

REFRIGERATED HEATING CIRCULATORS

TopTech | HighTech

JULABO cold as ice: cool refrigeration technology.

Refrigerated circulators made by JULABO are used worldwide. Whether in research, material testing or in technical systems – the well proven and reliable technology is valued by users in all industries worldwide. The JULABO range of circulators offers the functional solution for your day-to-day work, whether it is a routine task or highly demanding: TopTech and HighTech – two model series for every requirement.

Powerful.

- Working temperature ranges from -50 °C to +200 °C
- Powerful circulating pumps – electronically adjustable in steps
- Intelligent warning and safety functions – for more safety
- Unique early warning system for low liquid level (DBGM)
- Digital and analog interface for flexible communication
- Removable venting grid for quick dust removal
- Active Cooling Control: Maximum cooling capacity at all temperatures



Product brochure
online at
www.julabo.us

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Refrigerated heating circulators – technical data

The refrigerated circulators of the TopTech and HighTech series provide a heating capacity of 1 kW or 2 kW as well as a temperature stability of ± 0.01 °C, for MA models, the temperature stability amounts to ± 0.02 °C.

Model	Order No.	Working temperature range °C	Cooling capacity (kW) at bath temperature in °C			Pump capacity			Bath opening/ bath depth W x L / D in	Filling volume liters	Dimensions W x D x H in
			+20	0	-20	Pressure psi	Suction psi	Flow rate l/min			

Refrigerated heating circulators TopTech

F12-MA	9 153 612	-20 ... +200	0.16	0.1	0.02	3.3-6.5	-	11-16	5.1 x 5.9 / 5.1	4.5	7.9 x 14.2 / 22
F25-MA	9 153 625	-28 ... +200	0.26	0.2	0.06	3.3-6.5	-	11-16	4.7 x 5.5 / 5.5	4.5	9.1 x 16.5 / 24
F32-MA	9 153 632	-35 ... +200	0.45	0.39	0.15	3.3-6.5	-	11-16	7.1 x 4.7 / 5.9	8	12.2 x 16.5 / 25.5
F33-MA	9 153 633	-30 ... +200	0.5	0.32	0.12	3.3-6.5	-	11-16	9.1 x 5.5 / 7.9	16	14.2 x 18.1 / 27.2
F34-MA	9 153 634	-30 ... +150	0.45	0.32	0.14	3.3-6.5	-	11-16	9.4 x 11.8 / 5.9	20	15 x 22.8 / 24.4
FP35-MA	9 153 618	-35 ... +150	0.45	0.39	0.15	3.3-6.5	-	11-16	7.1 x 4.7 / -	2.5	12.2 x 16.5 / 25.2
FP40-MA	9 153 640	-40 ... +200	0.68	0.5	0.32	3.3-6.5	-	11-16	9.1 x 5.5 / 7.9	16	14.6 x 18.1 / 27.2
FP50-MA	9 153 650	-50 ... +200	0.9	0.8	0.5	3.3-6.5	-	11-16	7.1 x 4.7 / 5.9	8	16.5 x 19.3 / 27.6
FPW50-MA	9 153 651	-50 ... +200	0.9	0.8	0.5	3.3-6.5	-	11-16	7.1 x 4.7 / 5.9	8	16.5 x 19.3 / 27.6
F25-ME	9 162 625	-28 ... +200	0.26	0.2	0.06	3.3-6.5	-	11-16	4.7 x 5.5 / 5.5	4.5	9.1 x 16.5 / 24
F26-ME	9 162 626	-28 ... +200	0.26	0.2	0.06	3.3-6.5	-	11-16	4.7 x 5.5 / 5.5	4.5	16.5 x 16.5 / 16.5
F32-ME	9 162 632	-35 ... +200	0.45	0.39	0.15	3.3-6.5	-	11-16	7.1 x 4.7 / 5.9	8	12.2 x 16.5 / 25.5
F33-ME	9 162 633	-30 ... +200	0.5	0.32	0.12	3.3-6.5	-	11-16	9.1 x 5.5 / 7.9	16	14.2 x 18.1 / 27.2
F34-ME	9 162 634	-30 ... +150	0.45	0.32	0.14	3.3-6.5	-	11-16	9.4 x 11.8 / 5.9	20	15 x 22.8 / 24.4
FP40-ME	9 162 640	-40 ... +200	0.68	0.5	0.32	3.3-6.5	-	11-16	9.1 x 5.5 / 7.9	16	14.6 x 18.1 / 27.2
FP50-ME	9 162 650	-50 ... +200	0.9	0.8	0.5	3.3-6.5	-	11-16	7.1 x 4.7 / 5.9	8	16.5 x 19.3 / 27.6
FPW50-ME	9 162 651	-50 ... +200	0.9	0.8	0.5	3.3-6.5	-	11-16	7.1 x 4.7 / 5.9	8	16.5 x 19.3 / 27.6

