PolyScience®

Temperature Control Solutions®



Table of Contents



General Purpose Water Baths

WB1-WB8

WB5 Markets and Applications

WB7 Specifications

Circulating Baths

CB1-CB18

CB3 Markets and Applications

CB9 Temperature Controllers

CB13 Controller Specifications

CB15 Bath System Specifications

Chillers and Coolers

CC1-CC26

CC3 Markets and Applications

CC7 Benchtop Chillers

CC15 DuraChill Portable Chillers

CC23 High Capacity Chillers; Coolers

Application-Specific Products

SP1–SP4

SP3 Product Overview

Low Temp Coolers

LT1-LT4

LT3 Specifications

Accessories

AC1–AC2

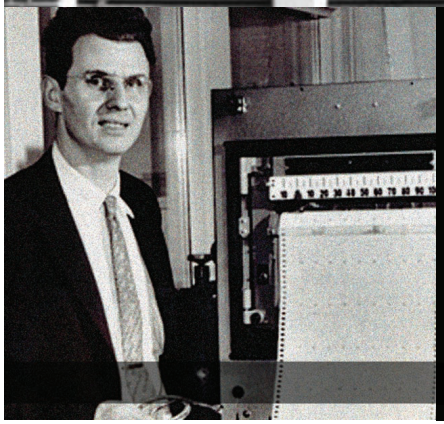
About Us

Our dedication to quality, ease of operation, reliability and value has helped us become a global leader that spans six continents.

Changing the world of temperature control is more than a "catchphrase." It's what we're good at. We have pioneered innovations ranging from the first zero-switching circulators to the first refrigeration systems for DNA amplification to award-winning lines in the culinary and extraction industries.

Our Refrigerated Circulators, Heated Circulators, Chillers, Recirculating Coolers, Water Baths and Application Specific Products are designed for ease of use, to take up less space, integrate more seamlessly and, perhaps most importantly, make your work productive and enjoyable.







PolyScience continues to be an award-winning American innovator and manufacturer of liquid temperature control solutions focusing on the needs of laboratory, chemical, medical, industrial, extraction, laser and plastics markets with unparalleled innovation, passion and user-focus.

QUALITY

Manufactured to our own rigid standards.

RELIABILITY

There for you when you need us.

DURABILITY

Made to stand the test of time.

SUSTAINABILITY

Developing products and processes to minimize environmental impact.

AMERICAN-MADE

Award-winning, American-made products since 1963.

Quality, reliability, durability, sustainablity and American Made, the core values and driving force behind every innovation and decision made at PolyScience since we opened our doors in 1963.

All of our products are designed and developed by a highly trained engineering team and manufactured to our own rigid standards. PolyScience has designed products with a focus on environmental stewardship, looking past short-term financial returns to provide solutions that are cleaner, more efficient, and longer lasting. PolyScience manufacturing practices follow ISO 14001 Environmental Management System guidelines.

Our dedication to our customers, and their needs, has helped us become a global company that spans six continents and most major cities.

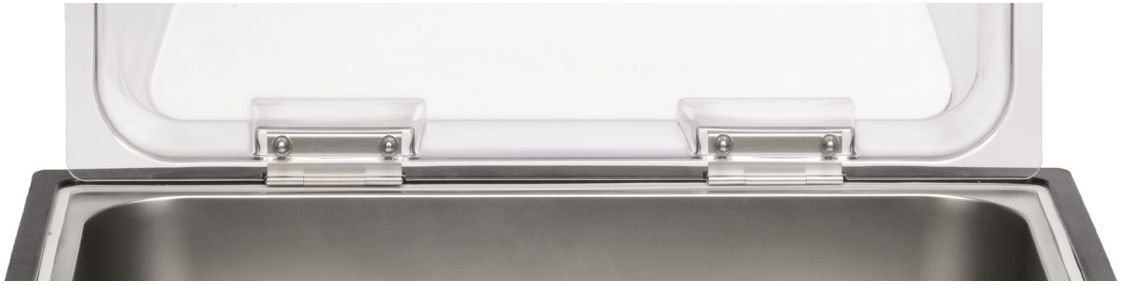
General Purpose Water Baths

A Perfect Balance Between Cost And Reliability

The general purpose water bath is a fundamental product in the lab. Many manufacturers often sacrifice quality and innovation strictly to meet the demands of a tight budget. PolyScience believes you can have both, as well as convenience, durability and safety. Our general-purpose water baths feature intelligent, fully customizable temperature and duration presets, giving you the ability to program frequently used values that are repeatable at the press of a button.

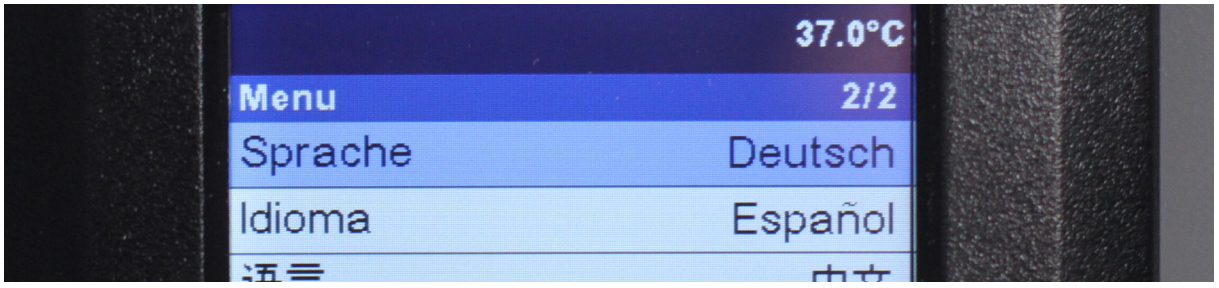


The highest value premium digital unstirred water baths on the market, developed with a set of user-friendly features for absolute control, precision and convenience.









Features

- Operates in five languages
- User-settable High Limit Value
- Eco Mode after timed run is complete
- User-settable alarms: audible, visible or both
- Displays actual and set point temperature simultaneously
- Programmable pre-sets for frequently used temperatures
- Integrated timer
- Hinged gable cover
- Calibration off-set feature
- Reservoir sizes from 2 to 28 liters
- Reservoir made of 304 Stainless Steel
- Reservoir drain (10 liter and larger baths)
- Primary and automatic safety thermostats
- Also compatible with waterless bath beads

Models







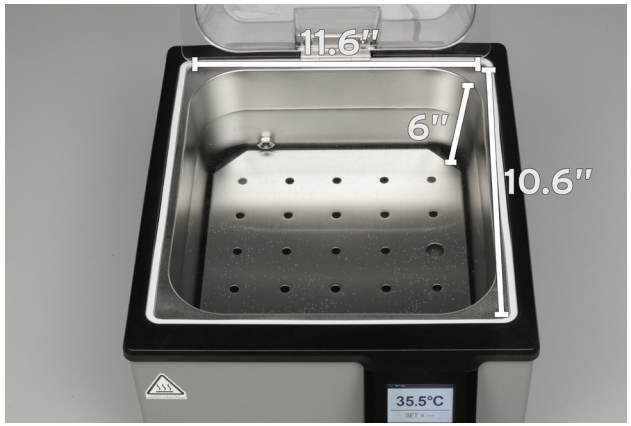


	WBE02	WBE05
Reservoir Volume	2 Liters	5 Liters
Overall Dimensions	8.8 x 8.5 x 13.1 in	9.3 x 14.4 x 13.1 in
Working Access	3.9 x 4.3 x 6 in	5 x 10.8 x 6 in

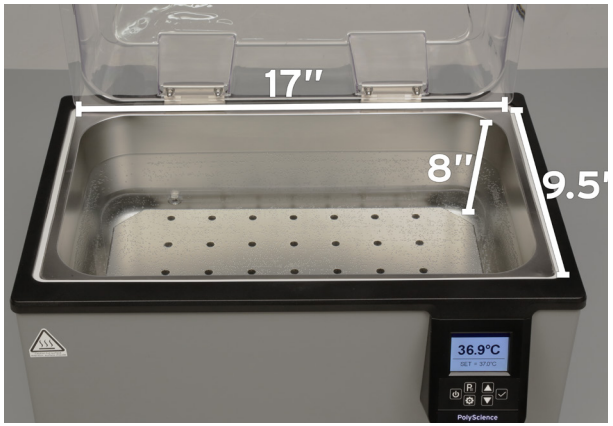












WBE10

10 Liters

16.3 x 14.4 x 15.0 in

10.6 x 11.6 x 6 in

WBE20

20 Liters

15.1 x 22.5 x 15.1 in

9.5 x 17 x 6 in

WBE28

28 Liters

15.1 x 22.5 x 17.0 in

9.5 x 17 x 8 in

Markets and Applications

Example Industries

- Academia
- Microbiology
- Clinical
- Biotechnology
- Chemical
- Food & Beverage
- Medical
- Petrochemical
- Pharmaceutical

