



## Thermo Scientific Precision Water Baths

Exceptional performance and reliability  
for laboratory applications

# Thermo Scientific Precision Water Baths – Value, Performance and Reliability

## Reliability

Our Precision Water Baths provide exceptional performance and reliability for your laboratory applications. Available in a variety of models and capacities, all Precision Water Baths can be equipped with a broad range of accessories to support your specific application requirements.

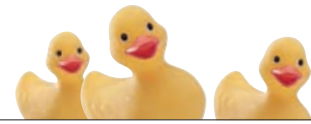
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# Applications

	General Purpose	Circulating		Shaking		Steaming
	Models 180 and 280 Series	Models 260, 265, 270	Coliform	Models 25 & 50	Dubnoff and Shallow Form	4-Hole and 8-Hole
Bacteriological Examinations	•	•	•	•	•	
Coagulation Tests	•	•		•		
Coliform Determinations		•	•	•		
Copper Strip Corrosion Tests	•	•			•	•
Crude Oil Studies	•	•				
Cytochemistry	•	•			•	
Dialysis					•	
Demulsibility Studies	•	•				
Enzyme Studies		•			•	
Electrophoresis Gel Destaining				•		
Environmental Studies	•	•	•	•	•	
Food Processing QC	•	•	•	•		
Genetic Studies	•	•		•	•	
Hormone Studies	•	•		•	•	
Immunological Research	•	•		•	•	
Incubation for Microbiological Assays	•	•	•	•		
Incubation for Microcentrifugation Tubes	•				•	
Melting Agar	•					•
Metallurgical Analysis	•	•		•	•	•
Molecular Biology	•	•		•	•	
Protein Analysis	•	•				
Radioactive Isotope Uptake Studies	•	•		•	•	
Radiochemistry	•	•		•		
Serological Research	•	•		•	•	
Thawing	•	•		•	•	
Thawing Blood	•	•		•	•	
Thawing Cryopreservation Vials	•					•
Tissue Culture Research	•	•		•	•	
Virology Research	•	•		•	•	
Warming Reagents	•	•				
Water Quality Research	•	•	•	•	•	

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# Thermo Scientific Precision General Purpose Water Baths



*FREE duck in every bath!*

## Features

- Easy-to-maintain, seamless stainless-steel interior chamber and epoxy powder-coated exterior resist corrosion and chemical damage
- Free stainless-steel diffuser shelf
- Free stainless-steel gable cover, all baths except Models 181/281
- Models 181/281 come with a polypropylene gable cover
- Choice of analog or digital temperature control
- Free thermometer on analog models
- Eight sizes. Choose chamber capacities ranging from 1.5 to 43 liters
- Over-temperature safety circuitry prevents thermal runaway
- Front mounted controls simplify operation
- UL listed (120V)
- A free duck in every bath!

