

Centrifuges & Vortexes

V-32, Multi-vortex

Multi-vortex **V-32** is intended for intensive stirring of bacterial and yeast cell, washing from the culture medium and extraction of metabolites and enzymes from cells and cell cultures.

Vortex is applicable for:

- performing various DNA operations- deproteinisation of DNA/protein complexes;
- purification of low-molecular DNA/RNA fragments in PCR-diagnostic.

Universal Vortex with various tips. Device is supplied with a 32- socket universal platform for Eppendorf type tubes up to 1,5 ml (1.5/0.5/0.2 ml- 16/8/8 sockets) and a tip for mixing single tube up to 15 ml.

Multi-Vortex has two operation modes:

- 1) continuous operation;
- 2) impulse operation.

Specifications:

- Speed range 500 - 3000 RPM
- Acceleration time 3 s
- Orbit 2 mm
- Overall dimensions 120x180x100 mm
- Weight, not more 1.5 kg
- Power supply External power supply DC 12V, 500 mA

Catalogue number

V-32 with two platforms BS-010207-AAG

V-32



PL-1

An optional 6-socket platform for 10 ml tubes (max. tube diameter 15 mm) can be supplied on request

FVL-2400N, Mini-centrifuge/vortex Combispin

Mini-centrifuge/vortex Combispin **FVL-2400N** is specially designed for genetic engineering research (for PCR-diagnostics experiments). It can be used in microbiological, biochemical, clinical laboratories and industrial biotechnological laboratories. Combi-Spin ensures possibility for simultaneous mixing and separation of samples, using centrifuge and mixing modules, located on the common spin-module.

It is provided with protection mechanism that stops the rotor motion when the lid is opened.

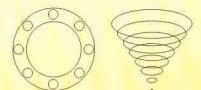
Specifications:

- Continuous and impulse operation modes
 - Rotation speed (constant) 2400 RPM
 - Autostop when lid is open
 - Max RCF:
 - from the middle of the test-tube 300 x g
 - from the bottom of the test-tube 700 x g
 - Overall dimensions 190x235x125 mm
 - Weight, not more 2.1 kg
 - Power supply 220/240 V, 50/60 Hz, 30 W
 - Rotors **R-1.5** and **R-0.5/0.2** are supplied with CombiSpin
 - R-1.5** - rotor for 12 x 1.5 ml microtest tubes,
 - R-0.5/0.2** - rotor for 12 x 0.5 and 12 x 0.2 ml microtest tubes.
- Other rotor types are available including rotor for strips (see page 15).

Catalogue number

FVL-2400N with R-1.5 & R-0.5/0.2	BS-010202-AAA	R-2/0.5/0.2	BS-010205-DK
R-1.5	BS-010205-AK	SR-16	BS-010202-AK
R-0.5/0.2	BS-010205-BK	R-2/0.5	BS-010205-CK

FVL-2400N



V-1 plus, Personal Vortex

Ideal instrument for gentle mixing to vigorous resuspension of cells and biological and chemical liquid components.

Vortex has two modes:

- 1) continuous operation;
- 2) impulse operation (activated by pressing the cap with the tube bottom).

Specifications:

- Speed range 250 - 3000 RPM
- Mixing module for tubes from 1.5 to 50 ml
- Maximum mixing volume 30 ml
- Eccentric mixing principle
- Orbit diameter 4 mm
- Overall dimensions 90x150x80 mm
- Weight, not more 1.1 kg
- Power supply External power supply DC 12V, 500 mA

Catalogue number

V-1

BS-010203-AAG

V-1 plus



FV-2400, Mini-centrifuge/vortex Microspin

Mini-centrifuge/vortex Microspin **FV-2400** is specially designed for genetic engineering research (for PCR-diagnostics experiments).

MicroSpin ensures possibility for the simultaneous mixing and separation of the samples, using centrifuge and mixing modules, located on the common spin-module. **FV-2400** is an "open type" centrifuge (without lid), that increases the speed of centrifugation and resuspension operations.

