

Refrigerated/Heating Circulators

for working temperatures from -50 °C to +200 °C

Ultra-Low Refrigerated Circulators

for working temperatures to -95 °C

ACC

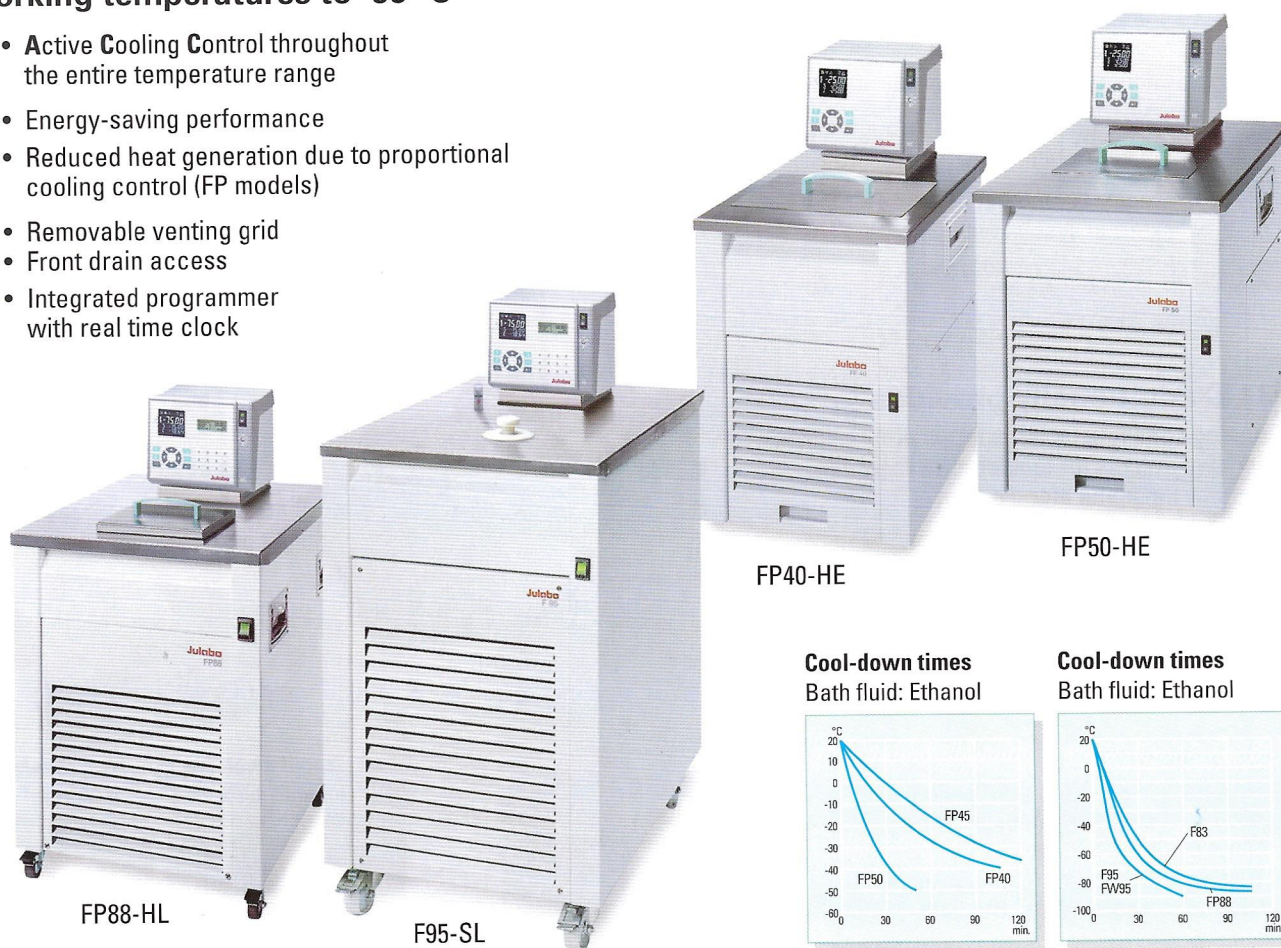
- Active Cooling Control throughout the entire temperature range



