



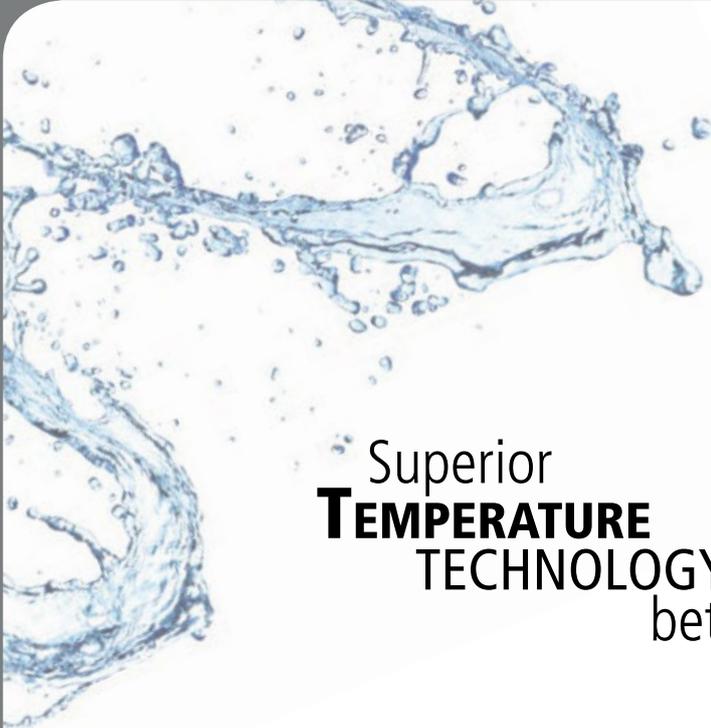
**Julabo**  
THE TEMPERATURE CONTROL COMPANY

# PRODUCT PORTFOLIO

JULABO Products from -95 °C ... +400 °C



ENGLISH



Superior  
**TEMPERATURE**  
TECHNOLOGY for a  
better **Life**



## Content



Refrigerated and Heating Circulators  
CORIO, TopTech, HighTech

06 - 15



Highly Dynamic Temperature Control Systems  
PRESTO, FORTE HT

16 - 17



Recirculating Coolers and Chillers  
F-, FL-, FC-Reihe, SemiChiller

18 - 21



Water Baths and Shaking Water Baths  
PURA, SW

22 - 23



Instruments for Special Requirements  
Calibration Baths, Visco Baths, Forcing Test Circulators,  
Immersion Coolers, Flow-Through Coolers,  
Laboratory Temperature Controllers, Refrigerators for Chemicals,  
Wireless Communication & Software

24 - 25



JULABO Information

26 - 27

# THE RIGHT PRODUCT FOR EVERY APPLI



## REFRIGERATED AND HEATING CIRCULATORS CORIO, TopTech, HighTech

Refrigerated and heating 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. Focused on your requirements, JULABO circulators have set the benchmark for temperature control technology for decades.

The JULABO range of circulators offers the functional solution for your day-to-day work, whether it is a routine task or highly demanding: CORIO, TopTech and HighTech – three model series for every requirement and every budget.



## HIGHLY DYNAMIC TEMPERATURE CONTROL SYSTEMS PRESTO, FORTE HT

Highly dynamic temperature control systems solve even difficult temperature control tasks within no time. With their extremely short heat-up and cool-down times, large working temperature ranges without changing the bath fluid, and high output data, they are ideal for compensating temperature differences in external applications extremely quickly. Opposite to conventional circulators, the bath fluid can be used in an extended temperature range and for a significantly longer time.



## RECIRCULATING COOLERS AND CHILLERS F, FL, FC Series, SemiChiller

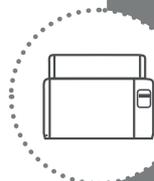
JULABO recirculating coolers can handle virtually any cooling requirements in laboratories or industrial environments. Their efficiency makes them an environmentally-friendly and economical alternative to cooling with tap water.

Compact models from JULABO are ideal for placement on or underneath a lab bench. JULABO offers several powerful models with up to 20 kW of cooling capacity for applications in industrial environments.



# CATION

## WATER BATHS AND SHAKING WATER BATHS PURA, SW



JULABO offers the water baths and shaking water baths for routine applications, such as temperature applications for samples, incubation, material testing, corrosion tests, as well as temperature control applications of cultivations or temperature tests for food and beverages. All models are high quality, durable instruments. Their working temperature ranges from +20 °C to +99.9 °C qualify them for a wide range of applications.

## INSTRUMENTS FOR SPECIAL REQUIREMENTS

Calibration Baths, Visco Baths, Forcing Test Circulators, Immersion Coolers, Flow-Through Coolers, Laboratory Temperature Controllers, Refrigerators for Chemicals, Wireless Communication & Software



With a temperature stability of  $\pm 0.005$  °C, calibration baths are suited for the calibration of measuring instruments, thermometers etc. Visco baths are used for highly precise measuring applications with viscometers and densimeters. The forcing test circulator specializes in the determination of the 'best before' date of beer. Immersion and flow-through coolers are the ideal add-on to heating circulators for quick cool-down. Temperature Controllers are used for measuring, controlling, and monitoring any electrically heated equipment in laboratories. The refrigerators for chemicals are suited for storage and cooling of hazardous substances.





