | Stores the last set of parameters.                       |
| <b>CONFIG</b>       | Sets the program parameters.                             |
| <b>PROGRAM</b>      | Select stored program.                                   |
| <b>RAMP</b>         | Centrifuge accelerating to set speed.                    |
| <b>SET SPEED</b>    | Centrifuge is running at set speed.                      |
| <b>BRAKE</b>        | Centrifuge is slowing down in deceleration phase.        |
| <b>ROTOR X PRG</b>  | The selected program does not match the installed rotor. |
| <b>PROGRAM TIME</b> | Informs that a time needs to be set to operate.          |



## High speed centrifuges with microprocessor control "Centronic BL-II" and "Centrifriger BL-II"

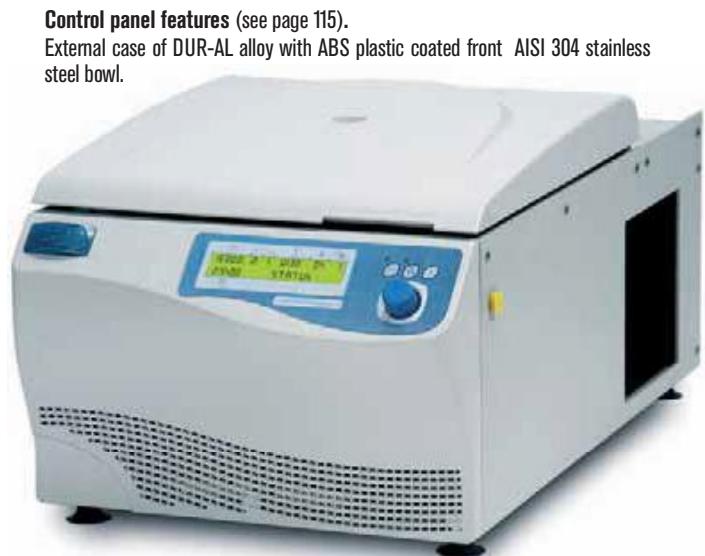
"in vitro" diagnostic  
medical devices I V T



**Versatile. Large range of rotors and adapters. Maintenance free induction motor drive.**



Model "Centronic BL-II"



Control panel features (see page 115).

External case of DUR-AL alloy with ABS plastic coated front AISI 304 stainless steel bowl.

### MODEL

| Part No.       | Max. Volume ml | Max. number of tubes | Height / Width / Depth (exterior) cm | Power W | Weight Kg |
|----------------|----------------|----------------------|--------------------------------------|---------|-----------|
| <b>7001668</b> | 400            | 4 x 100 ml           | 34 41 54                             | 440     | 22        |

Model "Centrifriger BL-II" refrigerated, temperature range 0 °C to 30 °C.

### MODEL

| Part No.       | Max. Volume ml | Max. number of tubes | Height / Width / Depth (exterior) cm | Power W | Weight Kg |
|----------------|----------------|----------------------|--------------------------------------|---------|-----------|
| <b>7001669</b> | 400            | 4 x 100 ml           | 34 41 71                             | 960     | 39        |

### ACCESSORIES

**Angle rotors with lid**, made of anodised hardened aluminium with identification system. All rotors are autoclavable.



**Tube adapters for rotor Part No. 7001706**

Part No.

**7001707** for plastic tubes, 50 ml (29 Ø x 103 mm).

**7001708** for glass tubes, 25 ml (24 Ø x 100 mm).

Part No.

**7001709** for plastic tubes, 30 ml (25 Ø x 92 mm).

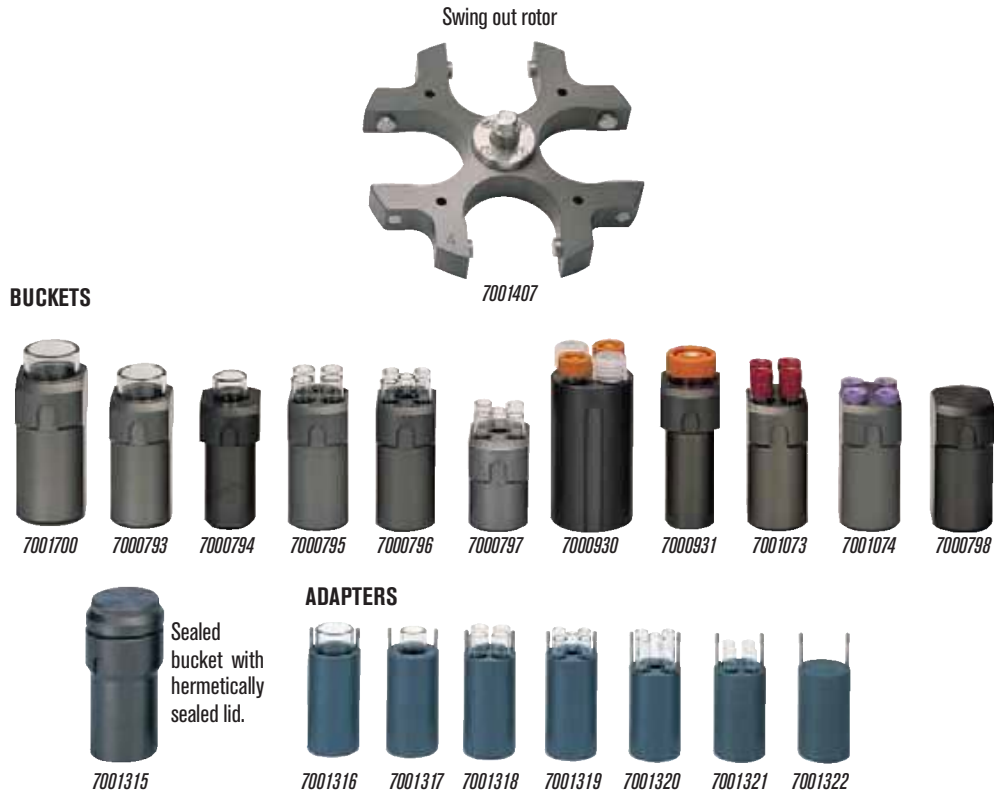
**7001710** for glass tubes, 15 ml (16.5 Ø x 100 mm).