## Specifications

Models	180	280	181	281
Chamber Capacity <sup>1</sup>	0.4 gallon / 1.5 liters	0.4 gallon / 1.5 liters	0.7 gallon / 2.5 liters	0.7 gallon / 2.5 liters
Temperature Display	0° to 100°C (Thermometer)	0° to 100°C (Digital LED)	0° to 100°C (Thermometer)	0° to 100°C (Digital LED)
Maximum Temperature <sup>2</sup>	95.0°C	95.0°C	99.9°C	99.9°C
Temperature Uniformity	±0.2°C at 37°C	±0.2°C at 37°C	±0.2°C at 37°C	±0.2°C at 37°C
Temperature Sensitivity	±0.1°C at 37°C	±0.1°C at 37°C	±0.1°C at 37°C	±0.1°C at 37°C
<b>Dimensions (L x W x H)</b>				
Chamber	6 x 11.5 x 2 in. (15.2 x 29.2 x 5.1 cm)	6 x 11.5 x 2 in. (15.2 x 29.2 x 5.1 cm)	6 x 5 x 6 in. (15.2 x 12.7 x 16.2 cm)	6 x 5 x 6 in. (15.2 x 12.7 x 16.2 cm)
Exterior without cover	8.9 x 14 x 6.7 in. (22.3 x 35.6 x 17.1 cm)	8 x 14 x 6.7 in. (20.3 x 35.6 x 17.1 cm)	9.75 x 8 x 9.7 in. (27.1 x 20.3 x 24.8 cm)	9.75 x 8 x 9.7 in. (24.8 x 20.3 x 24.8 cm)
<b>Electrical Specs (50/60Hz)</b>				
120V	225 Watts (2.0 Amps)	225 Watts (2.0 Amps)	225 Watts (2.0 Amps)	225 Watts (2.0 Amps)
230V	225 Watts (1.0 Amps)	225 Watts (1.0 Amps)	225 Watts (1.0 Amps)	225 Watts (1.0 Amps)
BTU Output	768	768	768	768
<b>Shipping Data</b>				
Dimensions (L x W x H)	12.25 x 19.25 x 12.25 in. (31.1 x 48.9 x 31.1 cm)	12.25 x 19.25 x 12.25 in. (31.1 x 48.9 x 31.1 cm)	12.25 x 13.75 x 12.25 in. (31.1 x 34.9 x 31.1 cm)	12.25 x 13.75 x 12.25 in. (31.1 x 34.9 x 31.1 cm)
Weight	12 lbs (5.4 kg)	12 lbs (5.4 kg)	12 lbs (5.4 kg)	12 lbs (5.4 kg)
Volume	1.6 cu. ft. (0.05 cu. meter)	1.6 cu. ft. (0.05 cu. meter)	1.2 cu. ft. (0.03 cu. meter)	1.2 cu. ft. (0.03 cu. meter)
<b>Catalog Number new (old)</b>				
120V (UL listed)	2823 (51221070)	2825 (51221044)	2827 (51221064)	2829 (51221046)
230V	2824 (51221071)	2826 (51221045)	2828 (51221211)	2830 (51221047)
Models	182	282	183	283
Chamber Capacity <sup>1</sup>	1.5 gallon / 5.5 liters	1.5 gallon / 5.5 liters	3.2 gallon / 12 liters	3.2 gallon / 12 liters
Temperature Display	0° to 100°C (Thermometer)	0° to 100°C (Digital LED)	0° to 100°C (Thermometer)	0° to 100°C (Digital LED)
Maximum Temperature <sup>2</sup>	99.9°C	99.9°C	99.9°C	99.9°C
Temperature Uniformity	±0.2°C at 37°C	±0.2°C at 37°C	±0.2°C at 37°C	±0.2°C at 37°C
Temperature Sensitivity	±0.1°C at 37°C	±0.1°C at 37°C	±0.1°C at 37°C	±0.1°C at 37°C
<b>Dimensions (L x W x H)</b>				
Chamber	11.5 x 6 x 6 in. (29.2 x 15.2 x 15.2 cm)	11.5 x 6 x 6 in. (29.2 x 15.2 x 15.2 cm)	11.5 x 12.5 x 6 in. (29.2 x 31.7 x 15.2 cm)	11.5 x 12.5 x 6 in. (29.2 x 31.7 x 15.2 cm)
Exterior without cover	16.2 x 8 x 9.75 in. (41.0 x 20.3 x 24.8 cm)	15.25 x 8 x 9.75 in. (38.7 x 20.3 x 24.8 cm)	16.2 x 14.75 x 9.75 in. (41.0 x 37.5 x 24.8 cm)	15.25 x 14.75 x 9.75 in. (38.7 x 37.5 x 24.8 cm)
<b>Electrical Specs (50/60Hz)</b>				
120V	300 Watts (2.5 Amps)	300 Watts (2.5 Amps)	400 Watts (3.3 Amps)	400 Watts (3.3 Amps)
230V	300 Watts (1.3 Amps)	300 Watts (1.3 Amps)	400 Watts (1.75 Amps)	400 Watts (1.75 Amps)
BTU Output	1025	1025	1366	1366
<b>Shipping Data</b>				
Dimensions (L x W x H)	19.25 x 12.25 x 12.25 in. (48.9 x 31.1 x 31.1 cm)	19.25 x 12.25 x 12.25 in. (48.9 x 31.1 x 31.1 cm)	20.5 x 18 x 12.75 in. (52.1 x 45.7 x 32.4 cm)	20.5 x 18 x 12.75 in. (52.1 x 45.7 x 32.4 cm)
Weight	16 lbs (7.3 kg)	16 lbs (7.3 kg)	20 lbs (9.1 kg)	20 lbs (9.1 kg)
Volume	1.6 cu. ft. (0.05 cu. meter)	1.6 cu. ft. (0.05 cu. meter)	2.7 cu. ft. (0.08 cu. meter)	2.7 cu. ft. (0.08 cu. meter)
<b>Catalog Number new (old)</b>				
120V (UL Listed)	2831 (51221073)	2833 (51221048)	2835 (51221060)	2837 (51221050)
230V	2832 (51221068)	2834 (51221049)	2836 (51221062)	2838 (51221051)

<sup>1</sup>Filled 1" (25 mm) from top of chamber, <sup>2</sup>With gable cover

See water bath accessories on back cover.



