Specialty Products

PolyScience specialty products are uniquely configured to accommodate specific testing and quality control needs, such as the calibration of temperature measurement devices, viscosity measurements, fecal coliform testing, plasma-thawing, histological and beverage-aging studies.







Features:

- Working temperatures up to 135°C
- Temperature stabilities to ±0.01°C
- · Advanced Programmable, Advanced Digital, Standard Digital, or MX Temperature Controller
- · Configured for use with popular capillary viscometers
- · Choice of glass or polycarbonate reservoir
- · Includes tap water cooling coil
- · Lidded viscometer openings



Polycarbonate Viscosity Baths

| Temperature Controller | Advanced Programmable | | Advanced Digital | | Standard Digital | | |
|----------------------------------|--|---------------|------------------|---------------|------------------|---------------|--|
| Programmable For Test Protocols | Yes | | No | | No | | |
| Reservoir Capacity | 29 liters | | | | | | |
| Maximum Temperature ¹ | 85°C | | | | | | |
| Temperature Stability | ±0.01°C | | ±0.0 | ±0.01°C | | ±0.04°C | |
| Heater | 1100 W (60 Hz)/2200 W (50 Hz) | | | | | | |
| Viscometer Openings | 5 Round | 3 Square | 5 Round | 3 Square | 5 Round | 3 Square | |
| Working Depth | 11.25"/28.6 cm | | | | | | |
| Pump | Variable-speed | | Variable-speed | | 2-Speed | | |
| Overall Dimensions (L X W x H) | 21.4 X 9 x 20.7"/54.4 x 22.9 x 52.6 cm | | | | | | |
| Part Number 120 VAC/60 Hz | AP29VB5R-A11B | AP29VB3S-A11B | AD29VB5R-A11B | AD29VB3S-A11B | SD29VB5R-A11B | SD29VB3S-A11B | |
| Part Number 240 VAC/50 Hz | AP29VB5R-A12E | AP29VB3S-A12E | AD29VB5R-A12E | AD29VB3S-A12E | SD29VB5R-A12E | SD29VB3S-A12E | |

^{1.} Maximum temperature dependent on tank material; Temperature Controllers capable of higher temperatures.

Glass Viscosity Baths

| Temperature Controller | MX | | |
|---------------------------|---------------------------------|-------------------------------|--|
| Reservoir Capacity | 17 liters | 27 liters | |
| Maximum Temperature | 135°C | | |
| Temperature Stability | ±0.07°C | | |
| Heater | 1100 W (50/60 Hz) | | |
| Viscometer Openings | 6 Round | | |
| Working Depth | 11"/27.9 cm | 17"/ 43.2 cm | |
| Pump | 1-Speed | | |
| Overall Dimensions | 12.5 Ø x 20.5"/31.8 Ø x 52.1 cm | 12.5 Ø x 26.4"/31.8 Ø x 67 cm | |
| Part Number 120 VAC/60 Hz | MX17VB6G-A11B | MX27VB6G-A11B | |
| Part Number 240 VAC/50 Hz | MX17VB6G-A12E | MX27VB6G-A12E | |

Electrical plugs for the part numbers listed are standard U.S. and European types. See page 128 for additional plug types and part numbers.

Key Specifications Calibration Temperatures: From -30° to +200°C Temperature Stability: ±0.005°C Calibration Certificate: 2-point factory calibration Reservoir Capacity: 15 liters

Features:

- Accommodates up to 6 temperature measuring devices
- Choice of Performance Programmable Temperature Controller with OpenMode time/temperature programming or Performance Digital Temperature Controller
- Intuitive 4.3" (10.9 cm) SmartTouch display
- Swivel 180[™], LidDock[™], DuraTop[™], WhisperCool[™], Cool Command[™]
- 11 languages: French, German, Spanish, Chinese, Portugese, Russian, Hindi, Arabic, Italian, Korean, English

- On-board connectivity: USB-A & B, Ethernet, RS232/485, remote on/off, and external temperature probe
- Event scheduling (time & date), real-time clock and temperature trends for up to 10 days
- Automatic and/or user-adjustable performance optimization and 10-point calibration capability
- Complies with DIN 12876-1 Class III safety requirements for use with flammable liquids
- Includes Enhanced Performance Hardware & Software Package
- Bath lid with sleeves for two each 3 mm, 4 mm, and 6 mm diameter openings



Displays calibration temperatures to 1/1000 degree C.



Accommodates thermometers and temperature sensors from 2 to 8 mm in diameter. See page 79 for available Sleeve Kits.





