Thermo Scientific VersaCool
Refrigerated Bath Circulator

experience the benefits
of going headless

Thermo
SCIENTIFIC

We lost our head,
so you don't lose your cool

We didn't set out to design one of the world's most innovative refrigerated bath circulators. We simply set out to solve the issues that labs like yours face everyday – smaller workspaces, tighter budgets, laboratory stock issues, green-building goals, and overly complex equipment.

Off with its head!

We started with the form factor: how to gain a large work area with a limited footprint. As with most great innovations – the solution was simple – we removed the control head to create more space. And we didn't stop there. Designed from the ground up – we added enhanced remote monitoring capabilities, energy efficiency, global voltage input, and other tools and features to give you control and optimal precision.

Imagine more space for your samples and smarter tools and features to simplify your daily tasks; so well designed anyone could use it.

Introducing the new Thermo Scientific™ VersaCool™ bath circulator. It's designed to help address your daily challenges, so you can stay focused on what you enjoy doing most – uncovering the answers to science's most perplexing questions.

Redefining versatility, so you can accomplish more.

What does it take to be a leader? We believe it takes courage, confidence, insight, persistence, and perhaps the most important skill of all, versatility.

At Thermo Fisher Scientific, we understand the daily challenges and industry pressures that you may face. That's why we are continually evolving, innovating, and advancing our technologies to accelerate the path of scientific discovery and enhance value to customers.

That's our mission and promise to you.

VERSACOOL

Go headless,
get more benefits

We see our largest bath with the smallest footprint, you'll see more samples – one step closer to discovery

- Removal of the control head and coils creates a larger, safer and easier to clean working area
- Increase capacity and the number of samples
- Maintain compact footprint on your workbench

We see our most energy efficient refrigerated bath circulator, you'll see lower power consumption and energy costs

- Continuous operation in an energy efficient mode
- Variable speed control in pumps, fans and compressors
- Use only the energy you need for your application

We see an intuitive, 5.7˝ touchscreen color display, you'll see an easier, more efficient set up

- Glove/stylus friendly touchscreen interface
- Bright display to view critical readings
- Simple navigation and operation

We see a tool-less, drip-less rack and lid, you'll see enhanced safety and faster cleanup

- Tool-less rack accommodates a wide range of beaker and test tube sizes
- One lid that can be left-handed hinge, right-handed hinge, or unhinged
- Drip-less lid and optional gable cover reduce moisture and directs condensate back into bath

We see global voltage input, you'll see one bath that works worldwide

- Automatically detects the appropriate frequency and voltage
- One part number that works on all voltages worldwide
- Optimizes inventory management

We see USB and Bluetooth™ communications, you'll see remote operation at your fingertips[1]

- Utilize the communication and control features to ensure your samples are properly maintained
- Pair to any iOS or Android smart phone or tablet for remote operation and monitoring
- Obtain operational control from remote locations with our optional NesCom software or with Thermo Scientific™ Smart-Vue™ wireless monitoring solution

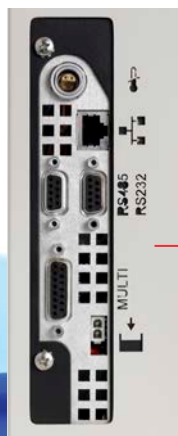1. See product literature for technology requirements.

Think outside the box

Each VersaCool bath comes with external circulation connections
so you can easily circulate the fluid from the bath to your application.

USB, MicroUSB, RS232
accessible from front of unit.[2]