Precision 281 Digital Water Bath with optional thermometer

Precision 183 Analog Water Bath

Precision 288 Digital Water Bath with optional thermometers

**Specifications**

Models	184	284	185	285
Chamber Capacity <sup>1</sup>	5.2 gallon (19.5 liters)	5.2 gallon (19.5 liters)	4.9 gallon (18 liters)	4.9 gallon (18 liters)
Temperature Display	0° to 100°C (Thermometer)	0° to 100°C (Digital LED)	0° to 100°C (Thermometer)	0° to 100°C (Digital LED)
Maximum Temperature <sup>2</sup>	99.9°C	99.9°C	99.9°C	99.9°C
Temperature Uniformity	±0.2°C at 37°C	±0.2°C at 37°C	±0.2°C at 37°C	±0.2°C at 37°C
Temperature Sensitivity	±0.1°C at 37°C	±0.1°C at 37°C	±0.1°C at 37°C	±0.1°C at 37°C
<b>Dimensions (L x W x H)</b>				
Chamber	14 x 12 x 8 in. (35.6 x 30.5 x 20.3 cm)	14 x 12 x 8 in. (35.6 x 30.5 x 20.3 cm)	19.5 x 11.5 x 6 in. (49.5 x 29.2 x 15.2 cm)	19.5 x 11.5 x 6 in. (49.5 x 29.2 x 15.2 cm)
Exterior without cover	19.7 x 15.75 x 9.75 in. (49.9 x 40 x 24.8 cm)	18.75 x 15.75 x 9.75 in. (47.6 x 40 x 24.8 cm)	23.9 x 13.75 x 9.75 in. (60.7 x 34.9 x 24.8 cm)	23 x 13.75 x 9.75 in. (58.4 x 34.9 x 24.8 cm)
<b>Electrical Specs (50/60Hz)</b>				
120V	600 Watts (5.0 Amps)	600 Watts (5.0 Amps)	600 Watts (5.0 Amps)	600 Watts (5.0 Amps)
230V	600 Watts (2.6 Amps)	600 Watts (2.6 Amps)	600 Watts (2.6 Amps)	600 Watts (2.6 Amps)
BTU Output	2048	2048	2048	2048
<b>Shipping Data</b>				
Dimensions (L x W x H)	23.5 x 18 x 12.75 in. (59.7 x 45.72 x 32.4 cm)	23.5 x 18 x 12.75 in. (59.7 x 45.72 x 32.4 cm)	27.5 x 16.5 x 14.75 in. (69.9 x 41.9 x 37.5 cm)	27.5 x 16.5 x 14.75 in. (69.9 x 41.9 x 37.5 cm)
Weight	25 lbs (11.3 kg)	25 lbs (11.3 kg)	30 lbs (13.6 kg)	30 lbs (13.6 kg)
Volume	3.1 cu. ft. (0.09 cu. meter)	3.1 cu. ft. (0.09 cu. meter)	3.9 cu. ft. (0.11 cu. meter)	3.9 cu. ft. (0.11 cu. meter)
<b>Catalog Number new (old)</b>				
120V (UL listed)	2839 (51221075)	2841 (51221052)	2843 (51221065)	2845 (51221054)
230V	2840 (51221069)	2842 (51221053)	2844 (51221066)	2846 (51221055)
Models	186	286	188 (Dual chamber)	288 (Dual chamber)
Chamber Capacity <sup>1</sup>	11.4 gallon (43 liters)	11.4 gallon (43 liters)	3.2 gallon <sup>3</sup> (12 liters)	3.2 gallon <sup>3</sup> (12 liters)
Temperature Display	0° to 100°C (Thermometer)	0° to 100°C (Digital LED)	0° to 100°C (Thermometer)	0° to 100°C (Digital LED)
Maximum Temperature <sup>2</sup>	99.9°C	99.9°C	99.9°C	99.9°C
Temperature Uniformity	±0.2°C at 37°C	±0.2°C at 37°C	±0.2°C at 37°C	±0.2°C at 37°C
Temperature Sensitivity	±0.1°C at 37°C	±0.1°C at 37°C	±0.1°C at 37°C	±0.1°C at 37°C
<b>Dimensions (L x W x H)</b>				
Chamber	16 x 28 x 6.5 in. (40.6 x 71.1 x 16.5 cm)	16 x 28 x 6.5 in. (40.6 x 71.1 x 16.5 cm)	11.5 x 12.5 x 6 in. <sup>1</sup> (29.2 x 31.7 x 15.2 cm)	11.5 x 12.5 x 6 in. <sup>1</sup> (29.2 x 31.7 x 15.2 cm)
Exterior without cover	21.6 x 31.5 x 9.75 in. (55.0 x 80 x 24.8 cm)	20.7 x 31.5 x 9.75 in. (52.7 x 80 x 24.8 cm)	16.1 x 29 x 9.75 in. (41.0 x 73.7 x 24.8 cm)	15.2 x 29 x 9.75 in. (38.7 x 73.7 x 24.8 cm)
<b>Electrical Specs (50/60Hz)</b>				
120V	1200 Watts (10.0 Amps)	1200 Watts (10.0 Amps)	800 Watts (6.7 Amps)	800 Watts (6.7 Amps)
230V	1200 Watts (5.2 Amps)	1200 Watts (5.2 Amps)	800 Watts (3.5 Amps)	800 Watts (3.5 Amps)
BTU Output	4095	4095	2732	2732
<b>Shipping Data</b>				
Dimensions (L x W x H)	24 x 36.25 x 18 in. (61 x 92.1 x 45.7 cm)	24 x 36.25 x 18 in. (61 x 92.1 x 45.7 cm)	18 x 34 x 12.75 in. (45.7 x 86.4 x 32.4 cm)	18 x 34 x 12.75 in. (45.7 x 86.4 x 32.4 cm)
Weight	56 lbs (25.4 kg)	56 lbs (25.4 kg)	40 lbs (18.1 kg)	40 lbs (18.1 kg)
Volume	9 cu. ft. (0.25 cu. meter)	9 cu. ft. (0.25 cu. meter)	4.5 cu. ft. (0.13 cu. meter)	4.5 cu. ft. (0.13 cu. meter)
<b>Catalog Number new (old)</b>				
120V (UL listed)	2847 (51221072)	2849 (51221056)	2851 (51221061)	2853 (51221058)
230V	2848 (51221074)	2850 (51221057)	2852 (51221063)	2854 (51221059)

<sup>1</sup>Filled 1" (25 mm) from top of chamber, <sup>2</sup>With gable cover, <sup>3</sup>Each chamber

See water bath accessories on back cover.

# Thermo Scientific Precision Circulating Water Baths

## Microprocessor-controlled Baths Combine Operational Simplicity With Excellent Temperature Uniformity.

Our Precision Circulating Water Baths are ideal for applications where temperature uniformity and control are critical, such as enzymes and serology. Available in three different models, these high performance baths range in capacity from 19 liters to 89 liters and include a stainless steel diffuser shelf and a gable cover as standard equipment.



Thermo Scientific Precision 265 Circulating Water Bath with optional Petri dish rack



Thermo Scientific Precision 270 Circulating Water Bath



Thermo Scientific Precision 260 Circulating Water Bath with optional Petri dish rack

### Features

- Microprocessor control with digital LED display
- Water flow directed around bath perimeter
- Elevated sample platform for more thorough circulation
- Easy-to-maintain, corrosion resistant construction
- Over-temperature protection capability
- Single switch control for heater and circulator pump
- Stainless-steel gable cover and diffuser shelf are standard equipment
- Meets ASTM E715 Class IIA standards for uniformity
- UL listed (120 V)
- Free Duck!

