

# Neofuge 15/15R

Laboratory Centrifuge

Heal Force



#### The ideal centrifuge for:

- Small medical laboratories
- Biochemistry and molecular biological research
- Routine analysis in industrial laboratories

# Performance you can rely on

#### Introduction

Heal Force Neofuge15 and its refrigerated counterpart, the Neofuge 15R offer the functionality of three centrifuges: high-capacity, general-purpose centrifuge for cell harvesting; a high-speed centrifuge for separating cell lysates; and a microcentrifuge for DNA precipitations. They are widely used in routine laboratories research in the fields of bioscience, medicine and industry.

#### Features

- Spin up to 16,000rpm or 20,800×g
- Max. capacity of 400ml
- Induction drive without carbon brushes
- Powerful motors for short acceleration and braking times
- Broad range of adaptors and modular accessories

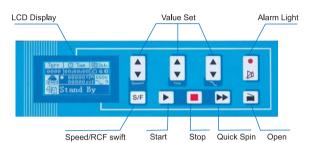
## **User-friendliness**

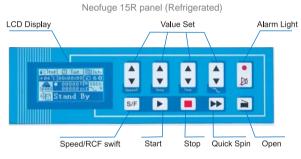
- Large back-lit LCD screen and easy-to-clean keypad comprise the user-friendly control panel
- Time, temperature(refrigerated models), g-force/speed are easily entered
- Most values can be changed during centrifugation
- Quick spin key enables quick runs at your desired rotational speed
- Nine acceleration and braking ramps are available for sensitive samples
- The last user program used stays automatically on display

## **Cooling system**

- Refrigerated by CFC-free unit (Ra134a)
- Temperature range from -10  $^\circ\mathrm{C}$  to +40  $^\circ\mathrm{C}$
- Rotors can be spun at maximum speed and still maintain  $4\,{\rm ^{\circ}C}$
- Precooling rotors function during standby







Neofuge 15 panel

## Safety design

- Lid locking and holding during rotor run
- Emergency lid-lock release
- Motor-overheating protection
- Automatic rotor identification
- Electronic imbalance detection

#### Modular adaptors

- The modular construction of adaptors allow centrifugation of pratically all commercially available tubes

- The adapters are solidly constructed and can be easily cleaned and autoclaved in event of contamination with biologically active sample material

## Versatility

Fixed angle, swinging bucket, microliter rotors for all common tubes from 0.2 to 100 are available for applications using microliter, DIN, blood sample and Falcon<sup>™</sup> type conical tubes.

Neofuge 15R (Refrigerated)

#### Automatic rotor identification

Different rotors are identified automatically by the control center. The system indicates alarm signal in cases of following conditions: setting speed exceeding limit, empty running without rotors, and failure of rotor identification

#### Imbalance Recognition

The Neofuge 15/15R are equipped with electronic imbalnce recognition system, which responds in case samples are loaded incorrectly or the tube is broken. Centrifugation is interrupted and the user can remove the rotor and, if necessary, decontaminate it.

#### Quick overview of rotors family for centrifuge Neofuge 15/15R



#1501 Fixed angle rotor (Standard)



#1502 Swing-bucket rotor (Optional)



Centrifuge tul

Centrifug	ge tube			Adaptor			
Capacity	Type	Diameter	Length	Tube qty/rotor	Specification	Order NO.	Packed/unit
2.0ml	round	Ø11mm	47mm	24 PCS	-	-	-
1.5ml	round	Ø11mm	47mm	24 PCS	-	-	-
0.5ml	conical	Ø8mm	32mm	24 PCS	1×0.5ml	ADP17.02-001	24 PCS
0.2ml	conical	Ø6.5mm	22mm	24 PCS	1×0.2ml	ADP17.02-002	24 PCS

#1502 Swing-bucket rotor / 4×100ml, 4000rpm, 2612×g (rotor incl. 4 aerosol-tight standard buckets)