For additional information on Performance Programmable and Performance Digital Temperature Controller features and capabilities, see pages 16-17 and 20-21.

Heating Only Calibration Baths

| Temperature Controller | Performance Programmable | Performance Digital | |
|--|--|---------------------|--|
| Programmable For Specific Test Protocols | Yes | No | |
| Calibration Temperatures | Ambient +10° to +200°C | | |
| Temperature Stability | ±0.005°C | | |
| Heater | 1100 W (60Hz)/2200 W (50Hz) | | |
| Pump | Variable-speed | | |
| Reservoir Volume | 15 liters | | |
| Bath Opening/Working Depth | 4.6 Ø x 11"/11.8 Ø x 28 cm | | |
| Overall Dimensions (L X W x H) | 21.3 x 8.7 x 24.3"/54.1 x 22.1 x 61.7 cm | | |
| Part Number 120 VAC/60 Hz | PP15HCAL-A11B | PD15HCAL-A11B | |
| Part Number 240 VAC/50 Hz | PP15HCAL-A12E | PD15HCAL-A12E | |

Refrigerated/Heated Calibration Baths

| Temperature Controller | Performance Programmable | Performance Digital | |
|--|--|---------------------|--|
| Programmable For Specific Test Protocols | Yes | No | |
| Calibration Temperatures | -30° to +200°C | | |
| Cooling Capacity @ 20°C | 505 W | | |
| Temperature Stability | ±0.005°C | | |
| Heater | 1100 W (60Hz)/2200 W (50Hz) | | |
| Pump | Variable-speed | | |
| Reservoir Volume | 15 liters | | |
| Bath Opening/Working Depth | 4.6 Ø x 11"/11.7 Ø x 28 cm | | |
| Overall Dimensions (L X W x H) | 21.3 x 8.7 x 30.5"/54.1 x 22.1 x 77.5 cm | | |
| Part Number 120 VAC/60 Hz | PP15RCAL-A11B | PD15RCAL-A11B | |
| Part Number 240 VAC/50 Hz | PP15RCAL-A12E | PD15RCAL-A12E | |

Electrical plugs for the part numbers listed are standard U.S. and European types. See page 128 for additional plug types and part numbers.

Factory Calibration Services

PolyScience Calibration Baths are factory calibrated at 35° and 90°C. Additional calibration certificates are available:

1-Point Calibration: Part Number: 130-346 Additional Calibration Points: Part Number: 130-347

75 Liter Refrigerated Circulating Bath

Key Specifications

-20° to +100°C Working Temperature: Temperature Stability: ±0.005°C

Cooling Capacity: 21.6 x 15.7 x 9.4" Working Access $(L \times W \times D)$: 54.9 x 39.8 x 23.9 cm

1400 W @ 20°C

Overall Dimensions 35.8 x 22.4 x 42.1" $(L \times W \times H)$: 90.9 x 56.9 x 107 cm

Maximum Pressure: psi (bar) 208-240 VAC/60 Hz Models 4.3 (0.3) 208-240 VAC/50 Hz Models 3.6 (0.25)

Maximum Flow Rate: Pressure Suction gpm (I/min) gpm (I/min)

208-240 VAC/60 Hz Models 5.3 (20.1) 3.9 (14.7) 208-240 VAC/50 Hz Models 4.4 (16.7) 3.2 (12.2)

Part Number:

208-240 VAC, 50/60Hz PP75R-20-A13D 208-240 VAC, 50/60Hz PP75R-20-A12E



Features:

- · Specifically designed to replicate temperature fluctuations that accelerate beverage aging
- Performance Programmable Temperature Controller allows endless array of thermal cycling options and programs
- Intuitive 4.3" (10.9 cm) SmartTouch display
- 11 languages: French, German, Spanish, Chinese, Portuguese, Russian, Hindi, Arabic, Italian, Korean, English
- Variable-speed pressure/suction pump with external circulation and temperature control capability
- Swivel 180[™], DuraTop[™], WhisperCool[™] Cool Command™

- · On-board connectivity: USB-A & B, Ethernet, RS232/485, remote on/off, external temperature probe
- Event scheduling (time & date), real-time clock and temperature trends for up to 10 days
- Multiple, selectable "home" screens and on-screen help
- Automatic and/or user-adjustable performance optimization and 10-point calibration capability
- · Complies with DIN 12876-1 Class III safety requirements for use with flammable liquids
- Includes Enhanced Performance Hardware & Software Package