| Part No. head  | Rotor type | Max. volume      | Tubes capacity                 | Ø x Length mm | CENTRONIC BL-II |                  | CENTROFRIGER BL-II |                  |
|----------------|------------|------------------|--------------------------------|---------------|-----------------|------------------|--------------------|------------------|
|                |            |                  |                                |               | Max. R.p.m      | Max. R.c.f. (xg) | Max. R.p.m         | Max. R.c.f. (xg) |
| <b>7001670</b> | Angle+lid  | 270 ml           | 18 x 15 ml                     | 16.5 x 100    | 4200            | 2669             | 4200               | 2669             |
| <b>7001706</b> | Angle+lid  | 400 ml           | 8 x 50 ml                      | 34 x 100      | 6000            | 3920             | 6000               | 3920             |
| <b>7001325</b> | Angle+lid  | 500 ml           | 6 x 50 ml                      | 29 x 103      | 13500           | 18844            | 15300              | 24204            |
| <b>7001324</b> | Angle+lid  | 180 ml           | 6 x 30 ml                      | 25 x 92       | 13500           | 15890            | 15300              | 20410            |
| <b>7001323</b> | Angle+lid  | 100 ml           | 10 x 10 ml                     | 16 x 80       | 13500           | 18335            | 15300              | 23550            |
| <b>7001671</b> | Angle+lid  | 40.5 ml          | 18x0.25/0.5 ml + 18x1.5/2.2 ml | -             | 13500           | 15992            | 15300              | 20541            |
| <b>7001672</b> | Angle+lid  | 60 ml            | 40 x 0.25/0.5 ml               | -             | 13500           | 13298            | 15000              | 20120            |
| <b>7001673</b> | Angle+lid  | 45 ml            | 30 x 1.5/2.2 ml                | -             | 13500           | 19048            | 15000              | 23716            |
| <b>7001408</b> | Angle+lid  | Microhaematocrit | 24                             | 1.4 x 75      | 12000           | 15935            | 12000              | 15935            |

Note: All buckets and adapters come without tubes unless stated, see page 127 for tubes and accessories.

## ACCESSORIES

Swing out rotor with interchangeable sealed buckets and adapters, each with identification code. Autoclavable.



| Part No. head | Rotor Type | Part No. bucket | Sealed bucket | Part No. adapter    | Total max. Volume (4 adapters) | Bucket/Adapter capacity | Ø x Length mm | Max. R.p.m. | Max. R.c.f. (xg) |      |
|---------------|------------|-----------------|---------------|---------------------|--------------------------------|-------------------------|---------------|-------------|------------------|------|
| 7001407       | Swing out  | 7001700         | -             | -                   | 400 ml                         | 1 x 100 ml              | 44 x 104      | 5000        | 4137             |      |
|               | Swing out  | 7000793         | -             | -                   | 200 ml                         | 1 x 50 ml               | 34 x 100      | 5000        | 4137             |      |
|               | Swing out  | 7000794         | -             | -                   | 100 ml                         | 1 x 25 ml               | 24 x 100      | 5000        | 4137             |      |
|               | Swing out  | 7000795         | -             | -                   | 240 ml                         | 4 x 15 ml               | 16.5 x 100    | 5000        | 4137             |      |
|               | Swing out  | 7000796         | -             | -                   | 140 ml                         | 5 x 7 ml                | 12 x 100      | 5000        | 4137             |      |
|               | Swing out  | 7000797         | -             | -                   | 100 ml                         | 5 x 5 ml                | 12.5 x 75     | 5000        | 3318             |      |
|               | Swing out  | 7000930         | -             | -                   | 240 ml                         | 4 x 15 ml Falcon        | 16.5 x 120    | 5000        | 4109             |      |
|               | Swing out  | 7000931         | -             | -                   | 200 ml                         | 1 x 50 ml Falcon        | 30 x 117      | 5000        | 4109             |      |
|               | Swing out  | 7001073         | -             | -                   | 16 VAC                         | 4 VAC*                  | 16 x 100      | 5000        | 4137             |      |
|               | Swing out  | 7001074         | -             | -                   | 16 VAC                         | 4 VAC*                  | 13 x 75       | 5000        | 3318             |      |
|               | Swing out  | 7000798         | -             | -                   | undrilled                      | -                       | -             | 5000        | 4137             |      |
|               | Swing out  | -               | 7001315       | 100 ml glass tube** | -                              | 400 ml                  | 1 x 100 ml    | 44 x 104    | 5000             | 4137 |
|               | Swing out  | -               | 7001315       | 7001316             | -                              | 200 ml                  | 1 x 50 ml     | 34 x 100    | 5000             | 4137 |
|               | Swing out  | -               | 7001315       | 7001317             | -                              | 100 ml                  | 1 x 25 ml     | 24 x 100    | 5000             | 4137 |
|               | Swing out  | -               | 7001315       | 7001318             | -                              | 240 ml                  | 4 x 15 ml     | 16.5 x 100  | 5000             | 4137 |
|               | Swing out  | -               | 7001315       | 7001319             | -                              | 140 ml                  | 5 x 7 ml      | 12 x 100    | 5000             | 4137 |
|               | Swing out  | -               | 7001315       | 7001320             | -                              | 100 ml                  | 5 x 5 ml      | 12.5 x 75   | 5000             | 4137 |
|               | Swing out  | -               | 7001315       | 7001321             | -                              | 64 ml                   | 4 VAC*        | 13 x 75     | 5000             | 4137 |
|               | Swing out  | -               | 7001315       | 7001322             | -                              | undrilled               | -             | -           | 5000             | 4137 |

\*VAC(r): Blood tube with cap.

\*\*Sealed bucket part no. 7001315 accommodates a 100 ml glass tube without the need of an adapter.

Micro-haematocrit rotor comes with a box of 100 tubes and calculus graph.

Note: All buckets and adapters come without tubes unless stated, see page 127 for tubes and accessories.



# Microprocessor controlled centrifuges “Meditronic BL-S”, “Medifriger BL-S”, “Macrotronic BL” y “Macrofriger BL”



## COMMON FEATURES

**Induction drive maintenance free motor.**

**Low noise level 50-60dBa.**

### Robust all metal construction:

- External case made from DUR-Al alloy.
- Internal bowl and top plate all stainless steel
- Internal steel safety chamber within the case.

**Electronic circuits,** microprocessor digital control of all parameters and functions: speed, acceleration, brake, RCF, temperature, timer, 10 program storage, automatic rotor recognition and alarm system.



**Rotor identification head,** when the centrifuge lid is closed the rotor communicates all the data of the functions of it. This prevents, before use, any risk of failure of using the wrong rotor in a program or exceeding the rotors running parameters. The advantage of this system is that we can add additional rotors to the range without changing the centrifuge model.

**All Rotors, buckets and adapters** are identified with an inalterable engraved laser code.

**Air circulation system,** for centrifuges without refrigeration to limit any excessive rise in temperature within the centrifuge, all air circulated within the chamber is channelled out of the back and is not re-circulated, this means that the centrifuges internal temperature will remain low and constant.

**Hermetically sealed compressor,** mounted on anti-vibration mounts with re-circulating evaporator around the centrifuge chamber. (only applies to refrigerated centrifuges).