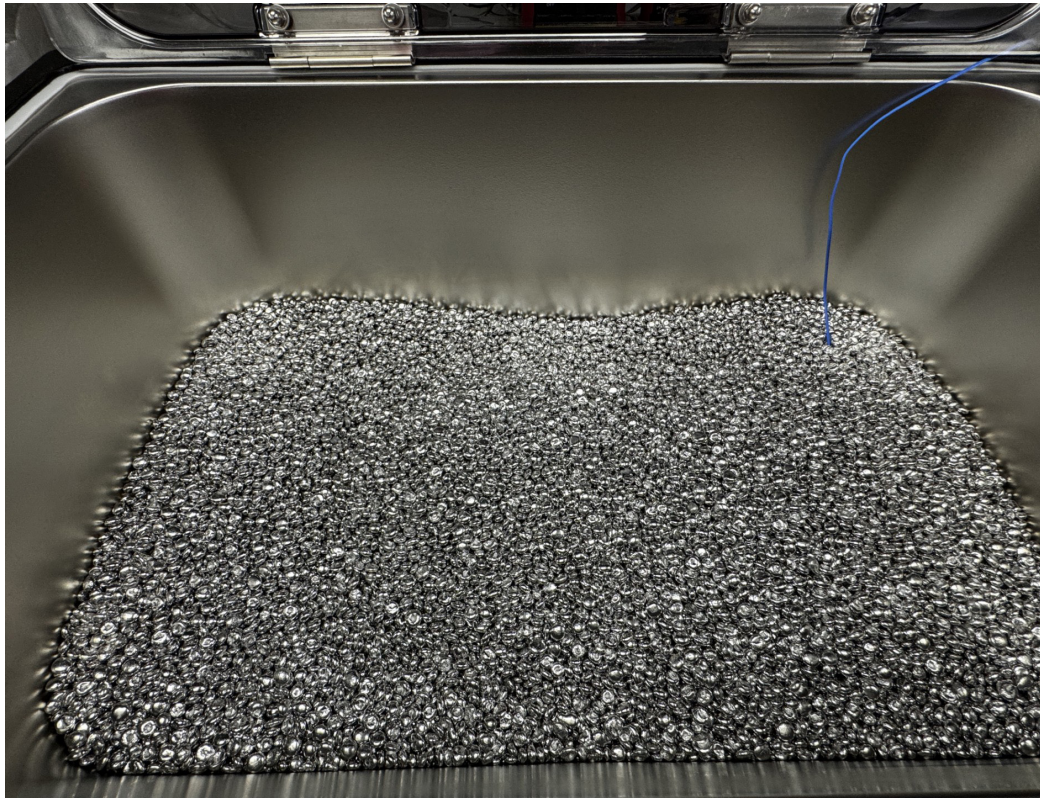
Featured Applications

- Tempering
- Thawing
- Incubation





Gabled cover accommodates media bottles



Compatible with dry media bath beads up to 40°C

Specifications

	2 LITER	5 LITER	10 LITER	20 LITER	28 LITER
Temperature Range	Ambient+5° to 100°C	Ambient+5° to 100°C	Ambient+5° to 100°C	Ambient+5° to 100°C	Ambient+5° to 100°C
Temperature Stability	±0.1°C	±0.1°C	±0.1°C	±0.1°C	±0.1°C
Working Access (L x W xD)	3.9 x 4.3 x 6 in 9.9 x 10.9 x 15.2 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)	8.8 x 8.5 x 13.1 in 22.2 x 21.6 x 33.3 cm	9.3 x 14.4 x 13.1 in 23.5 x 36.5 x 33.3 cm	16.3 x 14.4 x 15.0 in 41.3 x 36.5 x 38.1 cm	15.1 x 22.5 x 15.1 in 38.4 x 57.2 x 38.1 cm	15.1 x 22.5 x 17.0 in 38.4 x 57.2 x 43.2 cm
Heater Wattage	120 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
Programmable Calibration/ Temperature Offset	•	•	•	•	•
5 Programmable Preset	•	•	•	•	•
Audible and Visual Alarms	•	•	•	•	•
Control Panel Lock	•	•	•	•	•
Eco Mode	•	•	•	•	•
Model	WBE02	WBE05	WBE10	WBE20	WBE28

PolyScience®
Temperature Control Solutions®

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sales@PolyScience.com


Caution,hot surface
Attention, surface chaude
37.0°C
SET = 37.0°C

Circulating Baths

- Heated Circulating Baths
- Heated/Refrigerated Circulating Baths
- Open Bath Systems
- Immersion Circulators

The best lab partners you'll ever have

PolyScience Circulating Baths are as precise as they are reliable. Every product comes equipped with innovative proprietary features, from the quiet, energy-efficient heat removal of our WhisperCool™ Environmental Control System to the fast-acting temperature control of Cool Command™ Technology. Our Circulating Baths are easy to use, offering interface controller flexibility, clear navigational buttons and menu prompts, ergonomic design for easy repositioning and simple fluid connections. These hard-working machines were designed to make your life easier and more productive.





Achieve the temperature you want, when you want it. Innovation, ease of use and constant reliable temperature are the foundation of our circulating baths.


PolyScience
-39.999
PolyScience

Markets and Applications

Example Industries

Academia
Clinical
Microbiology
Biotechnology
Cannabis and Extraction
Chemical
Food & Beverage
Medical
Petrochemical
Pharmaceutical
Aerospace & Defense
Asphalt & Concrete

Featured Applications

Electrophoresis
Distillation Apparatus
Calibration Spectrophotometer
Rotary Evaporator
Refractometers
Viscosity Measurement
Asphalt Sample Tempering
Blood Thawing
CCD Camera Cooling
Cell Freezing
Chromatography Column
Cloud Point Testing
Condenser Cooling
Densitometer
Freeze Point Determination
Fourier Transform Infrared Spectroscopy (FTIR)
General Laboratory Cooling
Impact Testing
Incubation
Isoelectric Focusing
Peltier Devices
Photographic Solution Tempering
Plasma Thawing
Polarimeter
Pour Point Testing
Thermometry Calibration
Turbo-molecular Pump
Vacuum Systems and Traps


PolyScience
37.00
PolyScience
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PolyScience
37.001
PolyScience

Circulating Baths

These units provide precise temperature control for heating or cooling your application. Samples can be immersed in the reservoir and the powerful pump can provide external circulation and control.



How Your Circulator is Configured

THREE CONTROLLER OPTIONS



MX



PolyTemp DX



PolyTemp PX

\+ ↓ +

COMBINED WITH A COMPATIBLE RESERVOIR

FOUR RESERVOIR TYPES

Heat Only

Heated/Refrigerated



Heated Reservoir
(4 Sizes)



Stainless Steel Open Tank
(3 Sizes)



Polycarbonate Open Tank
(3 Sizes)



Refrigerated Reservoir
(7 Sizes)

= = ↓ = =

FULL CONFIGURATION



Page CB15



Page CB17



Page CB17



Page CB15

40+ CONFIGURATIONS AVAILABLE IN 50 OR 60 HZ

Circulating Baths

FEATURES

- Reservoir sizes ranging from 6 to 75 liters
- Refrigerated and Heated, Heated and Open Bath models, and Immersion Circulators
- Three types of digital temperature controllers, from the essentials to the all-new fully programmable PolyTemp controllers
- Intuitive setup and operation, featuring either multi-language help or screen prompts (depending on model)
- Washable air filter ensuring peak performance and energy efficiency
- LidDock™ stowing system offers convenient space to perch while adding liquid or working with samples
- Safety features include over-temperature protection, high and low temperature limits and alarms for abnormal conditions

REFRIGERATED/HEATED CIRCULATING BATHS



-40° to + 200°C

HEATED CIRCULATORS



Ambient +10° to + 200°C

STAINLESS STEEL OPEN BATH SYSTEMS



Ambient +10° to + 150°C

POLYCARBONATE OPEN BATH SYSTEMS



Ambient +10° to + 100°C

IMMERSION CIRCULATORS & OPEN TANKS



Ambient +10° to + 135°C

Temperature Controllers



Redefining the standard of temperature control. Designed for efficiency, power and durability.



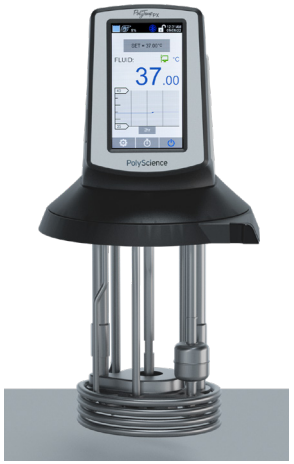
MX

Basic digital set and read functionality. Excellent pumping where restricted tubing or viscous fluids are not used. The flexibility of a fully integrated temperature controller or clamp-on immersion circulator.

Key Features and Specifications

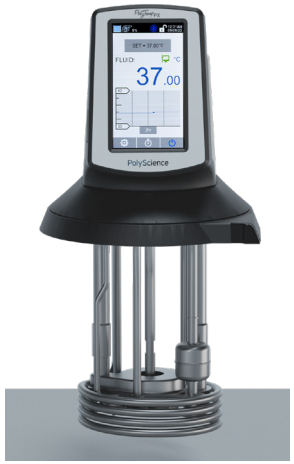
Working Temperature: 135°C maximum temperature
Temperature Stability: ±0.07°C
Safety Rating: DIN 12876-1 Class I (for use with non-flammable liquids)
Pump: 1-speed
External Circulation: Closed-loop

- Large, universal icon and English display
- On-screen prompts
- Single-point calibration capability
- Available as an integrated controller or as a self-attaching immersion design.



PolyTemp

PolyTemp helps you focus on what matters most: Results.



MORE POWER

Packed with our most powerful pump ever, PolyTemp strikes the perfect balance between excellent pressure characteristics and high flow rate capabilities.

EASIER TO USE

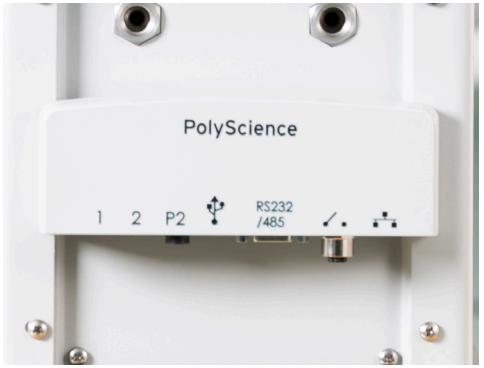
All PolyTemp models come equipped with a full-color touchscreen and our most responsive and intuitive UI to date. Programming is even easier than before.

QUIETER OPERATION

Standard equipped with the WhisperCool® Environmental Control System.

BETTER COMMUNICATION

The new Connectivity Module has an array of ports and connectivity options, making communication even easier to set up. And it comes standard with all PX models.



Connectivity Module

POLYTEMP DX

Features 11 language color user interface and excellent temperature range and stability. The pressure-only variable speed DC pump is suitable for most applications.

