

Thermo Scientific Heraeus Multifuge X1 and Multifuge X3 Centrifuge Series

*Market-leading throughput, versatility and efficiency
for high-performance processing*



Patented

- Auto-Lock
- ClickSeal
- Hybrid Lid Latch
- SMARTSpin



Hybrid Lid Latch

- Improve closure time and reduce wear with our highly reliable, motorized lid latch system – combining the advantages of mechanical and electromechanical systems
- One finger downward motion for easiest closing and locking – even on tall benches
- Optional automatic lid opening at end of run for rapid retrieval of samples
- Password protection option for sample security, preventing unwanted removal of temperature-sensitive samples

Compact, Comfortable Design

- Exceptional capability in compact dimensions maximizes workspace
- Low profile (only 31 cm/ 12.4 in deck height) and curved design ensure comfortable loading and unloading of samples and cleaning of the unit

Industry-Leading Energy Efficiency

- Extended tubes capacity significantly reduces the number of runs in high-throughput laboratories
- Power saving option optimizes energy usage



Breakthrough Technology for Ultimate Performance

The 4 x 400 ml Heraeus Multifuge X1 and 4 x 750 ml Heraeus Multifuge X3 centrifuges, both in ventilated and refrigerated units, are ideal for high-performance applications of temperature-sensitive samples, with chamber and sample control between -10°C and +40°C.



Innovative Thermo Scientific Solutions

Auto-Lock® III Rotor System

Secure locking system delivers:

- Installation and exchange of rotors with just the push of a button for quick switch between applications
- Easy chamber access enables cleaning convenience, reducing contamination risk and leading to improved research and a healthier working environment

SMARTSpin® Technology

- Advanced rotor management system optimizes acceleration, braking, temperature control and residual load imbalance for smooth runs and reproducible separations

ClickSeal® Bucket Sealing System

Innovative biocontainment solution provides:

- Simple operation for all laboratory users, eliminating screw caps and complicated clips
- Glove-friendly, one-handed open/close capability
- Biocontainment certification by CAMR* in Porton Down, UK
- Polyetherimide (PEI) sealing covers with high chemical resistance and excellent thermal properties

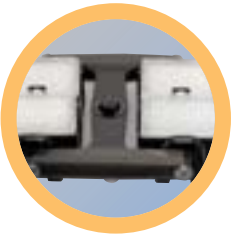
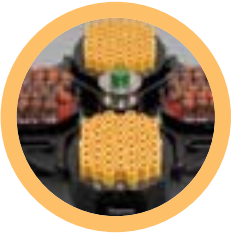
*CAMR is now incorporated within the UK Health Protection Agency (HPA)

Global Leader in Quality and Reliability

For more than 100 years, Thermo Scientific centrifuges have delivered outstanding performance and reliability in the lab. From basic benchtop instruments to advanced floor models, we take pride in manufacturing centrifuges that offer exceptional quality for consistent results year after year.



Our Heraeus® Multifuge® X1 and Multifuge X3 centrifuge series are ideal for a wide range of processing needs including:



- Cell Culture
- Bioproduction
- Food Safety
- Blood Separation
- Body Fluids Processing
- Hematology
- DNA/RNA Harvesting
- Pharmaceutical
- Biotechnology
- Stem Cell
- Microbiology
- Molecular Biology
- Proteomics
- Genomics
- Clinical Chemistry
- TB Sputum



Thermo Scientific Heraeus Multifuge X1 and Multifuge X3 Centrifuge Series

Bring superspeed applications to your benchtop

Introducing our new breakthrough Thermo Scientific Heraeus Multifuge general purpose centrifuge series – featuring market-leading performance, capacity and throughput for high-performance processing.

Exceptional Performance and Throughput:

Accelerate your research by processing up to 40 x 50 ml conical tubes (100% more) in your swing-out rotor, or up to 14 x 50 ml (133% more) in fixed angle configuration, for increased capacity over competitive models in the same bench space

Unmatched Versatility:

Industry's broadest range of rotors and adapters available, including Thermo Scientific Fiberlite rotors, enabling a minimum of 23 rotor configurations to meet virtually all processing needs

Outstanding Energy Efficiency:

Up to 40% energy consumption savings* on industry standard protocols, such as blood separation or conical tubes processing

**Based on internal benchmark data*





Advanced and Intuitive Controls Optimize Performance

Our Heraeus Multifuge X1 and Multifuge X3 general purpose centrifuges feature advanced, programmable controls with detailed operation information to maximize run performance and temperature accuracy for improved sample protection.

Dedicated Program Keys

Immediate storage and access to the most frequently used programs and to the 99 programs library, supporting high-throughput laboratories

Accessible Programming

Easily adjust speed, time and temperature, even during the run



Program Keys: 5 direct access and folder with additional storage of 94 programs

Acc/Dec: Choice of 9 acceleration and 10 deceleration rates

Speed Control: Immediate toggle between RCF and speed control, up to 25830 x g or 15200 rpm

Bucket: Quickly adjust rotor parameters for optimal RCF calculation

Dual Timing Mode

Set time in hrs.min, min:sec or continuous mode

At-Start *Standard timing down from pushing "Start" button*
Used for routine, non-critical runs when reproducibility not required

At-Speed *For ultimate replication of result*
Timing begins at operating speed for specific run time required
No variation due to changes in acceleration time to operating speed

