

# Isotemp<sup>®</sup>

 Fisher Scientific

Bath Circulators and Chillers



*Improve the productivity of your laboratory with accurate, efficient temperature control products from Fisher Scientific.*

## Choose the temperature control option that delivers the best value for your lab

Isotemp temperature control products offer a wide range of configurations that deliver the best value and performance for a wide array of applications with temperatures ranging from  $-35^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$ . You can count on the latest in technology, features and options to deliver the ideal combination of performance, ease of use, and reliability.

Choose the appropriate product for your liquid temperature control requirements:

**Heated Immersion Circulators:** ( $\text{Ambient} +10^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$ ) For use with a user supplied open bath work area for circulation internally or to circulate fluid externally to an application.

**Refrigerated/Heated Bath Circulators:** ( $-35^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$ ) A complete system made up of an immersion circulator and a refrigerated bath. Use as a temperature controlled bath or to circulate fluid externally to an application.

**Heated Bath Circulators:** ( $\text{Ambient} +10^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$ ) A complete system made up of an immersion circulator and a bath. Use as a temperature controlled bath or to circulate fluid externally to an application.

**Cooling/Heating Recirculating Chillers:** ( $-10^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ ) Circulate fluid externally to applications that do not require a bath work area.

**Recirculating Chillers:** ( $-10^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ ) Circulate fluid externally to applications where higher cooling capacity and higher pumping capacity are required.

Units are available to accommodate a variety of lab applications, including:

- » Sample Preparation
- » Analytical Instrumentation
- » General Laboratory Cooling
- » Rotary Evaporators
- » Fermenters
- » Lasers
- » Condensers
- » Bio-reactors
- » Histology

### Performance

- » Wide range of available configurations and performance options for an optimized temperature control solution
- » Minimum space requirements to maximize work space efficiency
- » Robust design for trouble-free operation

### Ease of Use

- » Intuitive controllers with simplified user interface ensure quick and easy operation
- » Innovative features and options to maximize efficiency
- » A variety of available accessories to meet your application needs

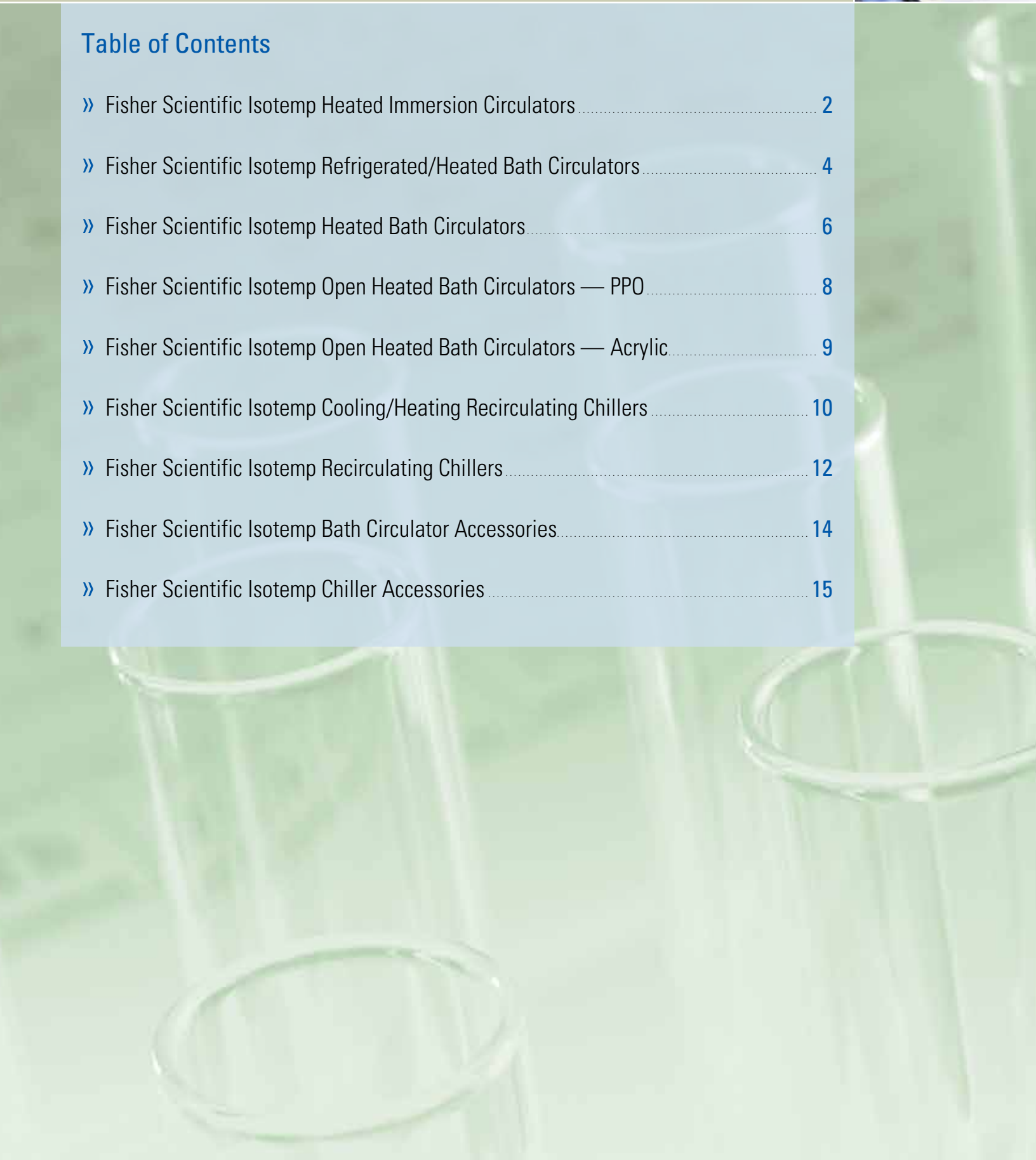
### Reliability

- » Robust product design ensures years of reliable operation
- » Inventive design features to maximize product reliability
- » Unparalleled product and service support



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# Fisher Scientific Isotemp Heated Immersion Circulators

Temperature Range: Ambient +10°C to +200°C

Isotemp Heated Immersion Circulators offer you a convenient and simple way to convert open baths to stable, constant temperature baths that ensure the perfect fit by offering three configurations. The differences in precision, features and performance will enable you to optimize your configuration to meet your needs.