Centrifug	ge tube				Adaptor		
Capacity	Туре	Diameter	Length	Tube qty/rotor	Specification	Order NO.	Packed/unit
100ml*	flat	Ø45mm	100mm	4 PCS	-	-	-
50ml	round	Ø29mm	114mm	4 PCS	1pc×50ml	SP15.04.100.S50-10	4 PCS
50ml	conical	Ø29mm	116mm	4 PCS	1pc×50ml	SP15.04.100.C50-10	4 PCS
50ml	round	Ø36mm	110mm	4 PCS	1pc×50ml	SP15.04.100.50-10	4 PCS
25ml	round	Ø25mm	115mm	4 PCS	1pc×25ml	SP15.04.100.25-10	4 PCS
15ml	conical	Ø17mm	120mm	4 PCS	1pc×15ml	SP15.04.100.C15-10	4 PCS
15ml	round	Ø17mm	104mm	12 PCS	3pcs×15ml	SP15.04.100.15-00	4 PCS
7ml	round	Ø12mm	104mm	20 PCS	5pcs×7ml	SP15.04.100.7-00	4 PCS
5/7ml	round	Ø12mm	104mm	12 PCS	3pcs×5/7ml	SP15.04.100.5-00	4 PCS
1.5/2.0ml	round	Ø11mm	41mm	40 PCS	10pcs×1.5/2m	SP15.04.100.1-00	4 PCS
						*HealForce can prov	vide such bottle

#### #1503 Fixed angle rotor / 6x50ml, 8500rpm, 9693xg,45°

Centrifug	ge tube				Adaptor		
Capacity	Туре	Diameter	Length	Tube qty/rotor	Specification	Order NO.	Packed/unit
50ml	conical	Ø29.5mm	116mm	6 PCS	1pc×50ml	F08.50-04	6 PCS
50ml	round	Ø29mm	115mm	6 PCS	1pc×50ml	ADP15.94-001	6 PCS
38ml	round	Ø25.5mm	96mm	6 PCS	1pcx38ml	ADP15.94-002	6 PCS
16ml	round	Ø18mm	114mm	6 PCS	1pc×16ml	ADP15.94-003	6 PCS
15ml	conical	Ø16mm	120mm	6 PCS	1pc×15ml	ADP15.94-008	6 PCS
12ml	round	Ø16mm	112mm	12 PCS	2pcsx12ml	ADP15.94-004	6 PCS
10ml	round	Ø16mm	82mm	6 PCS	1pcs×10ml	ADP15.94-011	6 PCS
6.5ml	round	Ø13mm	104mm	18 PCS	3pcs×6.5ml	ADP15.94-005	6 PCS
5ml	round	Ø13.5mm	52mm	12 PCS	2pcs×5ml	ADP15.94-010	6 PCS
3.5ml	round	Ø11mm	85mm	24 PCS	4pcsx3.5ml	ADP15.94-006	6 PCS
1.5ml	conical	Ø11mm	41mm	24 PCS	4pcs×1.5ml	ADP15.94-007	6 PCS

# #1503 Fixed angle rotor (Optional)



#1507 Microplate rotor (Optional)



#1508 Fixed angle rotor (Optional)

#1507 Microplate rotor with 2 racks / 2 microplate, 3000rpm, 1087×g,90°

Centrifuge microplate			Adaptor		
Name	L×W×H(mm)	Tube qty/rotor	Specification	Order NO.	Packed/unit
96-hole microplate	128×85.6×15	6 PCS	-	-	-
24-hole microplate	128×85.6×21	4 PCS	-	-	-
96-hole deep microplate	128×85.6×45	2 PCS	-	-	-

