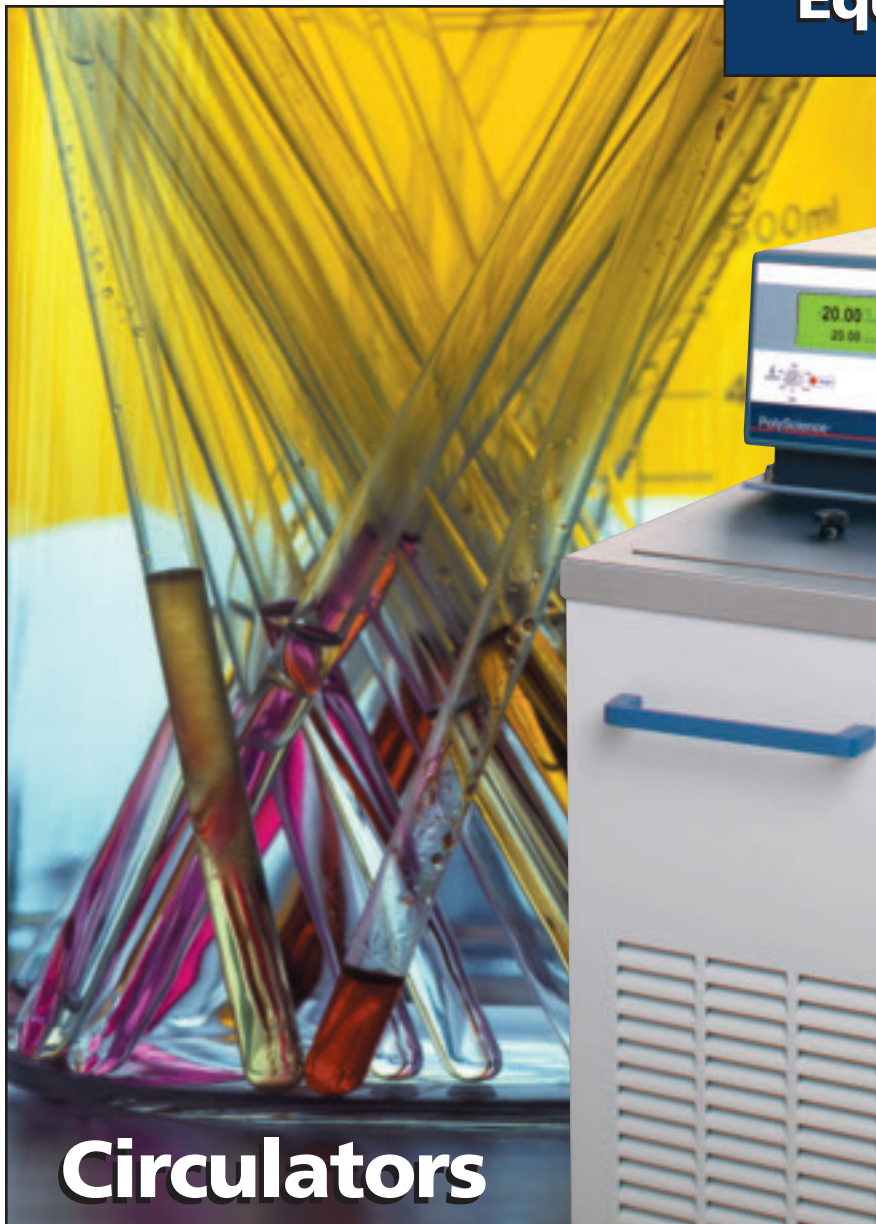




**Constant
Temperature
Equipment**



Circulators

Remarkably Responsive™



The Benefits of

PolyScience



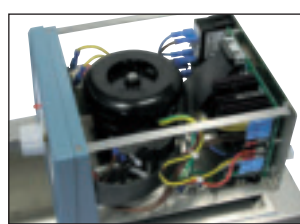
PolyScience is a leading manufacturer of Refrigerated Circulators, Heating Circulators, Chillers, Heat Exchangers, Water Baths, and custom temperature control equipment for industrial and laboratory use. We have been providing customers worldwide with precision temperature control equipment since 1963 and serve a diverse range of industries, including:

- Biotechnology
- Chemical
- Industrial Laser
- Medical
- Pharmaceutical
- Clinical

Beyond our comprehensive line of standard temperature control products, PolyScience also offers custom designed heating and cooling equipment. If you have a special application or specific product need, our experienced design, engineering, and technical staff will be happy to review your application and design a product that meets your exact requirements.

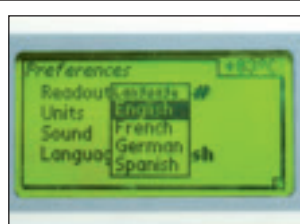


ISO 9001:2000 Certified



Precise Control

Controllers to fit every need - from precise programmable models to simple analog control for less demanding applications.



Easy Set-Up

Programmable and Advanced Digital controllers feature multi-language help menus to simplify operation and set-up.



Prevent Condensation

A reservoir purge tube port allows the injection of inert gas into the bath's reservoir to prevent condensation build-up.

Refrigerating/Heating Circulating Baths

Heating Circulating Baths

Immersion Circulators

Coolers

Easy Hook Up



All reservoir models have 1/4 inch NPT internally threaded inlet and outlet for easy attachment to external equipment. Adapters for 3/16, 1/4, and 3/8 inch (.47, .63, and .95 cm) tubing are supplied. 240V units also include 1/4 inch x M16 adapter.

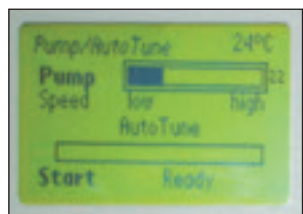


Cool Command Refrigeration Technology

- Rapid Cool Downs at Elevated Temperatures
- Ultra-Precise Cooling Control
- Longer Compressor Life

Cool Command is an advanced refrigeration technology that carefully monitors heat load to deliver only the amount of refrigerant needed. As a result, it permits fast bath cooling even at high temperatures without excessive energy consumption.

PolyScience Circulators



Selectable Flow Rates

Pressure and suction pumps on programmable and digital models provide variable flow rates for both open and closed applications.



Exceptional Stability

Advanced refrigeration systems and high wattage heaters respond quickly to temperature changes for ultimate stability.



Lasting Durability

Stainless steel wetted parts and reservoirs fight corrosion. Tough epoxy powder coated exteriors clean easily.

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PolyScience Controllers Programmable Controller

Programmable Controller

- Time/Temperature Programming and Data Logging
- Full Graphic Display with Multi-Language Help Menus
- 200°C Temperature Control
- Optional Remote Probe Capability
- RS232 Interface
- Continuously Variable Pump Speed Control
- Compatible with National Instruments LabView™, Microsoft® Excel, and Palm OS®
- Easy-to-Use Select/Set Knob
- Readout in °C or °F



The Programmable Controller

The PolyScience Programmable Controller offers the greatest number of features plus the simplicity of a one-touch, multi-function, Select/Set knob.

The multi-language LCD graphic readout simultaneously displays your set point and actual fluid temperature. The built-in timer provides visual and audible indications of timed events. The display also lets you know when it's time for calibration or service to insure accuracy and eliminate downtime.

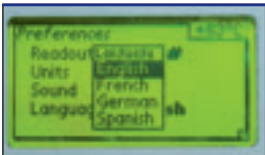
Time/temperature programs can be set directly by the controller's Select/Set knob. Ten programs can be stored in the controller's memory, each having up to 50 steps that can be cycled up to 99 times.

An RS232 interface is standard. Data logging can be viewed from the graphic display or via your PC. Included software supports National Instruments LabView™, Microsoft® Excel, and Palm® OS.

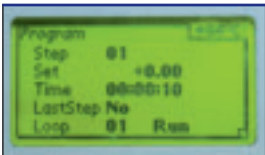
Remote probe capability is one of the strongest reasons for choosing the Programmable Controller. The optional probe can take over temperature control at the point of application, such as in a remote bath. Temperature shifts due to heat loss along tubing lines are eliminated and accuracy is maintained.

Programmable units are accurate to $\pm 0.25^\circ\text{C}$, and stable to $\pm 0.01^\circ\text{C}$. The micro-processor controller can be tuned to optimize PID performance for various fluids and volumes. User-adjustable high and low temperature limits and alarms are stored in non-volatile memory. A redundant safety thermostat protects over-temperature and low-liquid situations. On-demand automatic refrigeration control is standard on all refrigerated programmable units.

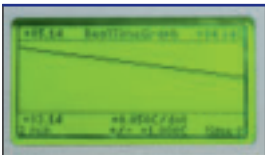
The programmable unit can be used for open or closed loop applications with its variable speed pressure/suction (duplex) pump.



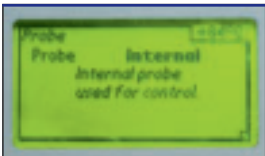
Set preference parameters with multi-language help menus.



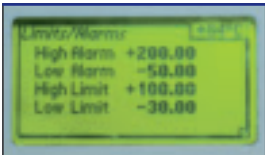
Time/temperature programming by PC or by the controller's Select/Set knob.



Temperature trends on the controller's display with real-time graphing.



Select internal probe or external probe to optimize control.



Set high and low limits with ease. Audible alarm capability.

PolyScience Controllers

Advanced Digital, Standard Digital, and Basic



- Full Graphic Display with Multi-Language Help Menus
- 200°C Temperature Control
- RS232 Interface
- Microprocessor Control
- Readout in °C and °F



- Three User-defined Temperature Preset Buttons
- 150°C Temperature Control
- Easy-to-Read LED Display
- Accurate Microprocessor Control
- Excellent Performance - Moderate Price



- Proportional Temperature Control
- 100°C Temperature Control
- Great for Routine Use
- Redundant Safety Backup
- Most Economical Model

Advanced Digital Controller

The PolyScience Advanced Digital Controller provides outstanding performance for demanding applications where programmability, software bundle, or remote probe are not required.

Readout accuracy is $\pm 0.25^{\circ}\text{C}$, stability is $\pm 0.01^{\circ}\text{C}$, and temperature control is up to 200°C . The LCD provides convenient menu selection and displays set point and actual fluid temperatures simultaneously.

The powerful microprocessor controller can be tuned to optimize PID performance for various fluids and volumes. In addition to user-settable high and low safety limits, redundant over-temperature and low-liquid level cutoffs are standard.

Equipped with a variable speed pressure/suction (duplex) pump, the Advanced Digital Controller may be used for either open or closed loop applications.

Standard Digital Controller

Digital set and read to 0.1°C and microprocessor control at a price near analog technology distinguish the PolyScience Standard Digital Controller. Its stability of $\pm 0.05^{\circ}\text{C}$ plus temperature control up to 150°C are excellent for many applications.

Operation is simple: One Select/Set knob and three temperature preset buttons. The bright LED displays fluid temperature continuously, and with a quick touch of the Select/Set knob, displays your set temperature. Choosing $^{\circ}\text{C}$ or $^{\circ}\text{F}$ temperature units, entering calibration values, and setting high limit temperature are quick and easy.