# REFRIGERATED CIRCULATORS

## CORIO



Product brochure  
online at  
[www.julabo.com](http://www.julabo.com)

The new instruments of the CORIO series, the introductory model into professional temperature control, stand for future-oriented technology with high demands on accuracy, economics and handling. The CORIO program offers different models for daily work and routine tasks in the lab.

### Powerful.

- For internal and/or external applications
- Models for working temperatures from -40 °C to +150 °C
- Very quiet operation
- All models feature user-friendly, intuitive operation
- Bright displays – easy to read even from a distance
- State-of-the-art control technology – for quick results and precision
- USB data port
- Refrigerated units without side vents



# CORIO™

## Saves energy.

CORIO comes with various operating modes for the refrigerated unit: permanently on, permanently off, or on as refrigeration is needed. CORIO CD-600F to CORIO CD-1001F additionally contain a continuous automatic adjustment of the cooling capacity at the operating point to minimize power consumption and heat waste.

## Maintenance. Friendly.

The magnetic front grid can be removed easily for user-friendly cleaning and maintenance. No tools are needed.



Accessories at  
[www.julabo.com](http://www.julabo.com)



## CORIO refrigerated circulators – technical data

The refrigerated circulators of the CORIO series provide a heating capacity of 2 kW as well as a temperature stability of  $\pm 0.03$  °C.

Model	Order No.	Working temperature range °C	Cooling capacity (kW) at bath temperature in °C			Pump capacity			Bath opening/ bath depth W x L / D cm	Filling volume liters	Dimensions W x D x H cm
			+20	0	-20	Pressure bar	Suction bar	Flow rate l/min			
CD-200F	9 012 701	-20 ... +150	0.22	0.17	0.06	0.35	-	15	13 x 15 / 15	3 ... 4	23 x 39 x 65
CD-201F	9 012 702	-20 ... +150	0.22	0.16	0.06	0.35	-	15	13 x 15 / 15	3 ... 4	44 x 41 x 44
CD-300F	9 012 703	-25 ... +150	0.31	0.28	0.11	0.35	-	15	13 x 15 / 15	3 ... 4	24 x 42 x 66
CD-600F	9 012 704	-35 ... +150	0.6	0.53	0.22	0.35	-	15	22 x 15 / 15	5 ... 7.5	33 x 47 x 69
CD-601F	9 012 705	-40 ... +150	0.6	0.5	0.2	0.35	-	15	22 x 15 / 20	8 ... 10	36 x 46 x 74
CD-900F	9 012 706	-40 ... +150	0.9	0.8	0.35	0.35	-	15	26 x 35 / 20	21 ... 30	39 x 62 x 75
CD-1000F	9 012 707	-40 ... +150	1	0.9	0.5	0.35	-	15	22 x 15 / 15	5 ... 7.5	42 x 49 x 70
CD-1001F	9 012 708	-38 ... +100	1	0.9	0.35	0.35	-	15	35 x 41 / 30	42 ... 56	45 x 64 x 95



# REFRIGERATED HEATING CIRCULATORS

TopTech | HighTech



Product brochure  
online at  
[www.julabo.com](http://www.julabo.com)

## 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



Climate-friendly  
temperature control with  
FN refrigerated circulators  
with natural refrigerant.



## FN refrigerated heating circulators – technical data

The FN refrigerated circulators with natural refrigerant provide a heating capacity of 2 kW as well as a temperature stability of  $\pm 0.01$  °C, for MA models, the temperature stability amounts to  $\pm 0.02$  °C.

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

### FN refrigerated heating circulators TopTech

FN25-MA	9 153 625N	-28 ... +200	0.26	0.2	0.06	0.23-0.45	-	11-16	12 × 14 / 14	4.5	23 × 50 × 61
FN32-MA	9 153 632N	-35 ... +200	0.45	0.39	0.15	0.23-0.45	-	11-16	18 × 12 / 15	8	31 × 50 × 64
FN25-ME	9 162 625N	-28 ... +200	0.26	0.2	0.06	0.23-0.45	-	11-16	12 × 14 / 14	4.5	23 × 50 × 61
FN32-ME	9 162 632N	-35 ... +200	0.45	0.39	0.15	0.23-0.45	-	11-16	18 × 12 / 15	8	31 × 50 × 64

### FN refrigerated heating circulators HighTech

FN25-HE	9 212 625N	-28 ... +200	0.26	0.2	0.06	0.4-0.7	0.2-0.4	22-26	12 × 14 / 14	4.5	23 × 50 × 64
FN32-HE	9 212 632N	-35 ... +200	0.45	0.39	0.15	0.4-0.7	0.2-0.4	22-26	18 × 12 / 15	8	31 × 50 × 66
FN25-HL	9 312 625N	-28 ... +200	0.26	0.2	0.06	0.4-0.7	0.2-0.4	22-26	12 × 14 / 14	4.5	23 × 50 × 64
FN32-HL	9 312 632N	-35 ... +200	0.45	0.39	0.15	0.4-0.7	0.2-0.4	22-26	18 × 12 / 15	8	31 × 50 × 66



