



 **PolyScience**<sup>®</sup>  
Temperature Control Solutions

Circulating Baths • General Purpose Water Baths • Chillers & Coolers • Specialty Products

# Product Selection Guide

# PolyScience.

## Driven. Once a pioneer, always a pioneer.

Since 1963, we've responded, with many innovations, to the needs of laboratory, plastics, culinary, medical, chemical and industrial markets.

## Connected. Not just listening to customers. Hearing them.

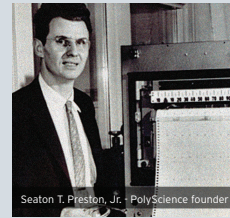
Even the best engineers can't operate in isolation. That's why our engineers and sales team spend countless hours gathering firsthand input.

## Established. The proof is in the proof.

We have sold over one million temperature control solutions, both under our brand and as private label for manufacturers and distributors. Our ISO 9001 quality management system and manufacturing process combines high quality and detail with precision and efficiency.

## Accommodating. Responding to OEM needs. NOW.

We are committed to finding solutions that help OEMs get to market faster and within budget. We can make both minor tweaks and major changes quickly and cost effectively.



## Temperature Controller Features



Performance Programmable  
Advanced Programmable  
Performance Digital



Standard Digital



Advanced Digital



MX



Features include patent-pending Swivel 180™ and a SmartTouch touch-screen.

This Selection Guide is intended to serve as a reference for offerings, model numbers, and specifications. For additional information, visit [www.polyscience.com](http://www.polyscience.com), request a catalog or contact a Customer Service Representative at (847) 647-0611.



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## Temperature Controller Selection Guide

Controller Type	Performance Programmable	Advanced Programmable	Performance Digital	Advanced Digital	Standard Digital	MX <sup>1</sup>
Maximum Temperature	200°C	200°C	200°C	200°C	170°C	135°C
Temperature Stability	±0.005°C	±0.01°C	±0.005°C	±0.01°C	±0.04°C	±0.07°C
Swivel 180™ Rotating Controller	o	o	o	o	o	
Pump	Variable-Speed	Variable-Speed	Variable-Speed	Variable-Speed	2-Speed	1-Speed
Pump Pressure (maximum) psi (bar) 60Hz/50Hz	4.3 (0.3) / 3.6 (0.25)	4.3 (0.3) / 3.6 (0.25)	4.3 (0.3) / 3.6 (0.25)	4.3 (0.3) / 3.6 (0.25)	3.5 (.24) / 2.9 (0.2)	2.3 (.16) / 1.8 (0.12)
Pressure Flow Rate (maximum) gpm (l/min) 60Hz/50Hz	5.3 (20.1) / 4.4 (16.7)	5.3 (20.1) / 4.4 (16.7)	5.3 (20.1) / 4.4 (16.7)	5.3 (20.1) / 4.4 (16.7)	2.9 (11.0) / 2.7 (10.2)	3.6 (13.5) / 3.1 (11.9)
Suction Flow Rate (maximum) gpm (l/min) 60Hz/50Hz	3.9 (14.7) / 3.2 (12.2)	3.9 (14.7) / 3.2 (12.2)	3.9 (14.7) / 3.2 (12.2)	3.9 (14.7) / 3.2 (12.2)		
Closed-Loop Operation	o	o	o	o	o	o
Open-Loop Operation	o	o	o	o		
Fluid Optimization/Specific Heat Tuning	o	o	o	o		
Temperature Calibration Capability	10-point	5-point	10-point	1-point	1-point	1-point
WhisperCool® Environmental Control System	o	o	o	o	o	o
Inert Gas Reservoir Purge	o	o	o	o	o	
Display Type & Size	SmartTouch Color LCD 4.3"	SmartTouch Color LCD 4.3"	SmartTouch Color LCD 4.3"	SmartView LCD Touch-Pad 3.75"	EasyView LCD Touch-Pad 3.75"	EasyView LCD 3.25"
Enhanced Data Display Capability	7 selectable views	7 selectable views	6 selectable views	Message Bar		
Multi-Language Menus or Prompts	11 languages	6 languages	11 languages	4 languages	Icon/English	Icon/English
Displays Temperature Trend	o	o	o			
Time/Temperature Programs & Steps	Open-Mode	Ten 100 step programs				
Date & Time with Calendar Start/Stop	o	o	o			
Timer	o	o	o	o		
On-Screen Help or Prompts	o	o	o	o		
External Temperature Control Capability (Pt100)	o	o	o	o		
RS232/RS485 Serial Output	o	o	o	o	RS232	
Remote On/Off Capability	o		o			
USB-A and USB-B	o	o	o	o		
Ethernet	o	o	o	o		
DeviceNet™/Canbus, Modbus®, Profibus® (optional)	o		o			
Software Support for LabVIEW™ included	o		o			
Backlit Display	o	o	o	o	o	o
Automatic Loss of Power Reset	Selectable	Selectable	Selectable	Selectable	Yes	Yes
Safety Class (DIN 12876-1)	III	III	III	III	I	I
Over-Temperature Protection	o	o	o	o	o	o
Failsafe Heater Control	o	o	o	o	o	o
High and Low Temperature Limits/Alarms	o	o	o	o	o	o
Low-Liquid-Level Safety	o	o	o	o	o	o
Alarm and Fault Indicators	Message	Message	Message	Message	Icon	Icon