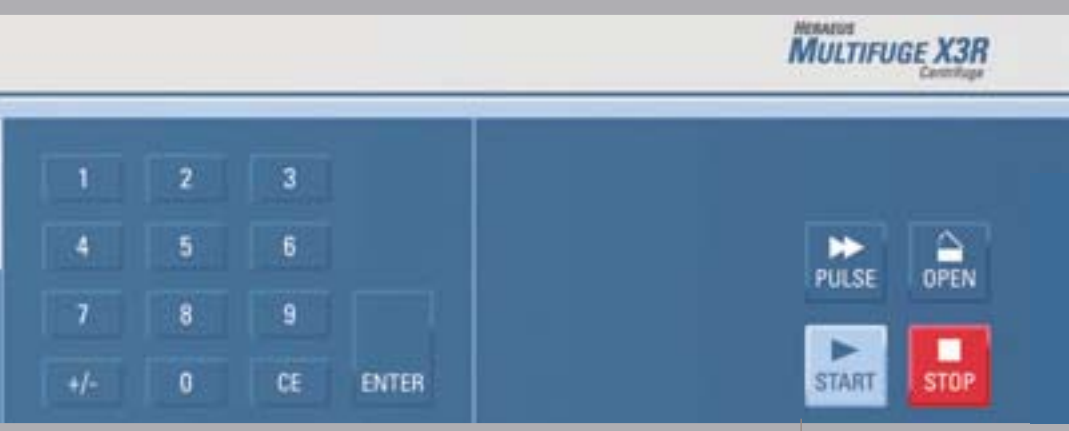
Superior Security

Optional password protection, ideal for multi-user environments

- For programs: prevents accidental adjustments or removal
- To open lid: ensures samples are only removed from the temperature-controlled chamber by the researcher

Easy to Read and Use

- Highly visible backlit display for clear reading of running parameters across the lab
- Display of SET and ACTUAL parameters
- Multilingual instructions, including English, German, French, Spanish and Italian, on programming, run conditions, alerts and service messages
- Glove- and detergent-friendly panel
- Convenient keyboard for direct input – without scrolling – of program parameters, reducing preparation time



Dual Temperature Mode

Temp: Control temperatures between -10°C and +40°C

Pre-Temp (refrigerated versions): Achieve 4°C in 15 minutes from ambient 23°C*

Air/Chamber Temperature

For most of the temperature-tolerant protocols. For efficient and stable precooling of the chamber and rotor, prior to temperature-sensitive runs.

Sample Temperature

For accurate control of the sample temperature during the run, independently from the rotor, the speed and the environmental conditions.

**with Thermo Scientific BLOLiner rotor*

Start/Stop

Pulse: Ideal for short runs

Open: Motorized latch with optional automatic operation

Save Valuable Lab Space





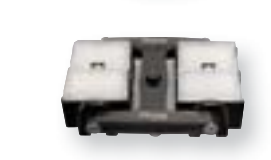


The Heraeus Multifuge X3 centrifuge series is available in floor-standing configuration to conserve valuable bench space and, with a smaller footprint than a rolling cart, saves additional lab space.

The Heraeus Multifuge X3F centrifuges feature movable, locking casters with the same performance and capacity as our benchtop models. Easily transported, positioned and safely locked for enhanced flexibility and improved ergonomics during loading, unloading and everyday programming, this centrifuge represents the ideal setup for smooth runs in total safety.

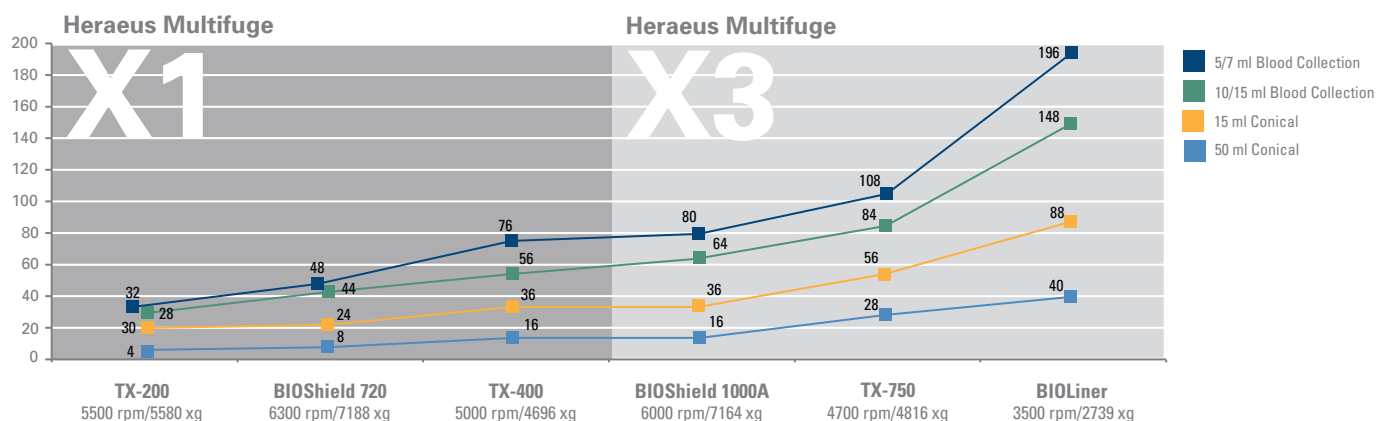










Incredible Capacity and Productivity

Our Heraeus Multifuge X1 and Multifuge X3 centrifuge series feature a wide range of rotors to meet your general purpose processing requirements.

Swinging Bucket Rotors		Heraeus Multifuge X1	Heraeus Multifuge X3
	TX-200 and TX-400 <i>>> Maximum flexibility</i> Designed for a broad range of laboratory throughput needs, with a capacity range of 32 to 76 blood tubes and up to 16 conical tubes in a single run, for the highest configuration flexibility on the market.	✓	
	TX-750 <i>>> Outstanding versatility</i> Delivers maximum flexibility at 4700 rpm and features a choice of round or rectangular buckets with multiple adapters as well as microplate carriers.		✓
	BIOLiner® <i>>> Exceptional capacity</i> Significantly improves productivity – process over 100% more 50 ml conical tubes or 100% more blood tubes with biocontainment sealing per run than with competitive models. Certified sealed microplate carriers expand application options.		✓
	HIGHPlate® 6000 <i>>> Filtration quality</i> For filter plate users, ideal for DNA purification protocols, delivering more than 6000 x g and meeting the needs of several filtration devices.		✓
	Fiberlite™ H3-LV <i>>> Unmatched microplate capacity</i> Perfect for pelleting cells and cellular debris, protein precipitation, plasmid purification and collecting physiological fluids for diagnostic tests. In addition, achieve high-volume microplate processing with a capacity of 8 deepwell blocks or 28 microplates.		✓
	M-20 <i>>> Compact processing</i> Centrifuges up to 6 microplates in certified sealed conditions with transportable carriers and the versatility of Auto-Lock rotor installation.	✓	
	BIOShield® 720 and BIOShield 1000A <i>>> Excellent performance</i> Runs frequently used tubes above 7000 x g with the confidence and simplicity of a single, certified biosafety lid.	✓ BIOShield 720	✓ BIOShield 1000A