### Specifications

Models	260	265	270
Chamber Capacity <sup>1</sup>	5.1 gallons / 19 liters	9.1 gallons / 34.5 liters	23.8 gallons / 89 liters
Maximum Temperature <sup>2</sup>	99.9°C	99.9°C	99.9°C
Temperature Uniformity at 37°C	±0.05°C	±0.05°C	±0.05°C
Temperature Sensitivity	±0.05°C	±0.05°C	±0.05°C
<b>Dimensions (L x W x H)</b>			
Chamber	12 x 15 x 7.5 in. (30.5 x 38.1 x 19.0 cm)	12 x 27 x 7.5 in. (30.5 x 68.6 x 19.0 cm)	18 x 36 x 9.5 in. (45.7 x 91.4 x 24.1 cm)
Shelf	11 x 14.5 in. (27.9 x 36.8 cm)	11 x 26.5 in. (27.9 x 67.3 cm)	17 x 35 in. (43.2 x 88.9 cm)
Exterior	14 x 24.5 x 9.5 in. (35.6 x 62.2 x 24.1 cm)	14 x 36.5 x 9.5 in. (35.6 x 92.7 x 24.1 cm)	20 x 45 x 12 in. (50.8 x 114.3 x 30 cm)
<b>Electrical Specs (50/60Hz)</b>			
120V	1000 Watts 8.3 Amps	1550 Watts 12.9 Amps	1550 Watts 12.9 Amps
230V	1000 Watts 4.3 Amps	1550 Watts 6.7 Amps	1550 Watts 6.7 Amps
BTU Output	3415	5294	5294
<b>Shipping Information</b>			
Dimensions (L x W x H)	25 x 34.5 x 15.5 in. (63.5 x 87.6 x 39.4 cm)	27 x 45.5 x 21 in. (68.6 x 115.5 x 53.3 cm)	27 x 46 x 21 in. (68.6 x 116.8 x 53.3 cm)
Weight	45 lbs. (20.4 kg)	68 lbs. (30.8 kg)	85 lbs. (38.5 kg)
Volume	7.7 cu. ft. (0.22 cu. meter)	14.9 cu. ft. (0.42 cu. meter)	15.1 cu. ft. (0.43 cu. meter)
<b>Catalog Number new (old)</b>			
120 V (UL listed)	2864 (51221035)	2866 (51221039)	2868 (51221036)
230V <sup>3</sup>	2865 (51221037)	2867 (51221040)	2869 (51221038)

<sup>1</sup>Filled to 1" (25 mm) from top of chamber, <sup>2</sup>With gable cover, <sup>3</sup>50/60Hz (Includes European style 50Hz power cord; standard 220V 60Hz power cord available separately. Part number 34400001)

See water bath accessories on back cover.

# Thermo Scientific Precision Coliform Water Baths

Our Precision Coliform Baths Models 251 and 253 are designed specifically for fecal coliform determination. Each bath is factory calibrated and can be field calibrated from the front panel without the use of tools. The preset temperature feature is standard on both coliform baths for ease of use. Both baths meet stringent performance requirements. The Model 251 comes with a seamless chamber and the Model 253 comes with a larger-welded chamber. Free stainless-steel gable cover and diffuser shelf.



Thermo Scientific Precision Coliform Water Baths

Model 251

Model 253

## Features

- Factory pre-set temperatures for easy use, even by untrained operators
- Microprocessor control with digital LED display
- Water pump gently directs water flow around bath perimeter for non-turbulent agitation
- Over-temperature protection capability
- Rugged stainless-steel construction with easy to clean epoxy-powder coated exterior
- Free stainless-steel gable cover and diffuser shelf
- Meets APHA, AWWA, EPA, WPCF, and AOAC high performance standards
- UL listed (120V)
- Free Duck!

## Specifications

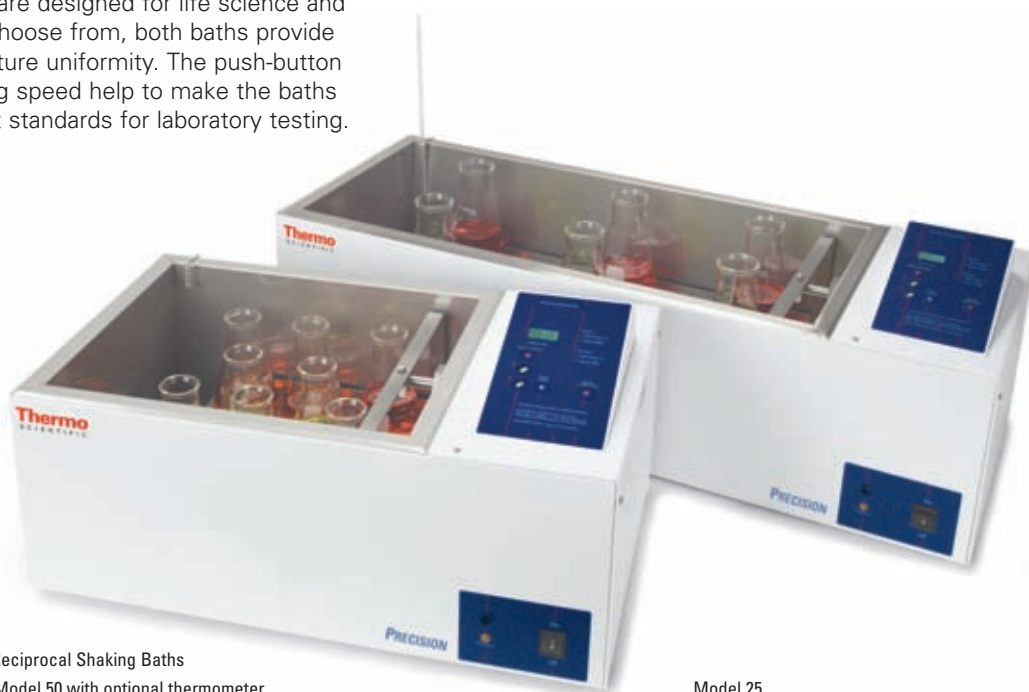
Models	Small Coliform Bath Model 251	Large Coliform Bath Model 253
Chamber Capacity <sup>1</sup>	4.8 gallons (17.5 liters)	9.1 gallons (34.5 liters)
Temperature Range	35.0°C – 45.5°C	35.0°C – 45.5°C
Factory Preset Temperatures	35.0°C, 41.5°C, 44.5°C, 45.5°C	35.0°C, 41.5°C, 44.5°C, 45.5°C
Temperature Uniformity	±0.05°C	±0.05°C
Temperature Sensitivity	±0.05°C	±0.05°C
<b>Dimensions (L x W x H)</b>		
Chamber	14 x 12 x 8 in. (35.6 x 30.5 x 20.3 cm)	12 x 27 x 7.5 in. (30.48 x 68.6 x 19.0 cm)
Diffuser Shelf	12 x 10 in. (30.5 x 25.4 cm)	11 x 26.5 in. (28 x 67.3 cm)
Exterior	18.5 x 15.5 x 9.5 in. (47 x 39.4 x 24.13 cm)	14 x 36 x 9.5 in. (35.6 x 91.4 x 24.1 cm)
<b>Electrical Specs (50/60Hz)</b>		
120V	600 Watts	1550 Watts
	5.0 Amps	12.9 Amps
230V	600 Watts	1550 Watts
	2.6 Amps	6.75 Amps
BTU Output	2049	5294
<b>Shipping Information</b>		
Net Weight	27 lbs. (12.2 kg)	46 lbs. (20.8 kg)
Shipping Dimensions (L x W x H)	27 x 21 x 16 in. (68.6 x 53.3 x 40.6 cm)	27 x 46 x 21 in. (68.6 x 116.8 x 53.3 cm)
Shipping Weight	35 lbs. (15.8 kg)	60 lbs. (27.2 kg)
<b>Catalog Number new (old)</b>		
120V (UL listed)	2860 (51221031)	2862 (51221033)
230V <sup>2</sup>	2861 (51221032)	2863 (51221034)