1. Patented design for MX Immersion Circulator, and MX Controller.

## Integrated Circulating Bath Selection Guide

### Refrigerated/Heated Circulating Bath Selection Guide

Capacity	7 Liter (Low Profile)	7 Liter	7 Liter	15 Liter	15 Liter	20 Liter	28 Liter	45 Liter <sup>2</sup>
Maximum Temperature <sup>1</sup>	200°C	200°C	200°C	200°C	200°C	200°C	200°C	135°C
Minimum Temperature	-20°C	-20°C	-40°C	-30°C	-40°C	-30°C	-30°C	-25°C
Cooling Capacity @ 20°C	200 W	200 W	505 W	915 W	1000 W	915 W	915 W	1400 W
Working Access (L x W x D)	6.2 x 5.6 x 5 in 15.7 x 14.2 x 12.7 cm	6.2 x 5.6 x 5 in 15.7 x 14.2 x 12.7 cm	6.2 x 5.6 x 5 in 15.7 x 14.2 x 12.7 cm	8.4 x 10.9 x 5.5 in 21.2 x 27.6 x 14 cm	8.4 x 10.9 x 5.5 in 21.2 x 27.6 x 14 cm	9.9 x 12.5 x 5.5 in 25 x 31.6 x 14 cm	12.4 x 14.1 x 5.5 in 31.4 x 35.9 x 14 cm	21.6 x 15.7 x 5.5 in 54.9 x 39.8 x 14 cm
Drain	○	○	○	○	○	○	○	○
LidDock™	○	○	○	○	○	○	○	○
Performance Programmable	PP7LR-20	PP07R-20	PP07R-40	PP15R-30	PP15R-40	PP20R-30	PP28R-30	PP45R-20
Advanced Programmable	AP7LR-20	AP07R-20	AP07R-40	AP15R-30	AP15R-40	AP20R-30	AP28R-30	AP45R-20
Performance Digital	PD7LR-20	PD07R-20	PD07R-40	PD15R-30	PD15R-40	PD20R-30	PD28R-30	PD45R-20
Advanced Digital	AD7LR-20	AD07R-20	AD07R-40	AD15R-30	AD15R-40	AD20R-30	AD28R-30	AD45R-20
Standard Digital	SD7LR-20	SD07R-20	SD07R-40	SD15R-30	SD15R-40	SD20R-30	SD28R-30	
MX	MX7LR-20	MX07R-20		MX15R-30		MX20R-30		