## CONTROL PANEL INFORMATION LCD display of 2 x 20 characters that permanently show the running conditions of the machine.

|              |  |
|--------------|--|
| STATUS       | Status.  |
| STOP         | Stop.  |
| START        | Starts the run.  |
| STANDBY      | Wait, standby.   |
| STORED       | Stores the last set of parameters.                       |
| CONFIG       | Sets the program parameters.                             |
| PROGRAM      | Select stored program.                                   |
| RAMP         | Centrifuge accelerating to set speed.                    |
| SET SPEED    | Centrifuge is running at set speed.                      |
| BRAKE        | Centrifuge is slowing down in deceleration phase.        |
| ROTOR<PRG    | The selected program does not match the installed rotor. |
| PROGRAM TIME | Informs that a time needs to be set to operate.          |

### ALARM

Informs of a fault:

|              |   |
|--------------|---|
| POWER FAIL   | Power failure during the run.                 |
| ROTOR FAIL   | Fault in reading the rotor identification.    |
| DOOR OPEN    | Lid open- not closed properly.                |
| UNBALANCED   | Out of balance, adjust distribution of tubes. |
| EEPROM FAIL  | Set parameters failed to be recognised.       |
| CONTROL FAIL | Speed detector indicator failure.             |
| OVER TEMP    | Over set temperature value.                   |

## CONTROL PANEL



1 2 3 4 16 5 6 7 9 8 10 11 13 12 14 15

1. R.c.f.
2. Acceleration ramp.
3. Brake ramp.
4. Speed.
5. Timer from 1' to 59' 59".
6. Temperature (Refrigeration model only).
7. Memory
8. Configuration.

9. Cursor.
10. Push button increase/decrease set or value.
11. Validation.
12. Open lid.
13. Program.
14. Stop.
15. Start.
16. LCD Display.





## High speed centrifuges with microprocessor control “Meditronic-BL-S” and “Medifriger-BL-S”

“in vitro” diagnostic  
medical devices I V T



**Capacity up to 800 ml. Maintenance free induction motor drive.**



**Control panel features** (see page 118).  
External case made of DUR-AL alloy with an AISI 304  
stainless steel bowl.

Model “Meditronic-BL-S”

Model “Medifriger-BL-S” refrigerated, temperature range 0 °C to 30 °C.

### MODEL

| Part No.       | Max. Volume ml | Max. Number of tubes | Height / Width / Depth (exterior) cm | Power W | Weight Kg |
|----------------|----------------|----------------------|--------------------------------------|---------|-----------|
| <b>7001376</b> | 800            | 4 x 200 ml           | 38 46 52                             | 520     | 44        |

### MODEL

| Part No.       | Max. Volume ml | Max. Number of tubes | Height / Width / Depth (exterior) cm | Power W | Weight Kg |
|----------------|----------------|----------------------|--------------------------------------|---------|-----------|
| <b>7001377</b> | 800            | 4 x 200 ml           | 38 68 52                             | 1230    | 70        |

Note: The rotor being used limits the actual temperature in the chamber due to the speed and ambient temperature. Internal temperature indicated on the LCD display.

### ACCESSORIES

**Angle rotors with lid**, made of anodised hardened aluminium with identification system. All rotors are autoclavable.



7000741



7000742



7000743



7001449



7001448



7001447



7001446



7001445



7001444

| Part No. head | Rotor type | Max. volume | Tube capacity   | Ø x Length mm | MEDITRONIC BL-S |                  | MEDIFRIGER BL-S |                  |
|---------------|------------|-------------|-----------------|---------------|-----------------|------------------|-----------------|------------------|
|               |            |             |                 |               | Max. R.p.m      | Max. R.c.f. (xg) | Max. R.p.m      | Max. R.c.f. (xg) |
| 7000741       | Angle+lid  | 600 ml      | 6 x 100 ml      | 44 x 104      | 4500            | 3170             | 4500            | 3170             |
| 7000742       | Angle+lid  | 400 ml      | 8 x 50 ml       | 34 x 100      | 4600            | 3075             | 4600            | 3075             |
| 7000743       | Angle+lid  | 360 ml      | 24 x 15 ml      | 16.5 x 100    | 4800            | 3761             | 4800            | 3761             |
| 7001449       | Angle+lid  | 510 ml      | 6 x 85 ml       | 38 x 105      | 8000            | 6868             | 12000           | 15455            |
| 7001448       | Angle+lid  | 400 ml      | 8 x 50 ml       | 29 x 103      | 8000            | 7802             | 12000           | 15938            |
| 7001447       | Angle+lid  | 180 ml      | 6 x 30 ml       | 25 x 92       | 9000            | 7424             | 14000           | 17965            |
| 7001446       | Angle+lid  | 200 ml      | 20 x 10 ml      | 16 x 80       | 9000            | 8964             | 11000           | 13390            |
| 7001445       | Angle+lid  | 100 ml      | 10 x 10 ml      | 16 x 80       | 9000            | 7293             | 15000           | 20124            |
| 7001444       | Angle+lid  | 45 ml       | 30 x 1.5/2.2 ml | -             | 11000           | 12619            | 15000           | 23470            |

Note: All buckets and adapters come without tubes unless stated, see page 127 for tubes and accessories.

## ACCESSORIES

Swing out rotor with interchangeable sealed buckets and adapters, each with identification code. Autoclavable.



| Part No. head | Rotor type | Bucket open | Sealed bucket | Part No. adapter        | Total max. Volume (4 adapters) | Bucket/Adapter capacity | Ø x Length mm | Max. R.p.m. | Max. R.c.f. (xg) |
|---------------|------------|-------------|---------------|-------------------------|--------------------------------|-------------------------|---------------|-------------|------------------|
|               | Swing out  | 7000731     | 7000732       | Bottle 200 ml 5715202** | 800 ml                         | 1 x 200 ml              | 56.6 x 104    | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7000733                 | 400 ml                         | 1 x 100 ml              | 44 x 104      | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7000734                 | 200 ml                         | 1 x 50 ml               | 34 x 100      | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7000935                 | 200 ml                         | 1 x 50 ml Falcon        | 30 x 117      | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7001645                 | 240 ml                         | 2 x 30 ml               | 25 x 92       | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7000735                 | 200 ml                         | 2 x 25 ml               | 24 x 100      | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7000736                 | 420 ml                         | 7 x 15 ml and VAC*      | 16.5 x 100    | 5000        | 4137             |
| 7009079       | Swing out  | 7000731     | 7000732       | 7000934                 | 180 ml                         | 3 x 15 ml Falcon        | 16.5 x 120    | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7001646                 | -                              | 4 x 17 Ø x 110 mm       | -             | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7001647                 | 240 ml                         | 6 x 10 ml               | 17 x 110      | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7000737                 | 336 ml                         | 12 x 7 ml               | 12 x 100      | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7000738                 | 240 ml                         | 12 x 5 ml               | 12.5 x 75     | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7001648                 | 140 ml                         | 7 x 5 ml and VAC*       | 13 x 75       | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7000739                 | 144 ml                         | 12 x 3 ml               | 11 x 100      | 5000        | 4137             |
|               | Swing out  | 7000731     | 7000732       | 7000740                 | -                              | undrilled               | -             | 5000        | 4137             |
| 7000609       | Swing out  | -           | -             | -                       | -                              | 6 x 96 microtiter       | -             | 4200        | 2702             |

\*VAC: Blood tube with stopper.