#### #1508 Fixed angle rotor / Neofuge 15R:8×50ml,12000rpm, 15778×g,26° Neofuge 15 :8×50ml,10000rpm, 10957×g,26° Adaptor

00110110	<i>jo cabo</i>				Adaptor			
Capacity	Туре	Diameter	Length	Tube qty/rotor	Specification	Order NO.	Packed/unit	
50ml	round	Ø29mm	112mm	8pcs	-	-	-	
38ml	round	Ø25.5mm	92mm	8pcs	1pcx38ml	ADP15.50-001	8pcs	
16ml	round	Ø18mm	108mm	8pcs	1pc×16ml	ADP15.50-002	8pcs	
15ml	round	Ø16mm	115mm	8pcs	1pc×15ml	ADP15.50-010	8pcs	
12ml	round	Ø16mm	106mm	8pcs	1pc×12ml	ADP15.50-003	8pcs	
10ml	round	Ø16mm	82mm	8pcs	1pc×10ml	ADP15.50-008	8pcs	
6.5ml	round	Ø13mm	104mm	8pcs	1pc×6.5ml	ADP15.50-004	8pcs	
5ml	round	Ø13.5mm	52mm	8pcs	1pc×5ml	ADP15.50-007	8pcs	
3.5ml	round	Ø11mm	82mm	24pcs	3pcsx3.5ml	ADP15.50-005	8pcs	
1.5ml	conical	Ø11mm	41mm	16pcs	2pcs×1.5ml	ADP15.50-006	8pcs	

#### **Neofuge 15R Technical Specifications**

Max. speed	16.000rpm
Min. speed	300rpm
Steplength	in 100rpm increments
Max. RCF	
Fixed-angle rotor	24900×g
Swing-out rotor	2612×g
Plate rotor	1087×g
Max. capacity	
Fixed-angle rotor	6×50ml
Swing-out rotor	4×100ml
Rotor options	5
Accel./Braking curves	9\9
Refrigerant	R134(CFC free)
Power supply	220V/50Hz-60Hz
Rated power	850VA
Drive	Induction drive without carbon brushes
Noise at max. speed	≤60dB
Temperature range	-10 <sup>°</sup> C~+40 <sup>°</sup> C, precooling
Control	Microprocessor
Run time	0~9h 59min, cont.operation(hold)
Functions	Quick-spin, RPM/RCF swift
Rotor recognition	Automatic
Imbalance detection	Electronic
Program	The most recent data remains in the memory
Dimensions(W*D*H) (mm)	580×520×315
Net weight without rotor kg(lb)	79(174)
Test standards	"Manufactured and tested in accordance with EN60601-2-020/A1:1996"

#### **Neofuge 15 Technical Specifications**

Max. speed	16,000rpm
Min. speed	300rpm
Steplength	in 100rpm increments
Max. RCF	
Fixed-angle rotor	24900×g
Swing-out rotor	2612×g
Plate rotor	1087×g
Max. capacity	
Fixed-angle rotor	6×50ml
Swing-out rotor	4×100ml
Rotor options	5
Accel./Braking curves	9/9
Refrigerant	N/A
Power supply	220V/50Hz-60Hz
Rated power	470VA
Drive	Induction drive without carbon brushes
Noise at max. speed	≤65dB
Temperature range	N/A
Control	Microprocessor
Run time	0~9h 59min, cont.operation(hold)
Functions	Quick-spin, RPM/RCF swift
Rotor recognition	Automatic
Imbalance detection	Electronic
Program	The most recent data remains in the memory
Dimensions(W*D*H) (mm)	525×390×330
Net weight without rotor kg(lb)	58(128)
Test standards	"Manufactured and tested in accordance with EN60601-2-020/A1:1996"