1. Maximum temperature is controller dependent.

2. All 45L Circulating Baths are 208-240 VAC, 50/60Hz

## Fully Integrated Heated Circulating Bath Selection Guide

Capacity	7 Liter	15 Liter	20 Liter	28 Liter
Maximum Temperature <sup>1</sup>	200°C	200°C	200°C	200°C
Minimum Temperature <sup>2</sup>	Ambient +10°C	Ambient +10°C	Ambient +10°C	Ambient +10°C
Working Access (L x W x D)	6.2 x 5.6 x 5 in 15.7 x 14.2 x 12.7 cm	8.4 x 10.9 x 5.5 in 21.2 x 27.6 x 14 cm	9.9 x 12.5 x 5.5 in 25 x 31.6 x 14 cm	12.4 x 14.1 x 5.5 in 31.4 x 35.9 x 14 cm
Tank Material	Insulated Stainless Steel	Insulated Stainless Steel	Insulated Stainless Steel	Insulated Stainless Steel
Drain	○	○	○	○
Tap Water Cooling-Coil	○	○	○	○
LidDock™	○	○	○	○
Performance Programmable	PP07H200	PP15H200	PP20H200	PP28H200
Advanced Programmable	AP07H200	AP15H200	AP20H200	AP28H200
Performance Digital	PD07H200	PD15H200	PD20H200	PD28H200
Advanced Digital	AD07H200	AD15H200	AD20H200	AD28H200
Standard Digital	SD07H170	SD15H170	SD20H170	SD28H170
MX	MX07H135	MX15H170	MX20H135	

1. Maximum temperature is controller dependent.

2. Minimum temperature is shown with no external heat load.



## Open Tank Circulating Bath Selection Guide

### Stainless Steel Open Bath Systems

Capacity	6 Liter	10 Liter	20 Liter	28 Liter
Maximum Temperature <sup>1</sup>	150°C	150°C	150°C	150°C
Minimum Temperature <sup>2</sup>	Ambient +10°C	Ambient +10°C	Ambient +10°C	Ambient +10°C
Working Access (L x W x D)	3.9 x 4.3 x 6 in 10 x 11 x 15.2 cm	3.9 x 10.1 x 6 in 9.9 x 25.5 x 15.2 cm	10.4 x 9 x 6 in 26.4 x 22.8 x 15.2 cm	10.1 x 8.4 x 8 in 25.7 x 21.4 x 20.3 cm
Tank Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Advanced Programmable	AP06S150	AP10S150	AP20S150	AP28S150
Advanced Digital	AD06S150	AD10S150	AD20S150	AD28S150
MX	MX06S135	MX10S135	MX20S135	MX28S135



### Polycarbonate Open Bath Systems

Capacity	8 Liter	11 Liter	14 Liter	17 Liter	23 Liter	28 Liter
Maximum Temperature <sup>1</sup>	85°C	85°C	85°C	85°C	85°C	85°C
Minimum Temperature <sup>2</sup>	Ambient +10°C	Ambient +10°C	Ambient +10°C	Ambient +10°C	Ambient +10°C	Ambient +10°C
Working Access (L x W x D)	4.1 x 6.1 x 8 in 10.5 x 15.6 x 20.3 cm	8.3 x 6.1 x 8 in 21 x 15.6 x 20.3 cm	12.4 x 6.1 x 8 in 31.4 x 15.6 x 20.3 cm	4.1 x 12 x 8 in 10.5 x 30.5 x 20.3 cm	8.3 x 12 x 8 in 21 x 30.5 x 20.3 cm	12.4 x 12 x 8 in 31.5 x 30.5 x 20.3 cm
Tank Material	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Drain				o	o	o
Advanced Programmable	AP08P100	AP11P100	AP14P100	AP17P100	AP23P100	AP28P100
MX	MX08P100	MX11P100	MX14P100	MX17P100	MX23P100	MX28P100



### MX Immersion Circulator<sup>3</sup>

Capacity	Up to 28 Liters
Maximum Temperature <sup>1</sup>	135°C
Minimum Temperature <sup>2</sup>	Ambient +10°C
MX	MX-CA



### LX Immersion Circulator

Capacity	Up to 20 Liters
Maximum Temperature <sup>1</sup>	98°C
Minimum Temperature <sup>2</sup>	Ambient +10°C
LX	LXC-9



1. Maximum temperature is dependent on tank material. Immersion Circulator's maximum temperature is dependent on fluid volume.  
 2. Minimum temperature is shown with no external heat load.  
 3. Patented design for MX Immersion Circulator.