Refrigerated heating circulators HighTech

F25-HE	9 212 625	-28 ... +200	0.26	0.2	0.06	5.8-10.2	2.9-5.8	22-26	4.7 x 5.5 / 5.5	4.5	9.1 x 16.5 / 25.2
F32-HE	9 212 632	-35 ... +200	0.45	0.39	0.15	5.8-10.2	2.9-5.8	22-26	7.1 x 4.7 / 5.9	8	12.2 x 16.5 / 26
F34-HE	9 212 634	-30 ... +150	0.45	0.32	0.14	5.8-10.2	2.9-5.8	22-26	9.4 x 11.8 / 5.9	20	15 x 22.8 / 25.2
FP40-HE	9 212 640	-40 ... +200	0.68	0.5	0.32	5.8-10.2	2.9-5.8	22-26	9.1 x 5.5 / 7.9	16	14.6 x 18.1 / 28
FP50-HE	9 212 650	-50 ... +200	0.9	0.8	0.5	5.8-10.2	2.9-5.8	22-26	7.1 x 4.7 / 5.9	8	16.5 x 19.3 / 28.3
FPW50-HE	9 212 651	-50 ... +200	0.9	0.8	0.5	5.8-10.2	2.9-5.8	22-26	7.1 x 4.7 / 5.9	8	16.5 x 19.3 / 28.3
F25-HL	9 312 625	-28 ... +200	0.26	0.2	0.06	5.8-10.2	2.9-5.8	22-26	4.7 x 5.5 / 5.5	4.5	9.1 x 16.5 / 25.2
F32-HL	9 312 632	-35 ... +200	0.45	0.39	0.15	5.8-10.2	2.9-5.8	22-26	7.1 x 4.7 / 5.9	8	12.2 x 16.5 / 26
F33-HL	9 312 633	-30 ... +200	0.5	0.32	0.12	5.8-10.2	2.9-5.8	22-26	9.1 x 5.5 / 7.9	16	14.2 x 18.1 / 28
FP35-HL	9 312 618	-35 ... +150	0.45	0.39	0.15	5.8-10.2	2.9-5.8	22-26	7.1 x 4.7 / -	2.5	12.2 x 16.5 / 26
FP40-HL	9 312 640	-40 ... +200	0.68	0.5	0.32	5.8-10.2	2.9-5.8	22-26	9.1 x 5.5 / 7.9	16	14.6 x 18.1 / 28
FP50-HL	9 312 650	-50 ... +200	0.9	0.8	0.5	5.8-10.2	2.9-5.8	22-26	7.1 x 4.7 / 5.9	8	16.5 x 19.3 / 28.3
FPW50-HL	9 312 651	-50 ... +200	0.9	0.8	0.5	5.8-10.2	2.9-5.8	22-26	7.1 x 4.7 / 5.9	8	16.5 x 19.3 / 28.3



CRYO-COMPACT CIRCULATORS ULTRA-LOW REFRIGERATED CIRCULATORS

CF | TopTech | HighTech

Compact and powerful – CF series

The CF series offers very compact refrigerated heating circulators. The small dimensions enable installation of the instruments in the smallest of spaces or within a technical apparatus. All models feature 1 kW or 2 kW heating capacity and protection class III per DIN12876-1. A maximum permissible ambient temperature of +40 °C as well as ventilation air cooling permit the installation close to other instruments or directly in the exhaust of a test system.

