

HAWK R

Refrigerated universal bench top centrifuge









18 000 rpm

24 270x g

4 x 100ml / 500 ml

-20°C à +40°C







FEATURES



- Delayed start function; two countdown modes: from pressing the start button or from reaching the set speed; intuitive parameter modification (RPM / RCF)
- · Parameters can be changed during centrifugation
- Locking of selected functions, password protection
- · Maintenance-free induction motor
- · Continuous or short mode operation
- · Automatic rotor identification
- · Automatic lid opening
- FAST COOL pre-cooling
- · Wide range of rotors and accessories; customized adapters on request
- Programmable density adjustment for samples > 1.2g / cm3
 (with automatic correction of maximum speed)



ANGLE ROTOR SYSTEMS



Cat. N°	Description	Capacity	RPM	RCF	Diam.
MSE2351	Hematocrit rotor for 24 capillaries	24 x 75 mm	13 000	16 816	1,4
MSE1767	Angle rotor PCR strips, hermetically sealed lid (45° angle)	4 x 8 x 0.2 ml	14 000	15339	10,2
MSE1250	Angle rotor 12 x 2/1.5 ml, hermetically sealed lid (45° angle)	12 x 2/1.5 ml	18 000	24 270	10,8
MSE1512	Angle rotor 24 x 2/1.5 ml, hermetically sealed lid (45° angle)	24 x 2/1.5 ml	15 100	21 158	10,8
MSE1513	Angle rotor 36 x 2/1. 5 ml with hermetic lid (45° angle)	36 x 2/1.5 ml	14 000	18 188	10,8
MSE1811	Angle rotor 24×2 ml filter tubes/spinning columns with hermetic lid (45° angle)	24 x 2 ml	14 600	20 257	10,8
MSE1267	Angular rotor 12 x 5 ml with hermetic lid (45° angle)	12 x 5 ml	14 000	19 064	12
MSE1995	Angle rotor 12 x 5 ml tubes with pressure cap	12 x 5 ml	12 000	13 684	17
MSE1791C	Angle rotor 12x5-15ml (30° angle) (with well MSE3131)	12x5-15ml	5500	4058	13-17
MSE1796C	Angle rotor 24x5-15ml (30° angle) (with well MSE3131)	24x5-15ml	5 000	3 354	13-17
MSE1552C	Angle rotor 30x5-15ml (angle 30°) (with well MSE3131)	30 x 5-15ml	4 500	2 922	13-17
MSE1766	Angle rotor 10 x 10 ml with hermetic lid (angle 30°)	10 x 10 ml	14 000	15 558	17
MSE1794C	Angle rotor 12 x 30/25 ml (angle 30°) (with well MSE3380)	12 x 30/25 ml	5 500	3 889	25,5
MSE1797C	Angle rotor 6 x 50 ml (angle 30°) (with well MSE3327)	6 x 50 ml	6 000	4 427	30
MSE1264C/A	Angular rotor 8 x 50 ml Falcon tubes (angle 30°) (with bucket and lid) & PC cap	8 x 50 ml	5 000	3 494	30
MSE1264C/B	Angle rotor 8 x 50ml Flacon tubes (angle 30°) (with bucket)	8 x 50ml	5 500	3 494	30
MSE1795C	Angle rotor 10 x 50 ml (angle 30°) (with bucket MSE3327)	10 x 50 ml	4 500	2 830	30
MSE1769C	Angle rotor 4 x 100 ml (angle 30°) (with bucket MSE3770)	4 x 100 ml	6 300	5 014	45,2