All Standard Digital Controllers have a 2-speed pressure (simplex) pump suitable for closed loop applications. Low pump speed is quiet and provides longer motor life, high speed is preferable for more difficult pumping requirements.

A redundant safety backup for over-temperature and low-liquid situations protects your work and equipment.

Basic Controller

The PolyScience Basic Controller is used on selected models. It provides economical and accurate control with $\pm 0.2^{\circ}\text{C}$ stability and temperature control up to 100°C .

Special controller design eliminates annoying radio frequency electrical interference which can disrupt nearby lab equipment.

The 2-speed pressure (simplex) pump produces a flow of 9 or 15 liters per minute on most models. Temperature readout is via a supplied thermometer (non-mercury).

**PolyScience
Controllers**

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Refrigerating/Heating Circulators

The 9100 Series

9100 Series Features

- Most Popular Design
- Small Footprint - Less Than 1 sq.ft.
- 6 Liter Reservoir
- Choice Of Four Controllers
- Enhanced Cooling Capacity
- Quiet Operation
- Easy-Access Reuseable Filter

This series features a 6 liter reservoir in a space-saving vertical design. Only 8¼ in. (21cm) wide, the small footprint conserves precious bench space.

Size, performance, and a choice of four controllers combine to make this series PolyScience's most popular circulators.

Dependable, precise, and compact, all models feature redundant over-temperature and low-liquid level protection.

The refrigeration system is designed to be used below 70°C. This allows rapid bath cooling from 70°C or lower, while maximizing temperature control and reducing energy consumption above 70°C. The hermetically-sealed compressor is designed for years of maintenance-free use.



Programmable Model 9112. This top-of-the-line model features a wide temperature range and time/temperature programmability. Programs can be set directly from the front panel with the aid of the Select/Set knob and multi-language display or from a PC using the RS232 interface. LabView™ drivers and Excel® macros offer even greater programming and data logging convenience. Remote probe capability plus variable speed pressure/ suction (duplex) pump further enhance the 9112's capabilities.

Advanced Digital Model 9102. The Advanced Digital Controller offers the same advanced performance as the Programmable model and is the ideal choice when remote probe, time/temperature programming, or communication software are not required. The LCD display also incorporates multi-language help menus that aid set-up and operation when using the Select/Set knob. A built-in RS232 interface is standard. The variable speed pressure/suction pump can be used in both open and closed loop applications. Great performance for those on a budget.

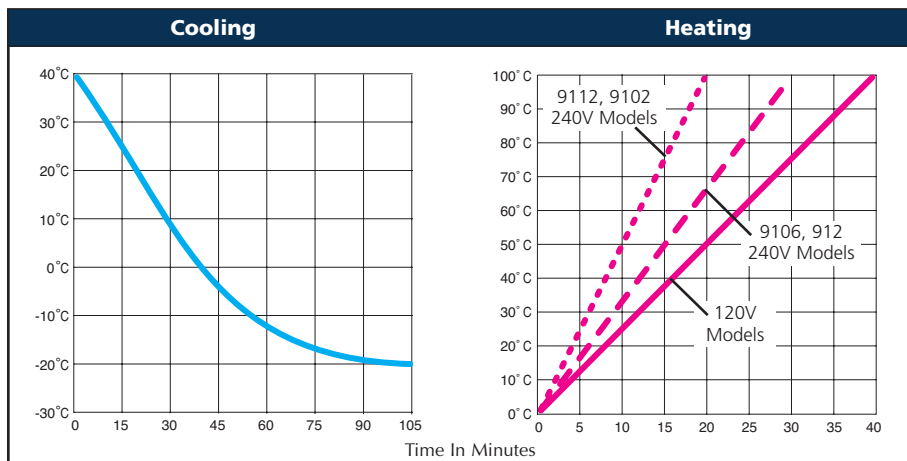
Standard Digital Model 9106. With the same cooling capacity as our more full featured models, this model combines high performance with economy. It is equipped with three user-defined temperature preset buttons for rapid set point changes. The bright LED display provides read and set capability, and its ±0.05°C stability meets all but the most demanding requirements. Frequently used for cooling electrophoresis cells, viscometers, and general lab applications.

Basic Model 912. Ideal for routine applications where extreme accuracy and stability are not critical. An excellent, low-price alternative to tap water cooling for rotary evaporators and condensers. Convenient set-point dial with supplied thermometer (alcohol) readout.

See pages 4 and 5 for additional controller information.

Upright, Space-Saving Design

6 Liter



9100 Series Specifications	
Reservoir Capacity	6 liters
Cooling Capacity @	+20°C 200 Watts
	0°C 140 Watts
	-10°C 100 Watts
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Working Access l x w x d	5 1/4 x 5 1/4 x 5 1/2 in.
	13.3 x 13.3 x 14 cm
Overall Dimensions l x w x h	15 3/4 x 8 1/4 x 22 1/2 in.
	40 x 21 x 57.1 cm
Pump Inlet and Outlet	1/4 in. FPT Rear Discharge

Note: For Cooling Capacity (Watts x 3.41) = BTU/hr.

---Tech Tip---

Fluids For Below Ambient Work

- ✓ Select one that satisfies operating conditions, including safety, flash point, and freezing point.
- ✓ Pick the lowest possible viscosity.
- ✓ Avoid synthetic fluids that are hygroscopic to prevent ice from forming in the reservoir.
- ✓ Minimize use of mixtures that may change concentration due to evaporation.
- ✓ Some mixtures may change from non-flammable to flammable if a volatile component is randomly added to keep the freezing point depressed.

Specifications	Model 9112	Model 9102	Model 9106	Model 912
Temperature Range	-20° to 200°C	-20° to 200°C	-20° to 150°C	-20° to 100°C
Temperature Stability	± 0.01°C	± 0.01°C	± 0.05°C	± 0.2°C
Controller / RS232	Programmable / Yes	Advanced Digital / Yes	Standard Digital/ No	Basic / No
Readout	Graphic LCD	Graphic LCD	LED	Thermometer (supplied)
Temperature Readout	°C or °F	°C or °F	°C or °F	N/A
Readout Accuracy	± 0.25°C	± 0.25°C	± 0.5°C	N/A
Pressure Flow Rate	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	2-speed, 9 or 15 lpm	2-speed, 9 or 15 lpm
Suction Flow Rate	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	N/A	N/A
Heater	60Hz 1100 Watts 50Hz 2200 Watts	1100 Watts 2200 Watts	1100 Watts 1600 Watts	1100 Watts 1600 Watts
Shipping Weight	69 lbs / 31.3 kg	69 lbs / 31.3 kg	66 lbs / 29.9 kg	65 lbs / 29.5 kg
Cat. No. 120V, 60Hz, 12A	9112A11B	9102A11B	9106A11B	91A0A11B
Cat. No. 240V, 50Hz, 9.9A	9112A12E	9102A12E	9106A12E	91A0A12E

Note: Performance specifications determined at ambient temperature of 20°C/68°F. For 50Hz units, derate cooling capacity by 17%.

9100 Series Applications

Calibration

Chromatography Columns

Densitometers

Distillation Condensers

Electrophoresis Apparatus

General Laboratory Cooling

Isoelectric Focusing

Polarimeters

Refractometers

Rotary Evaporators

Spectrophotometers

Viscometers

Supplied with reservoir cover, bypass tube, and male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Programmable Model

Accessories:

-Remote Probe (10, 25, or 50-ft.)

-Digital to Analog Adapter

Accessories on pages 30 and 31.

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Refrigerated/Heating Circulators

The 9000 Series

9000 Series Features

- Low Profile Permits Convenient Shelf or Bench Top Placement
- Bath Top Work Space
- 6 Liter Reservoir
- Easy Access Sample Immersion
- Ideal for Use On Mobile Carts
- Easy-Access Reusable Filter

PolyScience 9000 Series Circulators combine exceptional performance with a low profile design that permits placement on shelves, bench tops, even mobile carts without sacrificing capabilities or convenience. Each 9000 model features the same temperature range, cooling capacity, and pump as its 9100 Series' counterpart while also providing almost a full square foot of additional work space on its stainless steel top.

In applications where bench space is at a premium, 9000 Series Circulators can be placed on a shelf above the work area while still providing convenient eye-level access to the controls. And their wide footprint adds stability for calibration work or applications where cart-mounted use is desirable.



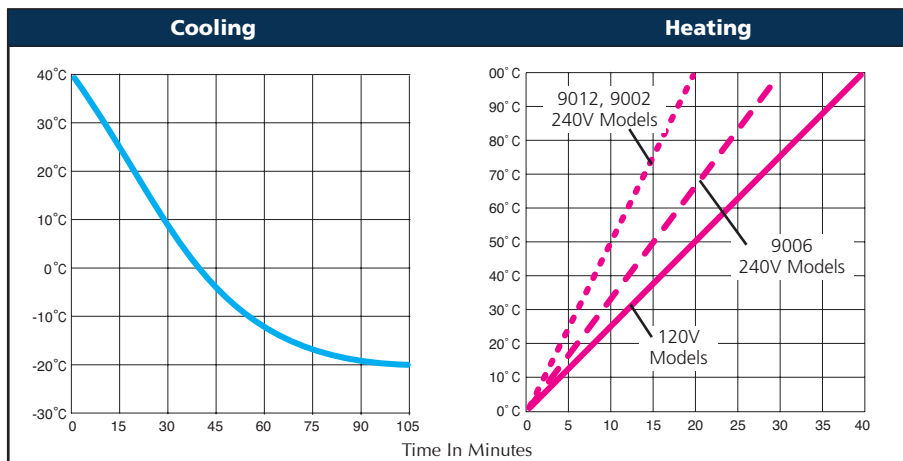
Programmable Model 9012. This model features a -20°C to 200°C temperature range and time/temperature programmability. The full graphic display with multi-language help menus and Select/Set knob make operation and set-up quick and simple. Data logging via the RS232 interface and included software are also possible. LabView™ drivers and Excel® macros provide even greater programming and data logging convenience. Remote probe capability and variable speed pressure/suction (duplex) pump are standard.

Advanced Digital Model 9002. Excellent temperature range and stability, combined with the easy-reading, full graphic display and multi-language help menus, make this model suitable for many applications and budgets. The built-in RS232 port comes standard. The pump is a variable speed pressure/suction (duplex) type for open or closed loop applications.

Standard Digital Model 9006. Designed for routine use up to 150°C, this model economically delivers the same cooling as our Programmable and Advanced Digital models. The convenient read-and-set LED display plus stability of $\pm 0.05^\circ\text{C}$ meets most requirements. Three user-defined temperature buttons offer quick set point changes for frequently used applications. The pump is 2-speed pressure (simplex) type for closed loop applications.

See pages 4 and 5 for additional controller information.

Low Profile Design 6 Liter



9000 Series Specifications	
Reservoir Capacity	6 liters
Cooling Capacity @	+20°C 200 Watts
	0°C 140 Watts
	-10°C 100 Watts
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Working Access l x w x d	5 1/4 x 5 1/4 x 5 1/2 in.
	13.3 x 13.3 x 14 cm
Overall Dimensions l x w x h	15 3/4 x 18 3/4 x 17 in.
	40 x 47.6 x 43.2 cm
Pump Inlet and Outlet	1/4 in. FPT Rear Discharge

Note: For Cooling Capacity (Watts x 3.41) = BTU/hr.