\*\* Bucket part nos. 7000731 and 7000732 accommodate 1 x 200 ml polypropylene bottle with cap without the need of an adapter.

Note: All buckets and adapters come without tubes unless stated, see page 127 for tubes and accessories.





## Microprocessor controlled Centrifuge “Macrotronic-BL” and “Macrofriger-BL”



**Multi-capability. Capacity from 1.5/2.2 ml vials up to tubes of 500 ml and 500ml blood bags.**

**Maintenance free induction motor drive.**

**Control panel features** (see page 118).

External case made of DUR-AL alloy with an AISI 304 stainless steel bowl.



**Model “Macrotronic-BL”**



**Model “Macrofriger-BL”** refrigerated, temperature range 0 °C to 30 °C.

### MODEL

| Part No.       | Max. volume ml | Max. No. of bags | Height / Width / Depth (exterior) cm | Power W | Weight Kg |
|----------------|----------------|------------------|--------------------------------------|---------|-----------|
| <b>7001385</b> | 2000           | 4 x 500 ml       | 45 60 66                             | 720     | 76        |

### MODEL

| Part No.       | Max. volume ml | Max. No. of bags | Height / Width / Depth (exterior) cm | Power W | Weight Kg |
|----------------|----------------|------------------|--------------------------------------|---------|-----------|
| <b>7001386</b> | 2000           | 4 x 500 ml       | 97 60 66                             | 1230    | 156       |

Note: The rotor being used limits the actual temperature in the chamber due to the speed and ambient temperature. Internal temperature Indicated on the LCD display.

### ACCESSORIES

**Angle rotors with lid**, made of anodised hardened aluminium with identification system. All rotors are autoclavable.



7001650



7001651



7001652



7001653



7001654



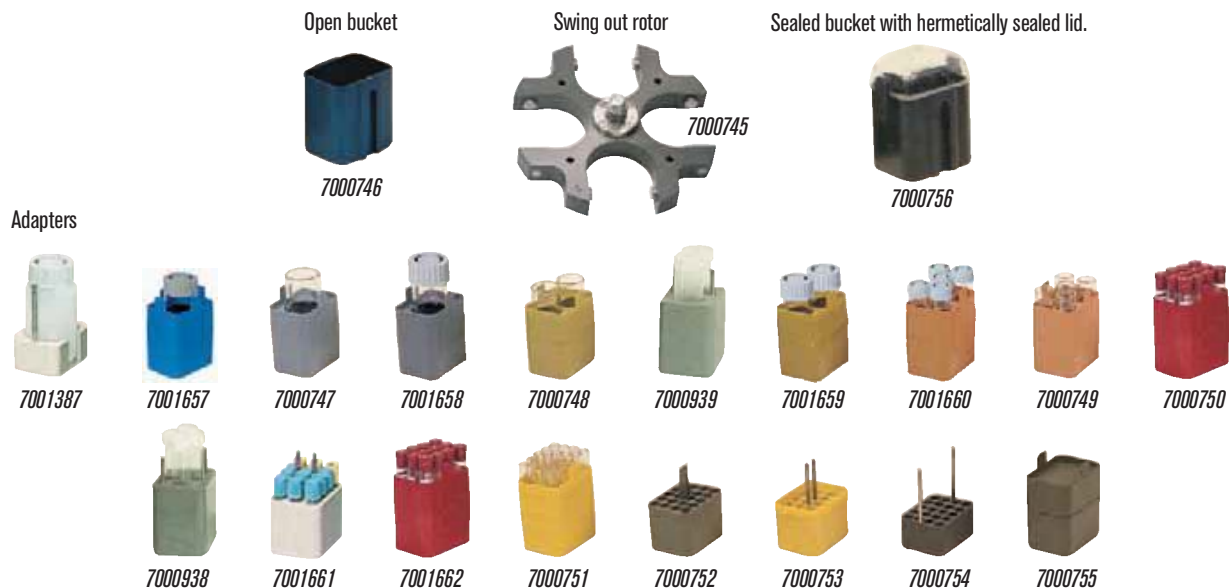
7000561



7000560

| Part No. head  | Rotor type | Max. volume | Tube capacity | Ø x Length mm | MACROTRONIC BL |                  | MACROFRIGER BL |                  |
|----------------|------------|-------------|---------------|---------------|----------------|------------------|----------------|------------------|
|                |            |             |               |               | Max. R.p.m     | Max. R.c.f. (xg) | Max. R.p.m     | Max. R.c.f. (xg) |
| <b>7000561</b> | Angle+lid  | 600 ml      | 12 x 50 ml    | 34 x 100      | 4530           | 3785             | 4530           | 3785             |
| <b>7000560</b> | Angle+lid  | 840 ml      | 56 x 15 ml    | 16.5 x 100    | 4030           | 3268             | 4030           | 3268             |
| <b>7001650</b> | Angle+lid  | 1500 ml     | 6 x 250 ml    | 62 x 122      | 8000           | 10373            | 9000           | 13129            |
| <b>7001651</b> | Angle+lid  | 510 ml      | 6 x 85 ml     | 38 x 105      | 10000          | 10731            | 12000          | 15452            |
| <b>7001652</b> | Angle+lid  | 400 ml      | 8 x 50 ml     | 29 x 103      | 10000          | 11066            | 12000          | 15935            |
| <b>7001653</b> | Angle+lid  | 360 ml      | 12 x 30 ml    | 25 x 92       | 10000          | 12296            | 12000          | 17706            |
| <b>7001654</b> | Angle+lid  | 200 ml      | 20 x 10 ml    | 16 x 80       | 10000          | 11066            | 12000          | 15935            |

Swing out rotor with interchangeable sealed buckets and adapters, each with identification code. Autoclavable.