#### Each Unit Features:

- » Two pump speeds: 50% and 100%
- » Adjustable PID control
- » Large, easy-to-read, five-line LCD display
- » Three languages: English, German, French
- » Over temperature/low level cutouts with audible and visual alarms
- » RoHS/WEEE Compliant
- » Safety Class III, FL-DIN 12876
- » Two-year warranty
- » Includes external circulation plumbing with 8-mm and 12-mm fittings and supply and return clamps
- » High quality industrial motor for excellent pump performance and long life



#### 4100 Controller for routine temperature control

- Ambient +10°C to +100°C
- 1 kW heater
- Powerful force pump
- Five programmable set points
- Temperature display in °C, °F or °K with resolution of 0.1 or 0.01
- Available with a clamp or a bridge
- Compatible fluids: DI water up to 3 mOhm; 50/50 EG/Water; 50/50 PG/Water



#### 5150 Controller for greater performance

- Ambient +10°C to +150°C
- 1 kW heater
- Powerful force pump
- Five programmable set points
- Temperature display in °C, °F or °K with resolution of 0.1 or 0.01
- Available with a clamp or a bridge
- Compatible fluids: DI water up to 3 mOhm; 50/50 EG/Water; 50/50 PG/Water; Sil 200; and Sil 300

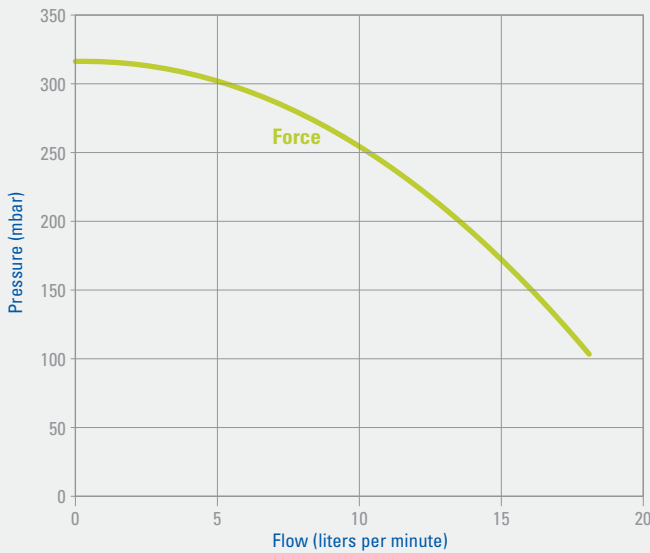


#### 6200 Controller for automation and remote operation

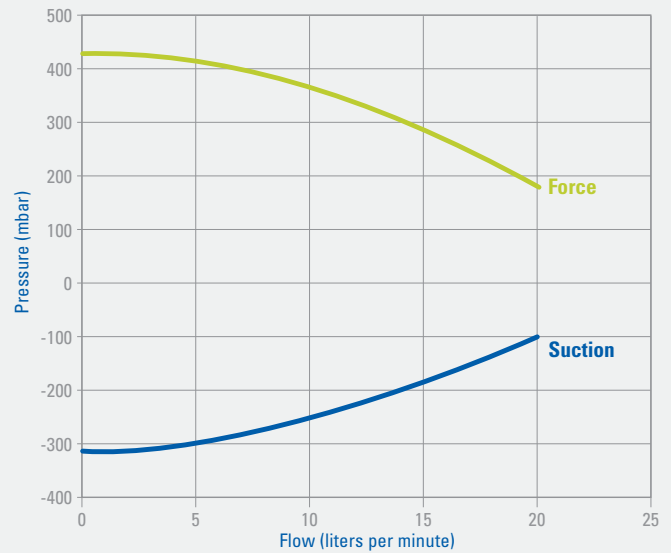
- Ambient +10°C to +200°C
- 1.2 kW heater
- Powerful force/suction pump
- Five programmable set points
- Temperature display in °C, °F or °K with resolution of 0.1 or 0.01
- Available with bridge only
- RS-232/USB interface option
- Remote temperature control of external systems (with optional probe)
- Compatible fluids: DI water up to 3 mOhm; 50/50 EG/PG; Sil 200; and Sil 300

## Performance Curves

**Pumping Capacity for Isotemp 4100 & Isotemp 5150**



**Pumping Capacity for Isotemp 6200**



**Performance Curve Notes**

Specifications obtained at sea level using water (above +5°C to +90°C) or a fluid with a specific heat of 0.6 J/kg-K (less than 5°C) as the recirculating fluid at a +20°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude or operating voltage will affect performance. Pump specifications are nominal values of ±10%. Specifications are for reference only and are subject to change.

## Ordering Information

Part Number	Product Name*	Voltage	Temperature Range	Stability	Heater Capacity	Pump Type	Pump Capacity	Overall Dimensions inches (HxWxD)	Unit Weight pounds
13-874-432	4100C	115 V / 60 Hz	Amb. +10°C to +100°C	±0.1°C	1 kW	Force	17 lpm / 310 mbar	12.6 x 4.4 x 8.1	9
13-874-438	4100B	115 V / 60 Hz	Amb. +10°C to +100°C	±0.1°C	1 kW	Force	17 lpm / 310 mbar	12.6 x 4.4 x 8.1	9
13-874-434	5150C	115 V / 60 Hz	Amb. +10°C to +150°C	±0.1°C	1 kW	Force	17 lpm / 310 mbar	12.6 x 4.4 x 8.1	9
13-874-440	5150B	115 V / 60 Hz	Amb. +10°C to +150°C	±0.1°C	1 kW	Force	17 lpm / 310 mbar	12.6 x 4.4 x 8.1	9
13-874-442	6200B	115 V / 60 Hz	Amb. +10°C** to +200°C	±0.05°C	1.2 kW	Force & Suction	21 lpm / 750 mbar	13.4 x 5.7 x 8.6	11

\* C = clamp (5-mm to 25-mm wall thickness)

B = bridge

\*\* Pump at low speed



# Fisher Scientific Isotemp Refrigerated/Heated Bath Circulators

Temperature Range:  $-35^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$



4100 R35

4100 R28

4100 R20

4100 R20F



Green tip: For less demanding applications, power consumption can be lowered by utilizing the energy savings mode.

Isotemp refrigerated/heated bath circulators allow you to choose the size of bath that's perfect for your application. The low-profile model enables easy bath access when lab counter height presents a challenge. Stainless-steel tanks guarantee durability and easy cleaning. The robust refrigeration system ensures that your samples and applications can be cooled quickly. Fine-tuned refrigeration metering allows for excellent temperature stability at all times.

