

Centrifugation

Thermo Scientific X Series Centrifuges

Revolving around performance

The Thermo Scientific™ X Series Centrifuges are designed to help provide exceptional performance, power and versatility through innovations to support efficiency across applications. The refrigerated models feature Thermo Scientific™ GreenCool™ Technology, a next-generation natural refrigerant cooling system for enhanced sustainability. These refrigerated centrifuges have a Global Warming Potential (GWP) of 3, do not contribute to ozone layer depletion, and comply with EU and US EPA F-gas regulations. Besides being less hazardous, the centrifuges use up to 15% less energy** compared to previous models. Additionally, they are manufactured in a certified zero-waste facility using 100% renewable electricity in Osterode am Harz, Germany. In the United States, we offer a recycling program that helps reduce the amount of waste sent to landfills. With advanced safety features, ergonomic design, and versatile configurations, these centrifuges turn every challenge into an opportunity.

Thermo Scientific™ features

- Intuitive user interface
- Wide range of rotors for application flexibility
- Thermo Scientific™ Auto-Lock™ Rotor Exchange
- GreenCool Technology (refrigerated models)
- Improved ergonomics and user experience
- Optional connectivity, sample tracking software
- Thermo Scientific™ ClickSeal™ Biocontainment Lids
- IVD models approved for use in diagnostic applications

Touchscreen | Up to 18 rotor options | Quick rotor exchange

**GREEN
COOL**
TECHNOLOGY
& SUSTAIN-
ABILITY



**GLOBAL
WARMING
POTENTIAL***

3

**LOWER ENERGY
CONSUMPTION
UP TO****

15%

**MADE IN A
CERTIFIED
ZERO-
WASTE
FACILITY*****

**END-OF-
LIFE
RECYCLING
PROGRAM******

* Due to natural refrigerant (R290).

**Comparing maximum power consumption to previous model. Current model X2TR Centrifuge, 120V (1200W) and previous model Thermo Scientific™ Sorvall™/Multifuge™ X1R Pro Centrifuge, 120V (1400W)

*** Zero waste defined as less than 10% of non-hazardous waste sent to landfill, incineration or waste-to-energy.

**** End of life recycling program in the United States. Visit thermofisher.com/centrifuge-recycling



Thermo Scientific™ X4T, X4TR and X4FR Centrifuges

Specifications	X4T		X4TR		X4FR	
	IVD-MD	General use only	IVD-MD	General use only	IVD-MD	General use only
Swinging bucket rotors						
Maximum capacity	4 x 1,000 mL with TX-1000 rotor					
Maximum speed	6,100 rpm with H-Flex HS4 rotor					
Maximum RCF	7,196 x g with H-Flex HS4 rotor					
Fixed angle rotors						
Maximum capacity	6 x 250 mL with F14-6x250LE rotor					
Maximum speed	15,200 rpm with F21-48 x 2, Microliter 48 x 2 or Microliter 30 x 2					
Maximum RCF	25,830 x g with Microliter 30 x 2					
Centrifuge details						
Control system	Microprocessor					
Drive system	Direct, brushless induction low profile motor					
Accel/decel profiles	Choices of 9 accel / 10 decel rates					
Material	Front, top, sides: PC-ABS plastic painted with 2K PUR-based lacquer; metal housing: cold rolled steel with powder paint; centrifuge bowl: stainless steel; benchtop centrifuge feet: rubber/ floor-standing centrifuge feet: lockable casters					
Safety features	SMARTSpin Imbalance detection, finger-pinch prevention, crash-proof construction					
Sustainability features	Green Mode, scheduling features, greener rotor options		GreenCool technology, Green Mode, scheduling features, greener rotor options			
Noise level ¹	<50 dB(A)		<51 dB(A)		<54 dB(A)	
Warranty	5 years limited (2 years standard warranty + 3 additional years on motor and refrigeration)					
Includes	Corrosion resistance oil (70009824), power cord, declaration of conformity (where applicable)					
Temperature range	N/A		–20°C to +40°C			
Number of compatible rotors	18					
Display details						
Display	Full color touch screen interface					
Run time	Max 99 h, 59 min, 59 sec; also with continuous and customizable pulse					
Speed	Increments of 1 rpm / 1 x g					
Timer	Count up or down in increments of 1 second					
Temperature	N/A		Sample temperature in increments of 1 degree			
Program storage	Up to 100 run programs with step programming					
Programmability	Via easy access touchscreen menu					
Dimensions, weight						
Dimensions H x W x D lid closed (cm)	36.2 x 56.6 x 69.0		36.1 x 74.6 x 69.5		83.5 x 56.4 x 69.6	
Height lid open (cm)	86.1		86.0		135.0	
Dimensions H x W x D lid closed (inches)	14.3 x 22.3 x 27.2		14.2 x 29.4 x 27.2		32.9 x 22.2 x 27.2	
Height lid open (inches)	33.9		33.9		53.1	
Net weight (kg)	89.0		125.0		155	
Net weight (lbs)	196.2		275.6		341.8	
Gross weight (kg)	110.0		147.0		188	
Gross weight (lbs)	242.6		324.1		414.5	
Certifications and standards						
IVD/MD	√		√		√	
Certifications	All models: IEC/UL/EN 61010-1, IEC/UL/EN 61010-2-020, IEC/UL/EN 61326-1, FCC part 15 Additional certification for refrigerated models: IEC/UL/EN 61010-2-011 Additional certifications for IVD-MD models: IEC/UL/EN 61010-2-101, IEC/UL/EN 61326-2-6					
Standards/ directives	ISO 14971, ISO 13485, ISO 9001 Additional directives for IVD-MD models: FDA listed, Device Class 1, EU IVDR class A					
Cleanroom compatibility			Class ISO 6 according to DIN EN ISO 14644-1		Class ISO 8 according to DIN EN ISO 14644-1	
Ordering information	X4T		X4TR		X4FR	
	IVD-MD	General use only	IVD-MD	General use only	IVD-MD	General use only
220–240 V 50/60 Hz (Global)	75007341*	75007343	75007365*	75007366	75007361*	75007362
208–240 V 60 Hz (North America only)	75007341*	N/A	75007364*§	N/A	75007360*§	N/A
120 V 60 Hz (Global)	75007340*	N/A	75007364*	N/A	75007360*	N/A
100 V 50/60 Hz (Japan only)	N/A	75007339	N/A	75007363	N/A	75007359