Swinging Bucket Rotors Capacity



Fixed Angle Rotors		Heraeus Multifuge X1	Heraeus Multifuge X3
	Fiberlite F14-6x250LE Ideal for pelleting bacteria or yeast cells at above 14000 x g and for purifying nucleic acids and cells.		✓
	Fiberlite F15-6x100 Durable design for general purpose pelleting of organelles, density gradients and various protocols requiring angle centrifugation of disposable conical tubes up to 24652 x g.	✓	✓
	Fiberlite F13-14x50c Ideal for pelleting prokaryotic and eukaryotic cells from cell cultures and with our generous 14-place capacity and high maximum RCF (12300-17000 x g), features more than double the throughput of an industry standard angle rotor.	✓	✓
	Fiberlite F15-8x50c Achieving more than 24000 x g, pellet cells, bacteria, subcellular fractions and small amounts of nucleic acids and viruses in disposable conical tubes.	✓	✓
	CLINIConic® Spin 30 x 15 ml round or conical tubes and ensure acceleration and throughput for cell culture and blood separation applications.	✓	
	8x50 Sealed Ideal for TB sputum applications and other high risk samples,, centrifuge 8 conical tubes in individually sealed vessels, which can be prepared remotely, with rapid acceleration and processing times.	✓	
	HIGHConic® II Process 6 x 94 ml tubes between 10000 and 15000 x g in certified sealed conditions.	✓	✓
	Micro-Volume Rotors >> <i>Fiberlite F21-48x2, Microliter 30x2, Microliter 48x2</i> Perfect blend of capabilities to support micro-volume protocols, such as nucleic acid or protein lysate preparation and PCR reaction set-up. With Auto-Lock rotor exchange, transform your general purpose unit into a microcentrifuge in less than 3 seconds! <i>* Microliter 30x2 and Microliter 48x2 only</i>	✓ 30x2 F21-48x2 48x2	✓ F21-48x2 48x2

Thermo Scientific Fiberlite Rotors

Setting New Performance Standards for Benchtop Processing

Our carbon fiber rotors maximize the performance of the Heraeus Multifuge general purpose centrifuge series with versatility, speed and robust, corrosion-free design.

Industry-Leading Performance

- Superspeed performance, with higher G-force and faster speeds, at benchtop value

Exceptional Security and Efficiency

- Resistance to corrosion protects against misuse and damage for improved safety
- Enhanced support for conical tubes with patented technology, enabling many popular tubes to be spun above their rated RCF**
- Supports complete workflow from initial pelleting to high speed subcellular purification in single conical tube for cost efficiencies and waste reduction
- Safe, continuous operation for lifetime use of rotor


** Please contact your sales representative for details of recommended tube suppliers.

 Biocontainment certified by CAMR, HPA, Porton Down, UK.



TX-200
Swinging Bucket Rotor¹

Thermo Scientific Rotors and Adapters

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Heraeus Multifuge X1/X1R		Heraeus Multifuge X3/X3R		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
TX-200 Swinging Bucket Rotor							75003658
Round Buckets (set of 4), 90°, R _{max} 165 mm	4 x 180 ml		5500 5250 ²	5580 5084 ²	n/a	n/a	75003659
 ClickSeal Biocontainment Lids for Round Buckets (set of 4)							75003660
Replacement O-rings for Lids (set of 4)							75003687
Adapters for Round Buckets (sets of 4)							
180 ml Polypropylene Screw Cap Bottle (75003800, pkg of 12)	4 x 180 ml	56.5 x 123					No adapter needed
① 100 ml Round Bottom Open-Top Tube	4 x 100 ml	48 x 122					75003801
② 50 ml DIN Round Bottom Tube	4 x 50 ml	35 x 126					75003802
③ 50 ml Round Bottom Tube	4 x 50 ml	32 x 126					75003815
④ 50 ml Conical Tube	4 x 50 ml	29.5 x 126					75003803
⑤ 25 ml Universal Tube	4 x 25 ml	25.5 x 118					75003804
⑥ 25 ml DIN Round/Flat Bottom Tube	8 x 25 ml	25 x 118					75003805
⑦ 20 ml Round Bottom Tube	12 x 25 ml	22 x 125					75003806
⑧ 15 ml Conical Tube	20 x 15 ml	16.5 x 121					75003771
⑨ 15 ml Blood Collection Tube	16 x 15 ml	17 x 121					75003809
⑩ 14 ml Conical Urine Tube	8 x 14 ml	17 x 114					75003807
⑪ 10 ml Blood Collection or 15 ml Corex®/Kimble® Tube	28 x 10/15 ml	17 x 121					75003808
⑫ 5/7 ml Blood Collection Tube	32 x 5/7 ml	13 x 122					75003785
⑬ 5/7 ml Round Bottom Open-Top Tube	36 x 5/7 ml	13 x 118					75003810
⑭ 3/5 ml RIA or Round Bottom Tube (without cap)	48 x 3/5 ml	12 x 124					75003811
⑮ 1.5/2 ml Conical Microtube	48 x 2 ml	11 x 45					75003812