---Tech Tip---

- ✓ For optimum performance locate your circulator on a level surface free from drafts and direct sunlight.
- ✓ Avoid locations where corrosive fumes, excessive moisture, or excessive dust are present.
- ✓ Protect against voltage drops by using properly grounded power outlets wired with 14 gauge or larger diameter wire. Locate the circulator close to the power outlet.

Specifications	Model 9012	Model 9002	Model 9006
Temperature Range	-20° to 200°C	-20° to 200°C	-20° to 150°C
Temperature Stability	±.01°C	±.01°C	±.05°C
Controller / RS232	Programmable / Yes	Advanced Digital / Yes	Standard Digital / No
Readout	Graphic LCD	Graphic LCD	LED
Temperature Readout	°C or °F	°C or °F	°C or °F
Readout Accuracy	± 0.25°C	± 0.25°C	± 0.5°C
Pressure Flow Rate	30 lpm max. (60 Hz)	30 lpm max. (60 Hz)	2-speed, 9 or 15 lpm
	22 lpm max. (50 Hz)	22 lpm max. (50 Hz)	
Suction Flow Rate	22 lpm max. (60 Hz)	22 lpm max. (60 Hz)	N/A
	15 lpm max. (50 Hz)	15 lpm max. (50 Hz)	
Heater	60Hz 1100 Watts	1100 Watts	1100 Watts
	50Hz 2200 Watts	2200 Watts	1600 Watts
Shipping Weight	74 lbs / 34 kg	70 lbs / 32 kg	67 lbs / 30.4 kg
Cat. No. 120V, 60Hz, 12A	9012A11B	9002A11B	9006A11B
Cat. No. 240V, 50Hz, 9.9A	9012A12E	9002A12E	9006A12E

Note: Performance specifications determined at ambient temperature of 20°C/68°F. For 50Hz units, derate cooling capacity by 17%.

9000 Series Applications

Calibration

Chromatography Columns

Densitometers

Distillation Condensers

Electrophoresis Apparatus

General Laboratory Cooling

Isoelectric Focusing

Polarimeters

Refractometers

Rotary Evaporators

Spectrophotometers

Viscometers

Supplied with reservoir cover, bypass tube, and male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Programmable Model Accessories:

- Remote Probe (10, 25, or 50-ft.)
- Digital to Analog Adapter

Accessories on pages 30 and 31.

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Refrigerating/Heating Circulators

The 9500 Series

9500 Series Features

- -30°C Cooling Capability
- 13 Liter Reservoir
- Energy-Saving Cool Command™ Refrigeration System
- Large Reservoir, Large Opening
- Easy-Access Reusable Filter

PolyScience 9500 Series Circulators offer exceptional cooling capability over a broad temperature range plus a high-capacity, easy-to-access 13 liter reservoir.

These versatile circulators also feature our exclusive Cool Command refrigeration system and fuzzy logic energy management technique to deliver up to 50% greater energy efficiency than traditional systems. This advanced technology carefully monitors heat load to deliver only the amount of refrigerant needed. As a result, it permits fast bath cooling even at high temperatures without excessive energy consumption.

To further add to their application versatility, Models 9512 and 9502 feature a powerful variable speed pressure/suction (duplex) pump, making them ideal for use where continuous, low-temperature operation is required or where the viscosity of the liquid may affect circulation uniformity.



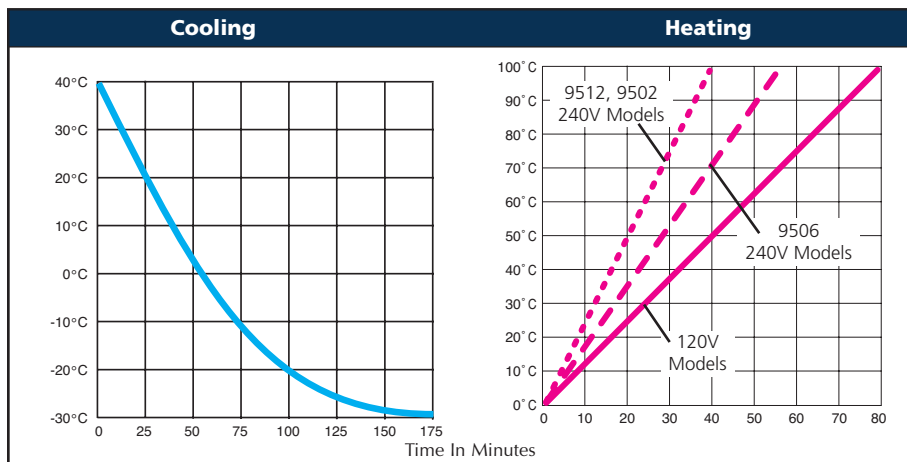
Programmable Model 9512. The Programmable Controller offers a wide temperature range, exceptional stability, and variable speed pressure/suction (duplex) pump along with time/temperature programming and remote probe capability. RS232 interface and PC programming software are standard. LabView™ drivers and Excel® macros provide even greater programming and data logging convenience. The full graphic LCD display and multi-language help menus simplify operation and set-up.

Advanced Digital Model 9502. Excellent temperature range and stability combined with an easy-reading graphic display make this model a fine choice for many applications. The pump is a powerful variable speed pressure/suction (duplex) type for open or closed loop applications. A built-in RS232 interface comes standard. The full graphic LCD display and multi-language help menus simplify operation and set-up.

Standard Digital Model 9506. The same -30°C cooling capacity of our Programmable and Advanced Digital models at a price comparable to units with analog controllers make the Model 9506 a great value for applications where high heat removal at close to ambient temperature is required. Microprocessor-based controller provides set-and-read functionality; three user-defined temperature buttons make set point changes quick and easy. The 2-speed pressure (simplex) pump is suitable for closed loop applications.

See pages 4 and 5 for additional controller information.

Low Temperature Control 13 Liter



9500 Series Specifications	
Reservoir Capacity	13 liters
Cooling Capacity @	+20°C 660 Watts
	0°C 480 Watts
	-20°C 240 Watts
	-30°C 100 Watts
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Reservoir Drain	Yes
Working Access l x w x d	6 x 11 x 5 1/2 in. 14 x 28 x 15.2 cm
Overall Dimensions l x w x h	17 x 15 1/2 x 24 3/4 in. 43 x 39.4 x 62.9 cm
Pump Inlet and Outlet	1/4 in. FPT Rear Discharge

Note: For Cooling Capacity (Watts x 3.41) = BTU/hr.

Specifications	Model 9512	Model 9502	Model 9506
Temperature Range	-30° to 200°C	-30° to 200°C	-30° to 150°C
Temperature Stability	± 0.01°C	± 0.01°C	± 0.05°C
Controller / RS232	Programmable / Yes	Advanced Digital / Yes	Standard Digital / No
Readout	Graphic LCD	Graphic LCD	LED
Temperature Readout	°C or °F	°C or °F	°C or °F
Readout Accuracy	± 0.25°C	± 0.25°C	± 0.5°C
Pressure Flow Rate	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	2-speed, 9 or 15 lpm
Suction Flow Rate	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	N/A
Heater	60Hz 1100 Watts 50Hz 2200 Watts	1100 Watts 2200 Watts	1100 Watts 1600 Watts
Shipping Weight	136 lbs / 61.7 kg	134 lbs / 60.8 kg	130 lbs / 59.0 kg
Cat. No. 120V, 60Hz, 13A	9512A11C	9502A11C	9506A11C
Cat. No. 240V, 50Hz, 9.8A	9512A12E	9502A12E	9506A12E

Note: Performance specifications determined at ambient temperature of 20°C/68°F. For 50Hz units, derate cooling capacity by 17%.

---Tech Tip---

For Best Temperature Control

- ✓ Use the largest diameter tubing possible for maximum flow.
- ✓ Insulate the tubing between the circulator and the application.
- ✓ Choose a fluid with lowest viscosity at the selected operating temperature.
- ✓ Select pump speed for optimum fluid mixing. This helps assure good uniformity.
- ✓ Keep reservoir covered.
- ✓ Consider the use of a remote probe.

9500 Series Applications

Low Temperature Calibration

Cloud Point and Pour Point Testing

Cell Freezing

Low Temperature Reactions

Distillation Condensers

General Laboratory Cooling

Rotary Evaporators

Spectrophotometers

Viscosity Studies

Supplied with reservoir cover, bypass tube, and male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Programmable Model

Accessories:

-Remote Probe

(10, 25, or 50-ft.)

-Digital to Analog Adapter

Accessories on pages 30 and 31.

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Refrigerating/Heating Circulators

The 9700 Series

9700 Series Features

- -40°C Cooling Capability
- 13 Liter Reservoir
- Broad Operating Temperature Range
- Ample Reservoir for Sample Immersion
- Cool Command™ Refrigeration System
- Enlarged Access Opening
- Easy-Access Reuseable Filter

Ultra-low cooling capability, large 13 liter reservoir, and integral over-temperature and low-liquid level protection combine to make PolyScience 9700 Series Circulators ideal for a wide range of demanding applications.

Models 9712 and 9702 offer a -40° to 200°C temperature range with $\pm 0.01^\circ\text{C}$ temperature stability. The Model 9706 features a temperature range of -40° to 150°C with $\pm 0.05^\circ\text{C}$ stability. All models feature our Cool Command refrigeration system and fuzzy logic energy management technique to deliver up to 50% greater energy efficiency than traditional systems. This advanced technology carefully monitors heat load to deliver only the amount of refrigerant needed. As a result, it permits fast bath cooling even at high temperatures without excessive energy consumption.



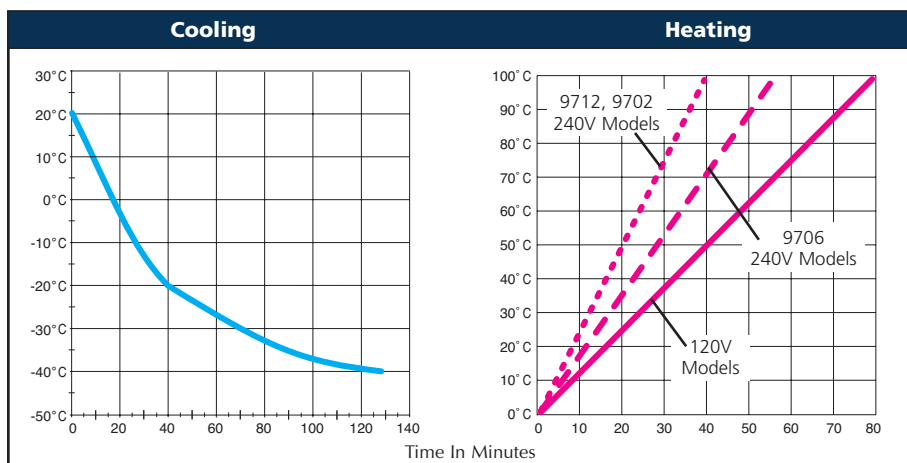
Programmable Model 9712. This model offers the widest temperature range along with high stability and variable speed pressure/suction (duplex) pump. Additional features include time/temperature programming and remote probe capability. RS232 interface and software for PC programming are standard. LabView™ drivers and Excel® macros offer even greater programming and data logging convenience. The full graphic LCD display with multi-language help menus aid in operation and set-up.