ADAPTORS FOR ANGULAR ROTORS



		Rotor compatibility									
Reference	Adpator by type/capacity of tube	MSE1794C	MSE1797C	MSE1264C/A	MSE1264C/B	MSE1795C	MSE1769C	MSE1250	MSE1512	MSE1513	MSE1811
MSE4135	0.5 ml tube							Х	Х	х	х
MSE4177	0.2 ml tube							Х	Х	Х	Х
MSE4184	0.4 ml conical tube							Х	Х	х	х
MSE4919C/A	5 ml Ependorf tube with screw cap		Х		Х	Х					
MSE4919C/B	5 ml Eppendorf tube with pressure cap (to be used with MSE4140)		Х	Х	Х	Х					
MSE4087	5 ml round-bottom tube (diam. 14mm)		Х		Х	Х					
MSE4094	5 ml round-bottom tube (diam. 13mm)		Х	Х	Х	X					
MSE4306	7ml tube	Х									
MSE4124	10 ml round-bottom tube and 7 ml S-Monovette, 5 ml		Х	Х	Х	X					
MSE4086	15-ml round-bottom Nalgene tube		Χ	Х	Х	Х					
MSE4307	15-ml Nalgene tube	Х									
MSE4075	15-ml conical tube						Х				
MSE4140	15-ml conical tube		Х	Х	Х	X					
MSE4299	Bottomless adapter for 28-ml Nalgene tube		Х	Х	Х	х					
MSE4122	28/30-ml round-bottom Nalgene tube		Х	Х	Х	X					
MSE4241C	30/25-ml conical-bottom rubber buffer tube MSE4239						Х				
MSE4275	30-ml round-bottom or skirted Sterilin tube, conical bottom						Х				
MSE4277	50 ml Greiner tube, conical bottom and skirted						Х				
MSE4240C	50 ml Falcon tube/Nalgene tube, rubber buffer MSE4239						Х				
MSE4243C	50 ml round/conical bottom tube, rubber buffer MSE4239						Х				
MSE4247	Coussinnet en PP pour tube de 100 ml						Х				

SWING OUT ROTORS

MSE2269C: Swing out rotor for microtitres (racks included)

RPM 3000 - RCF 916



Reference	Description	Dimension
MSE3270	Racks for microtiter plates /wells	86v128v15 /17 5mm

MSE2251: Swing out rotor 4 x 100 ml

RPM 4000 - RCF 2504









Ref.	Description Bucket / Hanger	Dim.		
MSE3252C	Bucket 100 ml Ø 58.4 x 87 mm with lid MSE7253	Ø 58.4 x 87 mm		
MSE3251	Bucket 100 ml Ø 58.4 x 81.5 mm without lid	Ø 58.4 x 81.5 mm		
MSE3266	Bucket for 2 Falcon 15 ml tubes	2 x 17.7 mm		
MSE3164	Blood tube rack 12 x 1.6÷4ml, 5 ml tubes	12 x 13.1 mm		

ADAPTOR FOR BUCKETS/ROTOR MSE2251



				Bucket compatibility			
Reference	Adpator by type/capacity of tube		MSE3251	MSE3252C/A	MSE3252C/B	MSE3266	
MSE4072	10 x 1.5/2 ml Eppendorf round-bottom tubes	4 x 16.5 mm	Х	Х	Х		
MSE4064	8 x 1.6÷7 ml blood tubes	1 x 16.9 mm	Х	Х			
MSE4067	Adapter for 7 x 7÷11 ml blood tubes	5 x 12.5 mm	Х	Х			
MSE4080	5/7 ml round-bottom tube	1 x 25.8 mm	Х	Х			
MSE4071	5 x 10 ml Nalgene and 5 x 13/14 ml Startdedt round-bottom tubes	4 x 13.1 mm	Х	Х			
MSE4078	Falcon, 15-ml conical tube	1 x 17 mm	Х		Х		
MSE4133	Reducer diameter for blood tube	1 x 13,33 mm				Х	
MSE4074	30-ml round-bottomed Nalgene tube	1 x 30 mm	Х	Х			
MSE4077	50-ml conical-bottomed tube Greiner	1 x 25.5 mm	Х		Х		
MSE4077C	50-ml Falcon® tube and 50-ml Nalgene tube (bucket MSE3251) or for 50-ml Nalgene tube (bucket MSE3252C), rubber pad	1 x 35.5 mm	Х	Х	Х		
MSE4079	50-ml round-bottomed glass tube	5 x 11 mm	Х	Х	Х		
MSE4151C/A	100-ml round-bottomed glass tube with rubber pad	1 x 30 mm	Х	Х	Х		
MSE4151C/B	100-ml PP round-bottomed tube with rubber pad	1 x 13.3 mm		Х	Х		
MSE4866	Height reducer for blood and urine tubes 13 x 75 mm	1 x 13 mm				х	

BENCH TOP CENTRIFUGE RANGE



Reliable benchtop centrifuges designed to deliver consistent results in demanding laboratory environments. Highly versatile with a wide range of rotors and adapters they cover all capacities of tubes and centrifugation vessels available on the market. Our benchtop centrifuge range offer high centrifugation parameters as well as high precision.