¹ Buckets and lids sold separately

² 120 V ventilated centrifuge




TX-400
Swinging Bucket Rotor¹

Thermo Scientific Rotors and Adapters

Heraeus Multifuge X1/X1R

Heraeus Multifuge X3/X3R

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	Cat. No.
TX-400 Swinging Bucket Rotor							75003629
Round Buckets (set of 4), 90°, R_{max} 168 mm	4 x 400 ml		5000	4696	n/a	n/a	75003655
 ClickSeal Biocontainment Lids for Round Buckets (set of 4)							75003656
Replacement O-rings for Lids (set of 4)							75003657
Adapters for Round Buckets (sets of 4)							
400 ml Polypropylene Bio-Bottle (75007585, pkg of 12)	4 x 400 ml	80 x 125					No adapter needed
16 250 ml Thermo Scientific Nalgene Oak Ridge Bottle	4 x 250 ml	62 x 125					75003788
16 200 ml Thermo Scientific Nunc Conical Bottle	4 x 200 ml	62 x 125					75003788
							+ Nunc no. 377585
16 225 ml and 175 ml BD Falcon™ Conical Bottle	4 x 175 ml	62 x 125					75003788
							+ BD no. 352090
17 100 ml Round Bottom Open-Top Tube	4 x 100 ml	45 x 117					75003708
18 50 ml DIN Round Bottom Tube	12 x 50 ml	34.5 x 105					75003707
19 50 ml Round Bottom Tube	16 x 50 ml	28.5 x 114					75003799
20 50 ml Conical Tube	16 x 50 ml	29.5 x 116					75003683
21 30/25 ml DIN Round/Flat Bottom Tube	20 x 30 ml	25.5 x 108					75003703
22 25 ml Universal Tube	12 x 25 ml	25 x 110					75003706
23 15 ml Conical Tube	36 x 15 ml	16.5 x 121					75003682
24 15 ml Blood Collection Tube (17 x 125 mm)	16 x 15 ml	15.5 x 131					75003794
25 15 ml Round Bottom Tube (Sarstedt®)	40 x 15 ml	17 x 105					75003704
26 14 ml Conical Urine Tube	28 x 14 ml	17 x 112					75003798
27 10 ml Blood Collection or 15 ml Corex/Kimble Tube	56 x 10/15 ml	15 x 113					75003681
28 5/7 ml Blood Collection Tube	76 x 5/7 ml	12 x 110					75003680
29 3 ml RIA or Round Bottom Tube (without cap)	76 x 3/5 ml	11 x 110					75003793
30 1.5/2 ml Conical Microtube	136 x 2 ml	11 x 45					75003700



TX-750 Swinging Bucket Rotor¹

Thermo Scientific Rotors and Adapters

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Heraeus Multifuge X1/X1R		Heraeus Multifuge X3/X3R		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
TX-750 High Versatility Swinging Bucket Rotor*							75003607
Round Buckets (set of 4), 90°, R_{max} 195 mm	4 x 750 ml		n/a	n/a	4700	4816	75003608
ClickSeal Biocontainment Lids for Round Buckets (set of 4)							75003609
Replacement O-rings for Lids (set of 4)							75003610
Adapters for Round Buckets (sets of 4 unless otherwise noted)							
750 ml Polypropylene Bio-Bottle (75003699, pkg of 12)	4 x 750 ml	98 x 133					No adapter needed
500 ml Corning® Conical Bottle	4 x 500 ml	98 x 133					Corning no. 431124
250 ml Corning Conical Bottle	4 x 250 ml	62.5 x 139					75003792
① 250 ml Nalgene® Oak Ridge Bottle	4 x 250 ml	62.5 x 139					75003710
① 225 ml and 175 ml BD Falcon Conical Bottle	4 x 225 ml	62.5 x 139					75003710
							+BD no. 352090
① 200 ml Nunc™ Conical Bottle	4 x 200 ml	62.5 x 139					75003710
							+ Nunc no. 377585
① 175 ml Nalgene Bottle	4 x 175 ml	62.5 x 139					75003710
							+ Nalgene no. DS3126-0175
② 100 ml Round Bottom Open-Top Tube	8 x 100 ml	45 x 123					75003713
③ 50 ml Conical Tube (includes sealing vessel)	12 x 50 ml	29.5 x 120					75003714
④ 50 ml Conical Tube	28 x 50 ml	29.5 x 120					75003638
⑤ 50 ml Round Bottom Tube	28 x 50 ml	29.5 x 120					75003715
⑥ 25 ml Universal Conical or Skirted Tube	28 x 25 ml	25.5 x 120					75003716
⑦ 15 ml Conical Tube	56 x 15 ml	17 x 122					75003639
⑧ 15 ml Blood Collection Tube (17 x 125 mm)	32 x 15 ml	17 x 134					(inner circle only) 75003719
⑨ 14 ml Conical Urine Tube	48 x 14 ml	18 x 124					75003718
⑧ 10 ml Blood Collection or 15 ml Corex/Kimble Tube	84 x 10/15 ml	17 x 117					75003719
⑩ 5/7 ml Blood Collection Tube	108 x 5/7 ml	13 x 116					75003723
⑪ 5 ml RIA or Round Bottom Tube (without cap)	148 x 5 ml	13 x 111					75003724
⑪ 5/7 ml Round Bottom Tube (without cap) with Decanting Aid	148 x 5/7 ml	13 x 111					75003732
⑫ 1.5/2 ml Conical Microtube	192 x 2 ml	11 x 50					75003733
⑬ T-75 Nunc Easy Flask (set of 2)	4 x T-75	-					75008383
⑭ T-25 Nunc Easy Flask (set of 2)	8 x T-25	-					75008384