Advanced Digital Model 9702. Excellent temperature range and stability combined with easy-reading graphic display make this model a fine choice for many applications and budgets. A built-in RS232 interface comes standard. The pump is a powerful variable speed pressure/suction (duplex) type for open or closed loop applications. The full graphic LCD display with multi-language help menus simplify operation and set-up.

Standard Digital Model 9706. A -40°C cooling capacity and +150°C upper temperature limit make this circulator an economical choice for applications where high heat removal at close to ambient temperatures is required. Microprocessor-based controller provides set-and-read functionality; three user-defined temperature buttons make set point changes quick and simple. The 2-speed pressure (simplex) pump is suitable for closed loop applications.

See pages 4 and 5 for additional controller information.

Extra Low Temperature Control 13 Liter



9700 Series Specifications	
Reservoir Capacity	13 liters
Cooling Capacity @	+20°C 680 Watts
	0°C 450 Watts
	-30°C 160 Watts
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Reservoir Drain	Yes
Working Access l x w x d	6 x 11 x 5 1/2 in. 14 x 28 x 15.2 cm
Overall Dimensions l x w x h	17 x 15 1/2 x 24 3/4 in. 43 x 39.4 x 62.9 cm
Pump Inlet and Outlet	1/4 in. FPT Rear Discharge

Note: For Cooling Capacity (Watts x 3.41) = BTU/hr.

---Tech Tip---

Fluids For Below Ambient Work

- ✓ Select one that satisfies operating conditions, including safety, flash point and freezing point.
- ✓ Pick the lowest possible viscosity.
- ✓ Avoid synthetic fluids that are hygroscopic to prevent ice from forming in the reservoir.
- ✓ Minimize use of mixtures that may change concentration due to evaporation.
- ✓ Some mixtures may change from non-flammable to flammable if a volatile component is randomly added to keep the freezing point depressed.

Specifications	Model 9712	Model 9702	Model 9706
Temperature Range	-40° to 200°C	-40° to 200°C	-40° to 150°C
Temperature Stability	± 0.01°C	± 0.01°C	± 0.05°C
Controller / RS232	Programmable / Yes	Advanced Digital / Yes	Standard Digital / No
Readout	Graphic LCD	Graphic LCD	LED
Temperature Readout	°C or °F	°C or °F	°C or °F
Readout Accuracy	± 0.25°C	± 0.25°C	± 0.5°C
Pressure Flow Rate	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	2-speed, 9 or 15 lpm
Suction Flow Rate	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	N/A
Heater 60Hz 50Hz	1100 Watts 2200 Watts	1100 Watts 2200 Watts	1100 Watts 1600 Watts
Shipping Weight	140 lbs / 63.5 kg	138 lbs / 62.6 kg	138 lbs / 62.6 kg
Cat. No. 120V, 60Hz, 14A	9712A11C	9702A11C	9706A11C
Cat. No. 240V, 50Hz, 9.9A	9712A12E	9702A12E	9706A12E

Note: Performance specifications determined at ambient temperature of 20°C/68°F. For 50Hz units, derate cooling capacity by 17%.

9700 Series Applications

Low Temperature Calibration

Cloud Point and Pour Point Testing

Cell Freezing

Low Temperature Reactions

Distillation Condensers

General Laboratory Cooling

Rotary Evaporators

Spectrophotometers

Viscosity Studies

Supplied with reservoir cover, bypass tube, and male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Programmable Model Accessories:

- Remote Probe (10, 25, or 50-ft.)
- Digital to Analog Adapter

Thermometry Calibration Reservoir and other Accessories on pages 30 and 31.

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Refrigerating/Heating Circulators

The 9600 Series

9600 Series Features

- -25°C Cooling Capability
- 28 Liter Reservoir Accommodates Large or Multiple Samples
- Extra Large Reservoir Opening
- Energy-Saving Cool Command™ Refrigeration System
- Bath Top Work Space
- Easy-Access Resuable Filter

The 9600 Series combines -25°C cooling capacity with a spacious 28 liter reservoir to provide precise temperature control for large or multiple samples even under rapidly changing heat loads. Plus they feature large 10¼ by 10¼ in. reservoir openings to make immersion and retrieval of samples quick and easy.

All 9600 Series models also feature our Cool Command refrigeration system and fuzzy logic energy management technique to deliver up to 50% greater energy efficiency than traditional systems. This advanced technology carefully monitors heat load to deliver only the amount of refrigerant needed. As a result, it permits fast bath cooling even at high temperatures without excessive energy consumption.



Programmable Model 9612. The most versatile model in the 9600 Series, the 9612 provides precise temperature control from -25°C to +150°C and features time/temperature programming, remote probe capability, and a variable speed pressure/suction (duplex) pump. An RS232 interface and PC programming software are standard while LabView™ drivers and Excel® macros provide even greater programming and data logging convenience. A full graphic LCD display with multi-language help menus simplify operation and set-up.

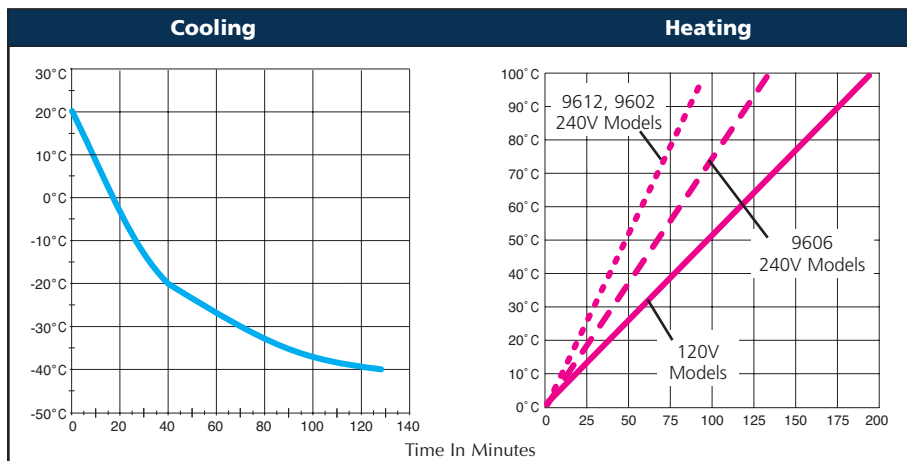
Advanced Digital Model 9602. A fine choice for more modest applications and budgets, the 9602 features -25°C to +150°C temperature control, a powerful variable speed pressure/suction (duplex) pump for open or closed loop applications, and integral RS232 interface. A full graphic LCD display with multi-language help menus simplify operation and set-up.

Standard Digital Model 9606. The most economical model in this series, the 9606 offers the same temperature range and cooling capacity as our more full-featured models. A microprocessor-based controller provides set-and-read functionality; three user-defined temperature buttons make set point changes quick and simple. The 2-speed pressure (simplex) pump is suitable for closed loop applications.

See pages 4 and 5 for additional controller information.

Large Access Reservoir

28 Liter



9600 Series Applications

- Temperature Calibration
- Cloud Point and Pour Point Testing
- Low Temperature Reactions
- Distillation Condensers
- General Laboratory Cooling
- Rotary Evaporators
- Spectrophotometers
- Sample Tempering
- Viscosity Studies

9600 Series Specifications	
Reservoir Capacity	28.4 liters
Cooling Capacity @	+20°C 700 Watts
	0°C 510 Watts
	-20°C 260 Watts
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Reservoir Drain	Yes
Working Access l x w x d	10 1/4 x 10 1/4 x 10 1/4 in. 26 x 26 x 26 cm
Overall Dimensions l x w x h	19 1/2 x 27 1/2 x 18 1/2 in. 49.5 x 70 x 47 cm
Pump Inlet and Outlet	1/4 in. FPT Rear Discharge

Note: Cooling capacity, Watts x 3.41 = BTU's/hr.

---Tech Tip---

Selectable Pump Speed Advantages:

- Slow Speed** ✓ Quieter Operation
 ✓ Longer Motor Life
 ✓ Minimizes Bath Turbulence
 ✓ Reduce friction heating of bath
- Faster Speed** ✓ Responds Quickly to Changes
 ✓ Pumps to Multiple Systems
 ✓ Better Flow in Small Tubing
 ✓ Better Uniformity with Viscous Fluids

Supplied with reservoir cover, bypass tube, and male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Programmable Model Accessories:
 -Remote Probe (10, 25, or 50-ft.)
 -Digital to Analog Adapter
 Accessories on pages 30 and 31.

Specifications	Model 9612	Model 9602	Model 9606
Temperature Range	-25° to 150°C	-25° to 150°C	-25° to 150°C
Temperature Stability	± 0.01°C	± 0.01°C	± 0.05°C
Controller / RS232	Programmable / Yes	Advanced Digital / Yes	Standard Digital / No
Readout	Graphic LCD	Graphic LCD	LED
Temperature Readout	°C or °F	°C or °F	°C or °F
Readout Accuracy	± 0.25°C	± 0.25°C	± 0.5°C
Pressure Flow Rate	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	2-speed, 9 or 15 lpm
Suction Flow Rate	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	N/A
Heater	60Hz 1100 Watts 50Hz 2200 Watts	1100 Watts 2200 Watts	1100 Watts 1600 Watts
Shipping Weight	153 lbs / 69.4 kg	150 lbs / 68.0 kg	148 lbs / 67.1 kg
Cat. No. 120V, 60Hz, 13A	9612A11C	9602A11C	9606A11C
Cat. No. 240V, 50Hz, 9.8A	9612A12E	9602A12E	9606A12E

Note: Performance specifications determined at ambient temperature of 20°C/68°F. For 50Hz units, derate cooling capacity by 17%.



Heating Circulators

The 8000 Series

8000 Series Features

- Above Ambient Temperature Control
- 6 Liter
- Small Footprint, Low Profile
- Choice of Microprocessor or Analog Controller

Compact and powerful, PolyScience 8000 Series Circulators are ideal for precise control of temperature from 5°C above ambient to as high as 200°C. Four different controllers are available – from a full-featured, fully programmable controller to a low-cost, set-it-and-forget-it analog model.

For even greater operational flexibility, a variety of accessories and add-ons are also available for 8000 Series Circulators. Our tap water cooling coil (Cat. No. 060300; page 30) allows operation at temperatures closer to ambient and provides more rapid cool-down from elevated temperatures. And for below ambient work, our KR60 Flow-Through Cooler (page 28) can be added to provide cooling down to -25°C.



Programmable Model 8012. The most versatile model in the 8000 Series, the 8012 provides precise temperature control from 5°C above ambient to 200°C and features time/temperature programming, remote probe capability, and a variable speed pressure/suction (duplex) pump. An RS232 interface and PC programming software are standard while LabView™ drivers and Excel® macros provide even greater programming and data logging convenience. A full graphic LCD display and multi-language help menus simplify operation and set-up.