- » Cooling capacities up to 800 watts
- » Includes external circulation plumbing with 8 mm and 12 mm fittings and supply and return clamps
- » Work area covers are standard on all refrigerated baths
- » All bath drains are located on the front of the unit with an integrated valve

## Ordering Information

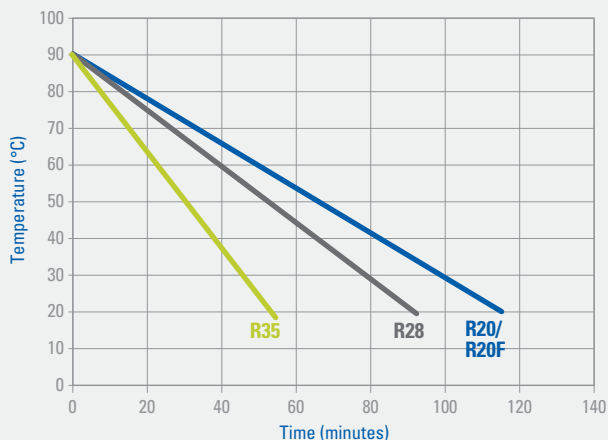
Part Number	Product Name*	Voltage	Temperature Range	Stability	Heater Capacity	Pump Type	Cooling Capacity at $+20^{\circ}\text{C}$	Pump Capacity	Reservoir Volume liters	Overall Dimensions inches (HxWxD)	Work Area Dimensions inches (WxLxD)	Unit Weight pounds
13-874-180	4100 R20	115 V / 60 Hz	$-20^{\circ}\text{C}$ to $+100^{\circ}\text{C}$	$\pm 0.1^{\circ}\text{C}$	1 kW	Force	250 W	17 lpm / 310 mbar	5.4 to 6.5	24.5 x 8.0 x 16.4	5.3 x 4.8 x 5.9	58
13-874-674	6200 R20	115 V / 60 Hz	$-20^{\circ}\text{C}$ to $+100^{\circ}\text{C}$	$\pm 0.05^{\circ}\text{C}$	1.2 kW	Force & Suction	250 W	21 lpm / 750 mbar	5.4 to 6.5	25.2 x 8.0 x 16.4	5.3 x 4.8 x 5.9	60
13-874-181	4100 R20F	115 V / 60 Hz	$-20^{\circ}\text{C}$ to $+100^{\circ}\text{C}$	$\pm 0.1^{\circ}\text{C}$	1 kW	Force	250 W	17 lpm / 310 mbar	5.4 to 6.5	16.8 x 18.4 x 16.4	5.3 x 4.8 x 5.9	64
13-874-675	6200 R20F	115 V / 60 Hz	$-20^{\circ}\text{C}$ to $+100^{\circ}\text{C}$	$\pm 0.05^{\circ}\text{C}$	1.2 kW	Force & Suction	250 W	21 lpm / 750 mbar	5.4 to 6.5	17.5 x 18.4 x 16.4	5.3 x 4.8 x 5.9	66
13-874-182	4100 R28	115 V / 60 Hz	$-28^{\circ}\text{C}$ to $+100^{\circ}\text{C}$	$\pm 0.1^{\circ}\text{C}$	1 kW	Force	500 W	17 lpm / 310 mbar	6.8 to 8.6	25.6 x 10.2 x 19.3	6.8 x 7.2 x 5.9	79
13-874-126	5150 R28	115 V / 60 Hz	$-28^{\circ}\text{C}$ to $+150^{\circ}\text{C}$	$\pm 0.1^{\circ}\text{C}$	1 kW	Force	500 W	17 lpm / 310 mbar	6.8 to 8.6	25.6 x 10.2 x 19.3	6.8 x 7.2 x 5.9	78
13-874-676	6200 R28	115 V / 60 Hz	$-28^{\circ}\text{C}$ to $+200^{\circ}\text{C}$	$\pm 0.05^{\circ}\text{C}$	1.2 kW	Force & Suction	500 W	21 lpm / 750 mbar	6.8 to 8.6	25.8 x 10.2 x 19.3	6.8 x 7.2 x 5.9	80
13-874-183	4100 R35	115 V / 60 Hz**	$-35^{\circ}\text{C}$ to $+100^{\circ}\text{C}$	$\pm 0.1^{\circ}\text{C}$	1 kW	Force	800 W	17 lpm / 310 mbar	6.8 to 8.6	27.1 x 14.6 x 20.8	6.8 x 7.2 x 5.9	121
13-874-127	5150 R35	115 V / 60 Hz**	$-35^{\circ}\text{C}$ to $+150^{\circ}\text{C}$	$\pm 0.1^{\circ}\text{C}$	1 kW	Force	800 W	17 lpm / 310 mbar	6.8 to 8.6	27.1 x 14.6 x 20.8	6.8 x 7.2 x 5.9	121
13-874-677	6200 R35	115 V / 60 Hz**	$-35^{\circ}\text{C}$ to $+200^{\circ}\text{C}$	$\pm 0.05^{\circ}\text{C}$	1.2 kW	Force & Suction	800 W	21 lpm / 750 mbar	6.8 to 8.6	27.8 x 14.6 x 20.8	6.8 x 7.2 x 5.9	123

\*Please refer to page 2 for additional information on controller features (4100, 5150, 6200)

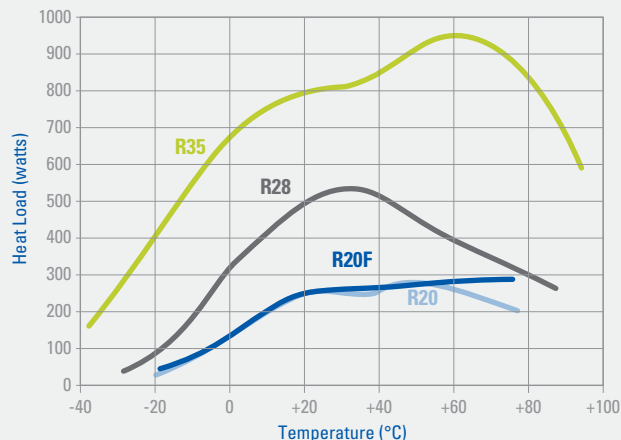
\*\*Requires a 20 amp circuit

## Performance Curves — 115V/60Hz

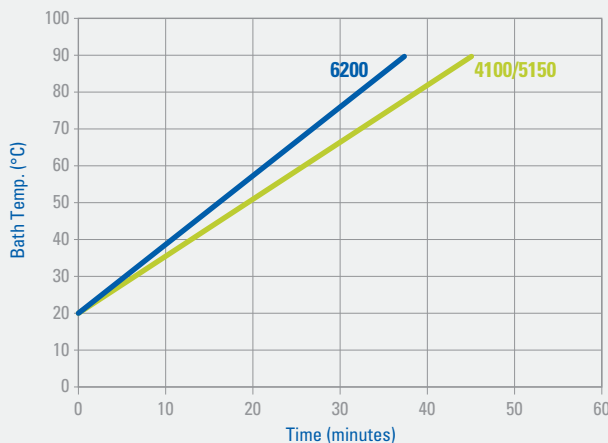
### Time to Temperature — Cooling



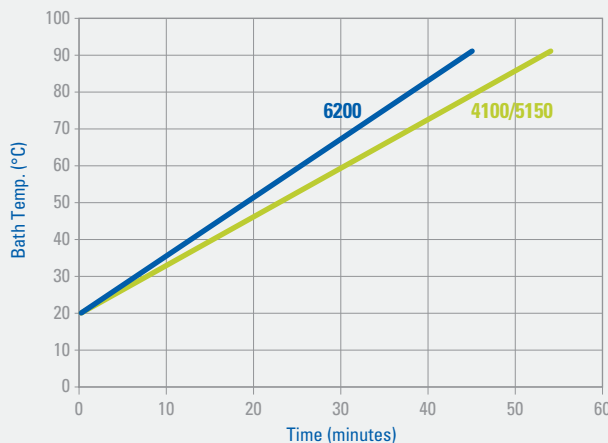
### Cooling Capacity



### Time to Temperature — Heating — R20 and R20F Baths



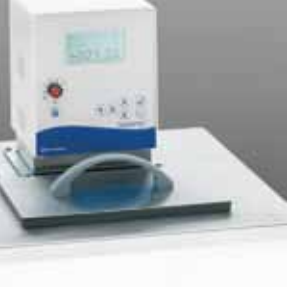
### Time to Temperature — Heating — R28 and R35 Baths