¹ Buckets and lids sold separately

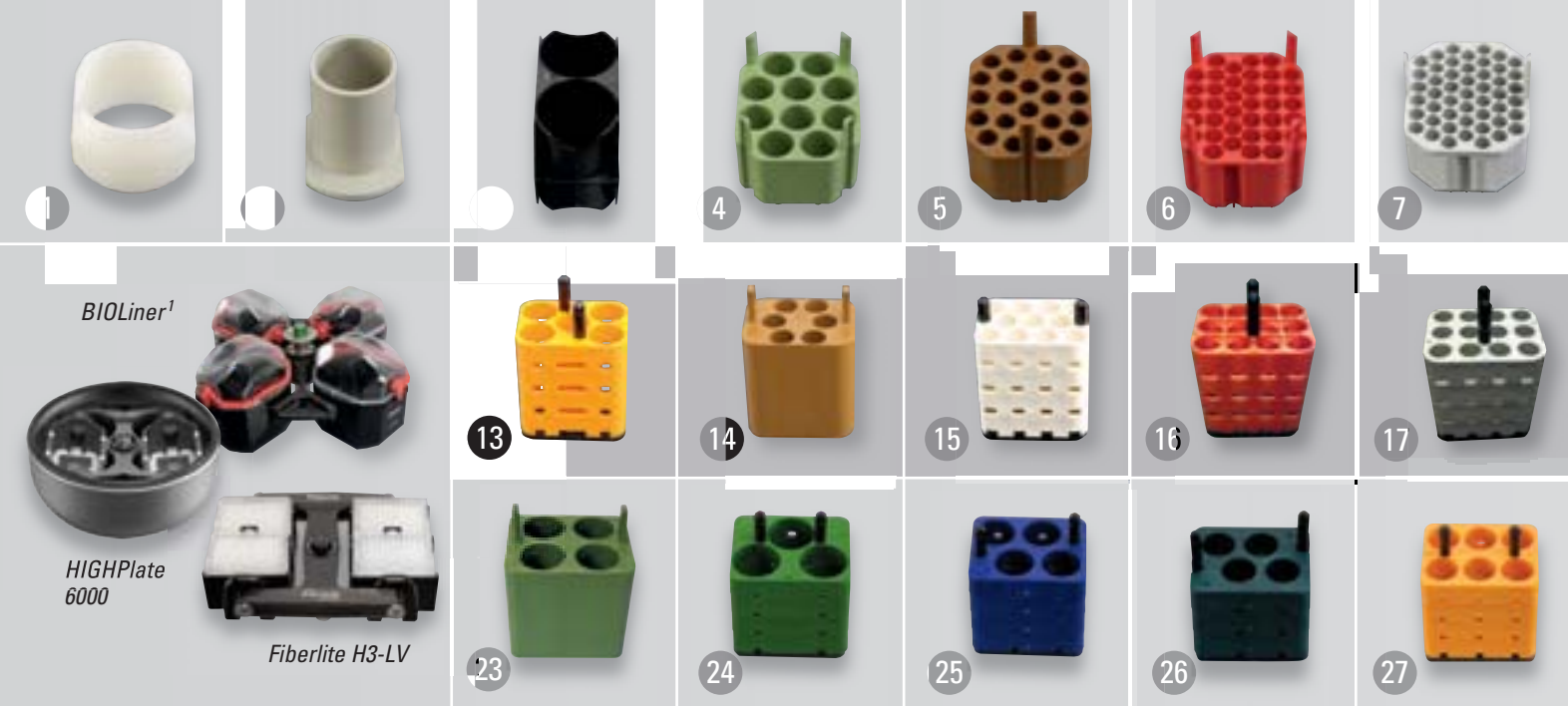


Thermo Scientific Rotors and Adapters

Thermo Scientific Rotors and Adapters			Heraeus Multifuge X1/X1R		Heraeus Multifuge X3/X3R		
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)					Cat. No.
TX-750 High Versatility Swinging Bucket Rotor (continued)							
15 Rectangular Buckets (set of 4), 90°, R _{max} 195 mm	4 x 250 ml		n/a	n/a	4500 4700 ³ 4300 ⁴	4415 4816 ³ 4031 ⁴	75003614
ClickSeal Biocontainment Lids for Rectangular Buckets (set of 4)							75003615
Replacement O-rings for Lids (set of 4)							75003616
Adapters for Rectangular Buckets (sets of 4)							
16 250 ml Flat Bottom Bottle	4 x 250 ml	63 x 130					75003737
17 150 ml Round Bottom Open-Top Tube	4 x 150 ml	56 x 124					75003738
18 100 ml Round Bottom Open-Top Tube	4 x 100 ml	46 x 124					75003742
19 50 ml Conical Tube	20 x 50 ml	30 x 121					75003685
20 50 ml Round Bottom Tube	12 x 50 ml	35 x 121					75003749
21 45 ml Flat/Round Tube	16 x 45 ml	30 x 121					75003750
22 25 ml Universal Tube	16 x 25 ml	26 x 121					75003755
23 25 ml DIN Round Bottom Tube	24 x 25 ml	26 x 121					75003756
24 15 ml Conical Tube	48 x 15 ml	17 x 120					75003684
25 14 ml Flanged Round Bottom Tube	36 x 14 ml	18 x 121					75003758
26 15 ml Conical Urine Tube	36 x 15 ml	17 x 124					75003759
27 10 ml Blood Collection or 15 ml DIN Tube	64 x 10/15 ml	17 x 118					75003767
28 5/7 ml Blood Collection Tube	80 x 5/7 ml	14 x 118					75003768
29 5/7 ml Round Bottom Tube	112 x 5/7 ml	13 x 119					75003769
30 1.5/2 ml Conical Microtube	224 x 2 ml	11 x 50					75003770
31 Carriers for microplates and T-75 Horizontal Flasks, including plate trays and neoprene pad, 90° R _{max} 155 mm	4 x 4 Standard or 4 x 1 Deepwell	H _{max} : 60 mm	n/a	n/a	4700	3828	(set of 2) 75003795 (set of 4) 75003617