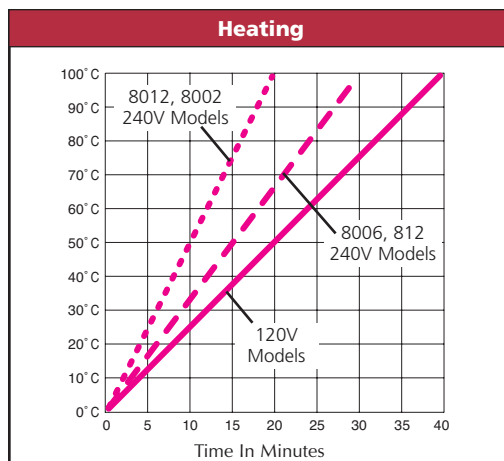
Advanced Digital Model 8002. A fine choice for more modest applications and budgets, the 8002 features the same temperature range and stability as the 8012 as well as a full graphic LCD display with multi-language help menus. Other standard features include a powerful variable speed pressure/suction (duplex) pump for open or closed loop applications and integral RS232 interface.

Standard Digital Model 8006. The most economical microprocessor-controlled model in this series, the 8006 has an upper temperature limit of 150°C and a bright set-and-read LED display. Three user-defined temperature buttons make set point changes quick and simple. The 2-speed pressure (simplex) pump is suitable for closed loop applications.

Basic Model 812. The lowest priced Heating Circulator in the 8000 Series, the 812 is ideal for use in applications where set point changes are infrequent. Temperature is set via a rotary dial and is read on a supplied alcohol thermometer. The 2-speed pressure (simplex) pump is suitable for closed loop applications.

See pages 4 and 5 for additional controller information.

Compact and Powerful Control 6 Liter



---Tech Tip---

High Temperature Precautions:

Before starting your circulator, set both a **Safety Set** point temperature as well as your operating set point temperature.

The **Safety Set** feature prevents your unit from excessive heat by switching off power to the heater in case of low-liquid level or primary controller failure. This feature has a temperature range of 40°C to 210°C.

8000 Series Specifications	
Reservoir Capacity	6 liters
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Working Access l x w x d	5 1/4 x 5 1/4 x 5 1/2 in. 13.3 x 13.3 x 14 cm
Overall Dimensions l x w x h	14 1/4 x 8 1/4 x 14 in. 37.5 x 21 x 35.6 cm
Pump Inlet and Outlet	1/4 in. FPT Rear Discharge

---Tech Tip---

High Temperature Precautions:

- ✓ Select a fluid with a flash point well above the operating temperature.
- ✓ Silicone oils are preferred over mineral oil which may smoke or burn.
- ✓ Place circulator in a fume hood if noxious vapors may be present.
- ✓ Use high temperature tubing and tubing adapters. See page 30 for accessories.

Specifications	Model 8012	Model 8002	Model 8006	Model 812
Temperature Range	Ambient +5° to 200°C	Ambient +5° to 200°C	Ambient +5° to 150°C	Ambient +5° to 100°C
Temperature Stability	±0.01°C	±0.01°C	±0.05°C	±0.2°C
Controller / RS232	Programmable / Yes	Advanced Digital / Yes	Standard Digital / No	Basic / No
Readout	Graphic LCD	Graphic LCD	LED	Thermometer (supplied)
Readout Accuracy	±0.25°C	±0.25°C	±0.5°C	N/A
Temperature Readout	°C or °F	°C or °F	°C or °F	N/A
Pressure Flow Rate	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	2-speed, 9 or 15 lpm	2-speed, 9 or 15 lpm
Suction Flow Rate	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	N/A	N/A
Heater	60Hz: 1100 Watts 50Hz: 2200 Watts	1100 Watts 2200 Watts	1100 Watts 1600 Watts	1100 Watts 1600 Watts
Shipping Weight	25 lbs / 11.3 kg	25 lbs / 11.3 kg	22 lbs / 9.8 kg	22 lbs / 9.8 kg
Cat. No. 120V, 50/60Hz, 11A	8012A11B	8002A11B	8006A11B	80A0A11B
Cat. No. 240V, 50/60Hz, 9.8A	8012A12E	8002A12E	8006A12E	80A0A12E

Note: Performance specifications determined at ambient temperature of 20°C/68°F.

8000 Series Applications

- Aging Studies
- Calibration
- Densitometers
- Extractor - Concentrators
- DNA Melting Curves
- Enzyme Assays
- Kinetic Research
- Polymer Studies
- Petroleum Testing
- Temperature Gradients
- Spectrophotometers
- Viscosity Studies

Supplied with reservoir cover, bypass tube, and male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Programmable Model Accessories:
-Remote Probe (10, 25, or 50-ft.)
-Digital to Analog Adapter
Accessories on pages 30 and 31.

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Heating Circulators

The 8100 Series

8100 Series Features

- Above Ambient Temperature Control
- 13 Liter Reservoir
- Large Reservoir Opening
- Small Footprint, Low Profile
- Carrying Handles For Easy Placement

These medium capacity 8100 Series Heating Circulators are ideal for maintaining larger or multiple samples at temperatures from 5°C above ambient to 150°C.

They feature powerful, high-wattage heaters to provide excellent temperature stability and respond quickly to changes in heat demand.



Programmable Model 8112. Our best 8100 Series Circulator, the 8112 provides precise temperature control from 5°C above ambient to 150°C and features time/temperature programming, remote probe capability, and a variable speed pressure/suction (duplex) pump. An RS232 interface and PC programming software are standard while LabView™ drivers and Excel® macros provide even greater programming and data logging convenience. A full graphic LCD display with multi-language help menus simplify operation and set-up.

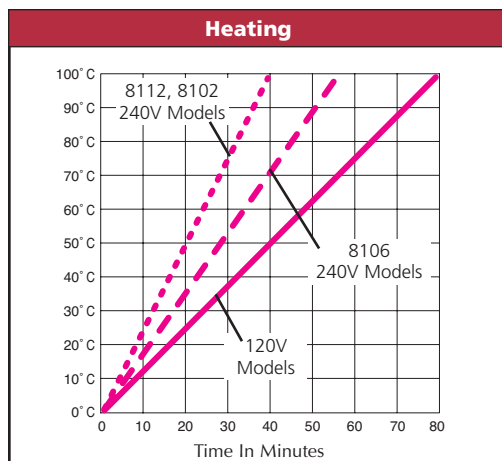
Advanced Digital Model 8102. A bit less full-featured than our Programmable model, the 8102 offers identical temperature performance at a more modest price. Standard features include a full graphic LCD display with multi-language help menus, powerful variable pressure/suction (duplex) pump for open or closed loop applications, and integral RS232 interface.

Standard Digital Model 8106. The most economical microprocessor-controlled model in this series, the 8106 also provides ambient +5°C to 150°C temperature control. It features a bright set-and-read LED display, three user-defined temperature set point buttons, and a 2-speed pressure (simplex) pump suitable for closed loop applications.

See pages 4 and 5 for additional controller information.

Compact and Powerful Control

13 Liter



---Tech Tip---

If you operate above 90°C, be aware of the following:

- ✓ Heat loss from vapor may cause poor temperature stability.
- ✓ Use a cover and floating hollow balls to help prevent heat and vapor loss.
- ✓ Fluid lost from vapor will have to be frequently replenished.
- ✓ If fluid other than water is used, a fume hood may be required to prevent the buildup of vapors inside the room.

8100 Series Specifications	
Reservoir Capacity	13 liters
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Working Access l x w x d	5 1/4 x 8 1/2 x 7 3/4 in. 13.3 x 21.6 x 19.7 cm
Overall Dimensions l x w x h	15 1/2 x 10 7/8 x 14 3/4 in. 39.4 x 27.6 x 37.5 cm
Pump Inlet and Outlet	1/4 in. FPT Rear Discharge

Specifications	Models 8112	Models 8102	Models 8106
Temperature Range	Ambient +5° to 150°C	Ambient +5° to 150°C	Ambient +5° to 150°C
Temperature Stability	±0.01°C	±0.01°C	±0.05°C
Controller / RS232	Programmable / Yes	Advanced Digital / Yes	Standard Digital / No
Readout	Graphic LCD	Graphic LCD	LED
Readout Accuracy	±0.25°C	±0.25°C	±0.5°C
Temperature Readout	°C or °F	°C or °F	°C or °F
Pressure Flow Rate	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	2-speed, 9 or 15 lpm
Suction Flow Rate	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	N/A
Heater	60Hz: 1100 Watts 50Hz: 2200 Watts	1100 Watts 2200 Watts	1100 Watts 1600 Watts
Shipping Weight	40 lbs / 18 kg	32 lbs / 14.5 kg	28 lbs / 12.7 kg
Cat. No. 120V, 50/60Hz, 11A	8112A11B	8102A11B	8106A11B
Cat. No. 240V, 50/60Hz, 9.8A	8112A12E	8102A12E	8106A12E

Note: Performance specifications determined at ambient temperature of 20°C/68°F.

8100 Series Applications

- Aging Studies
- Calibration
- Densitometers
- Extractor - Concentrators
- DNA Melting Curves
- Enzyme Assays
- Kinetic Research
- Polymer Studies
- Petroleum Testing
- Temperature Gradients
- Spectrophotometers
- Viscosity Studies

Supplied with reservoir cover, bypass tube, and male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Programmable Model Accessories:
-Remote Probe (10, 25, or 50-ft.)
-Digital to Analog Adapter
Accessories on pages 30 and 31.

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Heating Only Circulators

The 8200 Series

8200 Series Features

- Above Ambient Temperature Control
- 28 Liter Reservoir
- Large Reservoir Opening
- Compact Design
- Carrying Handles For Easy Placement

PolyScience 8200 Series Heating Circulators feature spacious 28 liter reservoirs and ambient +5°C to 150°C temperature control to keep large or multiple samples at a constant, stable temperature. Their powerful, high-wattage heaters respond quickly to changes in heat demand and provide excellent temperature stability.

For operational convenience, all 8200 Series feature a large 12¹/₈ x 10³/₈ in. reservoir opening for easy access and carrying handles for added portability.



Programmable Model 8212. Ambient +5°C to 150°C temperature control, ±0.01°C temperature stability, time/temperature programming, and remote probe capability make this PolyScience's best large-capacity Heating Circulator. Other features include variable speed pressure/suction (duplex) pump, RS232 interface and PC programming software, LabView™ drivers and Excel® macros, and full graphic LCD display with multi-language help menus.