Key Features and Specifications

- Temperature Range -40° to 150°C
- Stability ±0.01°C
- Full Color Touchscreen
- Variable-Speed, Pressure-only Pump
- DIN Class I (non-flammable fluids)
- 11 Languages
- Connectivity Module Optional

POLYTEMP PX

The ultimate in precise temperature control with a broad temperature range and extreme stability. The 11 language color touch user interface makes even complex operation easy. The variable-speed brushless DC pump provides best in class pressure and suction capabilities. Full time and temperature programmability.
Fulfills the most demanding applications.

Key Features and Specifications

- Temperature Range -40° to 200°C
- Stability ±0.004°C
- Ramp/Soak Programmability
- Full Color Touchscreen
- Variable-Speed, Pressure-Suction Pump
- DIN Class III (flammable fluids)
- 11 Languages
- Connectivity Module Included

ECO-FRIENDLY

R290 NATURAL REFRIGERANT

Natural refrigerants are very important to our customers, to us and to the environment. They are more sustainable. They're much less energy intensive to produce. They provide zero ozone-depleting potential and negligible global warming potential. We invested in building a natural refrigerant charging station to be able to charge our Refrigerated Bath Reservoirs with cleaner, safer refrigerants. Look for Circulators with an E in the part number—because Environmentally-friendly starts with E.





HEATED INTEGRATED CIRCULATING BATHS



DX07H175
DX15H175
DX20H175
DX28H175
PX07H200
PX15H200
PX20H200
PX28H200

STAINLESS STEEL OPEN BATH SYSTEMS



DX06S150
DX10S150
DX20S150
DX28S150
PX06S150
PX10S150
PX20S150
PX28S150

POLYCARBONATE OPEN BATH SYSTEMS



DX07G100
DX10G100
DX25G100
PX07G100
PX10G100
PX25G100

REFRIGERATED/HEATED INTEGRATED CIRCULATING BATHS



DX07E-25*
DX07E-40*
DX7LE-25*
DX15E-40*
DX20E-40*
DX28E-40*

PX07E-25*
PX07E-40*
PX7LE-25*
PX15E-40*
PX20E-40*
PX28E-40*
PX45R-25
PX75R-20

PolyScience Circulating Bath part numbers are constructed from the attributes of a product. Each section of characters denotes a specific attribute of the configuration.

Example: PX7LE-25-A11B

- Controller Model (PX Programmable)
- Reservoir Detail (7 Liters, Low Profile)
- Heating or Refrigerated (Refrigerated Bath, R290)
- Upper or Lower Temperature Capability, depending on model (-20°C)
- Paint Color (Gray)
- Voltage/Frequency (1 = 120 Volts/60 Hertz)
- Electrical Plug Type (B=US-Type, 120 Volts, 13 Amp)

*Indicates R290 Natural Refrigerant

Specifications Controllers Comparison

		MX	DX	PX
Operating Temperature Range		-30° to 135°C[1] -22° to 275°F[1]	-40° to 175°C[1] -40° to 347°F[1]	-40° to 200°C[1] -40° to 392°F[1]
Display		7-segment LCD	Full Color Touchscreen	
Outlet Flow Max	gpm lpm	3.4 12.8	5.8 22	6.9 26
Outlet Pressure Max	psi kPa mbar	1.8 12.4 124	4.5 31.0 310	7.5 51.7 517
Suction Flow Max	gpm lpm	N/A	N/A	5.3 20
Pump		Single-speed Pressure	Variable Speed Brushless DC	
Heater Wattage		1100 W	1200 W at 120V 2200 W at 240V	
Stability (°C)		±0.07°	±0.01°	±0.004°
Over-temperature Protection		Yes	Yes, Adjustable	
Failsafe Heater Control		Yes	Yes	
High and Low Temperature Limits/Alarms		Yes	Yes	
Alarm and Fault Indicators		On-screen Prompts	Message	
Float Switch for Fluid Level		No (DIN Class I)	No (DIN Class I)	Yes (DIN Class III)
Closed-Loop Operation		Yes	Yes	Yes
Open-Loop Operation		No	No	Yes
Fluid Optimization/Specific Heat Tuning		No	Yes	
Temperature Calibration Capability		1-point	10-point	
Swivel 180™ Rotating Controller		No	Yes	
WhisperCool® Environmental Control System		Yes	Yes	
Automatic Loss of Power Reset		Yes	Selectable	
Elec. Req. (controller only)		10A at 120V 6A at 240V	11A at 120V 11A at 240V	
On-Screen Help or Prompts		Yes	Yes	
Multi-Language Menus or Prompts		English and Icon only	11 languages	
Displays Temperature Trend		No	Yes	
Timer		No	Yes	
Time/Temperature Programs & Steps		N/A	N/A	Open-mode
On-board Connectivity		No	USB-A	
Connectivity Module		Not compatible	Optional, includes all: USB-B, Dry contact on/off and Status, RS232, RS485, Ethernet, Remote Probe	Included, includes all: USB-B, Dry contact on/off and Status, RS232, RS485, Ethernet, Remote Probe

1. Actual temperature range is dependent on final reservoir configuration.
† For conversion of W to BTU/hr, multiply by 3.412

Specifications are subject to change.





The MX Immersion Circulator safely clamps to open tanks, converting virtually any open tank into a circulating bath system.

MX Immersion Circulator

Capacity	Up to 28 Liters	
Maximum Temperature	135°C	
Minimum Temperature	Ambient +10°C	
Temperature Stability	±0.07°C	
Electrical Configurations	120V, 60Hz	240V, 50Hz
Maximum Pressure psi (kPa)	1.8 (12.4)	1.5 (10.3)
Maximum Flow Rate gpm (L/min)	3.4 (12.8)	2.8 (10.6)

Integrated Circulating Baths

Refrigerated/Heated Circulating Baths

Insulated Stainless Steel Tanks • Integrated Drain • Lid Dock* • Heating and Refrigerating

	Reservoir Capacity	Temperature Controller	Temperature Range	Working Access (L x W x D)	Temperature Stability	Cooling Capacity @20°C	Refrigerant
PX07E-25	7 liters	PX	-25° to 200°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.004°C	190W	R290
PX07E-40	7 liters	PX	-40° to 200°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.004°C	700W	R290
PX7LE-25	7 liters	PX	-25° to 200°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.004°C	160W	R290
PX15E-40	15 liters	PX	-40° to 200°C	8.4 x 10.9 x 5.5 in / 21.2 x 27.6 x 14 cm	±0.004°C	1300W	R290
PX20E-40	20 liters	PX	-40° to 200°C	9.9 x 12.5 x 5.5 in / 25 x 31.6 x 14 cm	±0.004°C	1300W	R290
PX28E-40	28 liters	PX	-40° to 200°C	12.4 x 14.1 x 5.5 in / 31.4 x 35.9 x 14 cm	±0.004°C	1300W	R290
PX45R-25	45 liters	PX	-25° to 135°C[1]	21.6 x 15.7 x 5.5 in / 54.9 x 39.8 x 14 cm	±0.004°C	1400W	R513A
PX75R-20	75 liters	PX	-20° to 100°C[1]	21.6 x 15.7 x 9.4 in / 54.9 x 39.8 x 23.9 cm	±0.004°C	1400W	R513A
DX07E-25	7 liters	DX	-25° to 175°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.01°C	190W	R290
DX07E-40	7 liters	DX	-40° to 175°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.01°C	700W	R290
DX7LE-25	7 liters	DX	-25° to 175°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.01°C	160W	R290
DX15E-40	15 liters	DX	-40° to 175°C	8.4 x 10.9 x 5.5 in / 21.2 x 27.6 x 14 cm	±0.01°C	1300W	R290
DX20E-40	20 liters	DX	-40° to 175°C	9.9 x 12.5 x 5.5 in / 25 x 31.6 x 14 cm	±0.01°C	1300W	R290
DX28E-40	28 liters	DX	-40° to 175°C	12.4 x 14.1 x 5.5 in / 31.4 x 35.9 x 14 cm	±0.01°C	1300W	R290
MX07R-20	7 liters	MX	-20° to 135°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.07°C	200W	R513A
MX07LR-20	7 liters	MX	-20° to 135°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.07°C	200W	R513A
MX15R-30	15 liters	MX	-30° to 135°C	8.4 x 10.9 x 5.5 in / 21.2 x 27.6 x 14 cm	±0.07°C	915W	R513A
MX20R-30	20 liters	MX	-30° to 135°C	9.9 x 12.5 x 5.5 in / 25 x 31.6 x 14 cm	±0.07°C	915W	R513A

[1] Maximum operating temperature at which ±0.01°C temperature stability can be maintained
* Lid Dock unavailable on reservoirs 45L or larger

Heated Circulating Baths

Insulated Stainless Steel Tanks • Integrated Drain • Tap Water Cooling Coil •Lid Dock • Heat Only

	Reservoir Capacity	Temperature Controller	Temperature Range	Working Access (L x W x D)	Temperature Stability
PX07H200	7 liters	PX	Ambient+10° to 200°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.004°C
PX15H200	15 liters	PX	Ambient+10° to 200°C	8.4 x 10.9 x 5.5 in / 21.2 x 27.6 x 14 cm	±0.004°C
PX20H200	20 liters	PX	Ambient+10° to 200°C	9.9 x 12.5 x 5.5 in / 25 x 31.6 x 14 cm	±0.004°C
PX28H200	28 liters	PX	Ambient+10° to 200°C	12.4 x 14.1 x 5.5 in / 31.4 x 35.9 x 14 cm	±0.004°C
DX07H175	7 liters	DX	Ambient+10° to 175°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.01°C
DX15H175	15 liters	DX	Ambient+10° to 175°C	8.4 x 10.9 x 5.5 in / 21.2 x 27.6 x 14 cm	±0.01°C
DX20H175	20 liters	DX	Ambient+10° to 175°C	9.9 x 12.5 x 5.5 in / 25 x 31.6 x 14 cm	±0.01°C
DX28H175	28 liters	DX	Ambient+10° to 175°C	12.4 x 14.1 x 5.5 in / 31.4 x 35.9 x 14 cm	±0.01°C
MX07H135	7 liters	MX	Ambient+10° to 135°C	6.2 x 5.6 x 5 in / 15.7 x 14.2 x 12.7 cm	±0.07°C
MX15H135	15 liters	MX	Ambient+10° to 135°C	8.4 x 10.9 x 5.5 in / 21.2 x 27.6 x 14 cm	±0.07°C
MX20H135	20 liters	MX	Ambient+10° to 135°C	9.9 x 12.5 x 5.5 in / 25 x 31.6 x 14 cm	±0.07°C