## Specialty Products

PolyScience offers an array of specialty products, uniquely configured to accommodate specific testing and quality control needs.

### Viscosity Baths

- Configured for use with popular capillary viscometers
- Choice of glass or polycarbonate reservoir
- Includes tap water cooling coil
- Lidded viscometer openings
- Configured to accommodate ASTM D-445 testing

### Calibration Baths

- Accommodates up to 6 temperature measuring devices
- Bath lid with sleeves for two each 3 mm, 4 mm, and 6 mm diameter openings

### 75 Liter Refrigerated Circulating Bath

- Specifically designed to replicate temperature fluctuations that accelerate beverage aging
- Performance Programmable Temperature Controller allows endless array of thermal cycling options and programs
- Complies with DIN 12876-1 Class III safety requirements for use with flammable liquids

### Forced-Age Testing Bath

- 189 liter reservoir specifically designed for accelerated shelf life tests of beer and other beverages; food stability testing; product quality analysis and asphalt sample tempering.

### Cryoprecipitate Bath

- Safe, reliable thawing of Fresh Frozen Plasma (FFP) for the recovery of Cryoprecipitated Antihemophilic Factor (AHF)
- Preset to a 4°C thawing temperature
- Thaws up to 24 units of FFP or Whole Blood (WB) simultaneously

### 13 Liter Refrigerated Open Bath

- Continuous cooling to 0°C
- Designed to run at maximum cooling; requires heated thermostat for temperature control
- Ideal for applications where bath temperatures at or below ambient are required

### Histology Bath

- Low working temperature freezes samples quickly, preventing microscopic ice crystals from developing and samples from distorting
- Ideal for fast-freezing tissue for enzyme studies

### Histology Freeze Plate

- Fast-freeze cold plate allows histotechnicians to observe tissue freezing and keep specimen edges flat
- Ultra-cold surface freezes samples quickly, reduces overall processing time by 40% or more

### Coliform Bath

- Ideal for fecal coliform and *E.coli* testing
- 28 liter reservoir with hinged, see-through cover
- Designed specifically for the following Coliform tests:
  - APHA, AWWA, WEF and EPA fecal coliform determinations at 44.5°C as specified in "Standard Test Methods for the Examination of Water and Wastewater" (19th edition)
  - Membrane filter method or MPM method can be used
  - AOAC determination of *E.coli* at 45.5°C
  - APHA, AWWA, WEF 7-hour Fecal Coliform Test at 41.5°C
  - Defined Substrate Technology® tests for *E.coli* and total coliform at 35.0°C