### Refrigerated heating circulators – technical data

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

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

#### Refrigerated heating circulators TopTech

F12-MA	9 153 612	-20 ... +200	0.16	0.1	0.02	0.23-0.45	-	11-16	13×15 / 13	4.5	20×36×56
F25-MA	9 153 625	-28 ... +200	0.26	0.2	0.06	0.23-0.45	-	11-16	12×14 / 14	4.5	23×42×61
F32-MA	9 153 632	-35 ... +200	0.45	0.39	0.15	0.23-0.45	-	11-16	18×12 / 15	8	31×42×64
F33-MA	9 153 633	-30 ... +200	0.5	0.32	0.12	0.23-0.45	-	11-16	23×14 / 20	16	36×46×69
F34-MA	9 153 634	-30 ... +150	0.45	0.32	0.14	0.23-0.45	-	11-16	24×30 / 15	20	38×58×62
FP35-MA	9 153 618	-35 ... +150	0.45	0.39	0.15	0.23-0.45	-	11-16	18×12 / -	2.5	31×42×64
FP40-MA	9 153 640	-40 ... +200	0.68	0.5	0.32	0.23-0.45	-	11-16	23×14 / 20	16	37×46×69
FP50-MA	9 153 650	-50 ... +200	0.9	0.8	0.5	0.23-0.45	-	11-16	18×12 / 15	8	42×49×70
FPW50-MA	9 153 651	-50 ... +200	0.9	0.8	0.5	0.23-0.45	-	11-16	18×12 / 15	8	42×49×70
F25-ME	9 162 625	-28 ... +200	0.26	0.2	0.06	0.23-0.45	-	11-16	12×14 / 14	4.5	23×42×61
F26-ME	9 162 626	-28 ... +200	0.26	0.2	0.06	0.23-0.45	-	11-16	12×14 / 14	4.5	42×42×42
F32-ME	9 162 632	-35 ... +200	0.45	0.39	0.15	0.23-0.45	-	11-16	18×12 / 15	8	31×42×64
F33-ME	9 162 633	-30 ... +200	0.5	0.32	0.12	0.23-0.45	-	11-16	23×14 / 20	16	36×46×69
F34-ME	9 162 634	-30 ... +150	0.45	0.32	0.14	0.23-0.45	-	11-16	24×30 / 15	20	38×58×62
FP40-ME	9 162 640	-40 ... +200	0.68	0.5	0.32	0.23-0.45	-	11-16	23×14 / 20	16	37×46×69
FP50-ME	9 162 650	-50 ... +200	0.9	0.8	0.5	0.23-0.45	-	11-16	18×12 / 15	8	42×49×70
FPW50-ME	9 162 651	-50 ... +200	0.9	0.8	0.5	0.23-0.45	-	11-16	18×12 / 15	8	42×49×70

#### Refrigerated heating circulators HighTech

F25-HE	9 212 625	-28 ... +200	0.26	0.2	0.06	0.4-0.7	0.2-0.4	22-26	12×14 / 14	4.5	23×42×64
F32-HE	9 212 632	-35 ... +200	0.45	0.39	0.15	0.4-0.7	0.2-0.4	22-26	18×12 / 15	8	31×42×66
F34-HE	9 212 634	-30 ... +150	0.45	0.32	0.14	0.4-0.7	0.2-0.4	22-26	24×30 / 15	20	38×58×64
FP40-HE	9 212 640	-40 ... +200	0.68	0.5	0.32	0.4-0.7	0.2-0.4	22-26	23×14 / 20	16	37×46×71
FP50-HE	9 212 650	-50 ... +200	0.9	0.8	0.5	0.4-0.7	0.2-0.4	22-26	18×12 / 15	8	42×49×72
FPW50-HE	9 212 651	-50 ... +200	0.9	0.8	0.5	0.4-0.7	0.2-0.4	22-26	18×12 / 15	8	42×49×72
F25-HL	9 312 625	-28 ... +200	0.26	0.2	0.06	0.4-0.7	0.2-0.4	22-26	12×14 / 14	4.5	23×42×64
F32-HL	9 312 632	-35 ... +200	0.45	0.39	0.15	0.4-0.7	0.2-0.4	22-26	18×12 / 15	8	31×42×66
F33-HL	9 312 633	-30 ... +200	0.5	0.32	0.12	0.4-0.7	0.2-0.4	22-26	23×14 / 20	16	36×46×71
FP35-HL	9 312 618	-35 ... +150	0.45	0.39	0.15	0.4-0.7	0.2-0.4	22-26	18×12 / -	2.5	31×42×66
FP40-HL	9 312 640	-40 ... +200	0.68	0.5	0.32	0.4-0.7	0.2-0.4	22-26	23×14 / 20	16	37×46×71
FP50-HL	9 312 650	-50 ... +200	0.9	0.8	0.5	0.4-0.7	0.2-0.4	22-26	18×12 / 15	8	42×49×72
FPW50-HL	9 312 651	-50 ... +200	0.9	0.8	0.5	0.4-0.7	0.2-0.4	22-26	18×12 / 15	8	42×49×72



# CRYO-COMPACT CIRCULATORS ULTRA-LOW REFRIGERATED CIRCULATORS

CF | TopTech | HighTech



Product brochure  
online at  
[www.julabo.com](http://www.julabo.com)

## 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 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 handle 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.



