

Julabo Case Study

JULABO FP50-HL

Cooling a 10 liters reactor from
+80 °C to +20 °C



Objective

This case study tests the cooling power of JULABO FP50-HL with a 10 liters glass reactor. The FP50-HL is connected to the reactor via two 2 m metal tubings. The FP50-HL is programmed to cool down from +80 °C to +20°C.

Test Conditions

JULABO unit	JULABO FP50-HL
Cooling power	+20 °C 0.9 kW
	0 °C 0.8 kW
	-20 °C 0.5 kW
Heating capacity	2 kW
Band limit	without
Flow pressure	0,4 bar
Bath fluid	JULABO Thermal H10
Reactor	10 liters glass reactor (Normag) filled with 10 liter JULABO Thermal H10
Jacket volume	5 l
Control	External (ICC)

Environment

Room temperature	20 °C
Humidity	45 %
Voltage	230 V /50 Hz



Test Results

See chart on back page: The FP50-HL cooling process from +80 °C to +20°C in 95 min without overshoot.

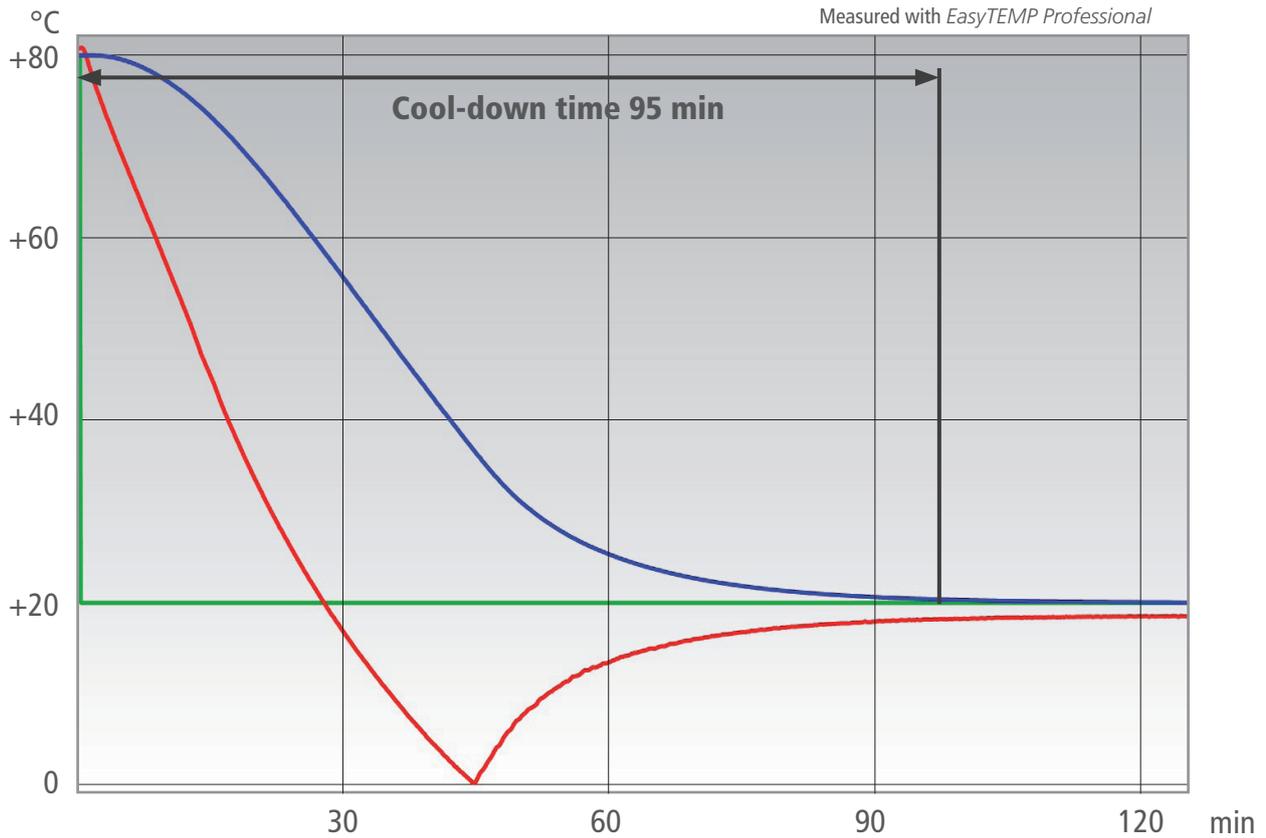
Tip

You can also use the robust Pt100 with PTFE coating.

More tips on
back page >>



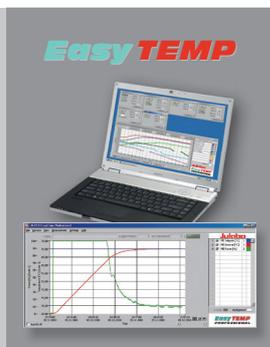
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- Setpoint
- Temperature in reactor's interior
- Temperature in reactor's jacket

Tip

Use the free of charge *EasyTEMP* software to control the units with the PC and to show the temperature curves graphically.



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