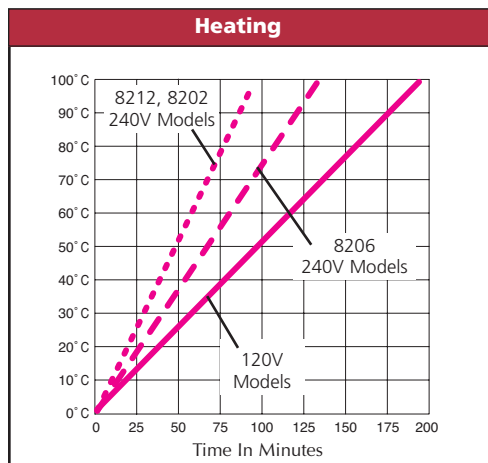
Advanced Digital Model 8202. The same broad temperature control range and excellent temperature stability performance of our top of the line model at a more modest price. Standard features include a full graphic LCD display with multi-language help menus, powerful variable speed pressure/suction (duplex) pump for open or closed loop applications, and integral RS232 interface.

Standard Digital Model 8206. Ideal for those on a tight budget, the 8206 is our most economical large-capacity Heating Circulator. As with our other 8200 Series Circulators, it provides ambient +5°C to 150°C temperature control. Standard features include a bright set-and-read LED display, three user-defined temperature set point buttons, and a 2-speed pressure (simplex) pump suitable for closed loop applications.

See pages 4 and 5 for additional controller information.

Compact and Powerful Control

28 Liter



8200 Series Specifications	
Reservoir Capacity	28 liters
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Working Access l x w x d	12 ¹ / ₈ x 10 ³ / ₈ x 8 in. 30.8 x 26.4 x 20.3 cm
Overall Dimensions l x w x h	22 ³ / ₄ x 13 ³ / ₁₆ x 14 ³ / ₄ in. 55.8 x 33.5 x 37.5 cm
Pump Inlet and Outlet	¹ / ₄ in. FPT Rear Discharge



8200 Series Applications

- Calibration
- Chromatography Columns
- Densitometers
- Distillation Condensers
- Electrophoresis Apparatus
- General Laboratory
- Isoelectric Focusing
- Polarimeters
- Refractometers
- Rotary Evaporators
- Spectrophotometers
- Viscometers

Specifications	Models 8212	Models 8202	Models 8206
Temperature Range	Ambient +5° to 150°C	Ambient +5° to 150°C	Ambient +5° to 150°C
Temperature Stability	±0.01°C	±0.01°C	±0.05°C
Controller / RS232	Programmable / Yes	Advanced Digital / Yes	Standard Digital / No
Readout	Graphic LCD	Graphic LCD	LED
Readout Accuracy	±0.25°C	±0.25°C	±0.5°C
Temperature Readout	°C or °F	°C or °F	°C or °F
Pressure Flow Rate	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	30 lpm max. (60 Hz) 22 lpm max. (50 Hz)	2-speed, 9 or 15 lpm
Suction Flow Rate	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	22 lpm max. (60 Hz) 15 lpm max. (50 Hz)	N/A
Heater	60Hz: 1100 Watts 50Hz: 2200 Watts	1100 Watts 2200 Watts	1100 Watts 1600 Watts
Shipping Weight	50 lbs / 23 kg	43 lbs / 19.5 kg	40 lbs / 18.1 kg
Cat. No. 120V, 50/60hz, 11A	8212A11B	8202A11B	8206A11B
Cat. No. 240V, 50/60Hz, 9.8A	8212A12E	8202A12E	8206A12E

Note: Performance specifications determined at ambient temperature of 20°C/68°F.

Supplied with reservoir cover, bypass tube, and male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Programmable Model Accessories:

- Remote Probe (10, 25, or 50-ft.)
- Digital to Analog Adapter

Accessories on pages 30 and 31.

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Circulating Water Bath The Model 8306

Model 8306 Features

- Easy-to-Use Microprocessor Controller
- Three Preset Temperatures Buttons Permit Rapid Temperature Set Point Changes
- 28 Liters
- External Circulation Capability
- Hinged, See-Through Cover

The Model 8306 Circulating Water Bath is an excellent general purpose bath suitable for a wide variety of laboratory applications, including those requiring external circulation. It is supplied with a sample tray for the bath bottom.

---Tech Tip---

Use distilled water for temperatures up to 90°C. Do not use deionized water.

For procedures at higher temperatures (i.e., non-coliform testing), use the following guidelines when selecting a bath medium:

- ✓ Use only fluids that meet your safety, health, and equipment requirements.
- ✓ Use a fluid suitable for the temperature range desired.
- ✓ Use a fluid compatible with 300 series stainless steel.



Model 8306. Designed specifically for coliform testing, the Model 8306 features the PolyScience Standard Digital Controller. It incorporates three preset temperature buttons which can be used to rapidly change to common coliform test temperatures, such as 44.5°C, 45.5°C, 41.5°C, and 35.0°C, or other temperatures from ambient +5°C to 150°C.

Bath temperature is displayed on a bright LED readout. A quick press of a knob displays set point and also selects temperature units (°C or °F).

For operational convenience, the Model 8306 is equipped with a tilting, see-through polycarbonate cover which drains back into the bath when opened and an integral 2-speed (simplex) pump which can be used to circulate the bath liquid to other instruments using a closed loop configuration.

All wetted components are corrosion-resistant 300 stainless steel. The outer case is protected with a durable, easy-to-clean epoxy powder coating.

See page 5 for additional information on the Standard Controller used on the Model 8306.

Ideal For Coliform Testing

28 Liter

The Model 8306

This circulating bath is specifically designed to be used for the following Coliform tests:

1. APHA, AWWA, WEF and EPA fecal coliform determination at 44.5°C as specified in "Standard Methods for the Examination of Water and Wastewater" (19th Edition 1995). The membrane filter method or MPM method can be used.
2. AOAC determination of E. coli at 45.5°C.
3. APHA, AWWA, WEF 7-Hour Fecal Coliform test at 41.5°C.
4. Defined Substrate Technology™ tests for E. coli and total coliform at 35.0°C.

Model 8306	
Reservoir Capacity	28 liters
Temperature Range	Ambient +5° to 150°C
Temperature Stability	±0.05°C
Readout	LED, °C or °F to 0.1°
Pump Flow Rate	2-speed, 9 or 15 lpm
Pump Inlet and Outlet	1/4 in. FPT Rear Discharge
Heater	60Hz 1100 Watt 50Hz 2200 Watt
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Overall Dimensions l x w x h	14 x 22 x 13 1/2 in. 35.6 X 55.9 x 34.3 cm
Working Access l x w x d	10 1/4 x 11 3/4 x 8 in. 27.3x 29.8 x 20.3 cm
Shipping Weight	43 lbs / 20 kg
Cat. No. 120V, 50/60Hz, 11A	8306A11B
Cat. No. 240V, 50/60Hz, 9.8A	8306A12E

Note: Performance specifications determined at ambient temperature of 20°C/68°F.

Model 8306 Applications

Standard Method Coliform Testing

General Bacteriological Testing

Incubation

Routine Laboratory Use

Sample Tempering

Circulate to:

- Refractometers

- Spectrophotometers

- Extractor Concentrators



Model 8306 supplied with reservoir cover, bypass tube, and male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Accessories on Pages 30 and 31.

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Model 210, Heating Recirculator

The Model 210 recirculating heater connects to a tank or full cooling system to provide low-cost, accurate control within a frequently used temperature range.

Ideal for routine applications such as thawing plasma, tempering photographic solutions, or circulating to an external device. The sealed reservoir allows use with closed loop applications.

Fittings for 1/2 in. ID tubing to allow for easy installation. Wetted parts are stainless steel, PVC, brass, or nylon.

Model 210	
Temperature Range	Ambient to 70°C
Temperature Stability	±0.2°C
Reservoir Capacity	0.5 liter
Over-Temperature	Adjustable
Low Liquid Cutoff	Yes
Overall Dimensions l x w x h	8 x 9 1/2 x 8 in. 20 x 24 x 20 cm
Shipping Weight	12 lbs / 5 kg
Cat. No. 120V, 60Hz, 7A	040300
Cat. No. 240V, 50Hz, 3.3A	040301

• Low-Cost Pumping and Heating

• Closed Loop Applications

• Make Your Own System

Immersion Circulators

The 7000 Series

7000 Series Features

- Standard Digital, Basic, or Programmable Controller
- Up to 30 Liter/Minute Pumping Pressure
- Control at Temperatures Up to 200°C
- Integral Temperature and Low-Liquid Level Protection

The PolyScience family of Immersion Circulators makes it easy to create your own unique bath for above ambient temperature control. Simply combine one of our versatile Basic, Standard Digital, or Programmable Controllers with any PolyScience open bath or your own tank or container.

Need time/temperature programming, remote probe, or data logging capability?

See the PolyScience Model 7312 Programmable Immersion Circulator on page 26.



The Model 7312 is shown in a PolyScience Acrylic tank. See pages 26 and 27 for more information.



Flexible

Rotating pump flow director accepts 1/2 in. (13mm) ID tubing for closed loop applications.



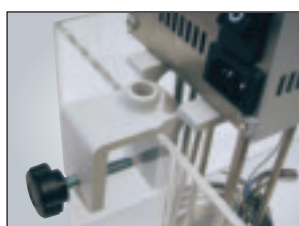
Easy To Use

Model 7306 offers three user-defined preset buttons for frequently used temperature set points.



Versatile

For additional temperature control flexibility, add an optional cooling coil. See page 30.



Adaptable

Models 7306 and 712 clamp on to a tank's side or can be mounted on to a standard lab stand.



Extra Protection

Optional protective shield prevents sample contact with heater element or pump. See page 30.



Adjustable

The Model 7312 is built on an expandable bridge that can be suspended over a variety of reservoir tanks.

Choice of Controller Selectable Pump Speed



7000 Series Applications

- Bacteriological Incubation
- Calibration
- Cell Culture
- Enzyme Assays
- Kinetic Research
- Tempering Samples
- Thawing Frozen Specimens
- Warming Culture Media

Standard Digital Model 7306. The PID micro-processor controller provides precise temperature control and greater temperature stability. The 2-speed pressure (simplex) pump minimizes turbulence in small tanks and provide higher flow and greater uniformity in large tanks. An adjustable flow director accepts 1/2 in. (13mm) ID tubing for external circulation.

Basic Model 712. This low-cost circulator offers good temperature control for routine lab applications. Proportional heater control combined with redundant safety backup makes this analog model an excellent value. The 2-speed pressure (simplex) pump minimizes turbulence in small tanks and can provide higher flow and greater uniformity in large tanks. Temperature readout is via the supplied thermometer (non-mercury).

Models 7306 and 712 supplied with 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Accessories on pages 30 and 31.



7306 and 712 Model Specifications	
Pumping Flow	9 or 15 lpm
Tank Occupancy, approx.	6 1/2 x 4 3/4 in. / 16.5 x 12.1 cm
Immersion, minimum to maximum	3 in. to 7 in. 7.6 cm to 17.8 cm
Overall Dimensions h x w x d	12 1/4 x 4 5/8 x 5 3/4 in. 31.2 x 11.7 x 14.6 cm
Heater	1100 Watts (60Hz), 1600 Watts (50Hz)
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Shipping Weight	9 lbs / 4.1 kg

Specifications	7306	712
Temperature Range*	Ambient +5°C to 150°C	Ambient +5°C to 100°C
Temperature Stability*	±0.05°C	±0.2°C
Controller	Standard Digital	Basic
Readout	LED	Thermometer (supplied)
Temperature Readout	°C or °F	N/A
Cat. No. 120V, 50/60Hz, 11A	7306A11B	73A0A11B
Cat. No. 240V, 50/60Hz, 7.5A	7306A12E	73A0A12E

* Temperature range and stability may vary depending on bath volume, surface area, insulation and type of fluid.