Filling port with  
insulated cover



## CF cryo-compact circulators – technical data

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

Model	Order No.	Working temperature range °C	Cooling capacity (kW) at bath temperature in °C			Pump capacity			Bath opening/ bath depth W x L / D cm	Filling volume liters	Dimensions W x D x H cm
			+20	0	-20	Pressure bar	Suction bar	Flow rate l/min			
CF30	9 400 330	-30 ... +150	0.32	0.25	0.15	0.35	-	15	16 x 3 / 14	3.5	24 x 46 x 40
CF40	9 400 340	-40 ... +150	0.47	0.4	0.28	0.35	-	15	19 x 3 / 19	5.5	28 x 46 x 46
CF31	9 400 331	-30 ... +200	0.32	0.25	0.15	0.4-0.7	0.2-0.4	22-26	16 x 3 / 14	3.5	24 x 46 x 40
CF41	9 400 341	-40 ... +200	0.47	0.4	0.28	0.4-0.7	0.2-0.4	22-26	19 x 3 / 19	5.5	28 x 46 x 46



## 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 F70-ME, F81-ME, F89-ME, F81-HL, FP89-HL models (heating capacity 1.3 kW). All models offer a temperature stability of  $\pm 0.05$  °C, except the ME & HE models, which offer  $\pm 0.02$  °C, and FPW91-SL with  $\pm 0.2$  °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 cm	Filling volume liters	Dimensions W x D x H cm
			+20	0	-20	Pressure bar	Suction bar	Flow rate l/min			

### Ultra-Low Refrigerated Circulators TopTech

<b>F70-ME</b>	<b>9 162 670</b>	-70 ... +100	0.34	0.22	0.17	0.23-0.45	-	11-16	12 x 12 / 13	4.5	42 x 54 x 71
<b>F81-ME</b>	<b>9 162 681</b>	-81 ... +100	0.45	0.38	0.36	0.23-0.45	-	11-16	13 x 15 / 16	6.5	50 x 58 x 88
<b>FP89-ME</b>	<b>9 162 689</b>	-90 ... +100	1.0	0.92	0.88	0.23-0.45	-	11-16	13 x 15 / 16	8	55 x 60 x 90

### Ultra-Low Refrigerated Circulators HighTech

<b>FP51-SL</b>	<b>9 352 751</b>	-51 ... +200	2.0	1.5	1.0	0.4-0.7	0.2-0.4	22-26	18 x 12 / 20	11	46 x 55 x 89
<b>FP52-SL</b>	<b>9 352 752</b>	-60 ... +100	3.0	2.8	1.6	0.4-0.7	0.2-0.4	22-26	28 x 23 / 22	24	59 x 76 x 116
<b>FP55-SL</b>	<b>9 352 755</b>	-60 ... +100	5.2	4.1	2.2	0.4-0.7	0.2-0.4	22-26	28 x 23 / 22	27	85 x 76 x 116
<b>F81-HL</b>	<b>9 312 681</b>	-81 ... +100	0.45	0.38	0.36	0.4-0.7	0.2-0.4	22-26	13 x 15 / 16	6.5	50 x 58 x 89
<b>FP89-HL</b>	<b>9 312 689</b>	-90 ... +100	1.0	0.92	0.88	0.4-0.7	0.2-0.4	22-26	13 x 15 / 16	8	55 x 60 x 92
<b>FP90-SL</b>	<b>9 352 790</b>	-90 ... +100	1.8	1.7	1.6	0.4-0.7	0.2-0.4	22-26	28 x 23 / 22	22	59 x 76 x 116
<b>FPW52-SL</b>	<b>9 352 753</b>	-60 ... +100	3.0	2.8	1.6	0.4-0.7	0.2-0.4	22-26	28 x 23 / 22	24	59 x 76 x 116
<b>FPW55-SL</b>	<b>9 352 756</b>	-60 ... +100	5.5	4.1	2.2	0.4-0.7	0.2-0.4	22-26	28 x 23 / 22	27	59 x 76 x 116
<b>FPW90-SL</b>	<b>9 352 791</b>	-90 ... +100	1.8	1.7	1.6	0.4-0.7	0.2-0.4	22-26	28 x 23 / 22	22	59 x 76 x 116
<b>FPW91-SL</b>	<b>9 352 793</b>	-91 ... +100	4.5	4.1	3.7	0.4-0.7	0.2-0.4	22-26	28 x 23 / 22	22	85 x 76 x 116
<b>FP52-SL</b>	<b>9 352 752N</b>	-60 ... +100	3.0	2.8	1.6	0.4-0.7	0.2-0.4	22-26	Filling port	24	59 x 76 x 116
<b>FP55-SL</b>	<b>9 352 755N</b>	-60 ... +100	5.2	4.1	2.2	0.4-0.7	0.2-0.4	22-26	Filling port	27	85 x 76 x 116
<b>FP52-SL</b>	<b>9 352 752N150</b>	-60 ... +150	3.0	2.8	1.6	0.4-0.7	0.2-0.4	22-26	Filling port	24	59 x 76 x 116
<b>FP55-SL</b>	<b>9 352 755N150</b>	-60 ... +150	5.2	4.1	2.2	0.4-0.7	0.2-0.4	22-26	Filling port	27	85 x 76 x 116
<b>FPW52-SL</b>	<b>9 352 753N</b>	-60 ... +100	3.0	2.8	1.6	0.4-0.7	0.2-0.4	22-26	Filling port	24	59 x 76 x 116
<b>FPW55-SL</b>	<b>9 352 756N</b>	-60 ... +100	5.5	4.1	2.2	0.4-0.7	0.2-0.4	22-26	Filling port	27	59 x 76 x 116
<b>FPW52-SL</b>	<b>9 352 753N150</b>	-60 ... +150	3.0	2.8	1.6	0.4-0.7	0.2-0.4	22-26	Filling port	24	59 x 76 x 116
<b>FPW55-SL</b>	<b>9 352 756N150</b>	-60 ... +150	5.5	4.1	2.2	0.4-0.7	0.2-0.4	22-26	Filling port	27	59 x 76 x 116
<b>FP90-SL</b>	<b>9 352 790N</b>	-90 ... +100	1.8	1.7	1.6	0.4-0.7	0.2-0.4	22-26	Filling port	22	59 x 76 x 116
<b>F95-SL</b>	<b>9 352 795N</b>	-95 ... 0	-	1.7	1.5	0.4-0.7	0.2-0.4	22-26	Filling port	22	59 x 76 x 116
<b>FP90-SL</b>	<b>9 352 790N150</b>	-90 ... +150	1.8	1.7	1.6	0.4-0.7	0.2-0.4	22-26	Filling port	22	59 x 76 x 116
<b>FPW90-SL</b>	<b>9 352 791N</b>	-90 ... +100	1.8	1.7	1.6	0.4-0.7	0.2-0.4	22-26	Filling port	22	59 x 76 x 116
<b>FPW91-SL</b>	<b>9 352 793N</b>	-91 ... +100	4.5	4.1	3.7	0.4-0.7	0.2-0.4	22-26	Filling port	22	85 x 76 x 116
<b>FW95-SL</b>	<b>9 352 796N</b>	-95 ... 0	-	1.7	1.5	0.4-0.7	0.2-0.4	22-26	Filling port	22	59 x 76 x 116
<b>FPW90-SL</b>	<b>9 352 791N150</b>	-90 ... +150	1.8	1.7	1.6	0.4-0.7	0.2-0.4	22-26	Filling port	22	59 x 76 x 116