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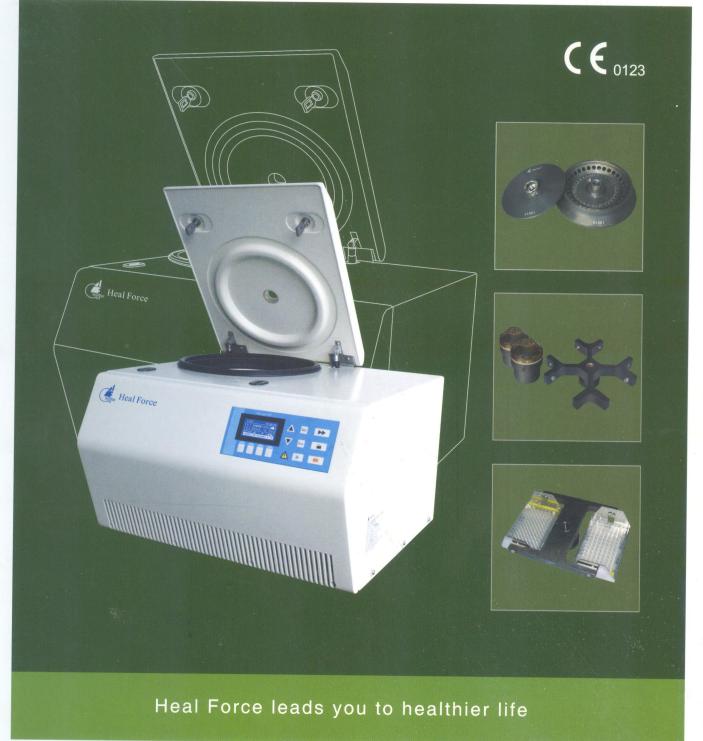
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#### Heal Force leads you to healthier life



Heal Force Laboratory Equipment

# Neofuge 18R Laboratory Centrifuge



# Neofuce 18R Laboratory Centrifuge

Heal Force Neofuge 18R laboratory centrifuge, providing excellent centrifugal effect and easy to use with high reliability and safety, are widely used in the fields of molecular and biochemical research, and medical diagnosis.

# Features

- Refrigerated by CFC-free unit (R134a), temperature range -10~40°C
- Maximum speed at 18,000rpm & maximum RCF at 31,515×g
- Easy control for parameter setting & precise control by microprocessor
- Electronic imbalance detection
- Automatic rotor identification
- Low noise brushless drive motor, free of maintenance
- Precooling rotors function during standby
- 9 acceleration/deceleration curves available
- Multi-function by 8 optional rotors

#### Lid-lock system

The lid-lock system is a patented design for safety. The lid is locked by electronic latch automatically, and also not able to be opened manually. The instruction of opening the lid is requested by the "open" key on the control panel, and takes effect only when the rotors inside stop running.

#### Programming

Up to 15 working modes are able to be programmed and saved, for the convenience of future uses.

#### Quick-spin

For short process working, a "quick spin" key is easy to operate without other setting.

#### **Electronic imbalance detection**

Heal Force

Neofuge 18R is equipped with an electronic imbalance detection system, which responds in case samples are loaded incorrectly or the tube is broken, and pauses centrifugation automatically to protect the operator or machine from being hurt or damaged.

#### Automatic rotor identification

Different rotors are identified automatically by the system. The system indicates alarm signal in case of following conditions: setting speed exceeding limit, empty running without rotors, and failure of rotor identification.

#### Alarm and troubleshooting

The control microprocessor is applied to monitor the machine to work safely and reliably. Any abnormal operation working status may be detected immediately, and the system activates protecting process automatically. Meanwhile, alarm and record functions are also activated to notice the operator by showing message on the panel and saving the error report.

#### **High quality rotors**

- Ultraduralumin
- Aerosol-tight
- Autoclavable (121°C, 20 min)

### Heal Force leads you to healthier life



#2302 fixed angle rotor



#1801 fixed angle rotor



#### #1802 fixed angle rotor



#2304 fixed angle rotor

# #2302 fixed angle rotor

			24	×2ml, 17000rp	m,28110×g,45°		
	С	entrifuge	tube			Adaptor	
Capacity	Туре	Diameter	Length	Tube qty/rotor	Tube qty/adaptor×volume	Order No.	Adaptor qty/rotor
2ml	round	Ø11mm	47mm	24pcs	-	-	-
0.5ml	conical	Ø8mm	32mm	24pcs	1pc×0.5ml	ADP17.02-001	24pcs
0.2ml	conical	Ø6.5mm	22mm	24pcs	1pc×0.2ml	ADP17.02-002	24pcs