PolyTemp PX
5%
37.00°C
SETTINGS: PROGRAMS:
EDIT PROGRAM
PROGRAM NAME:
SAMPLE PROGRAM 1
EDIT
PRIORITY
TIME
TEMP
REPEAT
x 1
STEPS
1
SCHEDULE
OFF
PROGRAM SUMMARY
255
230
USB
PolyScience

Specifications (continued)

Open Tank Circulating Baths

Stainless Steel Open Tank Circulating Baths

Durable Stainless Steel Tank • Heat Only

	Reservoir Capacity	Temperature Controller	Temperature Range	Working Access (L x W x D)	Temperature Stability
PX06S150	6 liters	PX	Ambient+10° to 150°C	3.9 x 4.3 x 6 in / 10 x 11 x 15.2 cm	±0.004°C
PX10S150	10 liters	PX	Ambient+10° to 150°C	3.9 x 10.1 x 6 in / 9.9 x 25.5 x 15.2 cm	±0.004°C
PX20S150	20 liters	PX	Ambient+10° to 150°C	10.4 x 9 x 6 in / 26.4 x 22.8 x 15.2 cm	±0.004°C
PX28S150	28 liters	PX	Ambient+10° to 150°C	10.1 x 8.4 x 8 in / 25.7 x 21.4 x 20.3 cm	±0.004°C
DX06S150	6 liters	DX	Ambient+10° to 150°C	3.9 x 4.3 x 6 in / 10 x 11 x 15.2 cm	±0.01°C
DX10S150	10 liters	DX	Ambient+10° to 150°C	3.9 x 10.1 x 6 in / 9.9 x 25.5 x 15.2 cm	±0.01°C
DX20S150	20 liters	DX	Ambient+10° to 150°C	10.4 x 9 x 6 in / 26.4 x 22.8 x 15.2 cm	±0.01°C
DX28S150	28 liters	DX	Ambient+10° to 150°C	10.1 x 8.4 x 8 in / 25.7 x 21.4 x 20.3 cm	±0.01°C
MX06S135	6 liters	MX	Ambient+10° to 135°C	3.9 x 4.3 x 6 in / 10 x 11 x 15.2 cm	±0.07°C
MX10S135	10 liters	MX	Ambient+10° to 135°C	3.9 x 10.1 x 6 in / 9.9 x 25.5 x 15.2 cm	±0.07°C
MX20S135	20 liters	MX	Ambient+10° to 135°C	10.4 x 9 x 6 in / 26.4 x 22.8 x 15.2 cm	±0.07°C
MX28S135	28 liters	MX	Ambient+10° to 135°C	10.1 x 8.4 x 8 in / 25.7 x 21.4 x 20.3 cm	±0.07°C

Polycarbonate Open Tank Circulating Baths

Transparent Polycarbonate Tanks • Tap Water Cooling Coil • Heat Only

	Reservoir Capacity	Temperature Controller	Temperature Range	Working Access (L x W x D)	Temperature Stability
PX07G100	6 liters	PX	Ambient+10° to 100°C	6.9 x 12.7 x 7.8 in / 17.5 x 32 x 20 cm	±0.004°C
PX10G100	10 liters	PX	Ambient+10° to 100°C	10.3 x 12.7 x 7.8 in / 26 x 32 x 20 cm	±0.004°C
PX25G100	25 liters	PX	Ambient+10° to 100°C	20.8 x 12.7 x 7.8 in / 53 x 32 x 20 cm	±0.004°C
DX07G100	6 liters	DX	Ambient+10° to 100°C	6.9 x 12.7 x 7.8 in / 17.5 x 32.3 x 19.8 cm	±0.01°C
DX10G100	10 liters	DX	Ambient+10° to 100°C	10.3 x 12.7 x 7.8 in / 26 x 32 x 20 cm	±0.01°C
DX25G100	25 liters	DX	Ambient+10° to 100°C	20.8 x 12.7 x 7.8 in / 53 x 32 x 20 cm	±0.01°C


-39.997
PolyScience

Chillers and Coolers

Not just a machine

Our chillers are more than just machines. They are the realization of our commitment to innovative thinking, powerful engineering and a dedication to quality. They deliver precise temperature control in the most demanding environments with innovative design, intuitive controls and large, easy-to-read displays. All chillers deliver extremely quiet and energy-efficient heat removal with easily accessible – or self-changing – air filters. By continuing to redefine what a chiller is, we are keeping our 60-year-old promise.




PolyScience
10.0°C

Markets and Applications

Example Industries

Academia
Aerospace & Defense
Automotive & EV
Biotechnology
Cannabis and Extraction
Chemical
Food & Beverage
Manufacturing
Medical
Petrochemical
Pharmaceutical
Semiconductor
Asphalt & Concrete

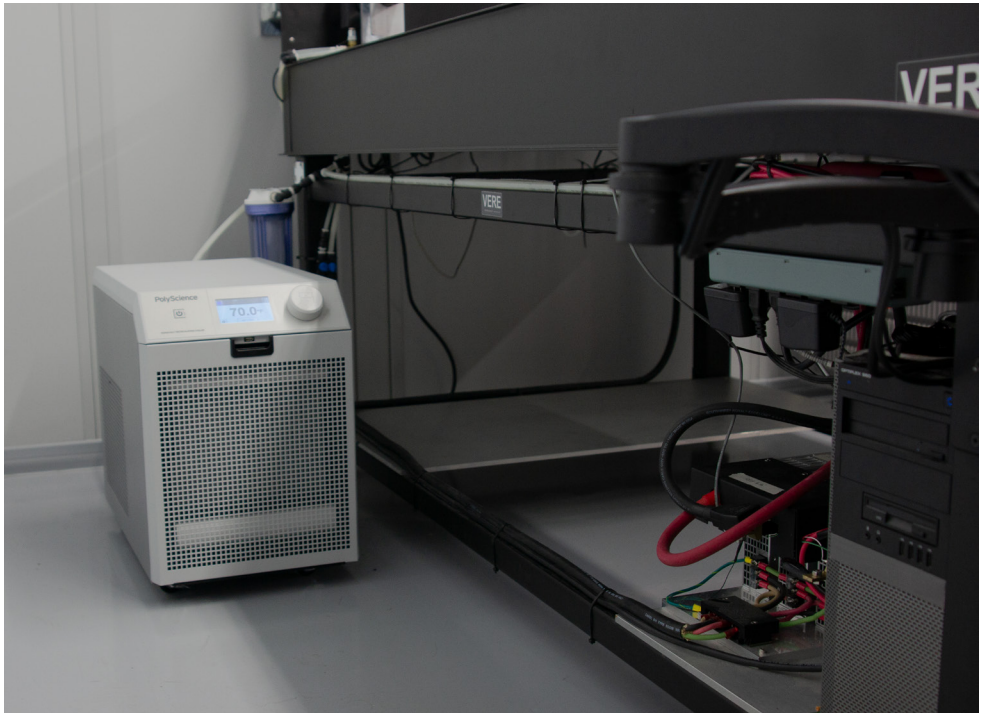
Featured Applications

Atomic Absorption (AA) Furnace
Condenser Cooling
Distillation
Inductively Coupled Plasma (ICP)
Lasers
Rotary Evaporators
Vacuum Systems and Traps
Short Path Distillation
EDM
Battery Testing
Bioreactor
Computed Tomography (CT) Scanning
Concentrator Extractor
Densitometer
Diffusion Pump
Electron Microscope
Fermentation
Food Processing
Incubation Water Jacket
Magnetic Resonance Imaging (MRI)
Medical Diagnostic Equipment
Nuclear Magnetic Resonance (NMR)
Positron Emission Tomography (PET) Scanners
Plasma Etching
Plasma Torch Cutting
Reaction Vessel
Scanning Electron Microscope


20.0°C
PolyScience


PolyScience
10.0°C


-30.0°C
PolyScience


PolyScience
70.0°C

Chillers and Coolers

The cornerstone of our company

For 60 years, our award-winning chillers and coolers have been the cornerstone of our company. Built in the United States, PolyScience Chillers and Coolers have proven over several decades and thousands of installations, that they are the most reliable in the industry. These products are the exceptionally smart choice for end-user and OEM applications ranging from lasers and analytical equipment to reactors and manufacturing equipment. Contact our sales team for your specific needs.



We say "changing the world of chillers forever," not because we like the sound of it, but because we continue to deliver on that promise of combining innovation, ease of use and sustainable manufacturing.

BENCHTOP CHILLERS



0.4-1.3kW Cooling

DURACHILL PORTABLE CHILLERS



0.7-2.9kW Cooling

HIGH CAPACITY RECIRCULATING CHILLERS



4-11kW Cooling

RECIRCULATING COOLERS



Liquid to Air Heat Exchanger

Benchtop Chillers

Powerful cooling performance in a compact package

PolyScience Benchtop Chillers deliver superior temperature ranges and consistent performance without taking up valuable floor space. These powerful units are ideal for use with rotary evaporators, vacuum systems, spectrometers and other analytical instrumentation. They feature a microprocessor-based controller, digital temperature display (C or °F), and simple operation and maintenance.



