

## Optima™ range

Heating circulators, heated and refrigerated circulating baths

### Optima™ range

3

year warranty

- INTUITIVE** › Supreme usability, easy to use and set up
- PRECISE** › Outstanding temperature control
- VERSATILE** › A complete range - heating circulators, heated and refrigerated circulating baths - cover basic to sophisticated needs
- PRACTICAL** › Excellent working area
- RELIABLE** › Robust design. Built and tested in Grant's UK manufacturing facility

#### Choose your heating circulator:

**T100** amb. +5 to 100°C

**TC120** amb. +5 to 120°C

**TX150** amb. +5 to 150°C

**TXF200** amb. +5 to 200°C



#### Combine with:

Refrigeration units

Stainless steel or plastic tanks



## Optima™ general purpose heating circulators - T100 and TC120

3

year warranty

- INTUITIVE** › Rotary dial and function key controls
- CLEAR** › Highly visible LED temperature display
- INTEGRATED** › TC120 integrated pump for external circulation
- RELIABLE** › Intelligent design, robust construction
- PRECISION** › Excellent temperature control
- SAFE** › Fixed and adjustable over temperature cut-out, clear alerts and alarms



## Optima™ advanced heating circulators - TX150 and TXF200

3

year warranty

- PRECISE** › Outstanding temperature control
- INTUITIVE** › Icon driven, language independent, full colour screen
- RELIABLE** › Smart design and robust construction
- EASY** › Simple to create profiles/programs
- HIGH SPEC** › USB/RS232, 5pt calibration, external probe socket, relay



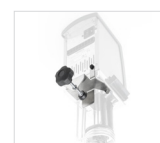
### Specifications

	T100	TC120	TX150	TXF200
				
Temperature range	ambient +5 to 100°C	ambient +5 to 120°C	ambient +5 to 150°C	ambient +5 to 200°C
Settable temperature range	0 to 100°C	-20 to 120°C*	-50 to 150°C*	-50 to 200°C*
Stability (DIN 12876-3 @70 °C)	±0.05°C	±0.05°C	±0.01°C	±0.01°C
Integral pump water flow / pump pressure	-	16L/min 210mBar	18L/min 310mBar	22L/min 530mBar
Programmable	-	-	1 program / 30 segments	10 programs / 100 segments

\*Cooling accessory required

#### T-Clamp for flexibility

Attach a thermostat to any vertical sided vessel with a maximum wall thickness of 35 mm rectangular tanks and 30 mm circular tanks, capacity up to 50L



ORDER CODE EXAMPLE: T100 or T100T (with clamp)

## Optima™ heated circulating baths





**3**

year warranty




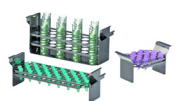



- EFFICIENT** › Efficient circulation for excellent temperature control
- PRACTICAL** › Excellent working area - gabled, hinged lid for tall vessels
- VERSATILE** › Modular format - combine a thermostat with a stainless steel or plastic bath
- RELIABLE** › Intelligent design, robust construction
- CONVENIENT** › Drain tap for emptying, raised feet for repositioning, dual position mounting thermostat



### Specifications

	Stainless steel tanks					Plastic tanks		
	ST5	ST12	ST18	ST26	ST38	P5	P12	P18
								
Tank capacity	5L	12L	18L	26L	38L	5L	12L	18L
Temperature range	≤ 200°C	≤ 200°C	≤ 200°C	≤ 200°C	≤ 200°C	≤ 99°C	≤ 99°C	≤ 99°C
Drain tap	-	•	•	•	•	-	-	-
Working area l x w / mm	150 x 150	205 x 300	385 x 300	385 x 300	575 x 300	120 x 150	210 x 280	280 x 325
Outer dimensions l x w x h / mm	330 x 280 x 200	360 x 330 x 200	540 x 330 x 200	540 x 330 x 255	730 x 330 x 255	240 x 330 x 180	415 x 350 x 180	600 x 365 x 180

### Accessories (full range available on website)

<b>Lids</b> A choice of lids to help reduce evaporation/heat loss and avoid sample contamination. Recommended when operating at 60°C and above 	<b>Stainless Steel Lid</b> Recommended when bath is being used constantly with water above 90°C 	<b>Polypropylene Spheres</b> Alternative to lids - helps reduce evaporation and heat loss. Recommended when operating at 60°C and above 	<b>Racks</b> Racks for micro-tubes from 0.5ml to 1.5ml and tubes from Ø10mm to Ø30mm to optimise the use of available bath capacity 	<b>Raised Shelves</b> Allows shallow vessels to be accommodated 	<b>Refrigerated Cooling Coils</b> C1G to allow systems to operate from 0 to 40°C and C2G for operation from -15 to 40°C 	<b>Heat Exchange Coil (CW5)</b> Attach to a supply of cooling tap water or refrigerated circulator for operation 2°C above coolant temperature 
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### Applications

Media tempering, thawing & incubating samples, water analysis techniques, material testing, temperature probe calibration, thermostat calibration, temperature control of external equipment/vessels

ORDER CODE EXAMPLE: T100-ST12 (T100 thermostat with ST12 tank)