1. Noise level measured with TX-1000 rotor at 1,000 x g/ 2,070 rpm.

*Indicates a centrifuge, rotor and/or adapter product approved for use in diagnostic applications; see user manual for details.

§ Refrigerated models are rated to be used with 120V-240V, 60Hz power sources and will include both the NEMA 5-15P (120V) and NEMA 6-15P (208V) plug heads.


Thermo Scientific™ X2T and X2TR Centrifuges

Specifications	X2T		X2TR	
	IVD	General use only	IVD	General use only
Swinging bucket rotors				
Maximum capacity	4 x 400 mL with TX-400 rotor			
Maximum speed	6,300 rpm with BIOShield 720 rotor			
Maximum RCF	7,188 x g with BIOShield 720 rotor			
Fixed angle rotors				
Maximum capacity	6x100 mL with F15 6x100y			
Maximum speed	15,200 rpm with F21-48x2, Microliter 48 x 2 or Microliter 30 x 2			
Maximum RCF	25,830 x g with Microliter 30 x 2			
Centrifuge details				
Control system	Microprocessor			
Drive system	Direct, brushless induction low profile motor			
Accel/decel profiles	Choices of 9 accel / 10 decel rates			
Material	Front, top, sides: PC-ABS plastic painted with 2K PUR-based lacquer; metal housing: cold rolled steel with powder paint; centrifuge bowl: stainless steel; centrifuge feet: rubber			
Safety features	SMARTSpin imbalance detection, finger-pinch prevention, crash-proof construction			
Sustainability features	Green Mode, scheduling features, greener rotor options		GreenCool technology, Green Mode, scheduling features, greener rotor options	
Noise level ¹	42 dB(A)		<52 dB(A)	
Warranty	5 years limited (2 years standard warranty + 3 additional years on motor and refrigeration)			
Includes	Printed English user manual, USB stick with 28 languages of user manual, corrosion resistance oil (70009824), power cord, declaration of conformity			
Temperature range	N/A		−20°C to +40°C	
Number of compatible rotors	17		17	
Display details				
Display	Full color touch screen interface			
Run time	Max 99 h, 59 min, 59 sec; also with continuous and customizable pulse			
Speed	Increments of 1 rpm / 1 x g			
Timer	Count up or down in increments of 1 second			
Temperature	N/A		Sample temperature in increments of 1 degree	
Program storage	Up to 100 run programs with step programming			
Programmability	Via easy access touch screen menu			
Dimensions, weight				
Dimensions H x W x D lid closed (cm)	36.2 x 44.5 x 66		36.1 x 62.5 x 66	
Height lid open (cm)	85.5		85.5	
Dimensions H x W x D lid closed (inches)	14.3 x 17.5 x 26		14.2 x 24.6 x 26	
Height lid open (inches)	33.6		33.6	
Net weight (lbs)	134		202	
Net weight (kgs)	61		94 (96 for 100 V)	
Gross weight	75 kg (165 lbs)		108 kg (233 lbs)	
Certifications and standards				
IVD/MD	√		√	
Certifications	All models: IEC/UL/EN 61010-1, IEC/UL/EN 61010-2-020, IEC/UL/EN 61326-1, FCC part 15 Additional certification for refrigerated models: IEC/UL/EN 61010-2-011 Additional certifications for IVD-MD models: IEC/UL/EN 61010-2-101, IEC/UL/EN 61326-2-6			
Standards/directives	ISO 14971, ISO 13485, ISO 9001 Additional directives for IVD-MD models: FDA listed, Device Class 1, EU IVDR class A			
Ordering information	X2T		X2TR	
	IVD	General use only	IVD	General use only
230V	75001042*	75001043	75001048*	75001039
120V	75001042*	N/A	75001047*	N/A
100V	N/A	75001043	N/A	75001049

¹Noise level measured with TX-400 rotor at 500 x g

*Indicates a centrifuge, rotor and/or adapter product approved for use in clinical applications; see user manual for details.

 Learn more at thermofisher.com/greenercentrifuges

 The intended use of the products mentioned in this brochure varies. Please refer to the product label. It is the customer's responsibility to ensure that the performance of the product is suitable for customers' specific uses or applications. © 2026 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. **FLY-15024036 0626**
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