# HEATING CIRCULATORS

CORIO | TopTech | HighTech



Product brochure  
online at  
[www.julabo.com](http://www.julabo.com)

## Hot heating technology from +20 °C to +300 °C.

Heating 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. Focused on your requirements, JULABO heating circulators have set the benchmark for temperature control technology for decades. The JULABO range of circulators offers the functional solution for your day-to-day work, whether it is a routine task or highly demanding: CORIO, TopTech, and HighTech – three model series for every requirement and every budget.

## Powerful.

- Models for working temperatures from +20 °C to +300 °C
- Available as: heating immersion circulators, bridge mounted circulators, open heating bath circulators, heating circulators with open baths or heating circulators.
- Suitable for internal and/or external applications
- Bath tanks made of transparent plastic or stainless steel (according to choice)



Accessories at  
[www.julabo.com](http://www.julabo.com)



## JULABO heating circulators – for every application

**Heating immersion circulators** form the foundation of the JULABO circulator portfolio. They can be mounted on bath tanks with up to 50 liters.

The **bridge mounted circulator** is delivered with an adjustable stainless steel telescope bridge. **Open heating bath circulators** are suited for internal applications, such as temperature control applications of samples.

CORIO™



### Heating immersion, bridge-mounted and open heating bath circulators – technical data

Model	Order No.	Working temperature range °C	Temperature stability °C	Heating capacity kW	Pump capacity			Bath opening/ bath depth W × L / D cm	Filling volume liters	Dimensions W × D × H cm
					Pressure bar	Suction bar	Flow rate l/min			
<b>Heating immersion circulators CORIO</b>										
<b>C</b>	<b>9 011 000</b>	+20 ... +100	± 0.03	2	0.1	-	6	-	-	13.2 × 16 × 36.2
<b>CD</b>	<b>9 012 000</b>	+20 ... +150	± 0.03	2	0.35	-	15	-	-	13.2 × 16 × 36.2
<b>Heating immersion circulators TopTech</b>										
<b>MA</b>	<b>9 153 000</b>	+20 ... +200	± 0.01	2	0.23 - 0.45	-	11 - 16	-	-	13 × 15 × 33
<b>ME</b>	<b>9 162 000</b>	+20 ... +200	± 0.01	2	0.23 - 0.45	-	11 - 16	-	-	13 × 15 × 33
<b>Bridge mounted circulator HighTech</b>										
<b>SE-Z</b>	<b>9 252 218</b>	+20 ... +300	± 0.01	3	0.4 - 0.7	0.2 - 0.4	22 - 26	-	-	32 × 17 × 40
<b>Open heating bath circulators CORIO</b>										
<b>C-BT5</b>	<b>9 011 305</b>	+20 ... +100	± 0.03	2	0.1	-	6	15 × 15 / 15	3.5 ... 5	23 × 38 × 38
<b>C-BT9</b>	<b>9 011 309</b>	+20 ... +100	± 0.03	2	0.1	-	6	23 × 15 / 15	6 ... 9	32 × 38 × 38
<b>C-BT19</b>	<b>9 011 319</b>	+20 ... +100	± 0.03	2	0.1	-	6	30 × 35 / 15	14 ... 19	38 × 58 × 38
<b>C-BT27</b>	<b>9 011 327</b>	+20 ... +100	± 0.03	2	0.1	-	6	30 × 35 / 15	20 ... 27	38 × 58 × 43
<b>C-B5</b>	<b>9 011 405</b>	+20 ... +100	± 0.03	2	0.1	-	6	15 × 15 / 15	3.5 ... 5	23 × 38 × 41
<b>C-B13</b>	<b>9 011 413</b>	+20 ... +100	± 0.03	2	0.1	-	6	30 × 18 / 15	9 ... 13	38 × 40 × 42
<b>C-B17</b>	<b>9 011 417</b>	+20 ... +100	± 0.03	2	0.1	-	6	30 × 18 / 20	13 ... 17	38 × 40 × 47
<b>C-B19</b>	<b>9 011 419</b>	+20 ... +100	± 0.03	2	0.1	-	6	30 × 35 / 15	14 ... 19	38 × 58 × 42
<b>C-B27</b>	<b>9 011 427</b>	+20 ... +100	± 0.03	2	0.1	-	6	30 × 35 / 20	17 ... 27	38 × 58 × 47