³ 230 V refrigerated centrifuge

⁴ 120 V ventilated and refrigerated centrifuge



Thermo Scientific Rotors and Adapters

Heraeus
Multifuge X1/X1R

Heraeus
Multifuge X3/X3R

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	Cat. No.
BIOLiner High Capacity Rotor							75003667
BIOLiner Buckets (set of 4), 90°, R_{max} 200 mm	4 x 750 ml		n/a	n/a	3500	2739	75003668
ClickSeal Biocontainment Lids for BIOLiner Buckets (set of 4)							75003669
Replacement O-rings for Lids							75003688
Adapters for BIOLiner Buckets (sets of 4)							
1 750 ml Flat Bottom Bottle with all round adapters listed for TX-750 round bucket	4 x 750 ml	98 x 124					75003692
1 500 ml Corning Conical Bottle	4 x 500 ml	98 x 124					75003692
							+ Corning no. 431124
2 250 ml Corning Conical Bottle ⁵	4 x 250 ml	62 x 145					75003691
3 250 ml Nalgene Oak Ridge Bottle	8 x 250 ml	62 x 130					75003675
3 225 ml and 175 ml BD Falcon Conical Bottle	8 x 225 ml	62 x 130					75003675
							+ BD no. 352090
3 200 ml Nunc Conical Bottle	8 x 175 ml	62 x 130					75003675
							+ Nunc no. 377585
4 50 ml Conical Tube	40 x 50 ml	30 x 120					75003674
5 15 ml Conical Tube	88 x 15 ml	17.5 x 121					75003673
6 10 ml Blood Collection Tube	148 x 10 ml	17 x 110					75003672
7 5/7 ml Blood Collection Tube	196 x 5/7 ml	14 x 110					75003671
Microplate Carriers for BIOLiner Rotor (set of 4), 90°, R_{max} 179 mm	4 x 4 Standard or 4 x 1 Deepwell	H_{max}: 60 mm	n/a	n/a	3500	2451	(set of 2) 75003796 (set of 4) 75003670
Sealing Lids for BIOLiner Microplate Carriers (set of 4)							75003689
Replacement O-rings for Microplate Carrier Lids (set of 4)							75003626
HIGHPlate 6000 Microplate Rotor, 90°, R_{max} 139 mm	2 x 5 Standard	H_{max}: 80 mm	n/a	n/a	6300	6168	75003606
Fiberlite H3-LV Large Volume Swinging Bucket Rotor, 90°, R_{max} 127 mm	28 Standard or, 8 Deepwell	H_{max}: 100 mm	n/a	n/a	3600	1840	75003665
M-20 Microplate Rotor, 90°, R_{max} 127 mm, includes 2 buckets and 2 adapters	2 x 3 Standard or 2 x 1 Deepwell	H_{max}: 65 mm	4000	2272	n/a	n/a	75003624
Sealed Carriers, includes trays and lids (set of 2)		H _{max} 45 mm					75003625
Replacement Sealing Lids (set of 2)							75002011
Replacement O-rings (set of 4 with grease)							75002012

¹ Buckets and lids sold separately

⁵ In open buckets only



Thermo Scientific Rotors and Adapters

Heraeus Multifuge X1/X1R

Heraeus Multifuge X3/X3R

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	Cat. No.
BIOShield 720 High Speed Swinging Bucket Rotor, 90°, R_{max} 162 mm	4 x 180 ml		6300	7188	n/a	n/a	75003621
Adapters for BIOShield 720 Rotor (sets of 4)							
180 ml Polypropylene Screw Cap Bottle (75003800, pkg of 12)	4 x 180 ml	56 x 123					75003693
8 150 ml Round Bottom Open-Top Tube	4 x 150 ml	50 x 122					75003813
9 100 ml Round Bottom Open-Top Tube	4 x 100 ml	44 x 120					75003814
10 50 ml Conical Tube	8 x 50 ml	34.5 x 116					75003677
11 50 ml DIN Round Bottom Tube	8 x 50 ml	34 x 109					75003816
12 25 ml Universal Tube	16 x 25 ml	22.5 x 105					75003818
13 25 ml DIN Round Bottom Tube	20 x 25 ml	25 x 107					75003817
14 15 ml Conical Tube	24 x 15 ml	17 x 120					75003678
15 15 ml Sarstedt Tube	44 x 15 ml	17 x 103					75003820
16 10 ml Blood Collection Tube	48 x 10 ml	17 x 105					75003701
17 5/7ml Blood Collection Tube	48 x 5/7 ml	13 x 106					75003821
18 5/7ml Round Bottom Open-Top Tube	80 x 5/7 ml	13 x 104					75003822
19 1.5/2ml Conical Microtube	160 x 2 ml	11 x 45					75003823
BIOShield 1000A High Speed Swinging Bucket Rotor, 90°, R_{max} 178 mm	4 x 250 ml		n/a	n/a	6000	7164	75003603
Adapters for BIOShield 1000A Rotor (sets of 4)							
20 250 ml Nalgene Flat Bottom Bottle	4 x 250 ml	62.5 x 124					75003737
21 150 ml Round Bottom Open-Top Tube	4 x 150 ml	56.5 x 119					75003738
22 100 ml Round Bottom Open-Top Tube	4 x 100 ml	45.5 x 120					75003742
23 50 ml Conical Tube	16 x 50 ml	29.5 x 117					75003643
24 50 ml Round Bottom Tube	12 x 50 ml	35 x 113					75003749
25 45 ml Flat/Round Tube	16 x 45 ml	30 x 113					75003750
26 25 ml Universal Tube	16 x 25 ml	26 x 113					75003755
27 25 ml DIN Round Bottom Tube	24 x 25 ml	25.5 x 113					75003756
28 15 ml Conical Tube	36 x 15 ml	17 x 121					75003642
29 14 ml Flanged Round Bottom Tube	36 x 14 ml	18 x 113					75003758
30 15 ml Conical Urine Tube	36 x 15 ml	17 x 115					75003759
31 10 ml Blood Collection or 15 ml DIN Tube	64 x 10/15 ml	17 x 109					75003767
32 5/7 ml Blood Collection Tube	80 x 5/7 ml	14 x 109					75003768
33 5/7 ml Round Bottom Tube	112 x 5/7 ml	13 x 110					75003769
34 1.5/2 ml Conical Microtube	224 x 2 ml	11 x 50					75003770