These powerful, low-temperature chillers are well-matched for use with rotary evaporators, vacuum systems, spectrometers, and other analytical equipment. Part of our award-winning line of chillers, these are a small and powerful option for your lab.


-30.0°C
PolyScience

Features

- Intuitive touchscreen display with 6 operating languages (Chinese, English, French, German, Spanish, Japanese)
- Full text messages and audible alarms
- Continuous fluid level monitoring to prevent premature pump failure
- Variable Fan Speed Technology for quieter operation
- UV Light Biological Growth Inhibitor
- Patented Self-diagnostic system
- Low flow shutoff and alarm, high and low temperature alarms
- Displayable temperature units in °C or °F
- RS-232, Dry Contact On/Off/Status; optional USB-B and Remote Probe port
- Contains air-shippable R290 Natural Refrigerant Gas




500-508
Rev. 1.2
GND FB LED


MENU
USER SETTINGS
SETPOINT
-30.0 °C
TEMPERATURE UNITS
°C
PolyScience



Changing the world of chillers...again



Smaller Footprint
We've minimized the footprint of the new DuraChill Benchtop Chiller, making it our most compact chiller yet.



Broader Temperature Range, as low as -30°C
With a coldest temperature of -30°C, DuraChill benchtop allows for a wider range of operations. It's the coolest Benchtop Chiller in the industry.



Quieter Operation
DuraChill Benchtop operates at 60dB at 1m, the same decibel level as a normal conversation. Feel comfortable working nearby while the chiller is in operation.



Environmentally-friendly Natural Refrigerants
Designed to utilize R290 natural refrigerant, which not only significantly reduces Global Warming Potential, but also has the added benefit of increased performance.



User-friendly Intuitive Operation
DuraChill Benchtop's touchscreen interface and visual menus are easy to navigate; spend less time studying the manual and more time achieving your goals.



More Informative and Useful Alarm Messages

Clear, easy-to-understand full-text alerts — no need to waste time looking up error codes. This chiller will tell you what the issue is and will help guide you to success.



Remote Probe

Control a jacketed reactor or any other process that requires a secondary temperature sensor with the easily-equippable optional Remote Probe.



Diagnostic Self-test

At any time, users can compare current performance against data stored on the day the chiller was first manufactured, allowing for quick and definitive troubleshooting of performance issues.



Low-flow Safety Switch

Our state of the art capacitance liquid level sensor will give you visual and audible alarms to protect the pump from premature failure.

Specifications

		BA05 (R290)	BA06 (R290)
Cooling Capacity @ 20°C[1]	60Hz	400 W	1100 W
	50Hz	400 W	1050 W
Cooling Capacity @ 10°C[1]	60Hz	350 W	900 W
	50Hz	350 W	650 W
Cooling Capacity @ 0°C[1]	60Hz	250 W	650 W
	50Hz	250 W	1.0 kW
Cooling Capacity @ -10°C[1]	60Hz	150 W	500 W
	50Hz	150 W	500 W
Reservoir Capacity	0.4 gal / 1.5 L		
Pump Inlet and Outlet	1/2 inch female NPT		
Connectivity	RS-232, USB-B, Dry Contact On/Off/Status, Remote Probe		
Selectable Operating Languages	English, Spanish, French, German, Mandarin, Japanese		
UV Biological Growth Inhibitor	Yes		
Optional Remote Temperature Probe	Remote Monitoring / Remote Control		
Ambient Air Temperature Tracking	Yes		
Maximum Sound Level	60 dBA		
Maximum Pump Pressure	16.5 psi / 114 kPa		
Maximum Flow Rate	6.4 gpm / 24.6 lpm		
Power Requirements	60Hz	120V, 60Hz, 3.3A	120V, 60Hz, 4.9A
	50Hz	240V, 50Hz 2.5A	240V, 50Hz 3.2A
Part Numbers	60Hz	BA05E1G3-310A13C	BA06E1G3-310A13C
	50Hz	BA05E0G3-310A13E	BA06E0G3-310A13E
Unit Weight	53.5 lbs / 24.3 kg		
Shipping Weight	78.2 lbs / 35.5 kg		
Unit Dimensions	16.9 x 9.1 x 18.4 in/ 42.9 x 23.1 x 46.7 cm		
Shipping Dimensions	33 x 22 x 27.7 in / 84 x 56 x 78 cm		

1. Cooling capacity based on a 50%/50% mix of ethylene glycol and distilled water as coolant at ambient temperature of 20°C/68°F. Capacity rating should be expected to decrease approximately 1.3% for each 1°C above 20°C ambient temperature.
† For conversion of W to BTU/hr, multiply by 3.412
All specifications are subject to change.

PolyScience®
Temperature Control Solutions®

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www.PolyScience.com

Toll-Free +1.800.229.7569 • Phone +1.847.647.0611
sales@PolyScience.com


20 psi
-30.0°C
SET = -30.0
PolyScience
DURACHILL® RECIRCULATING CHILLER
PolyScience
WhisperCool™

DuraChill Portable Chillers

Setting the new industry standard

Changing the world of chillers forever is more than a tagline, it's what we did once again with our new award-winning DuraChill portable recirculating chiller. We're changing maintenance with the patented DynamicFilter™ System preprogrammed to automatically change each month. We've redefined "convenience" with a full-color touchscreen display and front-fill reservoir. We've changed protection with a state-of-the-art capacitance liquid level sensor on the reservoir to protect the pump from premature failure. We're changing your working environment with our patented WhisperCool® Noise Reduction System. And we're changing our environmental footprint with a patented UV light system that will keep your fluid path clean without chemical additives. Over three years in the making, DuraChill is the new industry standard for all others to follow.



R290 Natural Refrigerant Capable

Gold Honoree Laser Focus World Innovators Awards (2020)

Most Innovative Product Cannabis & Tech Today (2019)

Top 25 Innovators Cannabis & Tech Today (2019)

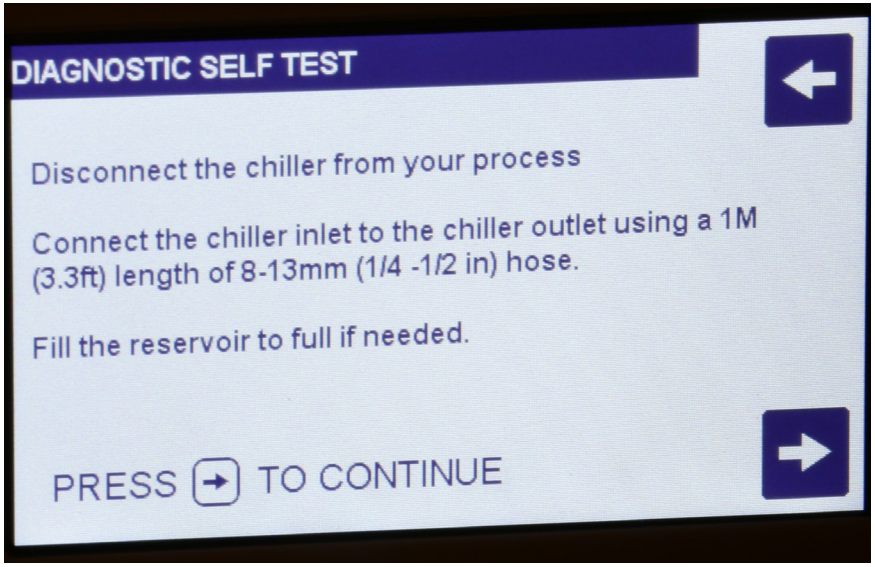

PolyScience

DuraChill Portable Chillers Features

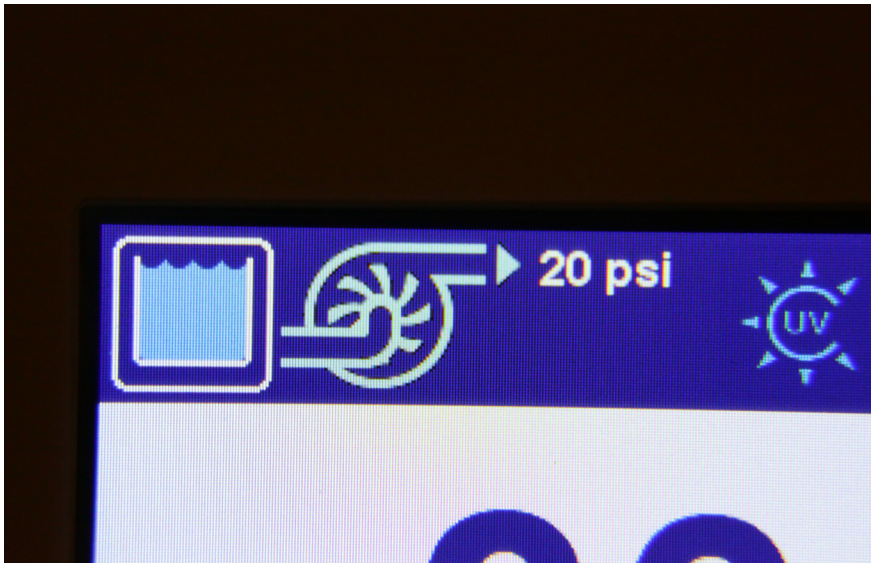
- Fluid temperature range of -10 to 70°C / 14 to 158°F
- Temperature Stability of ±0.1°C
- Intuitive touch screen display with 6 operating languages
- Self-changing air filter system
- Continuous fluid level monitoring
- WhisperCool® Technology
- UV Light Biological Growth Inhibitor
- Patent-pending self-diagnostic system
- Front-fill reservoir access
- Displayable temperature units in °C or °F
- Displayable pressure units in kPa or PSI
- Available with air-shippable R290 Natural Refrigerant Gas