| Part No. head  | Rotor type     | Bucket open    | Sealed bucket  | Part No. adapter | Total max. Volume (4 adapters) | Bucket/Adapter capacity | Ø x Length mm | Max. R.p.m. | Max. R.c.f. (xg) |
|----------------|----------------|----------------|----------------|------------------|--------------------------------|-------------------------|---------------|-------------|------------------|
| <b>7000745</b> | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7001387</b>   | 800 ml                         | 1 x 200 ml              | 56.6 x 104    | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7001657</b>   | 500 ml                         | 1 x 125 ml              | 51 x 115      | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000747</b>   | 400 ml                         | 1 x 100 ml              | 44 x 104      | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7001658</b>   | 320 ml                         | 1 x 80 / 85 ml          | 38 x 105      | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000748</b>   | 400 ml                         | 2 x 50 ml               | 34 x 100      | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000939</b>   | 400 ml                         | 2 x 50 ml Falcon        | 30 x 117      | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7001659</b>   | 400 ml                         | 2 x 50 ml               | 29 x 103      | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7001660</b>   | 600 ml                         | 5 x 30 ml               | 25 x 92       | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000749</b>   | 500 ml                         | 5 x 25 ml               | 24 x 100      | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000750</b>   | 720 ml                         | 12 x 15 ml              | 16.5 x 100    | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000750</b>   | 720 ml                         | 12 VAC*                 | 16.5 x 100    | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000938</b>   | 240 ml                         | 4 x 15 ml Falcon        | 16.5 x 120    | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7001661</b>   | -                              | 12 VAC*                 | 13 x 75       | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7001662</b>   | 480 ml                         | 12 x 10 ml              | 16.8 x 85     | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000751</b>   | 560 ml                         | 20 x 7 ml               | 12 x 100      | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000752</b>   | 400 ml                         | 20 x 5 ml               | 12.5 x 75     | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000753</b>   | 240 ml                         | 20 x 3 ml               | 11 x 100      | 5000        | 4615             |
|                | Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000754</b>   | 120 ml                         | 20 de 1.5 / 2.2 ml      | -             | 5000        | 4615             |
| Swing out      | <b>7000746</b> | <b>7000756</b> | <b>7000755</b> | undrilled        | -                              | -                       | 5000          | 4615        |                  |

\*VAC: Blood tube with stopper.

Note: All buckets and adapters come without tubes unless stated, see page 127 for tubes and accessories.

## ACCESSORIES

Swing out rotor



7001450

Open bucket  
1 blood bag



7001451

Adapters



7001395



7001655



7001396



7001397



7001398



7001399



7001400



7001401



7001656

Bucket for  
3 x 96 well plates

| Part No. head  | Rotor type | Bucket open    | Part No. adapter | Total max. Volume (4 adapters) | Bucket/Adapter capacity  | Ø x Length mm | Max. R.p.m. | Max. R.c.f. (xg) |
|----------------|------------|----------------|------------------|--------------------------------|--------------------------|---------------|-------------|------------------|
| <b>7001450</b> | swing out  | <b>7001451</b> | <b>7001395</b>   | 2000 ml                        | 1 x 500 ml               | 70 x 165      | 3200        | 2358             |
|                | swing out  | <b>7001451</b> | <b>7001655</b>   | 1000 ml                        | 1 x 250 ml               | 62 x 122      | 3200        | 2358             |
|                | swing out  | <b>7001451</b> | <b>7001396</b>   | 800 ml                         | 1 x 200 ml               | 56.6 x 104    | 3200        | 2358             |
|                | swing out  | <b>7001451</b> | <b>7001397</b>   | 800 ml                         | 2 x 100 ml               | 44 x 104      | 3200        | 2358             |
|                | swing out  | <b>7001451</b> | <b>7001398</b>   | 800 ml                         | 4 x 50 ml                | 34 x 100      | 3200        | 2358             |
|                | swing out  | <b>7001451</b> | <b>7001399</b>   | 900 ml                         | 9 x 25 ml                | 24 x 100      | 3200        | 2358             |
|                | swing out  | <b>7001451</b> | <b>7001400</b>   | 1020 ml                        | 17 x 15 ml               | 16.5 x 100    | 3200        | 2358             |
|                | swing out  | <b>7001451</b> | <b>7001401</b>   | 672 ml                         | 24 x 7 ml                | 12 x 100      | 3200        | 2358             |
|                | swing out  | <b>7001656</b> | -                | -                              | 3 plates x 96 microtiter | -             | 3200        | 2117             |

Swing out rotor



7000552

Buckets



7000763



7001075



7000764



200 Height x 36 mm Ø  
for buckets Part No. 7001075

ASTM buckets  
for testing  
sediments in oil and  
petroleum



158 Height x 58 mm Ø max.  
for buckets Part No. 7000764

| Part No. head  | Rotor type | Open Bucket    | Total max. Volume (4 adapters) | Bucket/Adapter capacity | Ø x Length mm | Max. R.p.m. | Max. R.c.f. (xg) |
|----------------|------------|----------------|--------------------------------|-------------------------|---------------|-------------|------------------|
| <b>7000552</b> | swing out  | <b>7000763</b> | 1000 ml                        | 1 x 250 ml              | 56 x 147      | 3520        | 3567             |
|                | swing out  | <b>7001075</b> | 4 x 1 ASTM                     | 1 x ASTM cylindrical    | 36 x 200      | 3720        | 3567             |
|                | swing out  | <b>7000764</b> | 4 x 1 ASTM                     | 1 x ASTM pear shaped    | 58 x 158      | 3720        | 3567             |

Note: All buckets and adapters come without tubes unless stated, see page 127 for tubes and accessories.



## Refrigerated high capacity microprocessor controlled centrifuge suitable for tubes, flasks and blood bags "Macrofriger-BL-Blood"

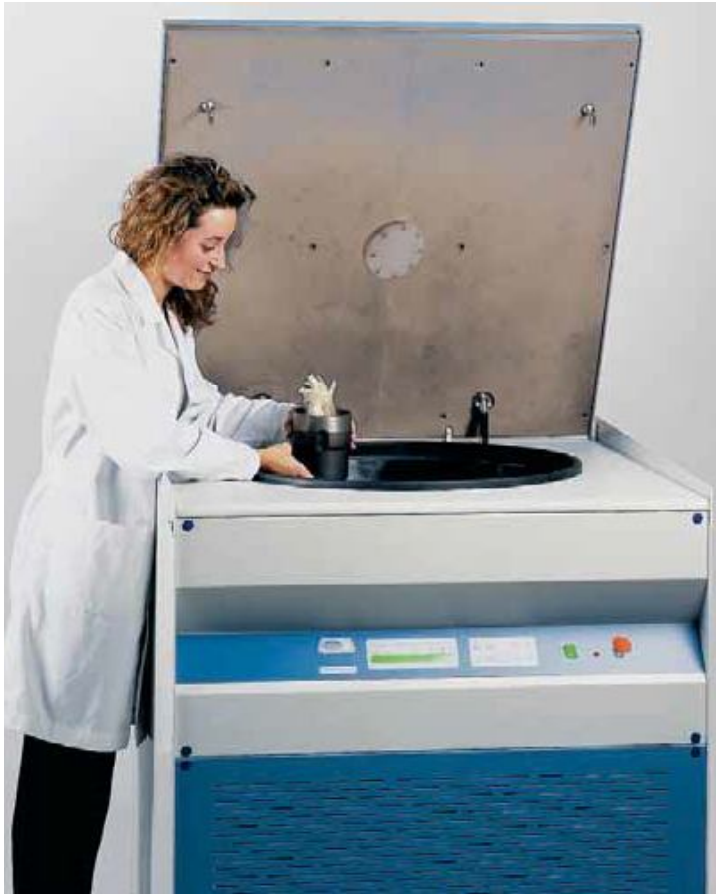
CONTROLLABLE TEMPERATURES FROM 4 TO 40 °C.