#### Performance Curve Notes

Specifications obtained at sea level using water (above +5°C to +90°C) or a fluid with a specific heat of 0.6 J/kg-K (less than 5°C) as the recirculating fluid at a +20°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude or operating voltage will affect performance. Pump specifications are nominal values of ±10%. Specifications are for reference only and are subject to change. Cool-down curve based on 4100 and 5150 controller.





# Fisher Scientific Isotemp Heated Bath Circulators

Temperature Range: Ambient +10°C to +200°C



4100 H24

4100 H11

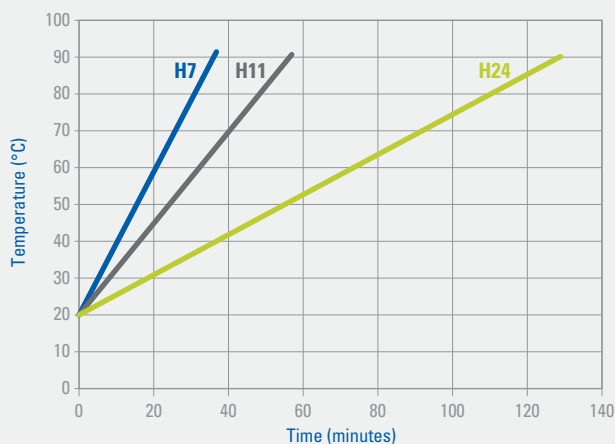
4100 H7

Isotemp heated bath circulators feature reliable, high-wattage heaters that deliver rapid fluid heat up for your application. Standard high temperature cutout (HTC) circuitry ensures application temperatures do not exceed user selectable limits.

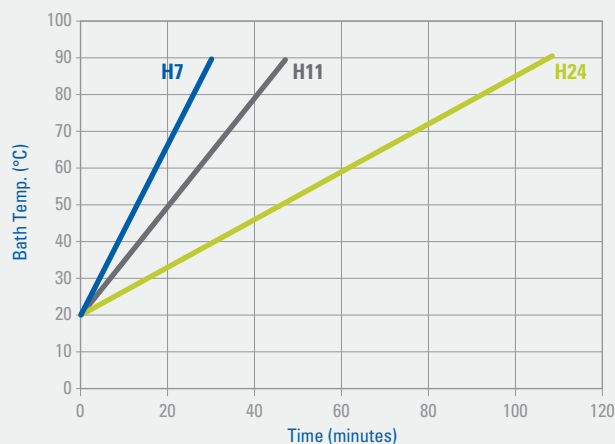
- » Heating capacity up to 1200 watts
- » Includes external circulation plumbing with 8-mm and 12-mm fittings and supply and return clamps
- » Work area cover included on all heated baths
- » High quality stainless steel baths
- » All bath drains are located on the front of the unit with an integrated valve
- » Optional cooling coil accessory is a valuable addition to this system for rapidly reducing the baths temperature or for helping achieve temperatures near ambient

## Performance Curves — 115V/60Hz

Time to Temperature — Heating 4100 & 5150



Time to Temperature — Heating 6200



Temperatures for both charts were obtained using a fluid with a specific heat of 0.6 J/kg-K



## Ordering Information

Part Number	Product Name***	Voltage	Temperature Range**	Stability	Heater Capacity	Pump Type	Reservoir Volume liters	Pump Capacity	Overall Dimensions inches (HxWxL)	Work Area Dimensions inches (WxLxD)	Unit Weight pounds
13-874-171	4100 H7	115 V / 60 Hz	Amb. +10°C to +100°C	±0.1°C	1 kW	Force	5.1 to 6.5	17 lpm / 310 mbar	15.6 x 8.5 x 14.3	6.4 x 4.4 x 5.9	22
13-874-121	5150 H7	115 V / 60 Hz	Amb. +10°C to +150°C	±0.1°C	1 kW	Force	5.1 to 6.5	17 lpm / 310 mbar	15.6 x 8.5 x 14.3	6.4 x 4.4 x 5.9	22
13-874-671	6200 H7	115 V / 60 Hz	Amb. +10°C* to +200°C	±0.05°C	1.2 kW	Force & Suction	5.1 to 6.5	21 lpm / 750 mbar	16.3 x 8.5 x 14.3	6.4 x 4.4 x 5.9	24
13-874-172	4100 H11	115 V / 60 Hz	Amb. +10°C to +100°C	±0.1°C	1 kW	Force	7.5 to 9.5	17 lpm / 310 mbar	15.6 x 11.9 x 14.3	9.4 x 4.4 x 5.9	25
13-874-124	5150 H11	115 V / 60 Hz	Amb. +10°C to +150°C	±0.1°C	1 kW	Force	7.5 to 9.5	17 lpm / 310 mbar	15.6 x 11.9 x 14.3	9.4 x 4.4 x 5.9	25
13-874-672	6200 H11	115 V / 60 Hz	Amb. +10°C* to +200°C	±0.05°C	1.2 kW	Force & Suction	7.5 to 9.5	21 lpm / 750 mbar	16.3 x 11.9 x 14.3	9.4 x 4.4 x 5.9	27
13-874-173	4100 H24	115 V / 60 Hz	Amb. +10°C to +100°C	±0.1°C	1 kW	Force	15.4 to 19.6	17 lpm / 310 mbar	15.6 x 14.3 x 22.1	11.6 x 12.3 x 5.9	35
13-874-123	5150 H24	115 V / 60 Hz	Amb. +10°C to +150°C	±0.1°C	1 kW	Force	15.4 to 19.6	17 lpm / 310 mbar	15.6 x 14.3 x 22.1	11.6 x 12.3 x 5.9	35
13-874-673	6200 H24	115 V / 60 Hz	Amb. +10°C* to +200°C	±0.05°C	1.2 kW	Force & Suction	15.4 to 19.6	21 lpm / 750 mbar	16.3 x 14.3 x 22.1	11.6 x 12.3 x 5.9	37

\* Pump at low speed

\*\* Without work area cover installed

\*\*\* Please refer to page 2 for additional information on controller features (4100, 5150, 6200)





# Fisher Scientific Isotemp Open Heated Bath Circulators—PPO

Temperature Range: Ambient +10°C to +100°C



4100 H31P

4100 H14P

4100 H5P

Isotemp PPO open heated baths are made from very rigid polyphenyleneoxide (PPO) and are thermally resistant up to +100°C making them an excellent alternative to stainless steel.