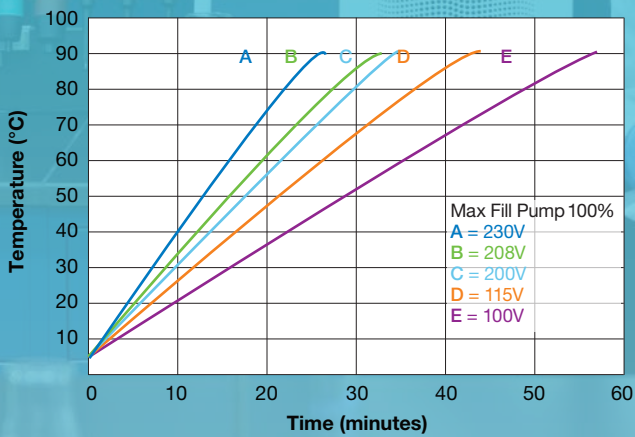2. See specifications chart for details.
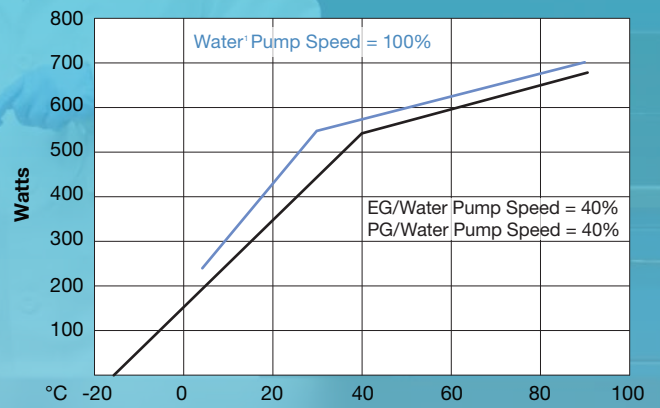
Comprehensive communications included.[2]

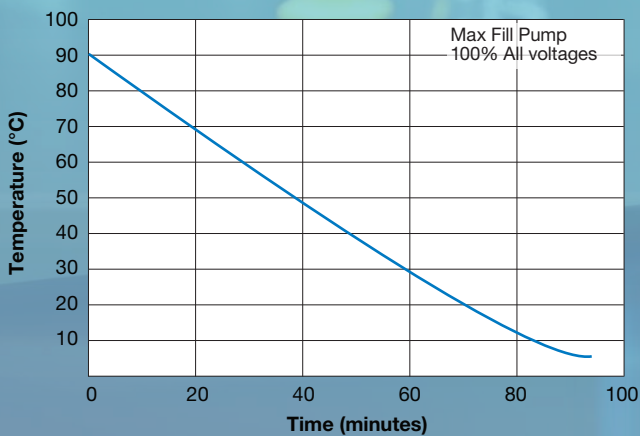Hose barbs and threaded adapters
included.[2]

Performance curves

Time to Temperature, Water

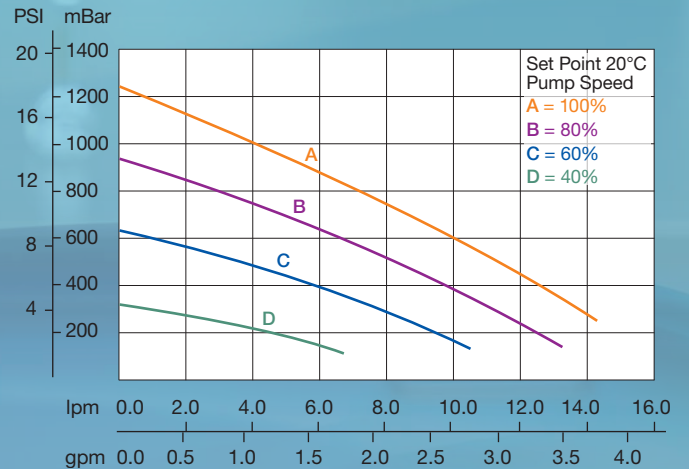Max Fill Pump 100%
A = 230V
B = 208V
C = 200V
D = 115V
E = 100V

(Temperature (°C) vs Time (minutes))

Cooling Capacity

Water' Pump Speed = 100%

EG/Water Pump Speed = 40%
PG/Water Pump Speed = 40%

(Watts vs °C)

Time to Temperature, Water

Max Fill Pump
100% All voltages

(Temperature (°C) vs Time (minutes))

Pump Performance

Set Point 20°C
Pump Speed
A = 100%
B = 80%
C = 60%
D = 40%

(PSI / mBar vs lpm / gpm)

1. Specifications at sea level at a +20°C ambient condition, at nominal operating voltage. Other fluids, process or ambient temperatures, altitude or operating voltage will affect performance. The bath was operating with the lid closed and no heat load or any external circulation. Minimum temperatures are only achieved with the above conditions. If your conditions vary from above, minimum temperature will most likely not be achieved.