Note: Performance specifications determined at ambient temperature of 20°C/68°F.

See page 5 for additional controller information.

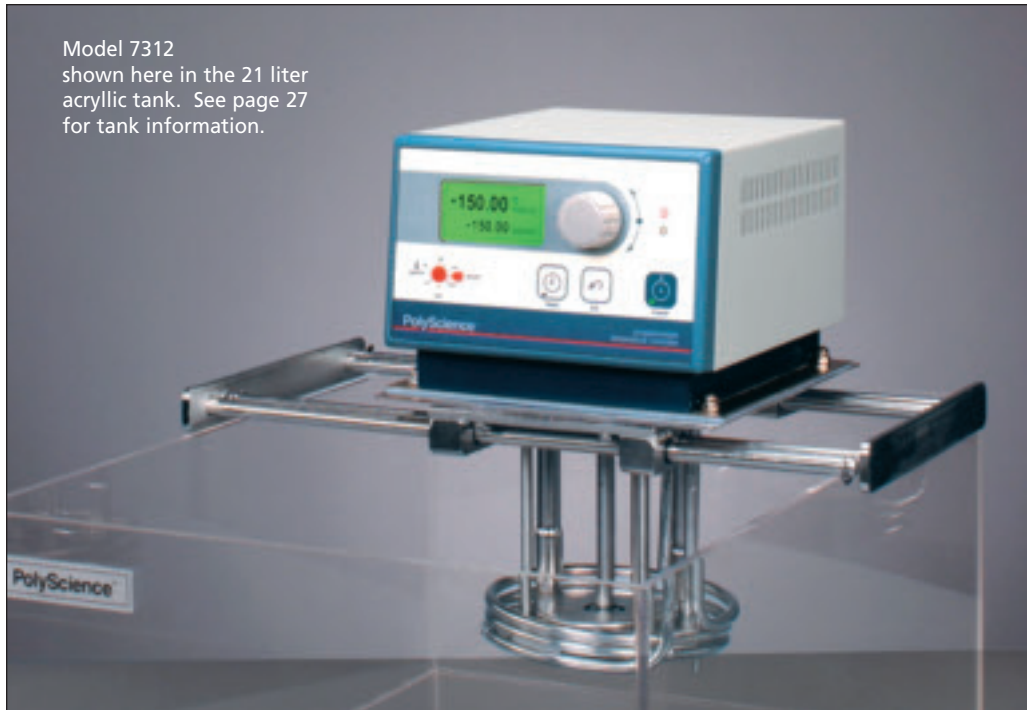
Programmable Controller The 7000 Series

Model 7312 Features

- Time/Temperature Programmability
- Variable Speed Pump
- Controllable Through RS232 Interface
- RS232 Cable Supplied
- Remote Probe Capability

Supplied with male inlet/outlet tubing adapters for 3/8, 1/4, and 3/16 inch (.95, .63, and .47 cm) tubing. Also includes 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience.

Accessories on pages 30 and 31.



Model 7312 shown here in the 21 liter acrylic tank. See page 27 for tank information.

Model 7312 Specifications	
Temperature Range*	Ambient +5° to 200°C
Temperature Stability*	±0.01°C
Controller / RS232	Programmable / Yes
Readout	Graphic LCD
Temperature Readout	°C or °F
Pressure Flow (max)	30 lpm (60Hz); 22 lpm (50Hz)
Suction Flow (max)	22 lpm (60Hz); 15 lpm (50Hz)
Tank Occupancy, approx.	7 1/2 x 8 3/4 in.
Immersion, minimum to maximum	2 1/2 in. to 4 1/2 in. 7 cm to 11.4 cm
Overall Dimensions d x w x h	11 1/4 x 15 x 9 1/2 in. 28.6 x 38 x 24.2 cm
Heater	1100 Watts (60Hz), 2200 Watts (50Hz)
Over-Temperature Cutoff	Adjustable
Low-Liquid Cutoff	Yes
Pump Inlet and Outlet	1/4 in. FPT Rear Discharge
Shipping Weight	24 lbs / 11 kg
Cat. No. 120V, 50/60Hz, 11A	7312A11B
Cat. No. 240V, 50/60Hz, 9.7A	7312A12E

* Temperature range and stability vary depending on bath volume, surface area, insulation, and type of fluid.

Note: Performance specifications determined at ambient temperature of 20°C/68°F.

Programmable Model 7312. The full-featured PolyScience Programmable Controller, combined with circulator placement flexibility, makes this “design your own bath” circulator a great value. Microprocessor PID control assures high accuracy and stability.

The Programmable Controller features a multi-language graphic display and time/temperature programming. Ten programs can be stored in the controller's memory; each can have up to fifty steps and can be cycled up to 99 times. An RS232 interface and remote probe capability are standard. The included software supports LabView™ drivers and Excel® macros to offer even greater programming and data logging convenience.

For internal circulation or external open and closed loop applications, the 7312 has a strong pressure and suction (duplex) pump with variable speed adjustment. The optional remote probe gives more accurate temperature control in applications where external circulation is required.

The expandable mounting bridge spans openings from 15 to 25 in. (38.1 to 63.5 cm) across to allow placement on almost any bath container. Choose from PolyScience's selection of stainless steel or acrylic baths or use your own reservoir.

See page 4 for additional controller information.

Open Bath Tanks

Open Baths



These open baths are recommended for use with PolyScience Immersion Circulators or where a container with the corrosion resistance of stainless steel or visibility of clear acrylic or polycarbonate is needed.

Acrylic Open Baths. Provide good visibility of immersed samples, never rust, and cost less than stainless steel baths. The upper working limit of these acrylic baths is 70°C. The bottoms are elevated 2 1/8 in. (5.4 cm) to allow placement of low-profile magnetic stirrers or other devices beneath the bath.

Stainless Steel Baths. Seamless, insulated, and coated with a durable epoxy powder finish. Carrying handles included. These baths can be used for fluid temperatures up to 300°C.

Polycarbonate Bath. Provides a broad working temperature range (-40° to +98°C). Stackable design fits standard racks and carts.

Acrylic Baths		Temperature Limit 70°	
Capacity	8 liter	16 liter	21 liter
Working Access l x w x d	18 x 5 x 7 1/2 in. 45.7 x 12.7 x 19 cm	18 x 10 x 7 1/2 in. 45.7 x 25.4 x 19 cm	18 x 13 1/8 x 7 1/2 in. 45.7 x 33.3 x 19 cm
Shipping Weight	7 lbs / 3 kg	9 lbs / 4 kg	11 lbs / 5 kg
Cat. No.	040700	040705	040710

Stainless Steel Baths		Temperature Limit 300°	
Capacity	13 liter	28 liter	
Working Access l x w x d	9 x 11 3/4 x 7 3/4 in. 22.9 x 29.8 x 19.7 cm	11 3/4 x 19 1/2 x 7 3/4 in. 29.8 x 49.5 x 19.7 cm	
Shipping Weight	15 lbs / 7 kg	25 lbs / 11 kg	
Cat. No.	040510	040520	

Polycarbonate Bath		Temperature Limit 98°C	
Capacity	18 liter		
Working Access l x w x d	12 x 18 x 9 in. 30.5 x 45.7 x 22.9 cm		
Shipping Weight	2 lbs / 0.9 kg		
Cat. No.	040904		

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PolyScience Coolers

The KR and VLT Series

KR and VLT Features

- Continuous Cooling to Temperatures as Low as -100°C
- Choice of Fixed or Adjustable Set Point
- Low-Cost Operation - An Economical Alternative to Dry Ice or Liquid Nitrogen
- Designed For Continuous Use

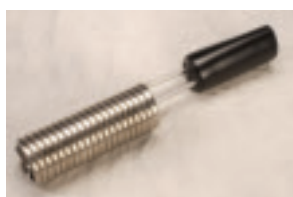


PolyScience VLT and KR Series Coolers can be used to achieve low-temperature capability with non-refrigerated circulators or boost the cooling capacity of refrigerated circulators.

VLT Series Coolers are available with immersion probes only. They are capable of achieving cooling temperatures as low as -100°C. VLT 100 models feature a digital temperature display and may be ordered with or without temperature control; non-temperature controlled models operate at maximum cooling. The VLT 60 also operates at maximum cooling (-60°C). It does not display temperature.

KR Series Coolers are available in both immersion probe and flow-through models. They are capable of achieving cooling temperatures as low as -45°C. All KR models are designed to run at maximum cooling; temperature control must be provided by an external circulator. The flow-through model must be used in-line with a circulator pump. Because of its high cooling efficiency, an anti-freeze solution is required in the circulating system.

Immersion Probe style coolers (VLT Series, KR 50, and KR 80) are excellent for trapping and Dewar type applications and can be used to reduce the expense of using dry ice or liquid nitrogen. PolyScience offers several different styles of immersion probes; all have an insulated flexible hose that allows convenient placement of the cooling probe.



Rigid Coil



Flexible

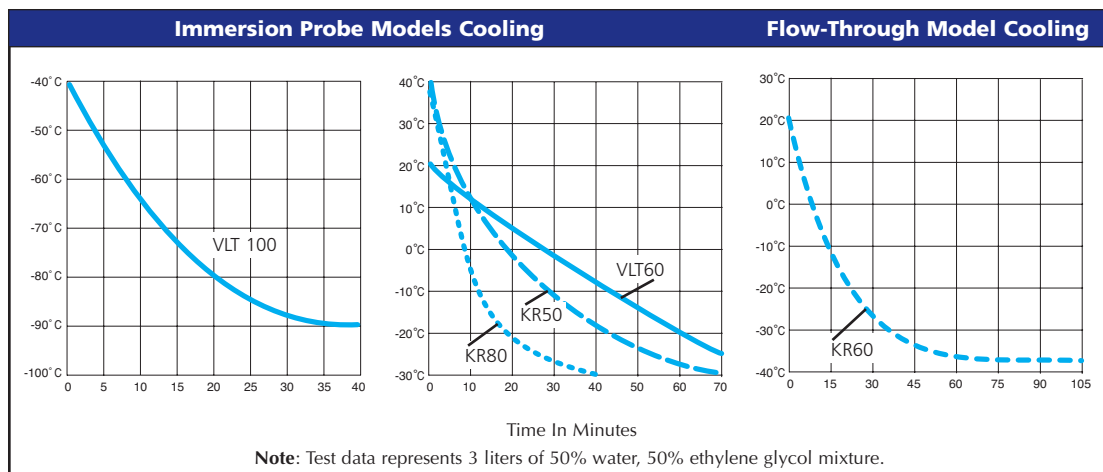


Cold Finger

Immersion Probe Dimensions

	Insulated Flexible Hose	3 in. Rigid Coil Probe (VLT 100 Series, KR 80)	1.5 in. Rigid Coil Probe (VLT 60)	1.75 in. Rigid Coil Probe (KR 50)	Cold Finger Probe (VLT 100) (VLT 100-NC)	Flexible Probe (VLT 100 Series)
Diameter	VLT 100 — 2.83 in. (7.14 cm) VLT 60 — 1.5 in. (3.81 cm) KR Series — 1.5 in. (3.81 cm)	3 in. (7.62 cm)	1.5 in. (3.81 cm)	1.75 in. (4.44 cm)	0.75 in. (1.91 cm)	0.625 in. (1.59 cm)
Length	VLT 100 — 6 ft. (1.83 m) VLT 60 — 4 ft. (1.22 m) KR Series — 4 ft. (1.22 m)	15 in. (38.1 cm) exposed length; 8.75 in. (22.2 cm) coil length	15 in. (38.1 cm) exposed length; 4.5 in. (11.4 cm) coil length	15 in. (38.1 cm) exposed length; 7.5 in. (19.05 cm) coil length	8.0 in. (20.3 cm) 3.75 in. (9.53 cm)	15 in. (38.1 cm)

Immersion Probe and Flow-Through Styles



KR and VLT Applications

- Cooling Exothermic Reactions
- Freezing Point Determinations
- Impact Testing
- Lyophilization
- Quick Cooling
- Replace Dry ice
- Solvent Traps
- Vacuum Traps

VLT and KR Series Coolers supplied with 6-ft. (1.83 meter) standard grounded electrical cord with U.S. (120V) or European (240V) plug. Other country-specific plugs available; consult PolyScience. KR 60 Flow-Through Coolers supplied with 3/8 inch male adapters with 1/2 inch barbed hose connector.