HAWK & HAWK R

- · Programming up to 99h, 99mn and 99s
- 100 programs / 10 deceleration and acceleration rates
- · Short cycle and continuous operation mode
- · Automatic rotor recognition
- · Wide choice of angular, swing out rotors and adapters

Angle rotor

• Pre-cooling function to start work at target temperature (Hawk R)



 $4 \times 100 \text{ ml}$

Swing rotor



4 000



18 000



Blood tubes



50 ml





Hawk R

2504



24 270

x 48

x 10

x 30 to +40°C

HARRIER & HARRIER R

- · Programming up to 99h, 99mn and 99s
- 100 programs / 10 deceleration and acceleration rates
- · Short cycle and continuous operation mode
- · Delayed start function
- · Automatic rotor recognition
- · Wide choice of angular, swing out rotors and adapters
- Pre-cooling function to start work at target temperature (Harrier R)



 $4 \times 250 \text{ ml}$

Swing rotor



5 200



4724

Angle rotor



18 000



30 065



x 76

Blood tubes

50 ml

x 16

15 ml

x 36

-20°C to +40°C

Harrier R

FALCON & FALCON R

- · Programming up to 99h, 99mn and 99s
- 49 programs / 10 deceleration and acceleration ramps
- · Automatic rotor recognition
- · Wide choice of rotors and adapters



4 x 750 ml

Falcon R

Swing out rotor Falcon Falcon R

2958



4700 6 385

6 030

Angle rotor

6 000

x 148 750 ml

Blood tubes 50 ml

x 24

(**) -20°C x 48 to +40°C

15 ml

MASTER OF CENTRIFUGATION FOR 90 YEARS



Be confident in choosing MSE! Our centrifuges have been sold worldwide for almost 90 years. Widely proven, they are robust and built to last.

We designed and improved our centrifuges for and with you with a thorough understanding of your needs.

Reliability, reproducibility of results, intuitive programming, robustness and safety, choosing an MSE centrifuge is the guarantee of peace mind for years to come.

Reliability

All our machines are individually tested through rigorous inspection procedures, performance and reliability tests in our factory, external laboratories and with end-user tests before to be released to the market

Life Span

The average service life of a centrifuge MSE is **10 years.** We guarantee the availability of the spare parts during at least all this period.

Low-cost maintenance

Our machines are designed to provide you long life service through **maintenance-free design**.

DIRECTIVES AND STANDARDS





All our products are CE and IVD marked.

They comply wih Regulation IVDR 2017-746

In consequence, all our centrifuges reflects the conformity of the medical device with the essential safety and clinical benefit requirements laid down by European regulations.



In accordance with these regulations all MSE laboratory equipment is fully RoHS 3 compliant, meaning that potentially harmful substances such as cadmium, mercury, lead or phthalates are not found in any of our products.



ISO 9001: Certified quality management system

ISO 13485: Certified quality management system specific for Medical Devices

TECHNICAL

DATAS

- WARRANTY: 24 months + possibility of extended warranty
- **CUSTOMER SERVICE**: immediate assistance, complaints or inquiries
- QUALITY: Our **ISO 9001 and ISO 134845** certifications testify to the quality of our products and our commitment to continuous improvement.
- All our centrifuges are CE and IVD marked.



Height	315 mm
Width	365 mm
Depth	660 mm
Weight	44 kg
Maximum capacity	500 ml
Maximum speed	90 à 18 000, 1 RPM step
Max. RCF	24 270 xg
Timer	1 s à 99 heures, 59 minutes 59s, 1s step ou continu
Sound level	≤56dB (*)
Power supply	230V, 6.3A, simple phase, 50/60Hz 110V, 10A, simple phase, 60Hz
Number of accelaration rates	10
Number of breaking rates	10
Number of programs	100
Display	LED
Motor	Induction motor, brushless drive

Imbalance sensor Lid locking during cenrifugation and opening Emergency lid opening Safety features Stainless steel centrifuge chamber Product complies with international safety standards EN-61010-1 and EN-61010-2-020, EN-61010-2-101

Reference

230V, 50/60Hz MSB050.CR3.5 110V, 60Hz MSB050.CR3.1

(*) with most of the rotors of the range

All MSE centrifuges comply with the latest European safety and environmental standards. Our centrifuges also comply with the RoHS directive.









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