<sup>1</sup>Filled to 1" (25 mm) from top of chamber, <sup>2</sup>50/60 Hz (Includes European style 50 Hz power cord; standard 220V 60 Hz power cord available separately. Part number 34400001)

See water bath accessories on back cover.

# Thermo Scientific Precision Reciprocal Shaking Water Baths

Our Precision Reciprocal Shaking Baths are designed for life science and QA/QC applications. With two sizes to choose from, both baths provide sample agitation with excellent temperature uniformity. The push-button input of desired temperature and shaking speed help to make the baths easy to use, while meeting the stringent standards for laboratory testing.



Thermo Scientific Precision Reciprocal Shaking Baths  
Model 50 with optional thermometer

Model 25

## Features

- Microprocessor control with digital LED display and shaker control
- Adjustable shaking speed from 30 to 200 OPM
- Over-temperature protection capability
- Rugged stainless-steel construction with easy to clean epoxy-powder coated exterior
- Push-button convenience for entry of temperature and shaking speed
- Automatic motor shut-down capability
- Meets ASTM Method E 715 Class IIA standards
- UL listed (120 V)
- Free Duck!

## Specifications

Models	25	50
Chamber Capacity <sup>1</sup>	3.9 gallons (14.5 liters)	7.1 gallons (26.5 liters)
Maximum Temperature <sup>2</sup>	99.9°C	99.9°C
Temperature Uniformity at 37°C	±0.05°C	±0.1°C
Temperature Sensitivity	±0.05°C	±0.05°C
Oscillation per Minute	30 to 200	30 to 200
Stroke Length	0.5 to 1.5 in. (1.3 to 3.8 cm)	0.5 to 1.5 in. (1.3 to 3.8 cm)
<b>Dimensions (L x W x H)</b>		
Chamber	12 x 15 x 7.5 in. (30.5 x 38.1 x 19.05 cm)	12 x 27 x 7.5 in. (30.5 x 68.6 x 19.05 cm)
Removable Tray	11.5 x 12 x 6.5 in. (29.2 x 30.5 x 16.5 cm)	11.5 x 24 x 6.5 in. (29.2 x 61 x 16.5 cm)
Exterior	14 x 24.5 x 9.5 in. (35.6 x 62.2 x 24.1 cm)	14 x 36.5 x 9.5 in. (35.6 x 92.7 x 24.1 cm)
<b>Electrical Specs (50/60Hz)</b>		
120V	1000 Watts, 8.8 Amps	1550 Watts, 12.9 Amps
230V	1000 Watts, 4.4 Amps	1550 Watts, 6.5 Amps
BTU Output	3415	5294
<b>Shipping Data</b>		
Dimensions	17 x 28.5 x 16.5 in. (43.2 x 72.4 x 41.9 cm)	17 x 40.5 x 16.5 in. (43.2 x 102.9 x 41.9 cm)
Weight	48 lbs. (22.2 kg)	62 lbs. (27.2 kg)
Volume	7 cu. ft. (0.20 cu. meters)	15.1 cu. ft. (0.43 cu. meters)
<b>Catalog Number new (old)</b>		
120V (UL listed)	2870 (51221080)	2872 (51221081)
230V <sup>3</sup>	2871 (51221203)	2873 (51221082)

<sup>1</sup>Filled 3.5" (89 mm) from top of chamber, <sup>2</sup>With gable cover, <sup>3</sup>50/60Hz (Includes European style 50Hz power cord; standard 220V 60Hz power cord available separately. Part number 34400001)

See water bath accessories on back cover.



# Thermo Scientific Precision

## Shallow Form Reciprocal Shaking Baths

Our Precision Shallow Form Reciprocal Shaking Baths have a capacity of 14.5 liters (3.9 gallons), however the removable tray provides a depth of only 3.5 inches (8.9 cm) for use with smaller sample containers. This bath can be equipped with optional 3-gas (oxygen, nitrogen, and CO<sub>2</sub>) flowmeter and gassing hoods.