Fixed Angle Rotors



Fiberlite F14-6x250LE



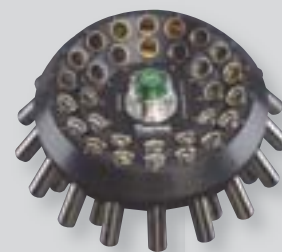
Fiberlite F15-6x100



Fiberlite F13-14x50c



Fiberlite F15-8x50c



CLINIConic

Thermo Scientific Rotors and Adapters

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Heraeus Multifuge X1/X1R		Heraeus Multifuge X3/X3R		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
Fiberlite F14-6x250LE Fixed Angle Rotor, 23°, R_{max} 137 mm	6 x 250 ml	62 x 125	n/a	n/a	11000	18533	75003662
O-ring Refresher Kit					10000⁴	15317⁴	021-062153
Adapters for F14-6x250LE Rotor (sold separately unless otherwise noted)							
50 ml Conical Tube (set of 2)	6 x 50 ml	30 x 121					75100136
50 ml Round Bottom Tube (set of 2)	6 x 50 ml	30 x 121					010-0138
30 ml Glass Round Bottom Tube	18 x 30 ml	24 x 105					00449
15 ml Conical Tube	30 x 15 ml	17 x 121					75101073
10 ml Round Bottom Tube	42 x 10 ml	17 x 110					00389
7 ml Round Bottom Tube	30 x 7 ml	14 x 110					00369 + 00456
5 ml Round Bottom Tube	72 x 5 ml	13 x 80					00388
Fiberlite F15-6x100 Fixed Angle Rotor, 25°, R_{max} 98 mm	6 x 100 ml	38 x 105	15000	24652	15000	24652	75003698
O-ring Refresher Kit							021-069031
Adapters for F15-6x100 Rotor (sold separately)							
94 ml Nalgene Tube	6 x 94 ml	38 x 105					No adapter needed
50 ml Conical Tube	6 x 50 ml	30 x 121					75003103
15 ml Conical Tube	6 x 15 ml	17 x 123					75003095
50 ml Round Bottom Tube	6 x 50 ml	30 x 117					75003102
38 ml Round Bottom Tube	6 x 38 ml	26 x 110					75003094
16 ml Round Bottom Tube	6 x 16 ml	18 x 123					76002906
12 ml Round Bottom Tube	12 x 12 ml	16 x 95					75003093
6.5 ml Round Bottom Tube	12 x 6.5 ml	13 x 114					75003092
3.5 ml Round Bottom Tube	24 x 3.5 ml	11 x 100					75003091
1.5/2 ml Conical Microtube	24 x 2 ml	11 x 40					76002905
Fiberlite F13-14x50c Fixed Angle Rotor, 34°, R_{max} 153 mm	14 x 50 ml	30 x 121	8500	12359	10000	17105	75003661
O-ring Refresher Kit					9250⁴	14636⁴	021-149027
Adapters for F13-14x50c Rotor (sold separately)							
15 ml Conical Tube	14 x 15 ml	17 x 121					75100378
Fiberlite F15-8x50c Fixed Angle Rotor, 25°, R_{max} 104 mm	8 x 50 ml	30 x 121	14500	24446	14500	24446	75003663
O-ring Refresher Kit			14000⁴	22789⁴			021-085077
Adapters for F15-8x50c Rotor (sold separately)							
15 ml Conical Tube	8 x 15 ml	17 x 121					75100378
CLINIConic Fixed Angle Rotor, 37°, R_{max} 140 mm	30 x 15 ml		5650	4997	n/a	n/a	75003623
Adapters for CLINIConic Rotor							
15 ml Round/Conical Bottom Tube	30 x 15 ml	16.5 x 131					No adapter needed
10 ml Round Bottom Tube	30 x 10 ml	16.5 x 95					75003702
7 ml Round Bottom or Blood Collection Tube (each)	30 x 7 ml	16.5 x 131					11172596
5 ml Round Bottom or Blood Collection Tube (each)	30 x 5 ml	13 x 95					11172595