# HEATING CIRCULATORS

CORIO | TopTech | HighTech



Product brochure  
online at  
[www.julabo.com](http://www.julabo.com)

## Heating circulators with open baths for different applications

**Heating circulators with open baths** can be used for internal and external applications. The switch-over between internal and external temperature control is very easy.

**Heating circulators** are tailored to external temperature control applications and offer the best heat insulation.

### Powerful.

- Models for working temperatures from +20 °C to +300 °C
- Large selection of models for internal and external applications
- Bath tanks made of transparent plastic or stainless steel (according to choice)
- Ease of use
- Bright displays – easy to read even from a distance
- State-of-the-art control technology – for quick results and precision
- With many professional functions (model specific) for adjusting control parameters, temperature calibration, temperature profiles, etc.
- Powerful recirculating pumps, electronically adjustable
- High heating capacities for rapid heat-up



# CORIO™



## Heating circulators with open baths – technical data

Model	Order No.	Working temperature range	Temperature stability	Heating capacity	Pump capacity			Bath opening/ bath depth W×L/D	Filling volume	Dimensions W×D×H
		°C	°C		Pressure	Suction	Flow rate			
				kW	bar	bar	l/min	cm	liters	cm

### Heating circulators with open baths CORIO

CD-BT5	9 012 305	+20 ... +100	±0.03	2	0.35	-	15	15×15 / 15	3.5 ... 5	23×38×38
CD-BT19	9 012 319	+20 ... +100	±0.03	2	0.35	-	15	30×35 / 15	14 ... 19	38×58×38
CD-BT27	9 012 327	+20 ... +100	±0.03	2	0.35	-	15	30×35 / 20	20 ... 27	38×58×43
CD-B5	9 012 405	+20 ... +150	±0.03	2	0.35	-	15	15×15 / 15	3.5 ... 5	23×38×41
CD-B13	9 012 413	+20 ... +150	±0.03	2	0.35	-	15	30×18 / 15	9 ... 13	38×40×42
CD-B17	9 012 417	+20 ... +150	±0.03	2	0.35	-	15	30×18 / 20	13 ... 17	38×40×47
CD-B19	9 012 419	+20 ... +150	±0.03	2	0.35	-	15	30×35 / 15	14 ... 19	38×58×42
CD-B27	9 012 427	+20 ... +150	±0.03	2	0.35	-	15	30×35 / 20	17 ... 27	38×58×47
CD-B33	9 012 433	+20 ... +150	±0.03	2	0.35	-	15	66×32 / 15	26 ... 39	91×36×43
CD-B39	9 012 439	+20 ... +150	±0.03	2	0.35	-	15	33×30 / 30	35 ... 41	54×34×57

### Heating circulators CORIO

CD-BC4	9 012 504	+20 ... +150	±0.03	2	0.35	-	15	13×15 / 15	3 ... 4.5	23×41×42
CD-BC6	9 012 506	+20 ... +150	±0.03	2	0.35	-	15	13×15 / 20	4.5 ... 6	24×44×47
CD-BC12	9 012 512	+20 ... +150	±0.03	2	0.35	-	15	22×15 / 20	8.5 ... 12	33×49×47
CD-BC26	9 012 526	+20 ... +150	±0.03	2	0.35	-	15	26×35 / 20	19 ... 26	39×62×48

### Heating circulators TopTech

MA-4	9 153 504	+20 ... +200	±0.01	2	0.23 - 0.45	-	11 - 16	13×15 / 15	4.5	21×42×38
MA-6	9 153 506	+20 ... +200	±0.01	2	0.23 - 0.45	-	11 - 16	13×15 / 20	6	21×43×42
MA-12	9 153 512	+20 ... +200	±0.01	2	0.23 - 0.45	-	11 - 16	22×15 / 20	12	30×43×45
MA-26	9 153 526	+20 ... +200	±0.01	2	0.23 - 0.45	-	11 - 16	22×30 / 20	26	36×61×45
ME-4	9 162 504	+20 ... +200	±0.01	2	0.23 - 0.45	-	11 - 16	13×15 / 15	4.5	21×42×38
ME-6	9 162 506	+20 ... +200	±0.01	2	0.23 - 0.45	-	11 - 16	13×15 / 20	6	21×43×42
ME-12	9 162 512	+20 ... +200	±0.01	2	0.23 - 0.45	-	11 - 16	22×15 / 20	12	30×43×45
ME-26	9 162 526	+20 ... +200	±0.01	2	0.23 - 0.45	-	11 - 16	22×30 / 20	26	36×61×45