Thermo Scientific Precision Shallow Form Shaking Bath with optional thermometer



### Features

- Microprocessor control with digital LED display and shaker control
- Adjustable shaking speed from 30 to 200 OPM
- Push-button convenience for entry of temperature and shaking speed
- Over-temperature protection capability
- Automatic motor shut-down capability
- One-piece, easy-to-remove tray for easy use and maintenance
- Free stainless-steel gable cover included
- Meets ASTM Method E 715 Class IIA standards
- UL listed (120 V)
- Optional O<sub>2</sub>/N<sub>2</sub>/CO<sub>2</sub> flowmeter
- Optional gassing hoods
- Free Duck!

### Specifications

Model	Shallow Form Shaking Bath
Chamber Capacity <sup>1</sup>	3.9 gallons (14.5 liters)
Maximum Temperature <sup>2</sup>	99.9°C
Temperature Uniformity at 37°C	±0.05°C
Temperature Sensitivity	±0.05°C
Oscillation per Minute	30 to 200
Stroke Length	0.5 to 1.5 in. (1.3 to 3.8 cm)
<b>Dimensions (L x W x H)</b>	
Chamber	12 x 15 x 7.5 in. (30.5 x 38.1 x 19 cm)
Removable Tray	11.5 x 11 x 3.5 in. (29.2 x 27.9 x 8.9 cm)
Exterior	14 x 24.5 x 9.5 in. (35.6 x 62.2 x 24.1 cm)
<b>Electrical Specs (50/60Hz)</b>	
120V	1000 Watts, 8.3 Amps
230V	1000 Watts, 4.3 Amps
BTU Output	3415
<b>Shipping Data</b>	
Dimensions	17 x 28.5 x 16.5 in. (43.2 x 72.4 x 41.9 cm)
Weight	55 lbs. (24.9 kg)
Volume	5.1 cu. ft. (0.14 cu. meters)
<b>Catalog Number new (old)</b>	
120V (UL listed)	2874 (51221079)
230V <sup>3</sup>	2875 (51221078)

<sup>1</sup>Filled 3.5" (89 mm) from top of chamber, <sup>2</sup>With gable cover, <sup>3</sup>50/60Hz (Includes European style 50Hz power cord; standard 220V 60Hz power cord available separately. Part number 34400001)

See water bath accessories on back cover.

# Thermo Scientific Precision Dubnoff Reciprocal Shaking Baths



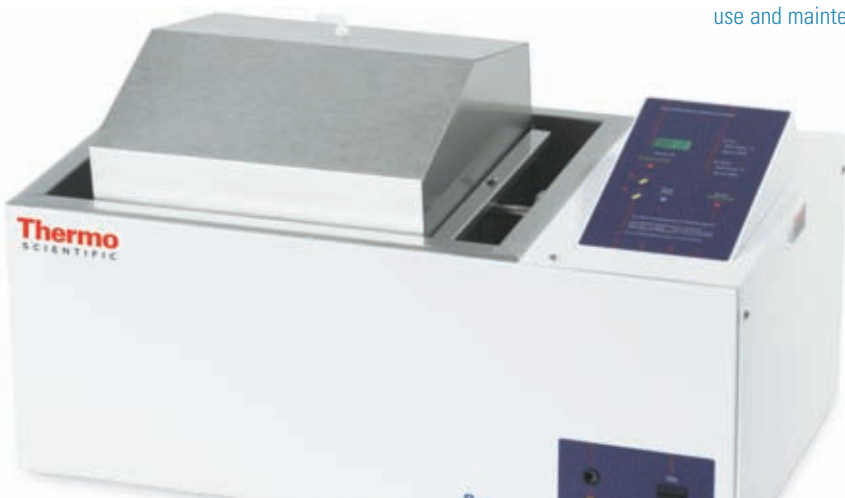
Our Precision Dubnoff Reciprocal Shaking Baths are designed specifically for applications that require your samples to be incubated in a controlled atmosphere. This bath has a capacity of 14.5 liters (3.9 gallons), and has a depth of 3.5 inches (8.9 cm). One large and two small gassing hoods are included with each bath along with the gable cover. An optional 3-gas (oxygen, nitrogen, and CO<sub>2</sub>) flowmeter is available for precise control of the atmosphere surrounding your important samples.



Thermo Scientific Precision Dubnoff Shaking Bath with large gassing hood

## Features

- Dubnoff baths equipped with gassing hoods: 1 large and 2 small
- Microprocessor control with digital LED display and shaker control
- Adjustable shaking speed from 30 to 200 OPM
- Push-button convenience for entry of temperature and shaking speed
- Over-temperature protection capability
- Automatic motor shut-down capability
- One-piece, easy-to-remove tray for easy use and maintenance
- Free stainless-steel gable cover included
- Meets ASTM Method E 715 Class IIA standards
- UL listed (120 V)
- Optional O<sub>2</sub>/N<sub>2</sub>/CO<sub>2</sub> flowmeter
- Free Duck!