2. Additional performance curves with different fluids are located in the VersaCool User Manual located at www.thermofisher.com.

Frequently asked questions

What's the difference between the VersaCool bath circulator and standard refrigerated circulating baths?

The VersaCool refrigerated bath circulator was designed with a focus on creating one of the largest work areas with the smallest footprint. Without the control head, heating element, cooling coils and pump in the bath area, you have more room to fit your samples, beakers, or test tubes. This headless design also makes it easier to clean and safer to operate. VersaCool circulator also features a lid that can be configured to the user's comfort – left-handed hinge, right-handed hinge, or unhinged.

How does global voltage work?

The VersaCool bath features global voltage for ordering and operational simplicity. It automatically detects the input voltage range with no user intervention for plug-and-play operation anywhere in the world. No matter where you or your customers are – one part number is all that is required.

Does the VersaCool bath come with external circulation connections?

Yes! Not only is VersaCool equipped with one of the most powerful bath pumps in its class (with industry standard 16M x1 male connections), a complete selection of hose barbs and threaded adapters are included as standard.
- ¼″, ½″, 8mm and 12mm hose barbs
- ¼″ MNPT and ½″ MNPT – ideal for use with quick disconnects

Does the VersaCool bath circulator come with remote monitoring capabilities?

Yes, the VersaCool comes standard with RS232, RS485, USB, and MicroUSB for serial communication with a PC or application that can use those standards. Through these methods complete control, monitoring and data logging are available. VersaCool also has an Analog multifunction port that has contacts for fault/warnings detection, remote on/off and 4-20mA, 1mV/°C and 0-10VDC ranges for setting and reporting temperature to your PLC. Lastly VersaCool has Bluetooth™ and can be controlled and monitored using your Bluetooth enabled iOS or Android phone or tablet. An integrated probe well is located on the back of the unit to accommodate RTD monitoring probes including the optional Smart-Vue system probe.

What are the programming parameters of the VersaCool bath circulator?

The VersaCool bath circulator has a wide variety of operation, convenience and safety parameters that can be selected or programmed by the user. For temperature ramping profiles it includes the ability to program temperature profiles over time, chart and data log. You can save profiles and use them on multiple baths by utilizing the USB flash-drive download and upload capabilities. You can set temperature limits, alarms, pump speeds, and much more using the touchscreen interface.

VersaCool Refrigerated Bath Circulator

Specifications

Specifications	
Minimum temperature (°C)	-20
Maximum temperature (°C)	150
Temperature stability (°C)	+/-0.03 [1]
Maximum bath volume (liters)	7 [1]
Cooling capacity (W)	425
Heater capacity (kW) 230V / 115V	2 / 1.2
Maximum pressure (mbar / psi)	1200 / 17.4
Maximum flow rate (LPM / GPM)	14.6 / 3.86
Ambient temperature range (°C)	10 to 40
Noise (dBA)	<58
Voltage range (VAC / Hz)	100-120 / 50 or 60 200-240 / 50 or 60

Dimensions / Weight

Dimensions / Weight	
Working area dimensions D x W x L	15.0 x 17.3 x 29.7 (cm) 5.9 x 6.8 x 11.7 (in)
Overall dimensions H x W x L	52.9 x 25.9 x 58.5 (cm) 20.9 x 10.2 x 23.1 (in)
Weight (kg / lbs)	36 / 80

Connectivity [2]

Connectivity [2]	
Bluetooth	✓
Ethernet	Pending
Micro USB – front	✓
USB – front	✓
RS232 – front / back	✓
RS485	✓
Remote sensor port	✓
Smart-Vue monitor port	✓

Compliance

Compliance	
CE	✓
RoHS	✓
UL / CSA	✓
WEEE	✓

Warranty

3 / 2 warranty [3]	3 year warranty on electronic components 2 year warranty on all other components