### Heating circulators HighTech

HE-4	9 212 504	+20 ... +250	±0.01	2	0.4 - 0.7	0.2 - 0.4	22 - 26	13×15 / 15	4.5	21×42×40
SE-6	9 252 506	+20 ... +300	±0.01	3	0.4 - 0.7	0.2 - 0.4	22 - 26	13×15 / 20	6	21×43×44
SE-12	9 252 512	+20 ... +300	±0.01	3	0.4 - 0.7	0.2 - 0.4	22 - 26	22×15 / 20	12	30×43×47
SE-26	9 252 526	+20 ... +300	±0.01	3	0.4 - 0.7	0.2 - 0.4	22 - 26	22×30 / 20	26	36×61×47
HL-4	9 312 504	+20 ... +250	±0.01	2	0.4 - 0.7	0.2 - 0.4	22 - 26	13×15 / 15	4.5	21×42×40
SL-6	9 352 506	+20 ... +300	±0.01	3	0.4 - 0.7	0.2 - 0.4	22 - 26	13×15 / 20	6	21×43×44
SL-12	9 352 512	+20 ... +300	±0.01	3	0.4 - 0.7	0.2 - 0.4	22 - 26	22×15 / 20	12	30×43×47
SL-26	9 352 526	+20 ... +300	±0.01	3	0.4 - 0.7	0.2 - 0.4	22 - 26	22×30 / 20	26	36×61×47



# HIGHLY DYNAMIC TEMPERATURE CONTROL SYSTEMS

## PRESTO | FORTE HT



Product brochure  
online at  
[www.julabo.com](http://www.julabo.com)

### PRESTO: Best performance for dynamic temperature control systems

With high cooling and heating capacities, PRESTO systems cover a working temperature range of -92 °C to +250 °C. And by using highly efficient components, they can compensate exothermic and endothermic reactions extremely fast.

- Ideal for highly precise, external temperature control tasks from -92 °C ... +250 °C
- Broad working temperature ranges without changing the bath fluid
- Extremely rapid cool-down and heat-up
- Powerful circulation pumps, set using levels or predefined pressure values

### FORTE HT with optional cooling unit

The high temperature circulators of the FORTE HT series are suitable for controlling the temperature of external closed systems. These compact instruments have a closed design. Even at high temperatures, there is no offgassing of oil odors.

- High heating capacity up to 7 kW for short heat-up times
- High pump capacity
- Low filling volume
- Cooling water connection for cold oil superimposed with cooling water
- External Pt100 sensor connection
- Numerous interfaces

### Models with C.U. cooling units also provide:

- Pulsed cooling water supply for temperature control tasks starting at +40 °C
- Cooling power up to max. 15 kW (cooling water at +20 °C and oil temperature at +300 °C)
- Rapid cool-down to low temperatures within the shortest time possible

FORTE HT without  
cooling unit



FORTE HT with  
cooling unit



Accessories at  
[www.julabo.com](http://www.julabo.com)

# PRESTO™



### Highly dynamic temperature control systems – technical data

Model	Order No.	Working temperature range °C	Temperature stability °C	Heating capacity kW	Cooling capacity (kW) at bath temperature in °C			Pump capacity		Cooling of refrigerant unit	Dimensions W × D × H cm
					+20	0	-20	Pressure bar	Flow rate l/min		