## Specifications

### Models

Chamber Capacity <sup>1</sup>	3.9 gallons (14.5 liters)
Maximum Temperature <sup>2</sup>	99.9°C
Temperature Uniformity at 37°C	±0.05°C
Temperature Sensitivity	±0.05°C
Oscillation per Minute	30 to 200
Stroke Length	0.5 to 1.5 in. (1.3 to 3.8 cm)

### Dimensions (L x W x H)

Chamber	12 x 15 x 7.5 in. (30.5 x 38.1 x 19 cm)
Removable Tray	11.5 x 11 x 6.5 in. (29.2 x 27.9 x 16.5 cm)
Exterior	14 x 24.5 x 9.5 in. (35.6 x 62.2 x 24.1 cm)

### Electrical Specs (50/60Hz)

120V	1000 Watts, 8.2 Amps
230V	1000 Watts, 4.3 Amps
BTU Output	3415

### Shipping Data

Dimensions	17 x 28.5 x 16.5 in. (53.3 x 72.4 x 41.9 cm)
Weight	55 lbs. (24.9 kg)
Volume	5.1 cu. ft. (0.14 cu. meters)

### Catalog Number new (old)

120V (UL listed)	2876 (51221076)
230V <sup>3</sup>	2877 (51221077)

<sup>1</sup>Filled 3.5" (89 mm) from top of chamber, <sup>2</sup>With gable cover, <sup>3</sup>50/60Hz (Includes European style 50Hz power cord; standard 220V 60Hz power cord available separately. Part number 34400001)

# Thermo Scientific Precision Concentric Ring Electrical Steaming Baths

Our Precision Concentric Ring Electrical Steaming Baths are designed to gently warm samples, make concentrates, and melt solids such as agar. Available in both 4-opening and 8-opening models, they accommodate various sizes of glassware and evaporating dishes, including round-bottom flasks. Flange-formed stainless-steel rings nest smoothly and become progressively larger as each concentric ring is removed. Copper-clad immersion heaters provide bath temperatures up to 100°C. These baths require hardwire installation by a qualified electrician and need to be hooked up to a continuous water source.



Thermo Scientific Precision Concentric Ring Electrical Steaming Baths

## Features

- 4 and 8-hole models enlarge from 7/8 inch to maximum opening diameters of 5 and 6 inches respectively
- Copper-clad immersion heaters provide bath temperatures up to 100°C
- Easy to operate with a 4-position switch and 3 different heat settings
- Adjustable water level regulator maintains bath depth at the desired level
- Stainless-steel cabinets with flanged cabinet top for table-top installations
- Rugged epoxy-coated, corrosion-resistant stand
- Accommodates most laboratory glassware

## Specifications

Models		4-Hole Steaming Bath	8-Hole Steaming Bath	
	Maximum Temperature	100°C	100°C	
	Time to reach 100°C	63 minutes	65 minutes	
Heater Settings	Low	275 W	500 W	
	Medium	550 W	1000 W	
	High	1100 W	2000 W	
	Minimum Opening Diameter (with cover removed)	7/8 in. / 22 mm	7/8 in. / 22 mm	
	Minimum Opening Diameter 5 in. (all rings removed)	5 in. / 125 mm	2 at 4 in. / 100 mm 4 at 5 in. / 125 mm 2 at 6 in. / 150 mm	
	Dimensions ( L x W x H) <sup>1</sup>	Without Support Stand	15 x 15 x 4 in. (38.1 x 38.1 x 10.2 cm)	15.5 x 29 x 4.5 in. (39.4 x 73.7 x 11.4 cm)
		With Support Stand	15 x 15 x 13 in. (38.1 x 38.1 x 33.0 cm)	15.5 x 29 x 13.5 in. (39.4 x 73.7 x 34.3 cm)
Electrical Specs (50/60Hz)	120V	1100 Watts, 9.2 Amps	2000 Watts, 16.7 Amps	
	230V	1100 Watts, 4.6 Amps	2000 Watts, 8.3 Amps	
	BTU Output	3757	6830	
Shipping Data	Dimensions (L x W x H)	20.5 x 20.5 x 21 in. (52.1 x 52.1 x 53.3 cm)	25 x 34.5 x 15.5 in. (63.5 x 87.6 x 39.6 cm)	
	Weight	20 lbs (9.1 kg)	30 lbs (13.6 kg)	
	Volume	5.1 cu. ft. (0.14 cu. meters)	7.7 cu. ft. (0.22 cu. meters)	
Catalog Number new (old)	120V	2896 (51220041)	2898 (51220042)	
	230V <sup>2</sup>	2897 (51220202)	2899 (51220043)	

<sup>1</sup>Water regulator adds 2.5 in. (63.5 mm) to exterior width of 4-hole bath and exterior length of 8-hole bath. <sup>2</sup>50/60Hz

See water bath accessories on back cover.

**Ordering Information**

**For General Purpose and Circulating Baths**

**Water Level Regulator Kit**

Adjustable float valve automatically opens when the water level in the bath falls below preset limits to keep the bath full. Valve and float are mounted on a removable bonnet for easy maintenance and service. Kit includes 6 ft. (1.8 meters) 1/4 in. I.D. Tygon tubing, nylon fittings, clamps, and adjustable mounting bracket.

Description	Cat. No.
Regulator Kits for Steaming Water Baths	3166211
For Circulating, Reciprocal Shaking, and Coliform Baths	3166223

**Sample Racks**

Stainless Steel Racks hold Petri dishes or test tubes.

Description	Cat. No.
Petri Dish Rack Measures 9-3/4 x 8-3/4 x 6-1/4 in. (248 x 222 x 159 mm). Holds 80 50 mm Petri dishes or 30 90 mm Petri dishes.	3166183
Test Tube Rack Measures 10 x 8-1/2 x 5-1/2 in. (254 x 216 x 140 mm). Openings are 1 in. (25 mm) square. Holds 50 test tubes up to 25 mm from 97 to 150 mm high.	3161601

**Oakite Sanitizer**

Description	Cat. No.
A safe yet effective quaternary ammonium type germicide and disinfectant. 1 quart (0.946 liter)	3166250

**Glass Thermometers\***

Non-hazardous glass thermometers read in 1.0°C increments.