These economic open bath circulators have integrated grips and supports and are fitted with bridge plates for placement of the controller.

- » Heating capacity up to 1000 watts
- » Available with 5-, 14-, and 21-liter baths

## Ordering Information

Part Number	Product Name*	Voltage	Temperature Range	Stability	Heater Capacity	Pump Type	Reservoir Volume liters	Pump Capacity	Overall Dimensions inches (HxWxL)	Work Area Dimensions inches (WxLxD)	Unit Weight pounds
13-874-174	4100 H5P	115 V / 60 Hz	Amb. +10°C to +100°C	±0.1°C	1 kW	Force	4.3 to 5.3	17 lpm / 310 mbar	13.7 x 7.5 x 15.3	5.2 x 5.2 x 6.3	12
13-874-175	4100 H14P	115 V / 60 Hz	Amb. +10°C to +100°C	±0.1°C	1 kW	Force	11.3 to 14.1	17 lpm / 310 mbar	13.7 x 14.1 x 17.8	11.8 x 6.4 x 6.3	15
13-874-176	4100 H21P	115 V / 60 Hz	Amb. +10°C to +100°C	±0.1°C	1 kW	Force	18 to 22.5	17 lpm / 310 mbar	13.7 x 14.1 x 25.3	11.8 x 13.9 x 6.3	17

\*Please refer to page 2 for additional information on the 4100 controller features



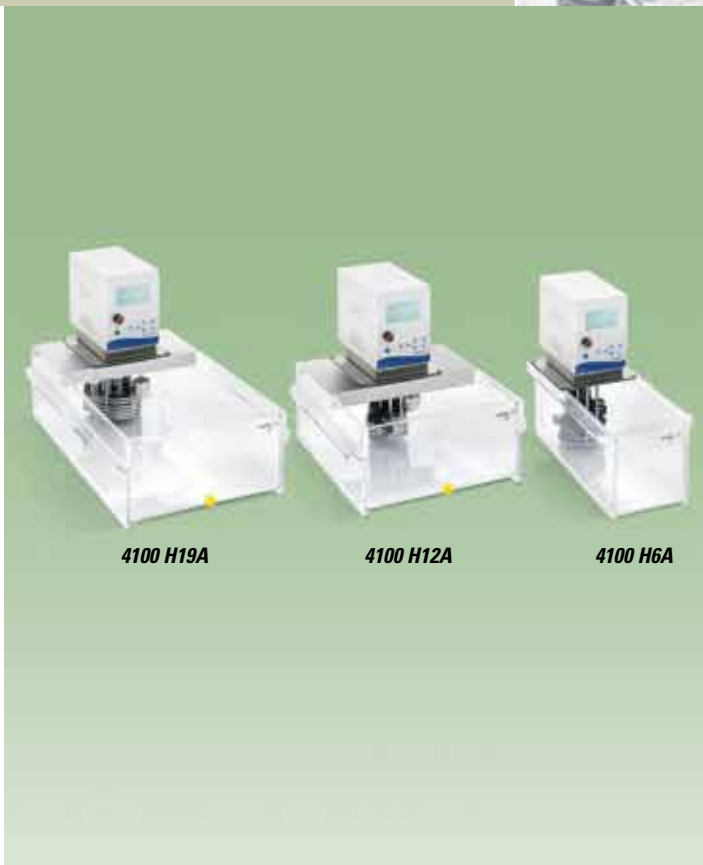
# Fisher Scientific Isotemp Open Heated Bath Circulators—Acrylic

Temperature Range: Ambient +10°C to +80°C



Isotemp acrylic open heated baths are valuable for the customer who needs to observe the application behavior within the bath. The acrylic baths are fitted with bridge plates for placement of the controller.

- » Heating capacity up to 1000 watts
- » Available with 6-, 12- and 19-liter baths
- » Easy sample viewing during operation



4100 H19A

4100 H12A

4100 H6A

## Ordering Information

Part Number	Product Name*	Voltage	Temperature Range	Stability	Heater Capacity	Pump Type	Reservoir Volume liters	Pump Capacity	Overall Dimensions inches (HxWxD)	Work Area Dimensions inches (WxD)	Unit Weight pounds
13-874-177	4100 H6A	115 V / 60 Hz	Amb. +10°C to +80°C	±0.1°C	1 kW	Force	5.5 to 7.0	17 lpm / 310 mbar	13.3 x 7.4 x 16.7	8.7 x 5.4 x 5.9	13
13-874-178	4100 H12A	115 V / 60 Hz	Amb. +10°C to +80°C	±0.1°C	1 kW	Force	10.1 to 12.8	17 lpm / 310 mbar	13.3 x 13.9 x 14.4	11.8 x 5.8 x 5.9	17
13-874-179	4100 H19A	115 V / 60 Hz	Amb. +10°C to +80°C	±0.1°C	1 kW	Force	15.6 to 19.9	17 lpm / 310 mbar	13.3 x 13.9 x 21.4	11.8 x 12.8 x 5.9	20

\*Please refer to page 2 for additional information on the 4100 controller features



# Fisher Scientific Isotemp Cooling/Heating Recirculating Chillers

Temperature Range:  $-10^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$



Isotemp Cooling/Heating Recirculating Chillers were designed with a focus on high performance, small footprint and quiet operation. The result is an easy-to-use laboratory chiller with a 2.8L reservoir, up to 500 watts of cooling power and temperature ramp from atmosphere to  $-10^{\circ}\text{C}$  in less than 16 minutes.

Choose between 250 or 500 watts of cooling, a force or force/suction pump and USB communication. Once installed all user interface is done through the front panel. An optional trolley accessory enables easy and convenient transport of the system around the laboratory.

An intuitive user interface allows the user to choose between five temperature set-points.