1. Note – Measured using water with the following nominal conditions: Nominal voltage, factory ambient (20°C to 24°C), work area cover on, no external pumping, data taken over 30+ minutes, at sea level.
2. See product literature for technology requirements.
3. *Subject to the terms and conditions of the standard limited warranty found in Thermo Fisher Scientific's Standard Terms and Conditions of Sale, available at www.thermoscientific.com.*

Ordering Information

Part Number	Description
231131300	VersaCool refrigerated bath circulator (includes VersaLid & Plumbing Adapter Kit)
230000001	Stainless Steel, Adjustable VersaRack • Holds up to 75 test tubes – 10mm ø • Holds up to 48 test tubes – 16mm ø • Holds up to 21 test tubes – 25mm ø
1600002	Stainless steel standard rack Choose a rack insert below:
1600003	Rack insert – includes top and bottom panels that will hold up to 100 test tubes that are 10mm ø
1600004	Rack insert – includes top and bottom panels that will hold up to 60 test tubes that are 16mm ø
1600005	Rack insert – includes top and bottom panel that will hold up to 25 test tubes that are 25mm ø
1600006	Rack insert – includes top and bottom panel with no holes
230000002	VersaLid (reversible hinged lid)
230000003	Gable Cover (reversible hinged cover for water, water / glycol applications)
230000005	Autorefill
230000006	Plumbing Adapter Kit – includes (6) pairs of fittings: 1/2˝ MPT and 1/4˝ MPT threaded adapters, 8mm, 12mm, 1/2˝ and 1/4˝ hose barbs, (3) pairs of clamps: 1/4˝, 3/8˝, 1/2˝, and (12) screws.
230000004	Trolley

Part Number	Tubing and Accessories
1600029	Adapts the M16x1 end of insulated stainless steel flexible tubing to 1/4˝ male pipe thread (MNPT). Contains 2 adapters
1600146	Plumbing Package – includes (4) clamps and (2) 5´ Viton tubing (uninsulated), temperature range of -30°C to +200°C, 12mm ø
1600147	Plumbing Package – includes (4) clamps and (2) 5´ Viton tubing (insulated), temperature range of -30°C to +200°C, 12mm ø
3330293	Insulated flexible stainless steel tubing with M16x1 threaded fittings 1.0m long. -50°C to +300°C
3330292	Insulated flexible stainless steel tubing with M16x1 threaded fittings 0.5m long. -50°C to +300°C
3330294	Insulated flexible stainless steel tubing with M16x1 threaded fittings 1.5m long. -50°C to +300°C
0012560	Connects two of the insulated flexible stainless steel tubing together

Part Number	Remote Temperature Sensors
3330818	Pt100 probe, teflon coated, flexible, 300mm long, 3mm ø, cable length 3m
3330429	Pt100 probe, 18/8 stainless steel tubing, 150mm long, 3mm ø, cable length 3m, up to 600°C

Part Number	Heat Transfer Fluids
610000000000	Silicone oil, temperature range +30°C to +150°C, 5 GAL
610000000005	Algaecide / corrosion inhibitor, Nalco Kit
610000000007	THERMO200 Treated water solution with Nalco, temperature range +5°C to +95°C, 5 GAL
9990203	Sil 180 Silicone oil bath liquid, temperature range -40°C to +200°C, 5L
9990204	Sil 180 Silicone oil bath liquid, temperature range -40°C to +200°C, 10L
9990213	Synth 260 bath liquid, temperature range +40°C to +250°C, 5L
9990214	Synth 260 bath liquid, temperature range +40°C to +250°C, 10L
160000000001	Ethylglycol, 5 GAL (approx. 19L) for low temperature applications to -30°C

Part Number	Software
422000000004	NEScom control / monitoring PC software

Add Thermo Scientific Smart-Vue wireless remote monitoring [4]

Safeguard the integrity of your precious samples by monitoring temperature and securely logging data to give you peace of mind.

Visit thermofisher.com/smart-vue to learn more.

4. *Smart-Vue is not available in all Radio Frequency(RF) regions. Please ask your sales representative to evaluate a Smart-Vue wireless solution that best meets your specific needs.*