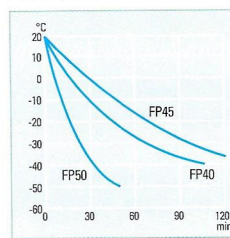
- Energy-saving performance
- Reduced heat generation due to proportional cooling control (FP models)



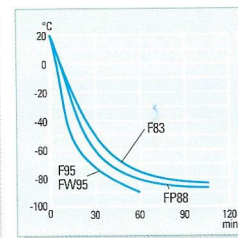
- Removable venting grid
- Front drain access
- Integrated programmer with real time clock



Cool-down times
Bath fluid: Ethanol



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JULABO Order No.	JULABO Model	Working temp. range °C	Temp. stab. °C	Heat. cap. kW ¹⁾	Cooling capacity W (Bath fluid: Ethanol)					Bath opening/ bath depth W x L / D in	Filling vol. Liters	Dimensions W x L x H in	Weight lbs
					20	0	-20	-40	-60	-80 °C			

Refrigerated/Heating and Ultra-Low Refrigerated Circulators

					ICC	TCF	ATC ³	PPC	Pt100	RS232	1x10				S3
9 210 640	FP40-HE	-40 ... 200	±0.01	2	680	500	320	40	--	--	9.1 x 5.5 / 7.9	16	14.6 x 18.1 x 28	107.8	
9 210 645	FP45-HE	-42 ... 200	±0.01	2	850	700	420	80	--	--	9.1 x 10.2 / 7.9	26	15 x 22.8 x 27.2	116.6	
9 210 650	FP50-HE	-50 ... 200	±0.01	2	900	800	500	160	--	--	7.1 x 4.7 / 5.9	8	16.5 x 19.3 x 28.3	125.4	

					ICC	TCF	ATC ³	PPC	Pt100	RS232 RS485	6x60				S3
9 310 640	FP40-HL	-40 ... 200	±0.01	2	680	500	320	40	--	--	9.1 x 5.5 / 7.9	16	14.6 x 18.1 x 28	107.8	
9 310 645	FP45-HL	-42 ... 200	±0.01	2	850	700	420	80	--	--	9.1 x 10.2 / 7.9	26	15 x 22.8 x 27.2	116.6	
9 310 650	FP50-HL	-50 ... 200	±0.01	2	900	800	500	160	--	--	7.1 x 4.7 / 5.9	8	16.5 x 19.3 x 28.3	125.4	

9 310 683	F83-HL	-83 ... 50	±0.02	1.3	900	780	720	600	380	120	5.1 x 5.9 / 6.3	8	21.7 x 23.6 x 36.2	259.6	
9 310 688	FP88-HL	-88 ... 100	±0.02	1.3	1100	960	920	730	590	150	5.1 x 5.9 / 6.3	8	21.7 x 23.6 x 36.2	266.2	
9 350 795 N	F95-SL	-95 ... 0	±0.05	3	--	2000	1900	1650	1200	360	dia. 2.8 / 7.9	22	23.2 x 29.9 x 45.7	470.8	
9 350 796 N	FW95-SL ²⁾	-95 ... 0	±0.05	3	--	2000	1900	1650	1200	360	dia. 2.8 / 7.9	22	23.2 x 29.9 x 45.7	470.8	

¹⁾ At 230 V/60 Hz or 230 V/50 Hz (F95-SL, FW95-SL: 230 V 3 Ph./60 Hz or 400 V 3 Ph./50 Hz)

Included with each unit: 2 ea barbed fittings for tubing 8 and 12 mm inner dia. (pump nozzles M16x1 male)

²⁾ FW95-SL is water-cooled.

Cooling water connection G 1/2" male with barbed fittings for tubing 1/2" inner dia.

Pump capacities: see curves on page 17