Specifications:

- Available in two colours: **blue** (standard) and **white** (on request)
 - Rotation speed (constant) 2400 RPM
 - Max RCF:
 - From the middle of the test-tube 300 x g
 - From the bottom of the test-tube 700 x g
 - Continuous and impulse operation modes
 - Overall dimensions 120x170x120 mm
 - Weight, not more 1.7 kg
 - Power supply 220/240 V, 50/60 Hz, 30 W
 - Rotors **R-1.5** and **R-0.5/0.2** are supplied with
 - R-1.5** - Rotor for 12 x 1.5 ml microtest tubes,
 - R-0.5/0.2** - Rotor for 12 x 0.5 and 12 x 0.2 ml microtest tubes.
- Other rotor types are available including rotor for strips.

Catalogue number

FV-2400 blue R-1.5 & R-0.5/0.2	BS-010201-AAA	R-0.5/0.2	BS-010205-BK
FV-2400 white R-1.5 & R-0.5/0.2	BS-010201-ABA	R-2/0.5	BS-010205-CK
R-1.5	BS-010205-AK	R-2/0.5/0.2	BS-010205-DK
		SR-16	BS-010202-AK

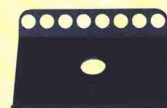
FV-2400



FV-2400



SR-16



Rotors for FVL-2400N, FV-2400

Standard (supplied with the product):

- **R-1.5** rotor for 12 x 1.5 ml microtest tubes
- **R-0.5/0.2** rotor for 12 x 0.5 and 12 x 0.2 ml microtest tubes

Optional:

- **R-2/0.5** rotor for 8 x 2.0 ml + 8 x 0.5 ml microtest tubes
- **R-2/0.5/0.2** rotor for 6x2,0 ml + 6x0.5 ml + 6x0.2 ml microtest tubes
- **SR-16** rotor for 2 x 8-section 0,2 ml microtube strips

R-1.5



R-0.5/0.2



R-2/0.5



R-2/0.5/0.2



Centrifuges & Vortexes

MSC-3000/MSC-6000, Centrifuge/Vortex Multi-Spin

Centrifuge/vortex Multi-Spin is a product of many year evolution of **spin-mix-spin technology** that is intended for collecting microvolumes of reagents on the microtube bottom (first centrifugation spin), following mixing (mix) and collecting the reagents again from the walls and cover of the microtube (second spin). We named this repetitive algorithm of operation that is aimed at reducing the mistakes during sample preparation in PCR analysis a "sms-algorithm".

- Multi-Spin is a fully automatic device for reproducing sms-algorithm for 12 tubes at one time, that allows saving time considerably.
- A must-have instrument for PCR-analysis.
- Multi Spin is four devices combined in one:
 1. Centrifuge* (regulated time and rotation speed);
 2. Vortex (3 mixing modes - soft, medium, hard; regulated time)
 3. Centrifuge/vortex;
 4. SMS-cycler for realization of the sms-algorithm.

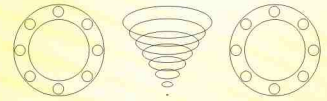
Specifications:

- | | | |
|--|--|--|
| • Spin regulation | MSC-3000
1000 - 3500 RPM
(increment 100 RPM) | MSC-6000
2000 - 6000 RPM
(increment 500 RPM) |
| • Spin timer | 1 s - 99 min | 1 s - 30 min |
| • Mixing strength | soft, medium, hard | |
| • Mixing time | 0 - 20 s (increment 1 s) | |
| • SMS-cycle regulation | 1 - 999 cycles | |
| • Two rotors included: | | |
| - RC-1.5 rotor for 12 x 1.5 ml microtubes | | |
| - RC-0.5/0.2 rotor for 12 x 0.5 ml + 12 x 0.2 ml microtubes | | |
| • Safety: | MSC-3000 - autostop at open lid,
MSC-6000 - lid lock, | |
| • Overall dimensions | 190x235x125 mm | |
| • Weight, not more | 2.5 kg | |
| • Power supply for MSC-3000 | External power supply: AC 12V, 1 A | |
| for MSC-6000 | External power supply: AC 24V, 1 A | |