CAPACITY FOR FLASKS UP TO 1000 ml AND ESPECIALLY FOR TRIPLE AND QUAD BLOOD BAGS FROM 500-800 ml.

MAXIMUM CAPACITY 12 BAGS.

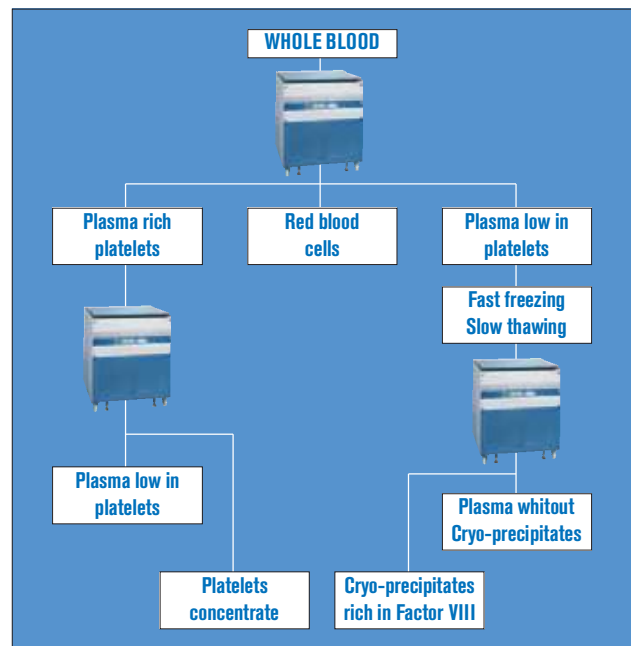


*Original J.P. Selecta design. With maintenance free induction drive motor*



### APPLICATIONS

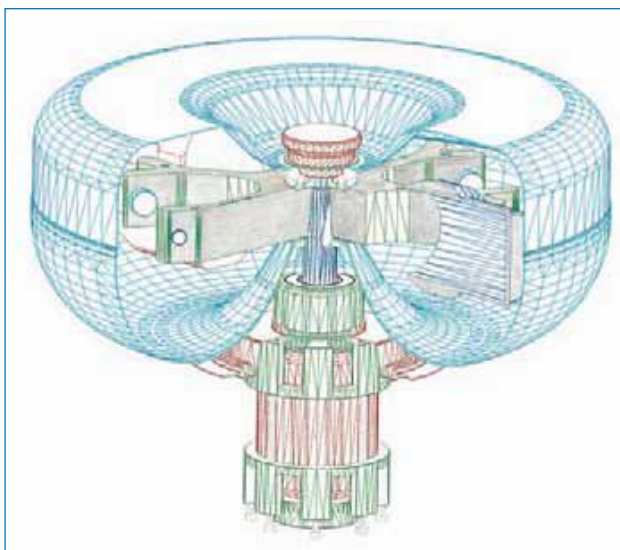
Specially designed for blood bank applications, where repeatability, precision and reliability of: speed, time, temperature, acceleration and deceleration are significant factors in obtaining perfect separations of the distinct blood fractions.



Serology investigations.

Molecular biology.

Serum separation, pharmaceutical applications.



Cross-section of the motor, rotor drive mechanism, showing the windshield protector with lid that reduces the air resistance and maintains a regulated temperature.

### FEATURES

Case: internal structure of tubular steel with lateral Dur-al supports.

Internal Stainless steel bowl .

Aluminium windshield protector.

Safety shield: 8 mm thick steel.

Swing-out rotor, buckets and adapters made of high-density material, engraved identification unalterable.

Suspended motor with silent-block and shock absorbers that guarantee smooth, quiet operation without vibrations.

Drive force: equipped with an induction drive maintenance free and highly efficient pollution free motor.

Semi-hermetically sealed, compressor pollution free with no hydrocarbons or fluoro-carbons.

Mounted on an anti vibration adjustable rubber feet.

Microprocessor digital control of all functions: speed, acceleration, brake, R.C.F., temperature, time, 20 program memory, rotor identification, operation fault alarm.

**SAFETY:**

**SAFETY, CONFORMS TO UNE-EN 61010-2-020.  
PROTECTIVE INTERNAL CYLINDER BETWEEN THE CASE AND BOWL.  
THE LID CANNOT BE OPENED WHILE THE ROTOR IS SPINNING.  
THE MOTOR CANNOT SPIN WHILE THE LID IS OPEN.**

**IMBALANCE DETECTOR, AUTOMATICALLY STOPS IF THERE IS ANY IMBALANCE.  
DOUBLE ELECTROMAGNETIC LID LOCK.  
IF THERE IS A POWER FAILURE, A FAIL SAFE SYSTEM CAN BE USED TO  
OPEN THE LID.  
EMERGENCY STOP BUTTON.**

**CONTROL PANEL INFORMATION**

LCD display of 2 x 20 characters that permanently show the running conditions of the machine in the form of machine/operator communication.

Message and display:

- STATUS** Machine state,
- STOP** Not running.
- START** Running.
- STANDBY** Waiting for command.
- STORED** Stores the last set of data input into the machine.
- CONFIG** Change the parameter of the machine.
- PROGRAM** Select a pre-stored programme.
- RAMP** The machine is accelerating to its set value.
- SET SPEED** The machine is running at the set speed.
- BRAKE** The machine has finished its run and is now braking.
- ALARM** There is an error:
  - POWER FAIL:** The power was disconnected while in operation.
  - ROTOR FAIL:** The rotor was not identified.
  - DOOR OPEN:** The lid has not been closed properly.
  - UNBALANCED:** The buckets are not well balanced or the tubes are not evenly distributed
  - EEPROM FAIL:** The data or parts of the data have not been programmed.
  - CONTROL FAIL:** The speed detector has failed to read the machine speed.
  - OVER TEMP:** The cooling system is in excess of the set temperature
  - PROGRAM TIME:** The length of time for the run has not been inserted.