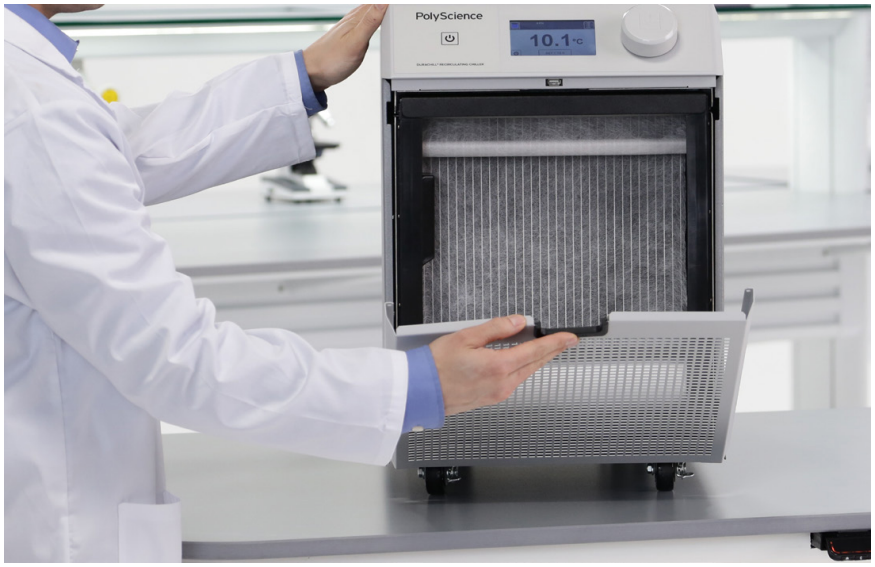
Intuitive touch screen display with 5 operating languages



Patented Self-Diagnostic System



Continuous fluid level monitoring



Self-changing air filter system



UV Light Biological Growth Inhibitor



Front-fill reservoir access

DuraChill Portable Chillers Benefits

All the information you need at a glance
A bright, full-color touchscreen display shows set temperature, actual fluid temperature, reservoir fill level, pump output pressure and even the status of your air filter – all on an easy-to-read display in your choice of five languages.

Save time and effort with easy access to the reservoir fill port
DuraChill® Chillers offer a conveniently located front fill reservoir. You no longer have to go to the back of the chiller to open and fill the reservoir. DuraChill® has the fill port in the front, making it easy to access, avoiding spills and saving time.

No more preventative air filter maintenance
Our new patent-pending DynamicFilter™ System is preprogrammed to change the air filter automatically once per month over a two year period and can be adjusted to suit your operating environment. This will relieve you of the burden of preventative air filter maintenance and eliminate downtime from unnecessary service calls due to improper maintenance.

Worry-free prevention of premature pump failure
Because pump seals will fail in as little as 30 seconds of being run dry, DuraChill® Chillers include a state-of-the-art capacitance liquid level sensor on the reservoir to protect the pump from premature failure. If the fluid level runs too low, the DuraChill® Chiller will give visual and audible alarms and if the fluid level reaches a point where there's risk of sucking air into the pump, DuraChill® will shut the chiller down and present another alarm.

Create a quieter working environment
These new high-performance chillers feature our exclusive patented WhisperCool® Noise Reduction System. This patented technology evaluates the demand for cooling from your process, then adaptively slows the fan speed to the minimum necessary to maintain control point, making the chiller extremely quiet without sacrificing any cooling performance.

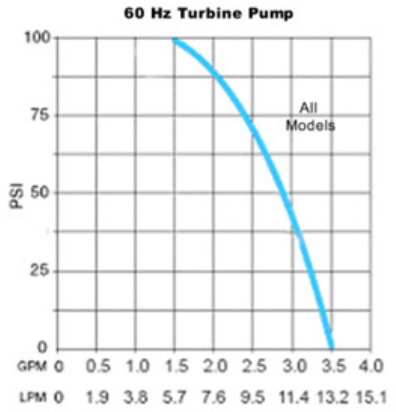
Your fluid path stays clean without chemical additives
As part of our commitment to the environment we developed a patent-pending UV light system that will continuously prevent biological growth in the fluid path without the need for chemical growth inhibitors, preventing algaecides from being released into the world's waterways.

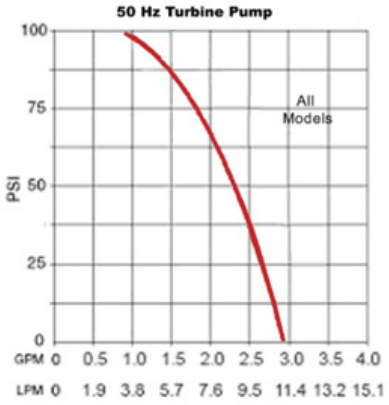
DuraChill Pumps

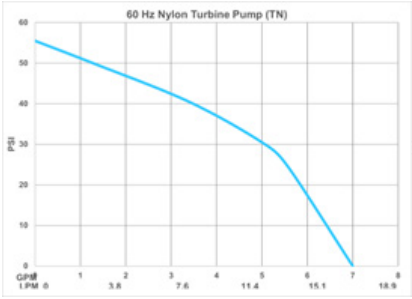
Considerations for Pump Selection

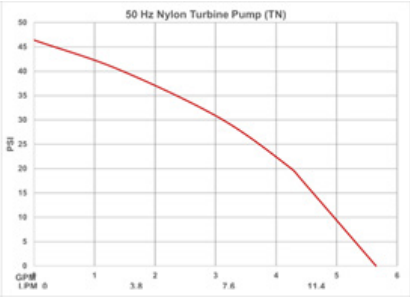
Turbine Pumps

Provide moderate flow and moderate pressures (20-90 psi, 1.4-6.9 bar.) which makes them well suited to applications that require higher pressure or experience a higher system pressure drop, such as long tubing runs or pumping vertically. A robust design makes turbine pumps very reliable and forgiving to impurities in the fluid stream. Bronze, nylon, and stainless steel turbine pumps are available.



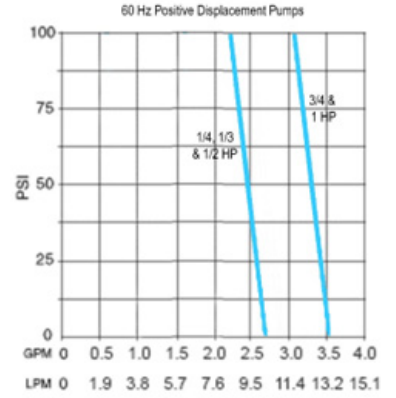


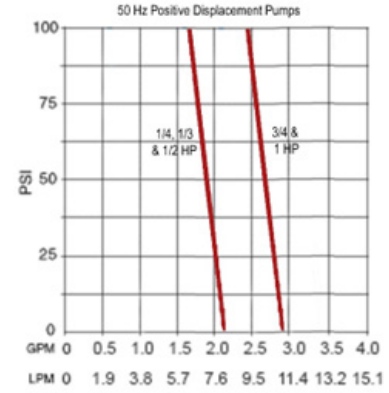




Positive Displacement Pumps

Have performance characteristics similar to turbine pumps and are suitable for high viscosity fluids, or pumping higher or further from the cooling product and the application. They produce moderate flow at high pressure; up to 100 psi (6.9 bar). Brass positive displacement pumps are standard; stainless steel positive displacement pumps are available.





DuraChill Portable Chillers Specifications

		CA02	CA03	CA05	CA10
Cooling Capacity @ 20°C[1]	60Hz	0.85 kW	1.4 kW	1.74 kW	2.9 kW
	50Hz	0.7 kW	1.28 kW	1.84 kW	2.65 kW
Cooling Capacity @ 10°C[1]	60Hz	0.6 kW	0.99 kW	1.29 kW	1.93 kW
	50Hz	0.5 kW	0.94 kW	1.29 kW	1.9 kW
Cooling Capacity @ 0°C[1]	60Hz	0.4 kW	0.53 kW	0.77 kW	1.0 kW
	50Hz	0.3 kW	0.49 kW	0.77 kW	1.0 kW
Reservoir Capacity	1.1 gal / 4.2 L				
Pump Inlet and Outlet	1/2 inch female NPT				
Connectivity	RS-232, USB Serial Port Emulation, USB TMC, USB-B, Dry Contact On/Off/Status				
Selectable Operating Languages	English, Spanish, French, German, Mandarin, Japanese				
Self-Changing Air Filter	Yes				
UV Biological Growth Inhibitor	Yes				
Optional Remote Temperature Probe	Remote Monitoring / Remote Control				
Ambient Air Temperature Tracking	Yes				
Maximum Sound Level		61.2 dB	61.2 dB	61.2 dB	61.2 dB
Pump Pressure Range (Nylon Turbine Pump)	60Hz	20 to 65 psi / 138 to 448 kPa			
	50Hz	20 to 65 psi / 138 to 448 kPa			
Pump Pressure Range (Bronze Turbine Pump)	60Hz	20 to 90 psi / 138 to 621 kPa			
	50Hz	20 to 75 psi / 138 to 517 kPa			
Pump Pressure Range (Positive Displacement Pump)	60Hz	20 to 100 psi / 138 to 689 kPa			
	50Hz	20 to 83 psi / 138 to 572 kPa			
Maximum Pump Flow Rate (with Nylon Turbine Pump)	60Hz	7 gpm / 26.5 lpm			7 gpm / 26.5 lpm
	50Hz	5.65 gpm / 21.4 lpm			5.65 gpm / 21.4 lpm
Maximum Pump Flow Rate (with Bronze Turbine Pump)	60Hz	3.5 gpm / 13.2 lpm			3.5 gpm / 13.2 lpm
	50Hz	2.2 gpm / 8.3 lpm			2.9 gpm / 11 lpm
Maximum Pump Flow Rate (with Positive Displacement Pump)	60Hz	2.6 gpm / 9.8 lpm			3.5 gpm / 13.2 lpm
	50Hz	2.0 gpm / 7.6 lpm			2.9 gpm / 11 lpm
Power Requirements (with All Turbine Pumps)	60Hz	120V, 60Hz, 13.7A	120V, 60Hz, 16.3A	120V, 60Hz, 17.4A	230V, 60Hz, 13.5A
	50Hz	240V, 50Hz 8.9A	240V, 50Hz 9.0A	240V, 50Hz 9.2A	240V, 50Hz 12.0A
Power Requirements (with Positive Displacement Pump)	60Hz	120V, 60Hz, 13.6A	120V, 60Hz, 16.2A	120V, 60Hz, 17.3A	230V, 60Hz, 13.4A
	50Hz	240V, 50Hz 8.2A	240V, 50Hz 8.3A	240V, 50Hz 8.5A	240V, 50Hz 12.0A
Part Numbers (with Nylon Turbine Pump)	60Hz	CA02A1TN-41AA1N	CA03A1TN-41AA1N	CA05A1TN-41AA1N	CA10A3TN-41AA1N
	50Hz	CA02A2TN-41AA1N	CA03A2TN-41AA1N	CA05A2TN-41AA1N	CA10A2TN-41AA1N
Part Numbers (with Bronze Turbine Pump)	60Hz	CA02A1T1-41AA1N	CA03A1T1-41AA1N	CA05A1T1-41AA1N	CA10A3T1-41AA1N
	50Hz	CA02A2T1-41AA1N	CA03A2T1-41AA1N	CA05A2T1-41AA1N	CA10A2T1-41AA1N
Part Numbers (with Positive Displacement Pump)	60Hz	CA02A1P1-41AA1N	CA03A1P1-41AA1N	CA05A1P1-41AA1N	CA10A3P2-41AA1N
	50Hz	CA02A2P1-41AA1N	CA03A2P1-41AA1N	CA05A2P1-41AA1N	CA10A2P2-41AA1N
Unit Weight		145 lbs / 65.5 kg	145 lbs / 65.5 kg	147 lbs / 66.9 kg	153 lbs / 69.2 kg
Shipping Weight		169 lbs / 76.7 kg	169 lbs / 76.7 kg	172 lbs / 78.1 kg	177 lbs / 80.3 kg
Unit Dimensions	26 x 15 x 21.8 in/ 66 x 38.1 x 55.4 cm				
Shipping Dimensions	33 x 22 x 33 in / 84 x 56 x 84 cm				