JULABO ice-cold: Nothing is cooler.

JULABO ultra-low refrigerated circulators for heating and cooling in a working temperature range from -95 °C to +150°C. The instruments are suited for external temperature control applications and/or for temperature control directly in the circulator bath. The instruments offer particularly high heating and cooling capacities for short heat-up and cool-down times, even with large-volume, external consumers. FP models with proportional cooling power control for energy savings and low waste heat. W models are water-cooled. With handles and/or rollers for easy transport and drain tap for easy emptying of the bath fluid. The instruments feature improved insulation, a level indicator as well as a heated bath cover plate to prevent condensation or ice build-up. Typical applications are the temperature control of jacketed reaction vessels, autoclaves, miniplant installations, kilo labs, freezing point determination, low temperature calibration, petroleum testing, etc.



Product brochure
online at
www.julabo.us



Filling port with
insulated cover



CF cryo-compact circulators – technical data

The CF series provides a heating capacity of 1 kW or 2 kW and a temperature stability of ± 0.02 °C, for CF30 and CF40, it amounts to ± 0.03 °C.

Model	Order No.	Working temperature range °C	Cooling capacity (kW) at bath temperature in °C			Pump capacity			Bath opening/ bath depth W × L / D in	Filling volume liters	Dimensions W × D × H in
			+20	0	-20	Pressure psi	Suction psi	Flow rate l/min			
CF30	9 400 330	-30 ... +150	0.32	0.25	0.15	5.1	-	15	6.3 × 1.2 / 5.5	3.5	9.4 × 18.1 × 15.7
CF40	9 400 340	-40 ... +150	0.47	0.4	0.28	5.1	-	15	7.5 × 1.2 / 5.5	5.5	11 × 18.1 × 18.1
CF31	9 400 331	-30 ... +200	0.32	0.25	0.15	5.8-10.2	2.9-5.8	22-26	6.3 × 1.2 / 5.5	3.5	9.4 × 18.1 × 15.7
CF41	9 400 341	-40 ... +200	0.47	0.4	0.28	5.8-10.2	2.9-5.8	22-26	7.5 × 1.2 / 5.5	5.5	11 × 18.1 × 18.1

Accessories at
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Ultra-low refrigerated circulators – technical data

The ultra-low refrigerated circulators of the TopTech and HighTech series feature a heating capacity of 3 kW, except the F89-ME, FP89-HL models (heating capacity 1.3 kW). All models offer a temperature stability of ± 0.05 °C, except the ME & HE models, which offer ± 0.02 °C, and FPW91-SL with ± 0.2 °C temperature stability.

Model	Order No.	Working temperature range °C	Cooling capacity (kW) at bath temperature in °C			Pump capacity			Bath opening/ bath depth W x L / D in	Filling volume liters	Dimensions W x D x H in
			+20	0	-20	Pressure psi	Suction psi	Flow rate l/min			

Ultra-Low Refrigerated Circulators TopTech

FP89-ME	9 162 689	-90 ... +100	1.0	0.92	0.88	3.3-6.5	-	11-16	5.1 x 5.9 / 6.3	8	21.7 x 23.6 x 35.4
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Ultra-Low Refrigerated Circulators HighTech

