

Optima™ R series, Refrigerated Thermostatic Baths and Circulators

TXF200-R4



TXF200-R5



Cost-effective and efficient multi-purpose systems for low-temperature applications.

- Powerful precision cooling, whether used in open-loop or closed-loop format
- Combining legendary quality, reliability and design for everyday usage — useful features, straightforward maintenance, compact design
- Robust, durable construction for longevity, reliability and long-term low cost of ownership
- Up to 4 years warranty

We recommend using the following liquids with refrigerated thermostatic baths and circulators:

- **-50 to 50°C:** Silicone oil — low viscosity (Bayer silicone M3);
- **-30 to 30°C:** 50% water 50% antifreeze (inhibited ethylene glycol);
- **0 to 30°C:** 80% water 20% antifreeze (inhibited ethylene glycol);
- **5 to 99.9°C:** Water.

Grant low-temperature circulators provide a source of precision cooling for many sensitive analytical procedures, including spectrophotometry, viscometry, refractometry and electrophoresis. They are suitable for use in both open and closed-loop circulation (i.e. remote vessel open or closed).

Alternatively, Grant RC series of recirculating chillers (closed circulators) can be used. These are generally needed for more powerful cooling requirements, e.g. the removal of mechanical or electrical heat produced in apparatus or machinery. Please contact marketing@biosan.lv for advice.

Model selection:

The R4 and R5 refrigeration ranges consist of two refrigeration units which can be combined with four heating circulators to offer a temperature range of -47°C to 100°C.

Capacity (l) Outer tank dimensions	• Working area (LxW) • Min/max liquid depths • Weight	T100 H: 333 mm D: 172 mm W: 120 mm	TC120 H: 333 mm D: 172 mm W: 141 mm	TX150 H: 342 mm D: 172 mm W: 141 mm	TXF200 H: 342 mm D: 172 mm W: 141 mm
R4 – 20 l stainless steel H: 550 mm D: 515 mm W: 393 mm; <i>Cat.num.: R4</i>	• 230 × 305 mm • 80/140 mm • 40.6 kg	T100-R4 0°C to 100°C	TC120-R4 -25°C to 100°C	TX150-R4 -30°C to 100°C	TXF200-R4 -30°C to 100°C
R5 – 12 L stainless steel H: 610 mm D: 590 mm W: 414 mm; <i>Cat.num.: R5</i>	• 260 × 115 mm • 120/180 mm • 48.3 kg	T100-R5 0°C to 100°C	TC120-R5 -25°C to 100°C	TX150-R5 -47°C to 100°C	TXF200-R5 -47°C to 100°C
Options and accessories					
Labwise™ PC software (optional)					
Allows two-way communication for status display, programming and data capture + USB cable provided		—	—	+	+
External probes (optional)					
TXPEP flexible plastic probe, 3 m cable		—	—	+	+
TXSEP stainless steel probe, 3 m cable		—	—	+	+
Remote switching device (optional)					
For switching mains power appliances on and off (up to max. 8 Amps)		—	—	1	1
Vertical turbine pumps (optional)					
Low noise, compact design. Supplied with pipe connections and special lid for fitting to tank, pipe bore 12.7 mm		Required only where application demands a higher pressure than that delivered by the internal pump to maintain flow			
VTP 1 max. pressure 1,000 mbar; max. flow 9 l/min	+				
VTP 2 max. pressure 1,650 mbar; max. flow 12 l/min	+				