## General Purpose Water Baths Selection Guide

Capacity	2 Liter	2 Liter Shallow	5 Liter	10 Liter	20 Liter	28 Liter
Temperature Range	Ambient +5° to 99°C	Ambient +5° to 99°C	Ambient +5° to 99°C	Ambient +5° to 99°C	Ambient +5° to 99°C	Ambient +5° to 99°C
Temperature Stability	±0.1°C	±0.1°C	±0.1°C	±0.1°C	±0.1°C	±0.1°C
Working Access (L x W x D)	3.9 x 4.3 x 6 in 9.9 x 10.9 x 15.2 cm	5 x 10.8 x 2.6 in 12.7 x 27.4 x 6.5 cm	5 x 10.8 x 6 in 12.7 x 27.4 x 15.2 cm	10.6 x 11.6 x 6 in 26.9 x 29.5 x 15.2 cm	9.5 x 17 x 6 in 24.1 x 43.2 x 15.2 cm	9.5 x 17 x 8 in 24.1 x 43.2 x 20.3 cm
Overall Dimensions (L x W x H)	9 x 11.5 x 12 in 22.9 x 29.3 x 30.5 cm	5 x 10.8 x 2.6 in 12.7 x 27.4 x 6.7 cm	14.5 x 12 x 12 in 37.0 x 30.5 x 30.5 cm	14.5 x 18.5 x 12 in 37.0 x 47 x 30.5 cm	22.5 x 17.5 x 12 in 57.2 x 44.5 x 30.5 cm	22.5 x 17.5 x 14 in 57.2 x 44.5 x 35.6 cm
Heater Wattage	120 W	360 W	360 W	1000 W	1400 W	1400 W
Programmable Timer	○	○	○	○	○	○
Hinged Gable Cover	○	○	○	○	○	○
Programmable High Limit	○	○	○	○	○	○
Over-Temperature Protection	Non-adjustable / Auto Reset	Non-adjustable / Auto Reset	Non-adjustable / Auto Reset	Non-adjustable / Auto Reset	Non-adjustable / Auto Reset	Non-adjustable / Auto Reset
Programmable Calibration/ Temperature Offset	○	○	○	○	○	○
3 Programmable Preset Temperatures	○	○	○	○	○	○
Audible Alarm	○	○	○	○	○	○
Model	WB02	WB02S	WB05	WB10	WB20	WB28



See-through gable cover accommodates flasks and other tall sample vessels, tilts out of the way when opened to allow condensate to drain back into the bath.