# #1801 fixed angle rotor

			32×	2ml, 15000rpr	m, 26664×g, 45°		
	С	entrifuge	tube		-	Adaptor	
Capacity	Туре	Diameter	Length	Tube qty/rotor	Tube qty/adaptor×volume	Order No.	Adaptor qty/rotor
1.5/2ml	round	Ø11mm	47mm	32pcs	-	-	-
0.5ml	conical	Ø8mm	32mm	32pcs	1pc×0.5ml	ADP17.02-001	32pcs
0.2ml	conical	Ø6.5mm	22mm	32pcs	1pc×0.2ml	ADP17.02-002	32pcs

# #1802 fixed angle rotor

			10×1	10ml, 18000rp	m, 28254×g, 30°		
	С	entrifuge	tube			Adaptor	
Capacity	Туре	Diameter	Length	Tube qty/rotor	Tube qty/adaptor×volume	Order No.	Adaptor qty/rotor
10	round	Ø16mm	82mm	10pcs	-	-	
5	round	Ø13.5mm	52mm	10pcs	1pc×5ml	ADP18.18.10.5	10pcs
1.5	conical	Ø11mm	41mm	10pcs	1pc×1.5ml	ADP18.18.10.1	10pcs

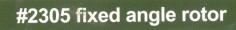
# #2304 fixed angle rotor

			6×94	4ml,15000rpm	,25046×g,26°		
	С	entrifuge	tube	1		Adaptor	
Capacity	Туре	Diameter	Length	Tube qty/rotor	Tube qty/adaptor×volume	Order No.	Adaptor qty/roto
94ml	round	Ø38mm	116mm	6pcs	-	-	-
50ml	conical	Ø29.5mm	116mm	6pcs	1pc×50ml	F08.50-04	6pcs
50ml	round	Ø29mm	115mm	6pcs	1pc×50ml	ADP15.94-001	6pcs
38ml	round	Ø25.5mm	96mm	6pcs	1pc×38ml	ADP15.94-002	6pcs
16ml	round	Ø18mm	114mm	6pcs	1pc×16ml	ADP15.94-003	6pcs
15ml	conical	Ø16mm	120mm	6pcs	1pc×15ml	ADP15.94-008	6pcs
12ml	round	Ø16mm	112mm	12pcs	2pcs×12ml	ADP15.94-004	6pcs
10ml	round	Ø16mm	82mm	6pcs	1pcs×10ml	ADP15.94-011	6pcs
6.5ml	round	Ø13mm	104mm	18pcs	3pcs×6.5ml	ADP15.94-005	6pcs
5ml	round	Ø13.5mm	52mm	12pcs	2pcs×5ml	ADP15.94-010	6pcs
3.5ml	round	Ø11mm	85mm	24pcs	4pcs×3.5ml	ADP15.94-006	6pcs
1.5ml	conical	Ø11mm	41mm	24pcs	4pcs×1.5ml	ADP15.94-007	6pcs

Heal Force Laboratory Equipment



#2305 fixed angle rotor



			8×50n	nl, 15000rpm,	26916×g,34°			
	C	entrifuge	tube			Adaptor		
Capacity	Туре	Diameter	Length	Tube qty/rotor	Tube qty/adaptor×volume	Order No.	Adaptor qty/rotor	
50ml	round	Ø29mm	112mm	8pcs	_	-	-	
38ml	round	Ø25.5mm	92mm	8pcs	1pc×38ml	ADP15.50-001	8pcs	
16ml	round	Ø18mm	108mm	8pcs	1pc×16ml	ADP15.50-002	8pcs	
12ml	round	Ø16mm	106mm	8pcs	1pc×12ml	ADP15.50-003	8pcs	
10ml	round	Ø16mm	106mm	8pcs	1pc×10ml	ADP15.50-008	8pcs	
6.5ml	round	Ø13mm	104mm	8pcs	1pc×6.5ml	ADP15.50-004	8pcs	
5ml	round	Ø13.5mm	52mm	8pcs	1pc×5ml	ADP15.50-007	8pcs	
3.5ml	round	Ø11mm	82mm	24pcs	3pcs×3.5ml	ADP15.50-005	8pcs	
1.5ml	conical	Ø11mm	41mm	24pcs	3pcs×1.5ml	ADP15.50-006	8pcs	