- » Full range heating and cooling from  $-10^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$
- » Small reservoir ensures fast temperature response time
- » Small footprint
- » Quiet operation

## Ordering Information

Part Number	Product Name	Voltage	Temperature Range	USB Port	Stability	Heater Capacity	Pump Type	Cooling Capacity at $+20^{\circ}\text{C}$	Pump Capacity	Internal Tank Volume liters	Overall Dimensions inches (HxWxD)	Unit Weight pounds
13-874-641	250LC	115 V / 60 Hz	$-10^{\circ}\text{C}$ to $+80^{\circ}\text{C}$	no	$\pm 0.1^{\circ}\text{C}$	1.2 kw	Force	250 W	17 lpm / 300 mbar	2.8	25 x 9 x 16.5	66
13-874-642	250LCS	115 V / 60 Hz	$-10^{\circ}\text{C}$ to $+80^{\circ}\text{C}$	no	$\pm 0.1^{\circ}\text{C}$	1.2 kw	Force / Suction	250 W	21 lpm / 805 mbar	2.8	25 x 9 x 16.5	66
13-874-643	250LCU	115 V / 60 Hz	$-10^{\circ}\text{C}$ to $+80^{\circ}\text{C}$	yes	$\pm 0.1^{\circ}\text{C}$	1.2 kw	Force	250 W	17 lpm / 300 mbar	2.8	25 x 9 x 16.5	66
13-874-644	250LCSU	115 V / 60 Hz	$-10^{\circ}\text{C}$ to $+80^{\circ}\text{C}$	yes	$\pm 0.1^{\circ}\text{C}$	1.2 kw	Force / Suction	250 W	21 lpm / 805 mbar	2.8	25 x 9 x 16.5	66
13-874-645	500LC	115 V / 60 Hz	$-10^{\circ}\text{C}$ to $+80^{\circ}\text{C}$	no	$\pm 0.1^{\circ}\text{C}$	1.2 kw	Force	500 W	17 lpm / 300 mbar	2.8	25 x 9 x 16.5	66
13-874-646	500LCS	115 V / 60 Hz	$-10^{\circ}\text{C}$ to $+80^{\circ}\text{C}$	no	$\pm 0.1^{\circ}\text{C}$	1.2 kw	Force / Suction	500 W	21 lpm / 805 mbar	2.8	25 x 9 x 16.5	66
13-874-647	500LCU	115 V / 60 Hz	$-10^{\circ}\text{C}$ to $+80^{\circ}\text{C}$	yes	$\pm 0.1^{\circ}\text{C}$	1.2 kw	Force	500 W	17 lpm / 300 mbar	2.8	25 x 9 x 16.5	66
13-874-648	500LCSU	115 V / 60 Hz	$-10^{\circ}\text{C}$ to $+80^{\circ}\text{C}$	yes	$\pm 0.1^{\circ}\text{C}$	1.2 kw	Force / Suction	500 W	21 lpm / 805 mbar	2.8	25 x 9 x 16.5	66

### Typical Applications:

- » Chemical reaction control
- » Separations
- » Life science instrumentation
- » Mass spectroscopy
- » Molecular spectroscopy
- » Atomic spectroscopy
- » Surface science
- » Materials characterization
- » Laboratory automation
- » General laboratory instrumentation

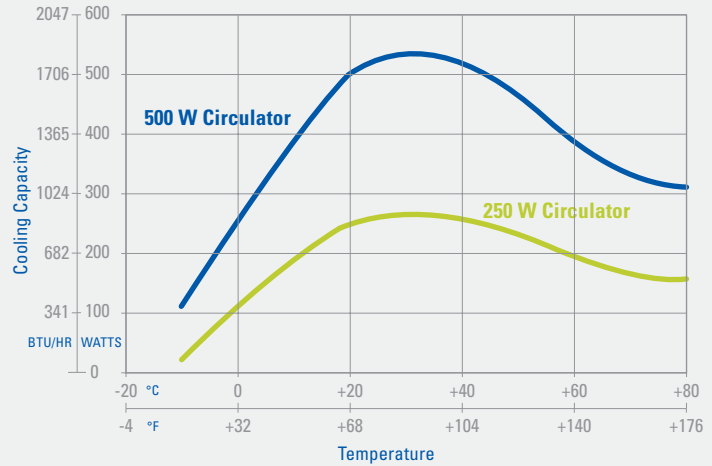
### Performance Curve Notes

Specifications obtained at sea level using water (above +5°C) and 50/50 EG/Water (less than 5°C) as the recirculating fluid at a +20°C process setpoint, +20°C ambient condition, at nominal operating voltage. Other fluids, process temperatures, ambient temperatures, altitude or operating voltage will affect performance. Cooling capacity based on units with force pump at max flow. Other pumps and flow rates will affect cooling capacity performance. Specifications are for reference only and are subject to change.

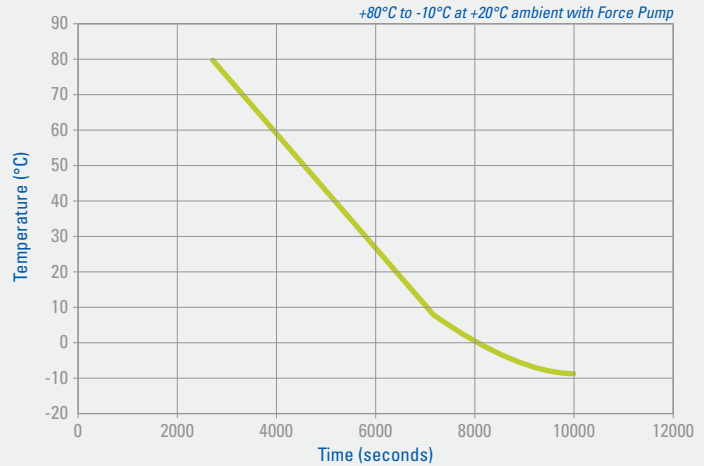


## Performance Curves — 115V/60Hz

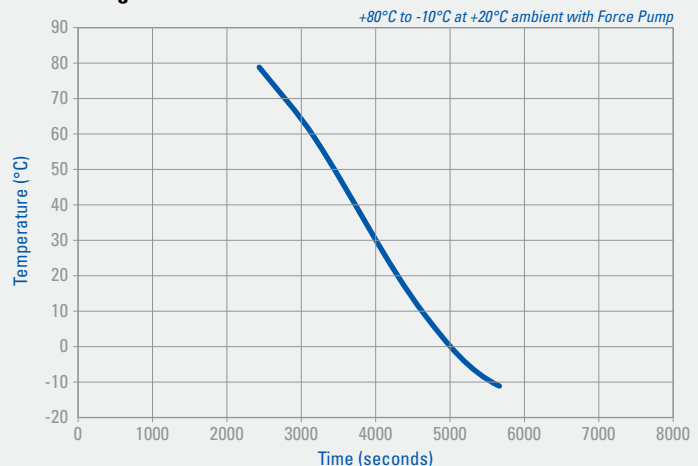
### Cooling Capacity for Isotemp Cooling/Heating Recirculating Chillers



### Time to Temperature for Isotemp 250 W Cooling/Heating Recirculating Chillers



### Time to Temperature for Isotemp 500 W Cooling/Heating Recirculating Chillers



# Fisher Scientific Isotemp Recirculating Chillers

Temperature Range: -10°C to +30°C



A compact line of refrigerated recirculating chillers ranging in cooling capacities from 700 watts to 2000 watts.