Image showing the rotor and double buckets for quad and triple blood bags of 500 and 800 ml.

**1** R.C.F.  
**2** Acceleration ramp.  
**3** Deceleration ramp.  
**4** Speed.  
**5** Time.  
**6** Temperature.  
**7** Memory.

**8** Configure.  
**9** Cursor.  
**10** Increase decrease value.  
**11** Validate / Confirm settings.  
**12** Open lid.  
**13** Program / Stored.  
**14** Stop.

**15** Run / Start.  
**16** LCD display.  
**17** Mains switch.  
**18** Emergency stop.  
**19** Red Light indicator showing emergency stop.



### TECHNICAL SPECIFICATION

|                        |                         |
|------------------------|-------------------------|
| Maximum volume:        | 9600 ml                 |
| Maximum bucket volume: | 1600 ml                 |
| Speed:                 | from 300 to 4070 r.p.m. |
| Accuracy:              | ± 5 r.p.m.              |
| Resolution r.p.m.:     | 10 r.p.m.               |
| R.C.F.:                | from 29 to 5370         |
| Imbalance:             | ± 5 g                   |
| Accuracy:              | 4 g                     |
| Temperature range:     | from 0 °C to 40 °C      |
| Temperature stability: | ±4 °C                   |
| Resolution:            | 1 °C                    |
| Temperature range:     | 59 min. 59 sec.         |
| Centrifuge radius:     | 290 mm                  |
| Acceleration profile:  | 5                       |
| Brake profile:         | 9 linear 6 quadratic    |
| Voltage:               | 230/400 three phase.    |
| Power:                 | 4500 VA                 |

### MODEL

| Part No.       | Max. Volume ml | Max. Capacity      | Height / Width / Depth (exterior) cm | Power W     | Weight Kg  |
|----------------|----------------|--------------------|--------------------------------------|-------------|------------|
| <b>7001390</b> | <b>9600</b>    | <b>6 x 1600 ml</b> | <b>105 90 100</b>                    | <b>5500</b> | <b>420</b> |

### ACCESSORIES

Swing out rotor 6 place, treated steel.



Part No. **7001391**

Buckets and adapters with engraved identification. Autoclavable.



Buckets with two compartments for blood bags of 500 to 800 ml. For triple and quad bags  
Part No. **7001392**

Single bucket. Capacity: 1 blood bag of 500 to 800 ml or 1 flask of 1 litre or with tube adapters.  
Part No. **7001393**



Adapters for single bucket Part No. 7001393.

Bottle



1001394



7001395



7001396



7001397



7001398



7001399



7001400



7001401

| Double Bucket  | Single Bucket           | Part No. adapter              | Total max. Volume (6 adapters) | Capacity: bags, tubes by adapter | Ø x Length mm | R.p.m. Min./Max. | R.c.f. (xg) Min./Max. |
|----------------|-------------------------|-------------------------------|--------------------------------|----------------------------------|---------------|------------------|-----------------------|
| <b>7001392</b> | -                       | -                             | 9600 ml                        | 2 bags 500 or 800 ml             | -             | 300/4070         | 29/5370               |
| -              | <b>7001393</b>          | Bottle 1000 ml <b>1001394</b> | 6000 ml                        | 1 bottle 1000 ml or 1 bag        | 98 x 175      | 300/4070         | 29/5370               |
| -              | <b>7001393</b>          | <b>7001395</b>                | 3000 ml                        | 1 bottle 500 ml                  | 70 x 165      | 300/4070         | 29/5370               |
| -              | <b>Capacity</b>         | <b>7001396</b>                | 1200 ml                        | 1 bottle 200 ml                  | 56.6 x 104    | 300/4070         | 29/5370               |
| -              | <b>without adapter:</b> | <b>7001397</b>                | 1200 ml                        | 2 tubes 100 ml                   | 44 x 104      | 300/4070         | 29/5370               |
| -              | <b>1 bag of</b>         | <b>7001398</b>                | 1200 ml                        | 4 tubes 50 ml                    | 34 x 100      | 300/4070         | 29/5370               |
| -              | <b>500 to 800 ml</b>    | <b>7001399</b>                | 1350 ml                        | 9 tubes 25 ml                    | 24 x 100      | 300/4070         | 29/5370               |
| -              | <b>or 1x bottle</b>     | <b>7001400</b>                | 1530 ml                        | 17 tubes 15 ml                   | 16.5 x 100    | 300/4070         | 29/5370               |
| -              | <b>1000 ml</b>          | <b>7001401</b>                | 1008 ml                        | 24 tubes 7 ml                    | 12 x 100      | 300/4070         | 29/5370               |

Note: All buckets and adapters come without tubes unless stated, see page 127 for tubes and accessories. Other adapters can be manufactured to the customers specification.

**COMMON ACCESSORIES.** Tubes of glass and plastic.

Plastic tubes and flasks with screw cap lids.

| Volume ml | Dimensions mm | Type    | Part No. | Material      | Max. (xg) range | Temperature °C |
|-----------|---------------|---------|----------|---------------|-----------------|----------------|
| 10        | 16 Ø x 80     | Comecta | 5752399  | Polypropylene | 50000           | 4 ... 121      |
|           |               | Herolab | 5752421  | Polypropylene | 57000           | -180 ... 145   |
|           |               | Herolab | 5752401  | Polycarbonate | 57000           | -150 ... 121   |
| 30        | 25 Ø x 92     | Comecta | 5752398  | Polypropylene | 50000           | 4 ... 121      |
|           |               | Herolab | 5752955  | Polypropylene | 64000           | -180 ... 145   |
|           |               | Herolab | 5752951  | Polycarbonate | 64000           | -150 ... 121   |
| 50        | 29 Ø x 103    | Comecta | 5752397  | Polypropylene | 50000           | 4 ... 121      |
|           |               | Herolab | 5753205  | Polypropylene | 69000           | -180 ... 145   |
|           |               | Herolab | 5753201  | Polycarbonate | 69000           | -150 ... 121   |
| 80        | 38 Ø x 105    | Comecta | 5752396  | Polypropylene | 40000           | 4 ... 121      |
|           |               | Herolab | 5753243  | Polypropylene | 50000           | -180 ... 145   |
|           |               | Herolab | 5753241  | Polycarbonate | 50000           | -150 ... 121   |
| 200       | 56.6 Ø x 104  | Herolab | 5715202  | Polypropylene | 10000           | -180 ... 145   |
|           |               | Herolab | 5715203  | Polycarbonate | 10000           | -150 ... 121   |
|           |               | Comecta | 5752395  | Polypropylene | 13200           | 4 ... 121      |
| 250       | 62 Ø x 122    | Herolab | 5753411  | Polypropylene | 33000           | -180 ... 145   |
|           |               | Herolab | 5753401  | Polycarbonate | 33000           | -150 ... 121   |
|           |               | Herolab | 5753512  | Polypropylene | 14000           | -180 ... 145   |
| 500       | 70 Ø x 165    | Herolab | 5753501  | Polycarbonate | 14000           | -150 ... 121   |
|           |               | Herolab | 5752571  | Polypropylene | 4936            | -180 ... 145   |
| 1000      | 98 Ø x 175    | Herolab | 5752561  | Polycarbonate | 4936            | -150 ... 121   |



Type HEROLAB polycarbonate tubes transparent Polypropylene tubes translucent. Autoclavable.