#1803 fixed angle rotor



#1804 swing-out rotor



#1805 microplate rotor with 2 racks

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	IIACC	CILCL	

			10×1	15ml, 14000rp	m, 20379×g, 26°		
	C	Centrifuge	e tube			Adaptor	
Capacity	Туре	Diameter	Length	Tube qty/rotor	Tube qty/adaptor×volume	Order No.	Adaptor qty/rotor
15ml	conical	Ø16mm	120mm	10pcs	- 8	_	-
5ml	round	Ø13.5mm	52mm	10pcs	1pc×5ml	ADP18.14.15.5	10pcs
1.5ml	conical	Ø11mm	41mm	10pcs	1pc×1.5ml	ADP18.14.15.1	10pcs

# #1804 swing-out rotor Rotor #1804 incl. 4 aerosol-tight standard buckets

			4×;	210ml, 5000rp	om, 3969×g,90°		
	(	Centrifuge	tube			Adaptor	
Capacity	Туре	Diameter	Length	Tube qty/rotor	Tube qty/adaptor×volume	Order No.	Adaptor qty/rotor
210ml	flat	Ø66mm	107mm	4pcs	-		-
100ml	flat	Ø45mm	100mm	4pcs	1pc×100ml	ADP18.05.250.100	4pcs
85ml	flat	Ø38mm	90mm	4pcs	1pc×85ml	ADP18.05.250.85	4pcs
10/7ml	round	Ø16.5mm	82/75mm	28pcs	7pcs×10/7ml	ADP18.05.250.10	4pcs
5ml	round	Ø13.5mm	52mm	36pcs	9pcs×5ml	ADP18.05.250.5	4pcs

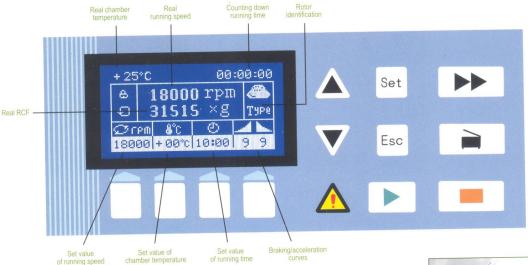
# #1805 microplate rotor with 2 racks Rotor #1805 incl. 2 microplate buckets

	2 microplate, 30	000rpm,1087×g,	90°		
Centrifuge m	nicroplate			Adaptor	
Name	L×D×H(mm)	Tube qty/rotor	Tube qty/adaptor×volume	Order No.	Adaptor qty/rotor
96-hole microplate	128×85.6×15	6pcs		-	-
24-hole microplate	128×85.6×21	4pcs	-	-	
96-hole deep microplate	128×85.6×45	2pcs		-	

# Neofuge 18R Laboratory Centrifuge

#### Simple & safe control

With all essential status parameters are directly displayed on the LCD screen, the operator is very convenient to preset parameters such as speed, RCF, running time and chamber temperature. Locking protection is applied in Neofuge 18R to prevent any possible mistake in operation.



#### Strong drive

A "strong drive" equipped in Neofuge 18R brings the following benefits and conveniences

- Applicable for manual tube balancing
- Extremely low noise during running
- Sturdy and reliable for daily work

#### **Torque spanner**

With help of the torque spanner, the rotors are easily released and tightened.

#### **Emergency lid release**

Despite the lid is locked and not able to be opened manually during running, operators are able to release the lid by pulling the cord in emergency such as accidental power failure or malfunctions.











Specifications					
Neofuge 18R	ż	E No			
Max. speed/Min. speed	18,000rpm/300rpm	Drive	Brushless induction motor		
Steplength	100 rpm	Noise at max. speed	≤60dB		
Max. RCF	31,515×g	Temperature range	-10°C ~+40°C		
Max. capacity	4×210ml	Control	Microprocessor control		
Braking/acceleration curves	9/9	Running time	≤9h 59min, quick spin		
Programs	15(pre-cooling program)	Dimensions(H×W×D)	405mm×600mm×565mm		
Power supply	220V/50Hz	Net weight without rotor	115kg		

# **Heal Force Laboratory Equipment**





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