## Key Features

- » 3 pump options for a variety of application requirements
- » Intuitive digital controller for ease of use
- » Pressure gauge on front panel for easy viewing of application pressure
- » High and low temperature alarms
- » Controller indicator lights:
  - Indicate when unit is cooling
  - Indicate when setpoint is being changed
  - Indicate when high and low temperature limits are being changed or are exceeded

Specifications common to all models:

Product Name	Setpoint Temperature Range	Ambient Temperature Range	Refrigerant
Isotemp Recirculating Chiller	-10°C to +30°C	+10°C to +35°C	R134A

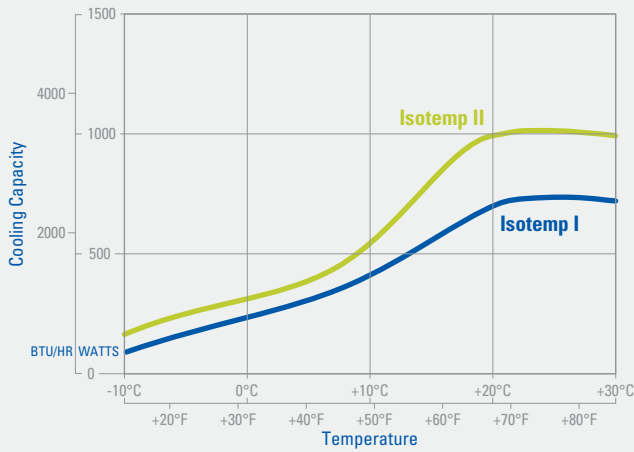
## Ordering Information

Part Number	Product Name	Voltage	Stability	Cooling Capacity at +20°C	Reservoir Volume	Pump Type	Pump Capacity at 60 psi (4.1 bar)	Overall Dimensions inches (H x W x D)	Unit Weight pounds
13-874-240	Isotemp I	115 V / 60 Hz	±0.1°C	700 W / 2391 BTU	9.5 L (2.5 gal)	PD-1	1.4 gpm (5.3 lpm)	23.8 x 14 x 23	90
13-874-241	Isotemp II	115 V / 60 Hz**	±0.1°C	1000 W / 3415 BTU	9.5 L (2.5 gal)	PD-1	1.4 gpm (5.3 lpm)	23.8 x 14 x 23	90
13-874-242	Isotemp II	115 V / 60 Hz**	±0.1°C	1000 W / 3415 BTU	9.5 L (2.5 gal)	PD-2	3.6 gpm (13.6 lpm)	23.8 x 14 x 23	90
13-874-243	Isotemp II	115 V / 60 Hz	±0.1°C	1000 W / 3415 BTU	9.5 L (2.5 gal)	MD	3 gpm (22.3 lpm)*	23.8 x 14 x 23	90
13-874-244	Isotemp III	208-230 V / 60 Hz	±0.5°C	2000 W / 6830 BTU	19 L (5 gal)	PD-1	1.4 gpm (5.3 lpm)	28 x 17 x 23	160
13-874-245	Isotemp III	208-230 V / 60 Hz	±0.5°C	2000 W / 6830 BTU	19 L (5 gal)	PD-2	3.6 gpm (13.6 lpm)	28 x 17 x 23	160

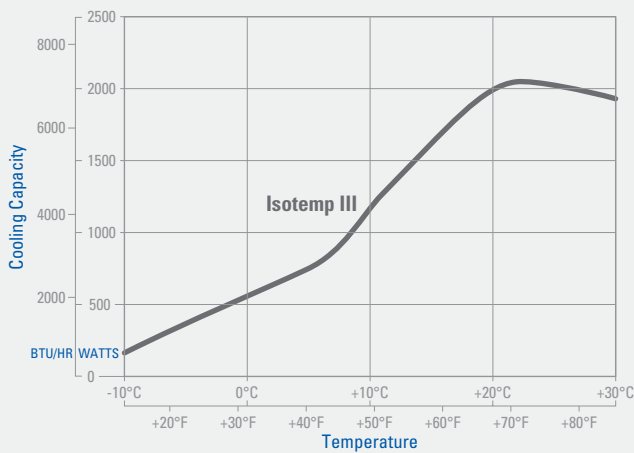
\*MD pumping capacity is @ 5 psi (0.3 bar)  
 \*\*Requires a 20 amp circuit

## Performance Curves — 115V/60Hz

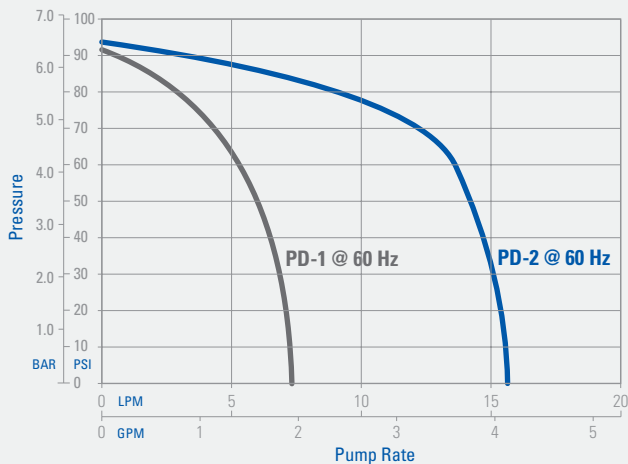
### Cooling Capacity for Isotemp I and Isotemp II