Cryoprecipitate Bath

Key Specifications

Working Temperature: Fixed at 4°C (other factory set

temperatures available)

71.1 x 37 x 93 cm

Temperature Stability: ±0.1°C

 Reservoir Capacity:
 52.24 liters

 Working Access (L x W x D):
 20.6 x 13 x 12"

 52.4 x 33 x 30.5 cm

 Overall Dimensions
 28 x 14.5 x 36.6"

Part Number:

 $(L \times W \times H)$:

120 VAC/60 Hz **6260B1CRY10C** 240 VAC/50 Hz **6250B2CRY30E**



Features:

- 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
- · Bright temperature and elapsed time displays

- · Built-in over-temperature and flow alarms
- Calibration capability
- High efficiency fluid filter, removable air filter, reservoir drain
- · Removable, center-hinged reservoir cover





Electrical plugs for the part numbers listed are standard U.S. and European types. See page 128 for additional plug types and part numbers.

13 Liter Refrigerated Open Bath

Key Specifications

Working Temperature: 0° to 150°C

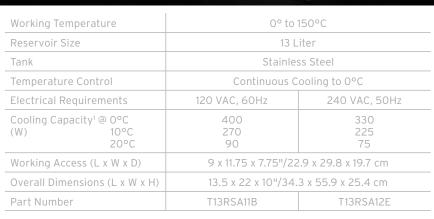
Cooling Capacity: Up to 400 watts at 20°C

Reservoir Capacity: 13 liters

Features:

- Continuous cooling to 0°C
- Designed to run at maximum cooling; requires heated thermostat for temperature control
- Combine with the MX Immersion Circulator to create a refrigerated circulating bath
- Ideal for applications where bath temperatures at or below ambient are required
- · Insulated stainless steel tank
- Cool Command™





1. Cooling capacity based on ambient temperature of 20°C (68°F).

Electrical plugs for the part numbers listed are standard U.S. and European types. See page 128 for additional plug types and part numbers.

Histology Bath

Key Specifications

Working Temperature: Fixed at -60°C/-76°F

Bath Work Area: 4.8 Ø x 6.6" deep

12.2 Ø x 16.8 cm

Reservoir Capacity: 1.9 liters

Overall Dimensions 22.75 x 11 x 11"

(L x W x H): 57.8 x 27.9 x 27.9 cm

Part Number:

120 VAC/60 Hz **HBATH-60-A11B** 240 VAC/50 Hz **HBATH-60-A12E**



Perforated stainless steel basket makes it easy to immerse and remove samples.

Features:

- Low working temperature freezes samples quickly, preventing microscopic ice crystals from developing and samples from distorting
- Ideal for fast-freezing tissue for enzyme studies
- 1.9 liter stainless steel reservoir with immersion basket and lid
- · Front-mounted reservoir drain
- DuraTop™
- · Includes stainless steel immersion basket

 ϵ

Key Specifications Working Temperature: Fixed at -34.4°C/-30°F Freezing Surface: 14.5 x 9.4" 36.8 x 23.8 cm Overall Dimensions (L x W x H): 15.9 x 18.4 x 10.5" 40.3 x 46.7 x 26.7 cm Part Number: 120 VAC/60 Hz 240 VAC/ 50 Hz HPLAT-30-A11B HPLAT-30-A12E

Features:

- Fast-freeze cold plate allows histotechnicians to observe tissue freezing and keep specimen edges flat
- 136 in² (877 cm²) freezing surface accommodates multiple specimens simultaneously
- Ultra-cold surface freezes samples quickly, reduces overall processing time by 40% or more



Electrical plugs for the part numbers listed are standard U.S. and European types. See page 128 for additional plug types and part numbers.

Coliform Bath

Key Specifications

Temperature Range: Ambient +10°C to 135°C

Temperature Stability: ±0.07°C 1-speed Pump:

11.8 x 12.9 x 8.3" Working Access $(L \times W \times D)$: 30 x 32.8 x 21.1 cm **Overall Dimensions** 13.9 x 21.5 x 18" $(L \times W \times H)$: 35.3 x 54.6 x 45.7 cm 1100 W (50/60Hz) Heater:

Part Number:

120 VAC/60 Hz MX28C135-A11B 240 VAC/50 Hz MX28C135-A12E



Features:

- · Ideal for fecal coliform and E.coli testing
- MX Temperature Controller
- · 28 liter reservoir with hinged, see-through cover
- · Large, easy to read display
- Calibration capability
- DuraTop™
- · Large bath opening

The PolyScience Coliform Bath is specifically designed 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). The 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



