



HighTech Series

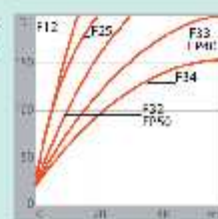
for working temperatures from -50 °C to +200 °C

The HighTech series features refrigerated/heating circulators with innovative technology for sophisticated applications. The instruments provide a powerful, electronically adjustable pressure and suction pump. The instruments can be used for internal as well as external (closed/open) temperature control applications.

Models with HE circulators

- The ICC Cascade control guarantees highest precision, stability ± 0.01 °C
- The VFD Comfort Display shows internal and external temperatures (resolution 0.01 °C)
- Integrated programmer (1 x 10 steps), real-time clock, RS232
- Powerful pressure and suction pump, electronically adjustable, automatic adjustment of pump capacity to viscosity characteristics

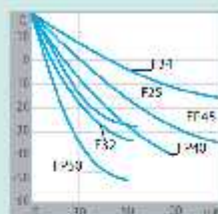
Heat-up time
Bath fluid: Thermal



Heat-up time
Bath fluid: Thermal



Cool-down time
Bath fluid: Ethanol



JULABO Order No.	JULABO Model	Working temperature range °C	Temp. stab. °C	Heat. cap. kW	Cooling capacity kW (Bath fluid: Ethanol)					Pump cap./Flow rate			Bath open./ Bath depth		Fill vol.	Dimensions
					+20	0	-20	-30	-40 °C	/min.	Pressure bar	Suction bar	W x L/D	cm	liters	W x L x H cm
9 212 625	F25-HE	-28 ... +200	+0.01	2	0.26	0.2	0.05	--	--	22-26	0.4-0.7	0.2-0.4	12 x 14 / 14	4.5	23 x 42 x 64	
9 212 625N	FN25-HE	-28 ... +200	+0.01	2	0.26	0.2	0.05	--	--	22-26	0.4-0.7	0.2-0.4	12 x 14 / 14	4.5	23 x 50 x 64	
9 212 632	F32-HE	-35 ... +200	+0.01	2	0.45	0.39	0.15	0.06	--	22-26	0.4-0.7	0.2-0.4	18 x 12 / 15	8	31 x 42 x 66	
9 212 632N	FN32-HE	-35 ... +200	+0.01	2	0.45	0.39	0.15	0.06	--	22-26	0.4-0.7	0.2-0.4	18 x 12 / 15	8	31 x 50 x 66	
9 212 634	F34-HE	-30 ... +150	+0.01	2	0.45	0.32	0.14	0.03	--	22-26	0.4-0.7	0.2-0.4	24 x 30 / 15	20	38 x 58 x 64	
9 212 640	FP40-HE	-40 ... +200	+0.01	2	0.68	0.5	0.32	0.17	0.04	22-26	0.4-0.7	0.2-0.4	23 x 14 / 20	16	37 x 46 x 71	
9 212 645	FP45-HE	-42 ... +200	+0.01	2	0.85	0.7	0.42	0.28	0.08	22-26	0.4-0.7	0.2-0.4	23 x 26 / 20	26	38 x 58 x 69	
9 212 650	FP50-HE	-50 ... +200	+0.01	2	0.9	0.8	0.5	0.32	0.16	22-26	0.4-0.7	0.2-0.4	18 x 12 / 15	8	42 x 49 x 72	

water-cooled model

9 212 651	FPW50-HE	-50 ... +200	+0.01	2	0.9	0.8	0.5	0.32	0.16	22-26	0.4-0.7	0.2-0.4	18 x 12 / 15	8	42 x 49 x 72	
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Included with each unit: 2 each barbed fittings for tubing 8 and 12 mm inner dia. (pump connections M16x1 male)



Applications

External temperature control applications, particularly for distillation apparatus and mini-plant installations, jacketed reactors, autoclaves, Kilo labs, pilot plants, etc.

HighTech Series

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

The top-of-the-line HL circulators provide sophisticated technology and maximum functionality for the most demanding applications.

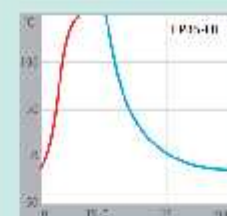
Additional advantages of models with HL circulators

- VFD Comfort Display and additional LCD Display
- Integrated programmer (6 x 60 steps) with real-time clock
- Combined RS232 / RS485 interface
- Temperature display in °C and °F
- Stakei connection for solenoid valve

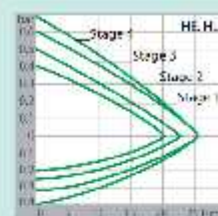
Note: FP models feature an energy-saving proportional cooling control.



Heat-up/Cool-down time
Bath fluid: Thermal



Pump capacity
Bath fluid: water



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					+20	0	-20	-30	-40 °C	l/min.	bar	Suction bar	W x L / D	cm		
9 312 625	F25-HL	-28 ... +200	±0.01	2	0.26	0.2	0.06	--	--	22-26	0.4-0.7	0.2-0.4	12 x 14 / 14	14	4.5	23 x 42 x 64
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9 312 633	F33-HL	-30 ... +200	±0.01	2	0.5	0.32	0.12	0.03	--	22-26	0.4-0.7	0.2-0.4	23 x 14 / 20	20	16	36 x 46 x 71
9 312 618	FP35-HL	-35 ... +150	±0.01	2	0.45	0.39	0.15	0.05	--	22-26	0.4-0.7	0.2-0.4	18 x 12 / --	--	2.5	31 x 42 x 66
9 312 640	FP40-HL	-40 ... +200	±0.01	2	0.68	0.5	0.32	0.17	0.04	22-26	0.4-0.7	0.2-0.4	23 x 14 / 20	20	16	37 x 46 x 71
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