# Chillers Selection Guide

## Benchtop and Portable 6000 Series Chillers, Non-Refrigerated Coolers - 60 & 50Hz

	Benchtop Chillers			Portable 6000 Series Chillers					Non-Refrigerated Coolers	
	MM	LM	LS	6200	6300	6500	6700	6100	3370	4100
Cooling Capacity @ 20°C <sup>1</sup> (W) 60Hz/50Hz	460/410	560/520	1290/1190	950/800	1430/1280	1800/1775	2350/2250	2900/2750	4000 <sup>3</sup>	10,000 <sup>4</sup>
Temperature Range	-5° to +50°C	-10° to +30°C	-20° to +40°C	-10° to +40°C (-10° to +70°C with heater option) <sup>2</sup>					Ambient +5° to 70°C	Facility Water +10° to 60°C
Temperature Stability	±0.1°C	±0.1°C	±0.1°C	±0.1°C	±0.1°C	±0.1°C	±0.1°C	±0.1°C		±0.4°C
Turbine Pump	Maximum Pressure psi (bar) 60Hz/50Hz		43.4 (3.0) 32 (2.2)	100 (6.9) 83 (5.7)	100 (6.9) 83 (5.7)	100 (6.9) 83 (5.7)	100 (6.9) 83 (5.7)	100 (6.9) 83 (5.7)	62 (4.3) 50 (3.4)	100 (6.9) 100 (6.9)
	Maximum Flow gpm (l/min) 60Hz/50Hz		2.6 (9.8) 2.2 (8.3)	3.5 (13.2) 2.9 (11)	3.5 (13.2) 2.9 (11)	3.5 (13.2) 2.9 (11)	3.5 (13.2) 2.9 (11)	3.5 (13.2) 2.9 (11)	5.4 (20.5) 4.5 (17.1)	3.5 (13.2) 3.5 (13.2)
Positive Displacement Pump	Maximum Pressure psi (bar) 60Hz/50Hz			100 (6.9) 83 (5.7)	100 (6.9) 83 (5.7)	100 (6.9) 83 (5.7)	100 (6.9) 83 (5.7)	100 (6.9) 83 (5.7)	100 (6.9) 100 (6.9)	
	Maximum Flow gpm (l/min) 60Hz/50Hz			1.0 (3.8) .95 (3.6)	1.0 (3.8) .95 (3.6)	1.0 (3.8) .95 (3.6)	3.5 (13.2) 2.9 (11)	3.5 (13.2) 2.9 (11)	2.4 (9.1) 2 (7.6)	
Centrifugal Pump	Maximum Pressure psi (bar) 60Hz/50Hz		14.5 (1.0) 12.5 (.9)	14.5 (1.0) 10.5 (.7)	10 (.69) 9.5 (.66)	10 (.69) 9.5 (.66)	10 (.69) 9.5 (.66)	10 (.69) 9.5 (.66)	10 (.69) 9.5 (.66)	
	Maximum Flow gpm (l/min) 60Hz/50Hz		3.5 (13.2) 3.0 (11.4)	3.5 (13.2) 3.0 (11.4)	3.9 (14.8) 3.4 (12.9)	4.1 (15.5) 3.9 (14.7)	4.1 (15.5) 3.9 (14.7)	4.1 (15.5) 3.9 (14.7)	4.1 (15.5) 3.9 (14.7)	
WhisperCool®			o				o	o		
Overall Dimensions (L x W x H)	20 x 10 x 17 in 50.8 x 25.4 x 43.2 cm		23.9 x 10 x 19 in 60.7 x 25.4 x 48.3 cm	27.6 x 14.5 x 22.6 in 70.2 x 36.8 x 57.5 cm				20.5 x 15 x 22.3 in 52 x 38.1 x 56.6 cm	27.6 x 14.5 x 22.6 in 70.2 x 36.8 x 57.5 cm	
Electrical Requirements VAC/Hz/Ph/A	Turbine Pump 60Hz/50Hz		120/60/1/12 240/50/1/6	120/60/1/12.2 240/50/1/6.8	120/60/1/13.1 240/50/1/7.3	120/60/1/16 240/50/1/8.9	230/60/1/11.9 240/50/1/11.9	230/60/1/12.2 240/50/1/12.2	120/60/1/5.5 240/50/1/3	208-240/50-60/1/3 240/50/1/3
	Positive Displacement Pump 60Hz/50Hz			120/60/1/12.2 240/50/1/6.8	120/60/1/13.1 240/50/1/7.3	120/60/1/16 240/50/1/8.9	230/60/1/11.9 240/50/1/11.9	230/60/1/12.2 240/50/1/12.2	120/60/1/5.5 240/50/1/3	
	Centrifugal Pump 60Hz/50Hz		120/60/1/12 240/50/1/4.5	120/60/1/12 240/50/1/6	120/60/1/9.5 240/50/1/5.6	120/60/1/10.4 240/50/1/5.9	120/60/1/13.5 240/50/1/7.2	230/60/1/9.2 240/50/1/9.2	230/60/1/9.5 240/50/1/9.5	
Reservoir Capacity gal (L)		0.7 (2.65)				1.1 (4.2)			1.1 (4.2)	
Process Connections				1/2" (F) NPT					1/2" (F) NPT	

- Cooling capacity based on 20°C (68°F) ambient temperature and a 50%/50% mix of ethylene glycol and distilled water as coolant.
- Heated option extends cooling range to 50°C, provides heat up to 70°C.
- Cooling capacity for 3370 based on 11°C temperature differential between ambient air temperature and cooling fluid temperature.
- Cooling capacity for 4100 given at 30°C using 20°C facility water.