### Cooling Capacity for Isotemp III



### Pumping Capacity for Positive Displacement Pumps (PD-1 & PD-2)

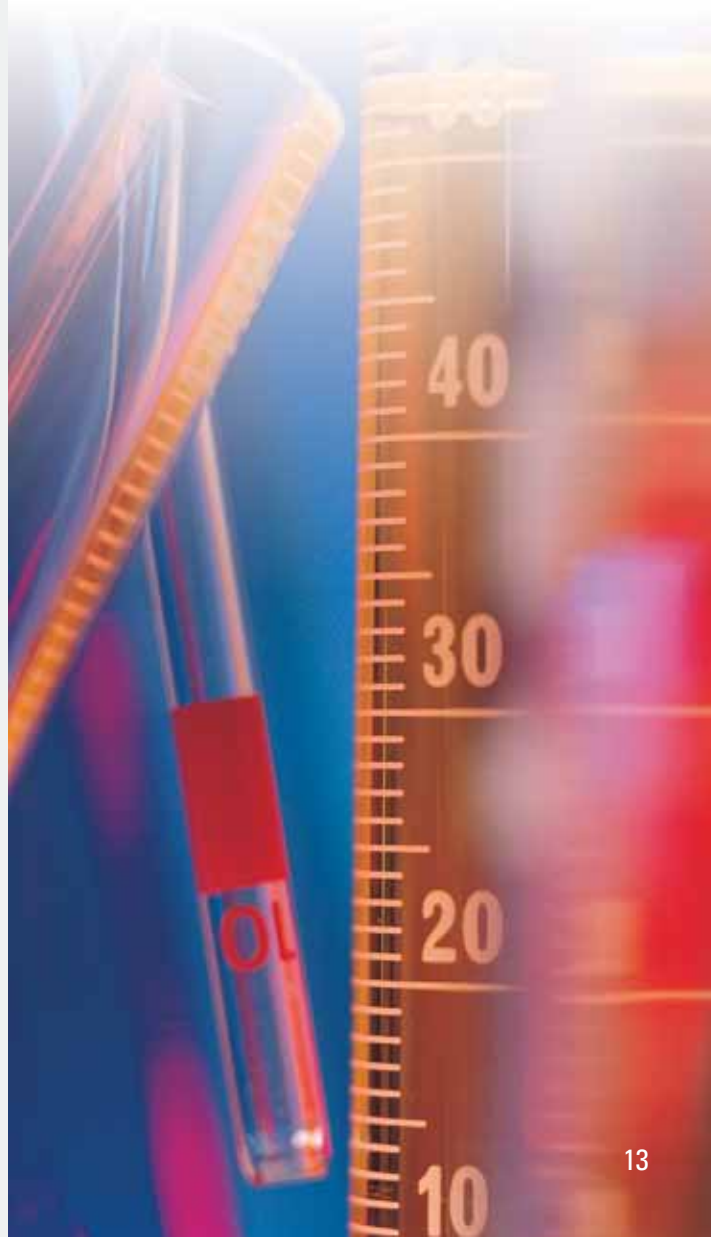


### Performance and Specification Curve Notes

Specifications obtained at sea level using water as the recirculating fluid, at a +20°C process setpoint, +20°C ambient condition, at nominal operating voltage.

Other fluids, process temperatures, ambient temperatures, altitude or operating voltages will affect performance. Cooling capacity based on units with PD-1 pumps with no back pressure. Cooling capacity reflects the usage of water used as a cooling medium between +8°C to +30°C and 50/50 EG/water below +8°C. Glycol or Glycol water mixtures are required below +8°C in order to prevent freezing of the cooling coils. Failure to follow these directions will result in a loss of cooling capacity and potential damage to the unit.

Other pumps will affect cooling capacity performance. Pressure values are differential pressures between the inlet and the outlet of the unit. Specifications subject to change.





# Fisher Scientific Isotemp Bath Circulator Accessories

## Ordering Information

Part Number	Bath Circulator Accessory	Description
13-873-884	Adapter	Adapter M16 female x 1/4-inch NPT male
13-265-155	Bath fluids	Use ethylene glycol for low temperature applications to -30°C, 5-gallon container
13-265-202	Bath fluids	Sil 100 Silicone oil bath liquid, temperature range -75°C to +75°C, 5-liter container
13-265-203	Bath fluids	Sil 100 Silicone oil bath liquid, temperature range -75°C to +75°C, 10-liter container
13-265-204	Bath fluids	Sil 180 Silicone oil bath liquid, temperature range -40°C to +200°C, 5-liter container
13-265-205	Bath fluids	Sil 300 Silicone oil bath liquid, temperature range +80°C to +300°C, 5-liter container
13-265-206	Bath fluids	Sil 300 Silicone oil bath liquid, temperature range +80°C to +300°C, 10-liter container
13-265-207	Bath fluids	Sil 180 Silicone oil bath liquid, temperature range -40°C to +200°C, 10-liter container
13-265-154	Bath fluids	Sil 200 Silicone oil bath liquid, temperature range +20°C to +200°C, 5-gallon container
13-265-124	Bridge	Adjustable Bridge for use with all controllers
13-872-271	Bridge	Lifting platform bridge H24
13-873-881	Communication	RS232 comm box for use with 6200 controller
13-265-210	Insulating balls	1.5-inch diameter hollow plastic balls insulate the reservoir from temperature losses while allowing immersion of a variety of vessels such as flask or test tubes
13-873-870	Lid	Stainless-steel lid for H5P
13-873-871	Lid	Stainless-steel lid for H14P
13-87-872	Lid	Stainless-steel lid for H21P
13-872-275	Lifting platform	Lifting platform H24
13-265-214	Plumbing package	Viton plumbing package -25°C to +100°C (uninsulated)
13-265-215	Plumbing package	Viton plumbing package -25°C to +100°C (insulated)
13-255-653	Rack	Stainless-steel rack for use with H11
13-255-63	Rack	Stainless-steel rack for use with R28, R35, H24
13-255-64	Rack insert	Stainless-steel insert for use with R28, R35, H24, 10-mm holes
13-255-65	Rack insert	Stainless-steel insert for use with R28, R35, H24, 16-mm holes
13-265-651	Rack insert	Stainless-steel insert for use with R28, R35, H24, 25-mm holes
13-255-652	Rack insert	Stainless-steel insert for use with R28, R35, H24, no holes
13-255-654	Rack insert	Stainless-steel insert for use with for use with H11, 10-mm holes
13-255-655	Rack insert	Stainless-steel insert for use with H11, 16-mm holes
13-255-656	Rack insert	Stainless-steel insert for use with H11, 25-mm holes
13-872-270	Rack insert	Stainless-steel insert for use with H11, no holes
13-265-232	Remote sensor	PT100 remote sensor for use with 6200 controller
13-265-114	Tap water cooling coil	Tap water cooling coil for use with 4100 H11; 5150 H11; 6200 H11; 4100 H24; 5150 H24; 6200 H24, 4100 H14P, 4100 H21P, 4100 H12A, 4100 H19A
13-265-119	Tap water cooling coil	Tap water cooling coil for use with 4100 H5P
13-265-120	Tap water cooling coil	Tap water cooling coil for use with 4100 H6A
13-265-123	Tap water cooling coil	Tap water cooling coil for use with 4100 H7, 51510 H7, 6200 H7



# Fisher Scientific Isotemp Chiller Accessories

Ordering Information



Part Number	Chiller Accessory	Description
13-265-155	Ethylene Glycol	Use ethylene glycol for low-temperature applications to -30°C, 5-gallon container
13-265-233	External Pressure Reducer (EPR)	Use with Isotemp I and II. Attaches to the chiller to limit the maximum outlet pressure of the chiller. Choose this accessory when circulating to applications that are sensitive to higher pressures or when circulating through glass.
13-265-234	External Pressure Reducer (EPR)	Use with Isotemp III. Attaches to the chiller to limit the maximum outlet pressure of the chiller. Choose this accessory when circulating to applications that are sensitive to higher pressures or when circulating through glass.
13-265-235	Installation Kit	The kit includes (2) ½-in x ½-in mpt fittings, 25 feet of ¼-in ID Polybraid hose, (2) hose clamps and hose insulation.





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# Isotemp<sup>®</sup>

Bath Circulators and Chillers



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