Description	Cat. No.
Model 180 and 280 General Purpose Baths, 0°C to 105°C, 6.5 in. (165 mm) long	3175997
All other Precision 180 and 280 Series General Purpose, Circulating and Shaking Baths. 0°C to 100°C 12 in. (305 mm) long	3166220

\*All thermometers are for monitoring purposes only!

**For Reciprocal, Shaking, Shallow Form and Dubnoff Baths**

**Gassing Hood**

For use with Dubnoff and Shallow Form Shaking Baths. Permits control over the atmosphere surrounding the sample. Also improves temperature uniformity and reduces energy consumption. Polished stainless steel with plastic gas fitting. Each bath will accommodate 1 large hood or 2 small hoods.

Description	Cat. No.
Small (5.6 x 11.35 in.)	3162639
Large (11.21 x 11.35 in.)	3162640

**Oxygen/Nitrogen/CO<sub>2</sub> Flowmeter**

For use with Dubnoff and Shallow Form Shaker Baths. Independent controls regulate flow of gas to sample environment. Permits flow rates from 0 to 10 CFH (0 to 4719 cc/minute).

Description	Cat. No.
Flowmeter	3166181

**Microfuge Test Tube Rack**

For use with Shallow Form or Dubnoff baths; requires Clip Fastener. Measures 5 x 4 x 1-1/2 in. (127 x 101 x 39 mm).

Description	Cat. No.
0.5 ml tubes (holds 63) (not shown)	3166184
1.5 ml tubes (holds 30)	3166185

**Test Tube Tray**

For use with Reciprocal, Dubnoff, and Shallow Form Shaking Baths. Measures 5 x 10.2 in. (12.7 x 25.9 cm).

Description	Cat. No.
Holds 10-13 to 25 mm test tubes	3161597

**Flask Tray**

For use in Reciprocal, Dubnoff, and Shallow Form Shaking Baths. Measures 5 x 10.2 in. (12.7 x 25.9 cm).

Description	Cat. No.
25 ml flask (Holds 18 clips)	3161599
50 ml flask (Holds 10 clips)	3166228

**Test Tube Clips**

For use in Reciprocal, Dubnoff, and Shallow Form Shaking Baths. Stainless steel. Each requires one fastener.

Description	Cat. No.
Holds 13 mm to 25 mm tube	3166216

**Flask Clips and Fasteners**

For use in Reciprocal, Dubnoff, and Shallow Form Shaking Baths. Secure various size flasks to bath platform. Stainless steel. Each requires one fastener.

*Flask Clip Capacities*

Flask Vol.	Model 25, Shallow form,		Cat. No.
	Dubnoff	Model 50	
25 ml	20	48	3166227
50 ml	15	36	3166198
125 ml	9	24	3166221
250 ml	6	14	3166566
500 ml	4	12	3166199
1000 ml	2	5	3166200

Clip Fasteners (One required per flask clip or tube. Package of 25.) 3166189

**High Wall Tray**

Description	Cat. No.
For use with Precision Shallow Form, Dubnoff, and Shaking Bath Model 25 (11.25 x 12.5 x 7.5 in.)	3164716

For use with Precision Shaking Bath Model 50. (11.25 x 24 x 7.5 in.) 3164717

**For Steaming Baths**

**Ring Sets**

For Steaming Baths. Stainless Steel ring sets nest smoothly and become progressively larger as rings are removed.

Description	Cat. No.
4 in. (100 mm)	3166186
5 in. (125 mm)	3166187
6 in. (150 mm)	3166215

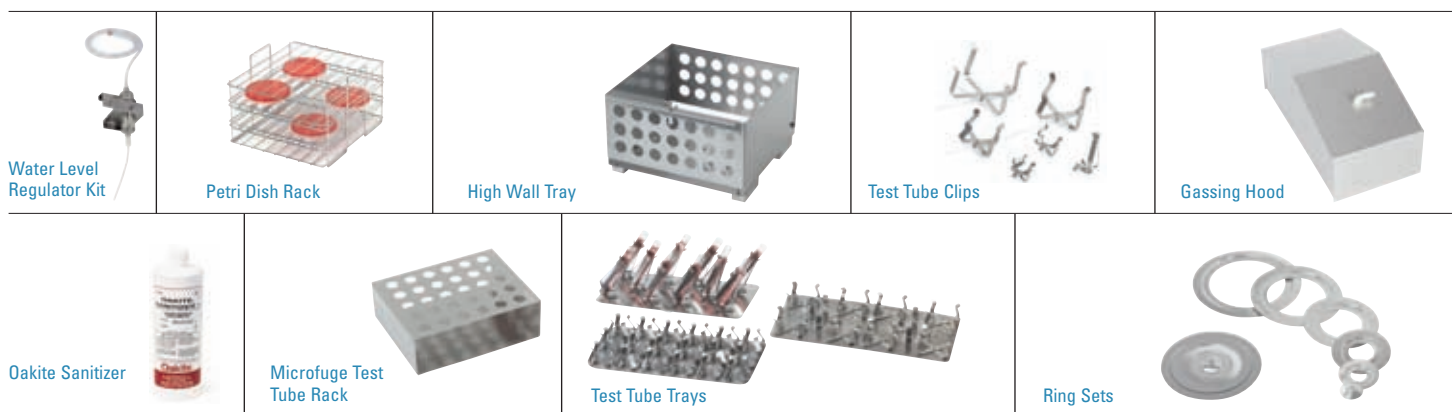
**Concentric Ring Cover**

Stainless steel cover converts the Model 184 or 284 Utility Bath for use as a steaming bath. Five openings (3 small, 2 large) accommodate glassware ranging in diameter from 4/5 to 4 in. in 1 in. (2 to 10 cm) increments. Openings enlarge as rings are removed.

Description	Cat. No.
Concentric Ring Cover	3161593

**Gable Covers**

Replacement Gable Covers are available. Contact your Thermo representative for details.



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