Benchtop Chiller - LS



Portable 6000 Series Chiller



4100

3370



# Chillers Selection Guide

## DuraChill® Chillers (1.5 - 10HP) - 60 & 50Hz

	Air Cooled	Air Cooled	Air Cooled	Air Cooled	Air Cooled	Air Cooled	Water Cooled	Water Cooled	
	6860/6850	DCA200	DCA300	DA500	DA750	DA1000	6960/6950	DCW300	
Cooling Capacity @ 20°C <sup>1</sup> (W) 60Hz/50Hz	5200 / 4371	7000 / 5885	10,500 / 9030	18,842 / 16,581	25,715 / 22,630	38,451 / 33,838	5328 / 4582	10,936 / 9405	
Temperature Range	5° to 35°C	5° to 35°C	5° to 35°C	0° to 30°C	0° to 30°C	0° to 30°C	5° to 35°C	5° to 35°C	
Temperature Stability	±0.5°C	±0.5°C	±0.5°C	±1.1°C	±1.1°C	±1.1°C	±0.5°C	±0.5°C	
Turbine Pump	For information regarding DuraChill® Chillers with Turbine Pumps, contact PolyScience.								
Maximum Pressure psi (bar) 60Hz/50Hz							100 (6.9)	83 (5.7)	
Maximum Flow gpm (l/min) 60Hz/50Hz							3.5 (13.2)	2.9 (11)	
Positive Displacement Pump							100 (6.9)	83 (5.7)	
Maximum Pressure psi (bar) 60Hz/50Hz	100 (6.9)						83 (5.7)		
Maximum Flow gpm (l/min) 60Hz/50Hz	3.5 (13.2)						2.9 (11)		
Centrifugal Pump			25 (1.7)	33 (2.3)	45 (3.1)	45 (3.1)	25 (1.7)	17.1 (1.2)	
Maximum Pressure psi (bar) 60Hz/50Hz			17.1 (1.2)	22.5 (1.5)	30.7 (2.1)	30.7 (2.1)	17.1 (1.2)	7 (26.5)	
Maximum Flow gpm (l/min) 60Hz/50Hz			5.8 (22)	10 (37.9)	20 (75.7)	20 (75.7)	5.8 (22)	7 (26.5)	
Overall Dimensions (L x W x H)	30.5 x 19 x 26 in 78 x 48 x 66 cm	30.5 x 37 x 42 in 78 x 94 x 107 cm	56 x 34.5 x 67 in 142.2 x 88 x 170.2 cm		77 x 34.5 x 68.2 in 195.5 x 88 x 173.2 cm	30.5 x 19 x 26 in 78 x 48 x 66 cm	30.5 x 37 x 42 in 78 x 94 x 107 cm		
Turbine Pump 60Hz/50Hz	For information regarding DuraChill® Chillers with Turbine Pumps, contact PolyScience.								
Positive Displacement Pump 60Hz/50Hz	230/50-60/3/11.5 240/50/1/13						230/60/1/13 240/50/1/13		
Centrifugal Pump 60Hz/50Hz			460/60/3/12 240/60/3/14 230/60/1/22	460/60/3/15 240/60/3/26	460/60/3/15	460/60/3/20 575/60/3/25	460/6/3/30 575/60/3/27	230/60/1/29	
Reservoir Capacity gal (L)	3.5 (13.25)	7 (26.5)	16 (60.5)		45 (170)	3.5 (13.25)	7 (26.5)		
Process Connections	3/4" (F) NPT		1.5" (F) NPT			1/2" (F) NPT		3/4" (F) NPT	

1. Cooling capacity for 5.2-10.5 kw chillers based on 20°C (68°F) ambient temperature and a 50%/50% mix of ethylene glycol and distilled water as coolant. Cooling capacity for 16.3 - 33.5 kw chillers based on 35°C (95°F) entering air, 49°C (120°F) condensing temperature, and 10°C (50°F) leaving water. Allowance made for heat gain from pump.



## Low Temperature Coolers

### Immersion Probe Style Coolers

	IP-100	IP-80	IP-60	IP-35
Temperature Range	-100 to -60°C	-80 to -40°C	-60 to -20°C	-35 to 40°C
Cooling Capacity (W)	85 @ -65°C 35 @ -80°C	215 @ -60°C 100 @ -80°C	150 @ -20°C 0 @ -60°C	1004 @ 20°C 106 @ -30°C
Temperature Control	Fixed at -100°C	Fixed at -80°C	Fixed at -60°C	Fixed at -35°C
Temperature Readout	Yes	Yes	No	No
Overall Dimensions (L x W x H)	20.1 x 15 x 22.3 in 51.1 x 38.1 x 56.6 cm	20.1 x 15 x 22.3 in 51.1 x 38.1 x 56.6 cm	11 x 10 x 9 in 27.9 x 25.4 x 22.9 cm	17 x 14 x 14 in 43.2 x 35.6 x 35.6 cm
Probe Options	Rigid Coil Rigid Cold Finger Flexible Cold Finger	Rigid Coil (1.75" / 4.4 cm)	Rigid Coil (1.5" / 3.8 cm)	Rigid Coil (1.75" / 4.4 cm or 3" / 7.6 cm)