8x50ml Sealed



HIGHConic II



Fiberlite F21-48x2







Microliter 30x2



Microliter 48x2

Thermo Scientific Rotors and Adapters

Description	Rotor Capacity (Places x Volume)	Max Tube Dimensions (Ø x L, mm)	Heraeus Multifuge X1/X1R		Heraeus Multifuge X3/X3R		Cat. No.
			Max Speed (rpm)	Max RCF (x g)	Max Speed (rpm)	Max RCF (x g)	
 8x50 ml Individually Sealed Fixed Angle Rotor, 45°, R_{max} 143 mm	8 x 50 ml		6700	7177	n/a	n/a	75003694
Replacement O-rings (set of 12)			6500⁴	6755⁴			75003689
Adapters for 8x50 ml Sealed Rotor							
50 ml Conical Tube	8 x 50 ml	29.5 x 116					No adapter needed
 HIGHConic II Aluminum Fixed Angle Rotor, 45°, R_{max} 126 mm	6 x 94 ml	38 x 105	10350	15090	10350	15090	75003620
Replacement Sealing O-rings (set of 2 with grease)							75003058
Adapters for HIGHConic II Rotor (sold separately)							
94 ml Round Bottom Tube	6 x 94 ml	38 x 105					No adapter needed
50 ml Conical Tube	6 x 50 ml	29.5 x 117					75003103
15 ml Conical Tube	6 x 15 ml	17 x 123					75003095
50 ml Round Bottom Tube	6 x 50 ml	29.4 x 117					75003102
38 ml Round Bottom Tube	6 x 38 ml	26 x 110					75003094
16 ml Round Bottom Tube	6 x 16 ml	18 x 123					76002906
12 ml Round Bottom Tube	12 x 12 ml	16 x 95					75003093
6.5 ml Round Bottom Tube	12 x 6.5 ml	13.5 x 114					75003092
3.5 ml Round Bottom Tube	24 x 3.5 ml	11 x 100					75003091
1.5/2 ml Conical Microtube	24 x 2 ml	11 x 40					76002905
Fiberlite F21-48x2 Fixed Angle Rotor, 45°, R_{max} 97 mm	48 x 2 ml	11 x 50	15200	25055	15200	25055	75003664
O-ring Refresher Kit							021-489021
Adapters for F21-48x2 Rotor (sets of 24)							
0.2 ml PCR Tube	48 x 0.25 ml	6 x 20					76003750
0.5 ml Microtube	48 x 0.5 ml	8 x 44					76003758
0.25 ml Microtube	48 x 0.25 ml	6 x 46					76003759
 Microliter 30x2 Sealed Aluminum Fixed Angle Rotor, 45°, R_{max} 100 mm	30 x 2 ml	11 x 50	15200	25830	n/a	n/a	75003652
Adapters for Microliter 30x2 Rotor (sets of 24)							
0.2 ml PCR Tube	30 x 0.25 ml	6.5 x 20					76003750
0.5 ml Microtube	30 x 0.5 ml	8 x 44					76003758
0.25 ml Microtube	30 x 0.25 ml	6 x 46					76003759
 Microliter 48x2 Sealed Aluminum Fixed Angle Rotor, 45°, R_{max} 98 mm	48 x 2 ml	11 x 50	15200	25314	15200	25314	75003602
Adapters for Microliter 48x2 Rotor (sets of 24)							
0.2 ml PCR Tube	48 x 0.25 ml	6.5 x 20					76003750
0.5 ml Microtube	48 x 0.5 ml	8 x 44					76003758
0.25 ml Microtube	48 x 0.25 ml	6 x 46					76003759

⁴ 120 V ventilated and refrigerated centrifuge

Thermo Scientific Heraeus Multifuge Centrifuge Series



Specifications	Heraeus Multifuge X1/X1R		Heraeus Multifuge X3/X3R	Heraeus Multifuge X3F/X3FR
Swinging Bucket Rotors				
Max Capacity	4 x 400 ml (with TX-400 rotor)		4 x 750 ml (with TX-750 and BIOliner rotors)	
Max Speed	6300 rpm (with BIOShield 720 rotor)		6000 rpm (with BIOShield 1000A rotor)	
Max RCF	7144 x g (with BIOShield 720 rotor)		7164 x g (with BIOShield 1000A rotor)	
Fixed Angle Rotors				
Max Capacity	6 x 100 ml (with F15-6x100 rotor)		6 x 250 ml (with F14-6x250LE rotor)	
Max Speed	15200 rpm (with microvolume rotors)		15200 rpm (with microvolume rotors)	
Max RCF	25830 x g (with 30x2 ml rotor)		25314 x g (with 48x2 ml rotor)	
Control System	Microprocessor			
Drive System	Direct, brushless induction low profile motor			
Rotor Locking System	Auto-Lock III			
Imbalance Detection System	SMARTSpin			
Programs	99 (5 with direct access key)			
Temperature Set Range*	-10 °C to +40 °C			
Pre-Cooling Function*	Yes, with direct button			
Refrigeration System*	CFC free			
Pulse (Short) Run	Yes			
Acceleration Rates	9			
Deceleration Rates	10			
Max Timer Range	9h, 99min + continuous			
Sound Level (dBA) with swinging bucket rotor at top speed	< 61/ < 55* (TX-400)	< 61/ < 57* (TX-750)	< 64/ < 58* (TX-750)	
with F15-8x50 rotor at top speed	< 65	< 64	< 55/ < 57*	
Other Features	Certified ClickSeal biocontainment system, language selection, motorized lid latch			
Max Power Consumption (W)	120 V	850/1200*	1400	
	230 V	1010/1400*	1700/1950*	
Max Heat Output (BTU/h)	120 V	2901/4096*	4776	
	230 V	3447/4776*	5800/6653*	
Dimensions				
Height (lid open)	87 cm/ 34.3 in	90 cm/ 35.4 in	138.5 cm/ 54.5 in 139 cm*/ 54.7 in*	
Height (lid closed)	36 cm/ 14.2 in	36 cm/ 14.2 in	79 cm/ 31.1 in	
Width	44 cm/ 17.3 in 62.3 cm*/ 24.5 in*	56.5 cm/ 22.2 in 74.5 cm*/ 29.3 in*	55 cm/ 21.7 in	
Depth	60.5 cm/ 23.8 in	67 cm/ 26.4 in	67 cm/ 26.4 in	
Weight	57.5 kg/ 126.8 lb 91.5 kg*/ 201.7 lb*	86 kg/ 189.6 lb 116 kg*/255.7 lb*	152.5 kg/ 336.2 lb 142.5 kg*/ 314.2 lb*	
Technical Standards	IEC 61010-1, IEC 61010-2-020, IEC 61010-2-101, 230 V only: EN 292, EN 61326, EN 55011B			
Certifications	UL listed, CSA certified, CE marked, IVD compliant, Certified Biosafety			
Ordering Information	Heraeus Multifuge X1/X1R	Heraeus Multifuge X3/X3R	Heraeus Multifuge X3F/X3FR	
Heraeus Multifuge, ventilated, 230 V, 50/60 Hz	75004210	75004500	75004530	
Heraeus Multifuge, ventilated, 120 V, 60 Hz	75004211	75004501	75004531	
Heraeus Multifuge, refrigerated, 230 V, 50/60 Hz	75004250	75004515	75004536	
Heraeus Multifuge, refrigerated, 120 V, 60 Hz	75004251	75004516	75004537	

*Refrigerated models

The quality of the procedures used to design, manufacture, sell and service the Heraeus Multifuge X1 and Multifuge X3 centrifuge series is certified and maintained in accordance to the **ISO 13485** international standard.

Our effort to continuously improve our formalized business processes is certified and regularly audited in conformance with **ISO 9000** family of Quality Standards.

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