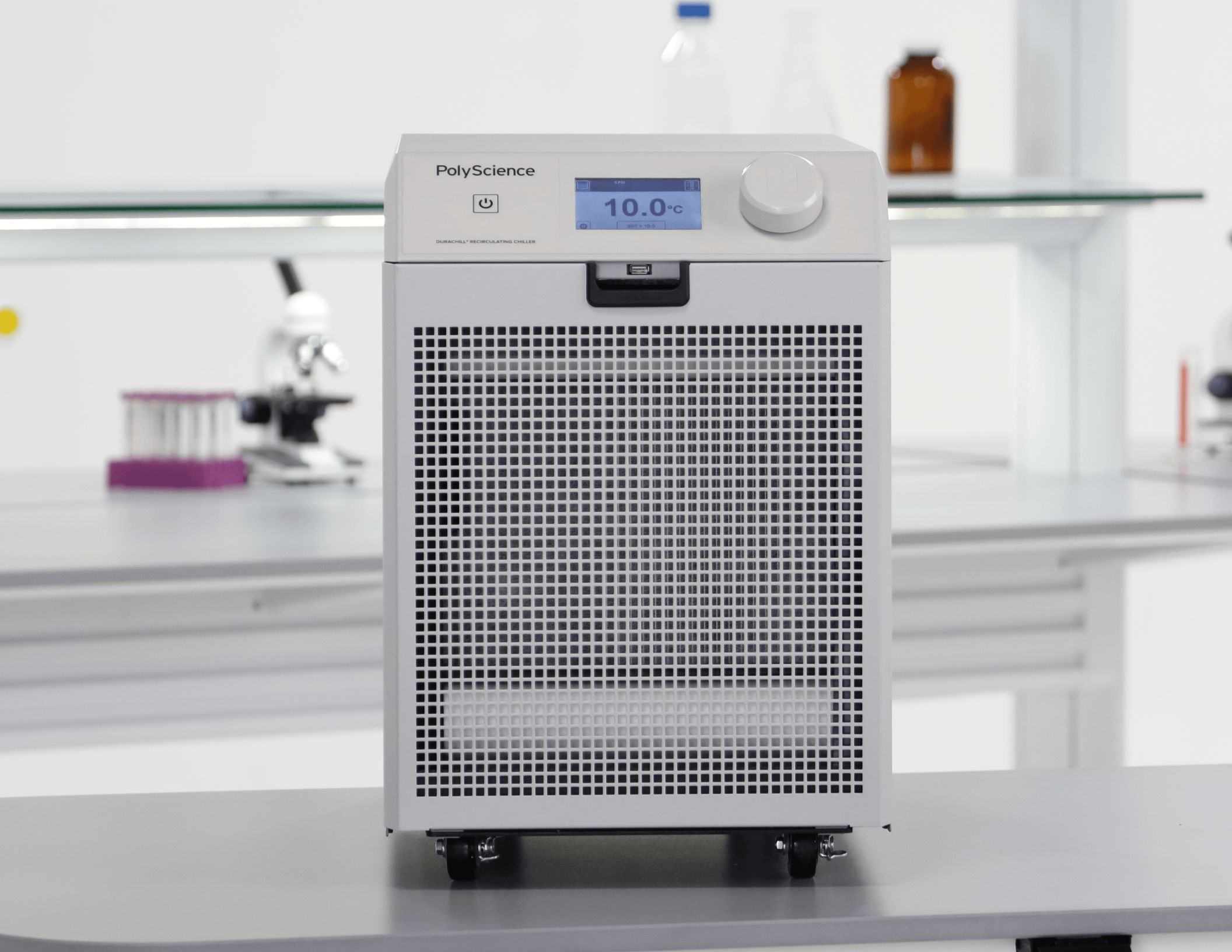
[1]Cooling capacity based on a 50%/50% mix of ethylene glycol and distilled water as coolant at ambient temperature of 20°C/68°F. Capacity rating should be expected to decrease approximately 1.3% for each 1°C above 20°C ambient temperature.

For conversion of kW to BTU/hr, multiply by 3412.14

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Temperature Control Solutions®

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www.PolyScience.com

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sales@PolyScience.com


PolyScience
10.0°C
DURACHILL® RECIRCULATING CHILLER

High Capacity Chillers

More Powerful Cooling for the Most Difficult Jobs

Designed for high heat removal in demanding environments, with cooling capacities up to 33 kilowatts at ambient temperatures as high as 40°C. Our High Capacity Chillers provide precise and reliable temperature control for closed, external systems such as pilot plants, medical diagnostic equipment, metalworking lasers, and plastic molding machines. These chillers are suitable for most applications with their many options and accessories.

High Capacity Chillers are our most customizable offering, with a large variety of options specifically designed to accommodate OEM applications.

For cooling needs in excess of 11kW, please contact our sales team directly.

Features

- Cooling capacities as high as 33.4 kW at 40°C ambient
- Air- and water-cooled models available
- Variety of pump options
- Large, dual displays present temperature and pressure or flow rate simultaneously
- User-adjustable temperature, pressure, and flow rate alarms



6800 Series Chillers
Turbine or Positive
Displacement Pumps
Air-cooled
Cooling Capacities: 5.2+ kW



6900 Series Chillers
Turbine or Positive
Displacement Pumps
Water-cooled
Cooling Capacities: 5.3 +kW



DCA and DCW Series Chillers†
Turbine or Positive
Displacement Pumps
Air- or Water-cooled
Cooling Capacities: 10+ kW

†Chillers 3HP and up are available in the United States only

Recirculating Coolers

The Budget-Friendly Chiller Alternative

The 3370 Liquid-to-Air Cooler is an economical, quiet, energy-efficient alternative to traditional chillers in many applications. Liquid-to-air cooling uses ambient air to cool your application. Heated process fluid is pumped through the 3370's fan-cooled heat exchanger and then returned to the process.

Features

- An economical cooling solution for applications where cooling fluid temperature is higher than ambient and temperature control is not required
- Quiet liquid-to-air cooling
- Positive Displacement or Turbine Pump
- Built-in low liquid level indicator



		3370
Cooling Capacity @ 20°C (W) 60Hz/50Hz		4000[1]
Temperature Range		Ambient +5° to 70°C
Turbine Pump	Maximum Pressure psi (bar) 60Hz/50Hz	62 (4.3) 50 (3.4)
	Maximum Flow gpm (l/min) 60Hz/50Hz	5.4 (20.5) 4.5 (17.1)
Positive Displacement Pump	Maximum Pressure psi (kPa) 60Hz/50Hz	100 (689) 100 (689)
	Maximum Flow gpm (l/min) 60Hz/50Hz	2.4 (9.1) 2 (7.6)
Overall Dimensions (L x W x H)		20.5 x 15 x 22.3 in 52 x 38.1 x 56.6 cm
Electrical Configurations	Turbine Pump 60Hz/50Hz	120V 60Hz 5.5A 240V 50Hz 3A
	Positive Displacement Pump 60Hz/50Hz	120V 60Hz 5.5A 240V 50Hz 3A
Reservoir Capacity gal (L)		1.1 (4.2)
Process Connections		1/2" female NPT

1. Cooling capacity for 3370 based on 11°C temperature differential between ambient air temperature and cooling fluid temperature.