Catalogue number

MSC-3000 with RC-1.5 & RC-0.5/0.2	BS-010205-AAN	R-2/0.5	BS-010205-CK
MSC-6000 with RC-1.5 & RC-0.5/0.2	BS-010211-AAL	R-2/0.5/0.2	BS-010205-DK
RC-0.5/0.2	BS-010211-BK	SR-16	BS-010202-AK
RC-1.5	BS-010211-AK		

MSC-3000



MSC-6000



Rotors for MSC-3000 & MSC-6000

Standard:

- **RC-1.5** rotor for 12 x 1.5 ml microtest tubes
- **RC-0.5/0.2** rotor for 12 x 0.5 and 12 x 0.2 ml microtest tubes

Optional:

- **R-2/0.5** rotor for 8 x 2.0 ml + 8 x 0.5 ml microtest tubes
- **R-2/0.5/0.2** rotor for 6x2,0 ml + 6x0.5 ml + 6x0.2 ml microtest tubes
- **SR-16** rotor for 2 x 8-section 0,2 ml microtube strips

* Max RCF:

MSC-3000

- from the middle of the test-tube (650 x g)
- from the bottom of the test-tube (800 x g)

MSC-6000

- from the middle of the test-tube (2040 x g)
- from the bottom of the test-tube (2350 x g)

New!

SR-16



R-2/0.5/0.2



RC-1.5



RC-0.5/0.2



R-2/0.5



LMC-3000, Laboratory Medical Centrifuge

LMC-3000 is a modern low-speed benchtop centrifuge. **LMC-3000** is designed for operation with 96-well microtitre plates and centrifuge tubes up to 50 ml. It is widely used equipment in biomedical profile laboratories applicable in biological liquid (blood, urina) and other bioorganic substances analysis. Convenient microtitre plate rotor design allows conducting separation of different component microquantities when conducting immunoenzyme analysis.

Features:

- Easy set up of centrifugation parameters (time and speed) and simultaneous display of the set and actual parameter values
- Safety: metal protective housing and metal lid, automatic imbalance switch-off, lid lock when centrifuge is running provide safe operation at all speeds
- Low noise level
- Soft run-up and run-down of the rotation
- Wide choice of accessory rotors

Specifications:

- Regulated speed for centrifuge tubes 1000 - 3000RPM (increment 100 RPM)
- Regulated speed for microtitre plates 1000 - 2000RPM (increment 100 RPM)
- Chamber diameter 335 mm
- Centrifugation time 1 - 30 min (increment 1 min)
- Display LCD
- Overall dimensions 470x400x235 mm
- Weight, not more 13.5 kg
- Power supply 230 V, 50/60 Hz, 130 W

Catalogue number

LMC-3000	BS-010208-AAA	R-6	BS-010208-DK
		R-2	BS-010208-AK
		R-12/10	BS-010208-BK
		R-12/15	BS-010208-EK





LMC-3000



LMC-3000



Specifications

Rotors	 R-6	 R-12/15	 R-12/10	 R-2
Type of test-tubes or microtest plates. Manufacturer	Centrifuge tube with cap, conical bottom. <i>Falcon, Greiner, Sarstead, Corning, or another</i>	Centrifuge tube with cap, conical bottom. <i>Falcon, Greiner, Sarstead.</i>	Centrifuge tube without cap, round bottom. <i>Nunc, Greiner.</i>	Standard 96-well microtiter plates. <i>Nunc, Greiner, Sarstead, Corning.</i>
Tubes dimensions, ø x length (max.)	29 x 115 mm	17 x 120 mm	16 x 105 mm	(WxDxH) 128 x 85.6 x 45 mm
Number of places	6	12	12	2
Tube capacity (ml)	50	15	10-15	
Timer (min)	0-30	0-30	0-30	0-30
Increment (min)	1	1	1	1
Speed range (RPM)	0-3000	0-3000	0-3000	0-2000
Increment (RPM)	100	100	100	100
RCF from the middle/bottom of the test-tube, till	1100 x g / 1700 x g	1150 x g / 1700 x g	1200 x g / 1700 x g	560 x g