	Insulated Flexible Hose	Rigid Coil Probe (3")	Rigid Coil Probe (1.5")	Rigid Coil Probe (1.75")	Rigid Cold Finger Probe	Flexible Cold Finger Probe
Model	IP-100, IP-80, IP-60, IP-35	IP-100, IP-35	IP-60	IP-80, IP-35	IP-100	IP-100
Diameter	IP-100, IP-80: 2.8" / 7.1 cm IP-60, IP-35: 1.5" / 3.8 cm	3" / 7.6 cm	1.5" / 3.8 cm	1.75" / 4.4 cm	0.7" / 1.8 cm	0.625" / 1.6 cm
Length	IP-100, IP-80: 6' / 1.8 m IP-60, IP-35: 4' / 1.2 m	Coil: 9" / 22.9 cm Exposed: 17" / 43.2 cm	Coil: 4" / 10.2 cm Exposed: 15" / 38.1 cm	Coil: 7" / 17.8 cm Exposed: 16.5" / 41.9 cm	3.75" / 9.53 cm	15" / 38.1 cm

### Flow-Through Style Coolers

Temperature Range	-25° to 40°C
Cooling Capacity (W)	745 @ 20°C 260 @ -10°C
Temperature Control	Fixed at -25°C
Inlet and Outlet Sizes	3/8" / 9.5 mm
Overall Dimensions (L x W x H)	17 x 14 x 14 in 43.2 x 35.6 x 35.6 cm





### Application Assistance

Need assistance in selecting the best product for your application? We're eager to help! Our trained staff will walk you through all your options and alternatives to make certain that you get the product with the performance and features you need to make your work easier - and perhaps even a little more fun.



### Global Technical Support

Our certified, factory-trained technicians know your product inside and out and are experts in troubleshooting and repairing PolyScience equipment. To assure you of prompt, competent service regardless of where you're located, authorized PolyScience service and technical support are available directly from our factory or through a global network of approved providers.



### On-Line Resources

You'll find a wealth of information and resources about PolyScience products that you can access anytime at [www.polyscience.com](http://www.polyscience.com).



### PolyScience Warranty

We back most of our products with a 2-year limited warranty on parts and labor. If for any reason you are unhappy with your product, please contact our Sales and Customer Service Department.



### World-Class Quality

As an ISO 9001 certified company, PolyScience has implemented the systems, processes, and procedures necessary to ensure the quality, performance and reliability of every product or component we manufacture. We're continually raising our already high standards and constantly striving for improvement. To that end, we've deployed just-in-time production and other Lean Manufacturing techniques - such as self-managed teams, Kanban, Five "S," Quick Changeover and Poke Yoke - throughout our vertically-integrated operation to help ensure that every step of the manufacturing process meets our rigid standards as well as ISO 9001 quality requirements.

### IQ/OQ/PQ

To help your company assess, develop and implement regulatory compliance at the level you need, we can provide IQ/OQ/PQ (Installation, Operation and Performance Qualifications) for all our Circulators, Chillers, and General Purpose Water Baths.

### Calibration Certification

Our technicians can calibrate your PolyScience product to the highest NIST standards and issue a calibration certificate for your records. Depending on the product, 1 to 10 point calibrations can be provided.



### Equipment Recycling

Taking care of the environment is a responsibility we all share. As part of our contribution to a greener world, we will gladly accept your old circulators, chillers, and water baths - regardless of brand - for disposal in an environmentally conscious manner. All recoverable materials such as steel, copper, plastic, and packaging will be recycled and refrigerants reclaimed by our qualified technicians.

### Equipment Trade-In

Are you in the market for a new circulator, chiller, water bath or other constant temperature control product? You can save money by trading in an old or broken device toward the purchase of a new PolyScience product. We will accept any brand and give you a discount toward your purchase. Naturally, we'll dispose of your old equipment in an environmentally conscious manner.



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