High Capacity Chillers Specifications

		6860/6850T	6860/6850P	6960/6950T
Cooling Type (Heat Exchange)		Air-cooled	Air-cooled	Water-cooled
Cooling Capacity @ 20°C[1]	60Hz	5.2 kW†	5.2 kW†	5.33 kW†
	50Hz	4.4 kW†	4.4 kW†	4.58 kW†
Reservoir Capacity		3.5 gal / 13.25 L		
Pump Inlet and Outlet		1/2 inch female NPT		
Connectivity		Inquire for options		
Selectable Operating Languages		English, Spanish, French, German, Mandarin		
Self-Changing Air Filter			No	
UV Biological Growth Inhibitor			No	
Optional Remote Temperature Probe		Remote Monitoring / Remote Control		
Display Type		Dual 7-segment		
Maximum Sound Level			61.2 dB	
Working Temperature Range		5° to 35°C / 41° to 95°F		
Pump Type		Turbine	Positive Displacement	Turbine
Maximum Pump Pressure (psi / bar)	60Hz	100 psi / 6.90 bar	100 psi / 6.90 bar	100 psi / 6.90 bar
	50Hz	83 psi / 5.72 bar	83 psi / 5.72 bar	83 psi / 5.72 bar
Maximum Pump Flow Rate (gpm / l/min)	60Hz	11 gpm / 41.6 l/min	3.50 gpm / 13.2 l/min	11 gpm / 41.6 l/min
	50Hz	9 gpm / 34 l/min	2.90 gpm / 11.0 l/min	9 gpm / 34 l/min
Power Requirements	60Hz	230V / 1 phase / 23.1A	230V / 1 phase / 21.1A	230V / 1 phase / 22A
	50Hz	240V / 1 phase / 25.6A	240V / 1 phase / 20.8A	240V / 1 phase / 24.5A
Part Numbers[2]	60Hz	6860T56A270D	6860P46A270D	6960T56A270D
	50Hz	6850T56A270E	6850P46A270E	6950T56A270E
Shipping Weight		340 lb / 154 kg		
Unit Dimensions		30.5 x 19 x 26 in / 78 x 48 x 66 cm		
Shipping Dimensions		33 x 22 x 33 in / 84 x 56 x 84 cm		

All specifications listed are examples. Actual specifications will vary by model and configuration.

[1] Cooling capacity based on a 50%/50% mix of ethylene glycol and distilled water as coolant at ambient temperature of 20°C/68°F. Capacity rating should be expected to decrease approximately 1.3% for each 1°C above 20°C ambient temperature.
[2] Standard configurations shown. Many customizable configurations are possible. Contact Sales for more information.

† For conversion of kW to BTU/hr, multiply by 3412.14

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PolyTemp PX
75%
1:08PM
08/28/25
SET = 37.00 °C
FLUID:
°C
37.002
40
35
2hr
PolyScience

Application-Specific Products



Viscosity Baths

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



75 Liter Forced Age Testing/Cryoprecipitate Bath

- Working Temperature: -20° to 100°C
- PX Programmable Temperature Controller allows endless array of thermal cycling options and programs
- Extremely effective at replicating temperature fluctuations that accelerate beverage aging
- Also well equipped to thaw multiple units of Whole Blood (WB) or Fresh Frozen Plasma (FFP) simultaneously for the recovery of Cryoprecipitated Antihemophilic Factor (AHF).



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*" (24th 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



Refrigerated Calibration Bath

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

Low Temperature Coolers

Cost-friendly refrigerated coolers designed to enhance and simplify low-temperature laboratory work.

Continuous cooling to temperatures as low as -100°C. PolyScience Low Temperature Coolers are the temperature control solutions you need to get the job done safely, quickly and efficiently. Part of our award-winning temperature control line, our Low Temperature Coolers are American Made and available in both immersion probe and flow-through styles to work with a variety of applications.

Excellent for trapping and Dewar-type applications, these coolers reduce the expense of using consumables such as dry ice or liquid nitrogen. A flexible hose allows convenient placement of the cooling probe. With a variety of probes available, these Immersion Probe Coolers are the ideal solution for reaching extreme cold temperatures with high efficiency.



Some applications include the cooling of exothermic reactions, freeze point determinations, botanical extraction, freeze drying, impact testing, lyophilization, vapor and solvent trapping.





Features

- Continuous cooling to temperatures as low as -100°C
- Designed to run at maximum cooling
- An economical alternative to dry ice or liquid nitrogen
- Excellent for cold trap applications, freeze drying, and rapidly cooling small volumes of liquids

PolyScience Immersion Probe Coolers reduce the expenses that come with using dry ice or liquid nitrogen. The flexible hose allows for convenient placement of the cooling probe. Engineered specifically for use with rotary evaporators, and designed to hold a fixed setpoint at maximum cooling performance.



Engineered specifically for use with Dewar Style Cold Traps, our revolutionary Bent Immersion Probe changes the way your lab is organized. By allowing for the probe to hang directly on the edge of the glass, no additional space or support is required.

Specifications

	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 100 @ -60°C	140 @ 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
Hose Diameter	2.8" (7.1 cm)	2.8" (7.1 cm)	1.5" (3.8 cm)	1.5" (3.8 cm)
Hose Length	6' (1.8 m)	6' (1.8 m)	4' (1.2 m)	4' (1.2 m)
3" Rigid Coil	•			•
1.875" Rigid Coil		•		•
1.5" Rigid Coil			•	
1.875" Bent Probe		•		
1.5" Bent Probe			•	
Rigid Cold Finger	•			
Flexible Cold Finger	•			

	Probe Length	Probe Diameter	Exposed Length[1]
3" Rigid Coil	9" (22.9 cm)	3" (7.6 cm)	17" (43.2 cm)
1.875" Rigid Coil	7" (17.8 cm)	1.875" (4.8 cm)	16.5" (41.9 cm)
1.5" Rigid Coil	4" (10.2 cm)	1.5" (3.8 cm)	15" (38.1 cm)
1.875" Bent Probe	7" (17.8 cm)	1.875" (4.8 cm)	8" (20.3 cm)
1.5" Bent Probe	4" (10.2 cm)	1.5" (3.8 cm)	6" (15.2 cm)
Rigid Cold Finger	3.75" (9.53 cm)	0.7" (1.8 cm)	3.75" (9.53 cm)
Flexible Cold Finger	15" (38.1 cm)	0.625" (1.6 cm)	15" (38.1 cm)

1. Exposed length refers to the amount of exposed metal from the insulated hose to the tip of the probe.

Different Probes for different applications



Flexible Cold Finger Probe



Rigid Coil Probe



Bent Coil Probe



Rigid Cold Finger Probe

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Accessories

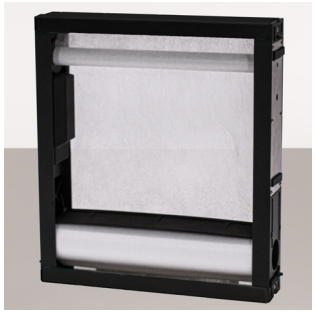
PolyScience Bath Fluids

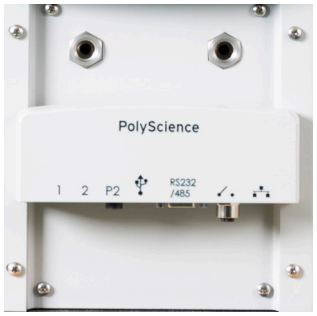
Bath Fluid	Quantity	For use with:	Normal Temperature Range	Specific Heat @ Fluid Temperature	Specific Heat BTU/lb °F	Specific Heat KJ/Kg °C	Viscosity (c St) @ 25°C	Part Number
polytherm S200	1 gallon (3.8 L)	Select Circulating Baths	100° to 200°C	150°C	0.40	1.67	125	060327
polytherm S250	1 gallon (3.8 L)	Select Circulating Baths	150° to 250°C	200°C	0.39	1.63	500	060328
polytherm PAG140	1 gallon (3.8 L)	Select Circulating Baths, General Purpose Water Baths	50° to 140°C	140°C	0.49	2.08	85	060350
polycool HC -50	1 gallon (3.8 L)	Select Circulating Baths, Chillers	-50° to 100°C	-30°C	0.62	2.59	3	060330
polycool EG -25	1 gallon (3.8 L)	Select Circulating Baths, Chillers	-25° to 100°C*	-20°C	0.78	3.26	20	060340
polycool PG -20	1 gallon (3.8 L)	Select Circulating Baths, Chillers	-20° to 100°C*	-10°C	0.83	3.47	20	060320
polycool MIX -25	case = 5 x 1/2 gallon (1.9 L)	Select Circulating Baths, Chillers	-25° to 100°C	-20°C	0.78	3.26	20	004-300060
polyclear MIX 30 Plus	case = 5 x 1/2 gallon (1.9 L)	Select Circulating Baths, General Purpose Water Baths, Chillers, Coolers	15° to 90°C	50°C	1.00	4.18	1	004-300063
polyclean CLARIFIER	8 oz (237 ml)	Select Circulating Baths, General Purpose Water Baths, Chillers, Coolers	–	–	–	–	–	004-300040
	case = 12 x 8 oz (237 ml)			–	–	–	–	004-300041

* When mixed 50/50 with distilled water









Temperature Measurement

Remote Pt100 Temperature Probes

Circulating Baths. For monitoring the temperature of an external application. 5/32" (4 mm) diameter x 6" (15.2 cm)

	Part Number
Cable length: 2' (0.6 m)	525-876
Cable length: 10' (3 m)	525-870
Cable length: 25' (7.6 m)	525-871
Cable length: 50' (15 m)	525-872

Chillers: Benchtop, Liquid-to-Liquid Coolers, DuraChill®

	Part Number
Cable length: 10' (3 m)	060101
Cable length: 25' (7.6 m)	060105
Cable length: 50' (15 m)	060110

PolyTemp Accessories

	Part Number
Communication Module	580-448-KIT
Fitting, 1/4" male NPT to 1/8" (3 mm) hose barb, brass **(set of 2)**	060305-2
Fitting, 1/4" male NPT to 5/16" (8 mm) hose barb, brass **(set of 2)**	060305

DuraChill® Accessories

	Part Number
Replacement DynamicFilter™	511-535
UV Biological Growth Inhibitor	511-528
Tubing Adapter Kit	510-288
Fixed Bypass Kit (Nylon Turbine Pump Only)	510-147

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