Type COMECTA polypropylene translucent. Autoclavable.



**Glass Tubes.**

| Volume             | Dimensions mm | Part No. |
|--------------------|---------------|----------|
| Micro-haematocrit* | 1.4 Ø x 75    | 7000910  |
| 7 ml               | 12 Ø x 100    | 7000773  |
| 15 ml              | 16.5 Ø x 100  | 7000772  |
| 25 ml              | 24 Ø x 100    | 7000771  |
| 50 ml              | 34 Ø x 100    | 7000770  |
| 100 ml             | 44 Ø x 104    | 7000769  |
| 250 ml             | 56 Ø x 147    | 7000768  |
| ASTM               | Conical       | 7001088  |
| ASTM               | Pear shape    | 7000767  |

\*Box of 100 tubes.

**SPARE**

Buckets for angle rotors.

| Suitable for model     | Part No. 7001403<br>15 ml plastic | Part No. 7001500<br>15 ml metal | Part No. 7005000<br>50 ml metal | Part No. 7001000<br>100 ml metal |
|------------------------|-----------------------------------|---------------------------------|---------------------------------|----------------------------------|
| <b>Cencom II</b>       | Yes                               |                                 |                                 |                                  |
| Part No. 7002240       |                                   |                                 |                                 |                                  |
| <b>Centro-8</b>        |                                   | Yes                             |                                 |                                  |
| Part No. 7002356       |                                   |                                 |                                 |                                  |
| <b>Centromix II-BL</b> |                                   | Rotor                           |                                 |                                  |
| Part No. 7002555       |                                   | 7000550                         |                                 |                                  |
| <b>Meditronic BL-S</b> |                                   | Rotor                           | Rotor                           | Rotor                            |
| Part No. 7001376       |                                   | 7000743                         | 7000742                         | 7000741                          |
| <b>Medifriger BL-S</b> |                                   | Rotor                           | Rotor                           | Rotor                            |
| Part No. 7001377       |                                   | 7000743                         | 7000742                         | 7000741                          |
| <b>Macrotronic BL</b>  |                                   | Rotor                           | Rotor                           |                                  |
| Part No. 7001385       |                                   | 7000560                         | 7000561                         |                                  |
| <b>Macrofriger BL</b>  |                                   | Rotor                           | Rotor                           |                                  |
| Part No. 7001386       |                                   | 7000560                         | 7000561                         |                                  |

ALL THE ROTORS, BUCKETS AND ADAPTERS COME WITH LASER ETCHED IDENTIFICATION.





## Centrifuge kit for separating plasma rich platelets from whole blood

MADE UP OF:

This model can be marked as medical device



### Centrifuge "CENTRO-4-BL"

Swing-out rotor (not an angle rotor), that performs the correct separation of the distinct blood fractions.

Capacity: 4 tubes, 75 x 13 mm VAC tubes.

Electronic control with digital display. Maximum speed of 5000 r.p.m. Maximum time 15 minutes or continuous operation. Fixed acceleration and deceleration rate.

Strong moulded external case of ABS plastic, extremely light weight, (6 Kg). Part No. **7002560**



### Metallic thermostat dry block "BIO-BATH"

Small size with a fixed temperature of 37 °C with check thermometer, 8 tube positions for 75x13 VAC tubes.

Note: Accelerates the extraction of plasma for faster results and waiting time for the patient.

#### MODEL

| Part No.       | Height / Width / Depth (exterior) cm | Stability °C | Power W | Weight Kg |
|----------------|--------------------------------------|--------------|---------|-----------|
| <b>7001561</b> | 8.8 9.6 7                            | 0.5          | 8       | 0.5       |



Part No. **5904013** Pipette fixed volume "Dispen-Fix" 50 µl

Part No. **5904014** Pipette fixed volume "Dispen-Fix" 100 µl

Part No. **5904017** Pipette fixed volume "Dispen-Fix" 500 µl

Part No. **1001562** Support rack made from stainless steel for 3 pipettes

Part No. **1001563** Tube rack made from stainless steel for 24 tubes (6x4) of 75x13 mm VAC tubes.

Part No. **1001574** Flask containing 10% calcium chloride, quantity 30 units.

Part No. **1001568** Strap bracelets of pure silicon "Esmarch". 3 units.



1 Part No. **1001558** Pipette tips, sterile with filters packed as individual tips, size 5-200 µl, and quantity 250 units.\*

1 Part No. **1001559** Pipette tips, sterile with filters packed as individual tips, size 100-1000 µl, and quantity 250 units.\*

2 Part No. **1001565** Tubes VE Sodium citrate 75x13mm VAC tubes, blue 4 ml sterile tubes. Box of 100 units.

2 Part No. **1001566** Tubes 75x13 mm sterile, 100 units in bags of 4 units.

3 Part No. **1001567** Micro extractor for the extraction of blood by vacuum. Box of 50 units. Complete with two adapters.

**Note:** \* All above components are individually sterilized.  
If aseptic conditions are required a laminar flow cabinet should be used for sample manipulation.



Part No. **5900499** Timer alarm bench top "RELAVIS" 0-60 minutes.



J.P. SELECTA has designed an effective small centrifuge and thermostat dry block that is suitable for easy transportation for consultants, emergency services, reception labs and clinical trials etc. To maintain the complete kit, a robust metallic case with moulded interior is provided. The complete kit comprises of:

1 centrifuge "Centro-4"; 1 metallic thermostat dry block "Bio-Bath", mains cables, 3 fixed volume pipettes "Dispen-Fix"; 1 rack 24 tubes, 1 timer "Relavis", and 2 boxes for consumables, tubes, tips, micropercussors, strips and flasks. In the lid are clip positions for easy access for the pipette rack and 3 pipettes. Total weight with all items: 11.5Kg.

Part No. **1001570** Metallic case with moulded compartments Armaflex, two perspex boxes for tubes and consumable Clips for pipette support.