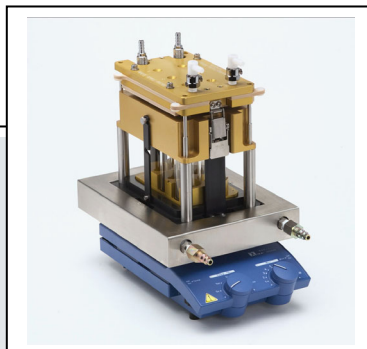
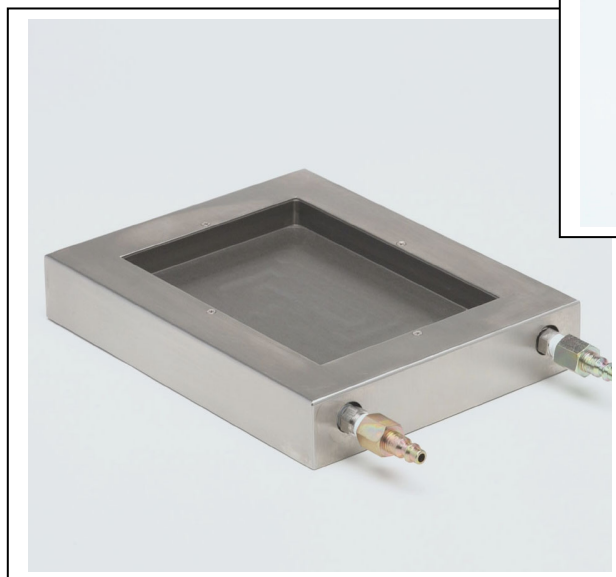


■ MiniBlock XT

Re-Circulating Heat/Cool Base

13000032 Version 2 3-03



- Highly controllable heating and cooling
- Excellent temperature precision and accuracy
- Can be placed on top of magnetic stirrer for mixing
- Suitable for process chemistry and temperature sensitive reactions

Heating and Cooling Performance

The following data was obtained using a 12-position MiniBlock XT, with each vessel containing 20ml of ethanol. Stirring was achieved using an IKA stirrer set at mixing speed 6 and 9.5mm cross stir bars. For heating and cooling, a Julabo PF40 recirculator was used with 50/50 glycol / water and a flow rate of 0.5-1.0 gallons per minute.

Run Number	Recirculator Bath Temp.	Actual temp. in XT Block	Time to 90% of Temp.	Standard Deviation	Configuration / Conditions
Controlled Cooling					
1	-25 °C	- 10.5 °C	31 min	0.6	No insulation, reflux layer not connected
2	-26 °C	- 17 °C	29 min	0.2	Fibre insulation, reflux layer not connected
3	-25 °C	- 21.5 °C	28 min	0.2	Fibre insulation, reflux layer connected to chiller
Controlled Heating					
4	78 °C	70.5 °C	19 min	0.3	Fibre insulation, no reflux layer
5	70 °C	62.9 °C	22 min	0.1	Fibre insulation, reflux layer not connected

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