FP51-SL	9 352 751	-51 ... +200	2.0	1.5	1.0	5.8-10.2	2.9-5.8	22-26	7.1 x 4.7 / 7.9	11	18.1 x 21.7 x 35
FP52-SL	9 352 752	-60 ... +100	3.0	2.8	1.6	5.8-10.2	2.9-5.8	22-26	11 x 9.1 / 8.7	24	23.2 x 29.9 x 45.7
FP55-SL	9 352 755	-60 ... +100	5.2	4.1	2.2	5.8-10.2	2.9-5.8	22-26	11 x 9.1 / 8.7	27	33.5 x 29.9 x 45.7
FP89-HL	9 312 689	-90 ... +100	1.0	0.92	0.88	5.8-10.2	2.9-5.8	22-26	5.1 x 5.9 / 6.3	8	21.7 x 23.6 x 36.2
FP90-SL	9 352 790	-90 ... +100	1.8	1.7	1.6	5.8-10.2	2.9-5.8	22-26	11 x 9.1 / 8.7	22	23.2 x 29.9 x 45.7
FPW52-SL	9 352 753	-60 ... +100	3.0	2.8	1.6	5.8-10.2	2.9-5.8	22-26	11 x 9.1 / 8.7	24	23.2 x 29.9 x 45.7
FPW55-SL	9 352 756	-60 ... +100	5.5	4.1	2.2	5.8-10.2	2.9-5.8	22-26	11 x 9.1 / 8.7	27	23.2 x 29.9 x 45.7
FPW90-SL	9 352 791	-90 ... +100	1.8	1.7	1.6	5.8-10.2	2.9-5.8	22-26	11 x 9.1 / 8.7	22	23.2 x 29.9 x 45.7
FPW91-SL	9 352 793	-91 ... +100	4.5	4.1	3.7	5.8-10.2	2.9-5.8	22-26	11 x 9.1 / 8.7	22	33.5 x 29.9 x 45.7
FP52-SL	9 352 752N	-60 ... +100	3.0	2.8	1.6	5.8-10.2	2.9-5.8	22-26	Filling port	24	23.2 x 29.9 x 45.7
FP55-SL	9 352 755N	-60 ... +100	5.2	4.1	2.2	5.8-10.2	2.9-5.8	22-26	Filling port	27	33.5 x 29.9 x 45.7
FP52-SL	9 352 752N150	-60 ... +150	3.0	2.8	1.6	5.8-10.2	2.9-5.8	22-26	Filling port	24	23.2 x 29.9 x 45.7
FP55-SL	9 352 755N150	-60 ... +150	5.2	4.1	2.2	5.8-10.2	2.9-5.8	22-26	Filling port	27	33.5 x 29.9 x 45.7
FPW52-SL	9 352 753N	-60 ... +100	3.0	2.8	1.6	5.8-10.2	2.9-5.8	22-26	Filling port	24	23.2 x 29.9 x 45.7
FPW55-SL	9 352 756N	-60 ... +100	5.5	4.1	2.2	5.8-10.2	2.9-5.8	22-26	Filling port	27	23.2 x 29.9 x 45.7
FPW52-SL	9 352 753N150	-60 ... +150	3.0	2.8	1.6	5.8-10.2	2.9-5.8	22-26	Filling port	24	23.2 x 29.9 x 45.7
FPW55-SL	9 352 756N150	-60 ... +150	5.5	4.1	2.2	5.8-10.2	2.9-5.8	22-26	Filling port	27	23.2 x 29.9 x 45.7
FP90-SL	9 352 790N	-90 ... +100	1.8	1.7	1.6	5.8-10.2	2.9-5.8	22-26	Filling port	22	23.2 x 29.9 x 45.7
F95-SL	9 352 795N	-95 ... 0	-	1.7	1.5	5.8-10.2	2.9-5.8	22-26	Filling port	22	23.2 x 29.9 x 45.7
FP90-SL	9 352 790N150	-90 ... +150	1.8	1.7	1.6	5.8-10.2	2.9-5.8	22-26	Filling port	22	23.2 x 29.9 x 45.7
FPW90-SL	9 352 791N	-90 ... +100	1.8	1.7	1.6	5.8-10.2	2.9-5.8	22-26	Filling port	22	23.2 x 29.9 x 45.7
FPW91-SL	9 352 793N	-91 ... +100	4.5	4.1	3.7	5.8-10.2	2.9-5.8	22-26	Filling port	22	33.5 x 29.9 x 45.7
FW95-SL	9 352 796N	-95 ... 0	-	1.7	1.5	5.8-10.2	2.9-5.8	22-26	Filling port	22	23.2 x 29.9 x 45.7
FPW90-SL	9 352 791N150	-90 ... +150	1.8	1.7	1.6	5.8-10.2	2.9-5.8	22-26	Filling port	22	23.2 x 29.9 x 45.7