Accessories on pages 30 and 31.

VLT Series Specifications	VLT 100	VLT 100-NC	VLT 60
Temperature Control	Yes	No	No
Temperature Range	-40° to -85°C	-40° to -100°C	-20° to -60°C
Temperature Readout	Digital Display		None
Cooling Capacity	150 watts @ -40°C 120 watts @ -60°C 70 watts @ -80°C		75 watts @ -20°C 0 watts @ -60°C
Compressor	Two; 1/2 HP each		One; 1/4 HP
Overall Dimensions (H x W x D)	21 x 15 x 20.125 in. 53.3 x 38.1 x 51.1 cm		9 x 10 x 11 in. 22.9 x 25.4 x 22.9 cm
Shipping Weight (Approximate)	162 lbs./ 73.5 kg		49 lbs./22 kg
Standard Cooling Probe	3 in. Rigid Coil		1.5 in. Rigid Coil
Optional Cooling Probes	Cold Finger Flexible		None
Electrical	120 V, 60 Hz, 11.5A 240 V, 50 Hz, 7.5A		120 V, 60 Hz, 5A 240 V, 50 Hz, 2.5A
Cat. No. / Probe Style (120V)	3 in. Rigid Coil - P85C6A101B Cold Finger - P85C8A101B Flexible - P85C4A101B	3 in. Rigid Coil - P10N6A101B Cold Finger - P10N3A101B Flexible - P10N4A101B	1.5 in. Rigid Coil - 070960
Cat. No. / Probe Style (240V)	3 in. Rigid Coil - P85C6A102E Cold Finger - P85C8A102E Flexible - P85C4A102E	3 in. Rigid Coil - P10N6A102E Cold Finger - P10N3A102E Flexible - P10N4A102E	1.5 in. Rigid Coil - 070965

KR Series Specifications	KR 50	KR 80	KR60
Operating Temperature Range	-35° to +40°C	-45° to +40°C	-25° to +40°C
Style	Immersion Probe		Flow Through
Temperature Control	No - Fixed at -35°C	No - Fixed at -45°C	No - Fixed at -25°C
Temperature Readout	None		
Cooling Capacity	975 watts @ 20°C 140 watts @ -30°C	1050 watts @ 20°C 265 watts @ -30°C	745 watts @ 20°C 260 watts @ -10°C
Probe Style	1.75 in. Rigid Coil	3 in. Rigid Coil	NA
Inlet & Outlet Size	NA	NA	3/8 in. FPT
Dimensions (H x W x D)	14 x 14 x 17 in. (35.6 x 35.6 x 43.2 cm)		
Shipping Weight	76 lbs./34 kg	78 lbs./35.4 kg	73 lbs./33.1 kg
Cat. No. 120 V, 60 Hz, 5A	070850	070880	070860
Cat. No. 240 V, 50 Hz, 2.5 A	070855	070885	070865

Note: Cooling capacity (Watts x 3.41) = BTU/hr. Performance specifications determined at ambient temperature of 20°C/68°F. For 50Hz units, derate cooling capacity by 17%.

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Accessories

Cooling Coils

For auxiliary cooling of circulators. The stainless steel coil, when connected to a water source, permits more rapid cool down from high temperatures or better control when operating close to ambient temperatures. Not recommended for use in circulator baths where fluid temperature exceeds the boiling point of water.



For Heating Circulators Cat. No. 060300
For Model 712 and 7306 Cat. No. 050300

Protective Shield for Immersion Circulators

For Standard Digital and Basic Immersion Circulators. Stainless steel grid prevents sample contact with heater element or pump. Attaches and removes easily for cleaning.



Cat. No. 510-451

Remote Probe

For circulators with Programmable Controller. Permits point of control to be switched from inside programmable circulator bath to a remote location, such as an open tank. Compensates for heat loss through tubing between the circulator and the control point. Platinum RTD sensor with stainless steel sheath $\frac{5}{32}$ dia. x 6 in. long (.4 dia. x 15.2 cm). One inch (2.54 cm) rubber coupling connects sheath to flexible cable. Probe cable ends in DB9 female plug.



10 ft. (3 m) Cat. No. 060101
25 ft. (7.6m) Cat. No. 060105
50 ft. (15.25m) Cat. No. 060110

Custom lengths available on special order.

Thermometry Calibration Reservoir

18-inch (45.7 cm) deep companion reservoir converts Model 9712 Refrigerating/Heating Circulator into a Thermometry Calibration System. Use the 9712's 13 liter reservoir to calibrate up to 20 standard length temperature measurement devices; use the 4.75 liter companion reservoir to calibrate up to 10 immersion thermometers. Includes lids with integral thermometer holders for both reservoirs. Note: The addition of the calibration reservoir may decrease the operating temperature range achievable with the Model 9712 to approximately -35° to 150°C.



Cat. No. 040512

Tubing and Tubing Accessories

High-Temperature Tubing

3 ft. (.93m) flexible Teflon® lined, stainless steel over-braid tubing with 1/4 in. (.63 cm) swivel fittings. Max. temperature 300°C. **Cat. No. 060310**

High-Temperature Viton Bypass Tubing

6 inch (15.2 cm) length. Includes internal spring and gear-type hose clips. Max. temperature 200°C. **Cat. No. 510-495**

Low-Temperature Insulated Tubing

Minimizes temperature loss from a circulator to external device. 6 ft. (1.9 m) of 1/2 in. (1.27 cm) ID Buna N tubing with foam insulation. **Cat. No. 060312**

Tubing Clamp

3 mm to 13 mm tubing **Cat. No. 060304**

Brass Reducing Adapters

8 mm ID (Set of 2) **Cat. No. 060305**
 3 mm (Set of 2) **Cat. No. 060306**

Buna N Tubing

8 mm ID per yard (.9m) **Cat No. 060307**
 13 mm ID per yard (.9m) **Cat No. 060308**

Insulation

8 mm tubing per yard (.9m) **Cat. No. 060309**
 13 mm tubing per yard (.9m) **Cat. No. 060311**

Accessories

Accessories

Digital-to-Analog Adapter

For circulators with Programmable or Advanced Digital Controller when direct digital control is not required. Connects to the RS232 port and provides 10mv/degree analog signal for external monitoring or control.

Cat. No. 062120

Lab Algicide

General purpose lab algicide helps keep water baths clean, odor free, and resistant to black algae. Stainless steel compatible. Use 20 drops per gallon to prevent algae growth. 8 oz. (236 ml) dispenser bottle treats approximately 200 gallons (757 liters).



8 oz. bottle Cat. No. 004-300040

Glass Thermometer (non-mercury)

-20° to 150°C, 1°C **Cat. No. 099590**

Concentrated Bath Cleaner

A concentrated liquid for cleaning and removing rust and mineral deposits from stainless steel and plastic baths. Use at elevated temperatures. Helps remove existing algae prior to treatment with Lab Algicide. 1 oz. (29.6 ml) treats approximately 2 gallons (8 liters).



8 oz. bottle Cat. No. 004-300050

16 oz. bottle Cat. No. 004-300052

Bath Fluids

Low Temperature - Dynalene HC-50™ combines the low-temperature performance of synthetic organic and silicone fluids while extending the properties of familiar aqueous-based glycols. Excellent low-temperature performance without toxicity or risk to the environment, equipment, or personnel.

High Temperature - Dow Corning® Silicone Heat Transfer Fluids provide superior thermal stability over their temperature ranges. Check bath system compatibility before using. Compatible with stainless steel; not compatible with Buna or natural rubber.



	Temperature Range	Freeze Point	Viscosity	Quantity	Cat. No.
Dynalene HC™	-53° to 60°C -63° to 140°F	-56°C -68°F	3.6 cSt @ 0°C 15.1 cSt @ -40°C	1 gallon 3.79 liters	060330
Dow Corning® 510	50° to 150°C 122° to 302°F	-70°C -94°F	50 cSt @ 25°C	1 gallon 3.79 liters	060326
Dow Corning® 550	100° to 200°C 212° to 392°F	-50°C -58°F	125 cSt @ 25°C	1 gallon 3.79 liters	060327
Dow Corning® 710	150° to 250°C 302° to 482°F	-22°C -7.6°F	500 cSt @ 25°C	1 gallon 3.79 liters	060328

Due to high viscosity, Silicone Fluids 510, 550, and 710 are not recommended for use below 90°C.

Dow Corning fluids are produced by and registered TMs of Dow Corning Corporation.

Dynalene HC is a registered TM of Advanced Fluid Technologies, Inc.

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- **Heating Circulators**
- **Immersion Circulators**
- **Chillers**
- **Recirculating Coolers**
- **Water Baths**

Along with custom-ordered temperature control equipment for industrial and laboratory use.

We have been providing customers worldwide with precision temperature control equipment since 1963 and serve a diverse range of industries.

Beyond our comprehensive line of standard temperature control products, PolyScience also offers custom designed heating and cooling equipment. If you have a special application or specific product need, our experienced design, engineering, and technical staff will be happy to review your application and design a product that meets your exact requirements.

PolyScience is an ISO 9001:2000 Certified Company

Ask for these PolyScience Product brochures



PolyScience offers six models of water baths with either digital or analog control. Shaking water bath systems are also available



PolyScience chillers have a new Noise Reduction Technology that offers quiet but powerful cooling operation. Compact and portable, they are ideal for a wide range of laboratory and industrial cooling applications.



PolyScience offers the new **DURACHILL™** line of Industrial Capacity Chillers. They provide high performance cooling even in high ambient conditions.