#### PRESTO

A30	9 420 300	-30 ... +250	±0.01 ... ±0.05	2.7	0.5	0.4	0.2	0.5	25	1-stage air	25 × 59 × 62
A40	9 420 401	-40 ... +250	±0.01 ... ±0.05	2.7	1.2	0.9	0.6	0.3 ... 1.7	16 ... 40	1-stage air	33 × 59 × 67
W40	9 421 401	-40 ... +250	±0.01 ... ±0.05	2.7	1.2	1.0	0.55	0.3 ... 1.7	16 ... 40	1-stage water	33 × 59 × 67
A45	9 420 452	-45 ... +250	±0.05 ... ±0.1	6	3.5	3.3	1.8	0.48 ... 3.2	35 ... 76	1-stage air	53 × 66.5 × 126
A45t	9 420 452.T	-45 ... +250	±0.05 ... ±0.1	12	3.5	3.3	1.8	0.48 ... 3.2	35 ... 76	1-stage air	53 × 66.5 × 126
W50	9 421 502	-50 ... +250	±0.05 ... ±0.1	6	7.5	6.5	3.0	0.48 ... 3.2	35 ... 76	1-stage water	53 × 66.5 × 126
W50t	9 421 502.T	-50 ... +250	±0.05 ... ±0.1	12	7.5	6.5	3.0	0.48 ... 3.2	35 ... 76	1-stage water	53 × 66.5 × 126
A80	9 420 801	-80 ... +250	±0.01 ... ±0.05	1.8	1.2	1.2	1.1	0.3 ... 1.7	16 ... 40	2-stage air	43 × 65 × 126
A80t	9 420 801.T	-80 ... +250	±0.01 ... ±0.05	3.4	1.2	1.2	1.1	0.3 ... 1.7	16 ... 40	2-stage air	43 × 65 × 126
W80	9 421 801	-80 ... +250	±0.01 ... ±0.05	1.8	1.2	1.2	1.1	0.3 ... 1.7	16 ... 40	2-stage water	43 × 65 × 126
W80t	9 421 801.T	-80 ... +250	±0.01 ... ±0.05	3.4	1.2	1.2	1.1	0.3 ... 1.7	16 ... 40	2-stage water	43 × 65 × 126
A85	9 420 852	-85 ... +250	±0.05 ... ±0.1	6	2.5	2.4	2.4	0.48 ... 3.2	35 ... 80	2-stage air	61 × 108 × 125
A85t	9 420 852.T	-85 ... +250	±0.05 ... ±0.1	15	2.5	2.4	2.4	0.48 ... 3.2	35 ... 80	2-stage air	61 × 108 × 125
W85	9 421 852	-85 ... +250	±0.05 ... ±0.1	6	2.5	2.4	2.4	0.48 ... 3.2	35 ... 80	2-stage water	61 × 84.5 × 125
W85t	9 421 852.T	-85 ... +250	±0.05 ... ±0.1	15	2.5	2.4	2.4	0.48 ... 3.2	35 ... 80	2-stage water	61 × 84.5 × 125
W91	9 421 912	-91 ... +250	±0.05 ... ±0.2	18	11	11	11	0.5 ... 3.0	26 ... 80	2-stage water	95 × 127 × 190
W91tt	9 421 912.TT	-91 ... +250	±0.05 ... ±0.2	36	11	11	11	0.5 ... 3.0	26 ... 80	2-stage water	95 × 127 × 190
W91x	9 421 913	-91 ... +250	±0.05 ... ±0.2	18	11	11	11	0.8 ... 5.5	18 ... 70	2-stage water	95 × 127 × 190
W91tx	9 421 913.TT	-91 ... +250	±0.05 ... ±0.2	36	11	11	11	0.8 ... 5.5	18 ... 70	2-stage water	95 × 127 × 190
W92	9 421 922	-92 ... +250	±0.05 ... ±0.2	18	27	20	11	0.5 ... 3.0	26 ... 80	2-stage water	95 × 127 × 190
W92tt	9 421 922.TT	-92 ... +250	±0.05 ... ±0.2	36	27	20	11	0.5 ... 3.0	26 ... 80	2-stage water	95 × 127 × 190
W92x	9 421 923	-92 ... +250	±0.05 ... ±0.2	18	27	20	11	0.8 ... 5.5	18 ... 70	2-stage water	95 × 127 × 190
W92tx	9 421 923.TT	-92 ... +250	±0.05 ... ±0.2	36	27	20	11	0.8 ... 5.5	18 ... 70	2-stage water	95 × 127 × 190

Model	Order No.	Working temperature range °C	Temperature stability °C	Heating capacity kW	Cooling capacity (water +20 °C) kW, max.	Pump capacity		Dimensions Circulator W × D × H cm	Dimensions Control electronics W × D × H cm
						Pressure bar	Flow rate l/min		

#### FORTE HT

HT30-M1	9 800 031	+70 ... +400	±0.01 ... ±0.1	3	-	0.8 - 1.2	14 - 18	23 × 23 × 58	25 × 25 × 18
HT60-M2	9 800 062	+70 ... +400	±0.01 ... ±0.1	7	-	0.8 - 1.2	14 - 18	23 × 23 × 58	25 × 25 × 18
HT60-M3	9 800 063	+70 ... +400	±0.01 ... ±0.1	6	-	0.8 - 1.2	14 - 18	23 × 23 × 58	25 × 25 × 18
HT30-M1-C.U.	9 800 035	+40 ... +400	±0.01 ... ±0.1	3	15	0.8 - 1.2	14 - 18	43 × 23 × 58	25 × 25 × 18
HT60-M2-C.U.	9 800 065	+40 ... +400	±0.01 ... ±0.1	7	15	0.8 - 1.2	14 - 18	43 × 23 × 58	25 × 25 × 18
HT60-M3-C.U.	9 800 066	+40 ... +400	±0.01 ... ±0.1	6	15	0.8 - 1.2	14 - 18	43 × 23 × 58	25 × 25 × 18



# RECIRCULATING COOLERS AND CHILLERS

AWC | F | FL



Product brochure  
online at  
[www.julabo.com](http://www.julabo.com)

## Environmentally-friendly cooling while saving tap water.

JULABO recirculating coolers and chillers are powerful solutions for a wide range of cooling requirements in laboratories and industrial environments. The instruments feature short cool-down times and are highly efficient and therefore offer an economic alternative to tap water cooling. The compact design offers a space saving installation. The instruments are equipped with a bright LED temperature display, which is easy to read even from a distance. W models are water-cooled for quiet operation and low waste heat. Warn and safety functions enable reliable, continuous operation. Filling and emptying is quick and easy via a well accessible filling and/or drain tap.



AC100 for working near  
ambient temperature

## Air-to-water recirculating cooler AWC100

- Particularly small space requirement
- Energy-saving
- Cooling capacity adjustable in two steps

## F models: compact recirculating coolers

- Working temperature ranges from -10 °C to +40 °C
- Cooling capacity up to 1 kW
- Environmentally-friendly operation with low energy consumption

## FL models: powerful recirculating coolers

- Working temperature ranges from -25 °C to +40 °C
- Cooling capacity up to 20 kW
- Powerful circulating pumps



Drain tap located behind  
removable venting grid



Accessories at  
[www.julabo.com](http://www.julabo.com)



### Recirculating coolers and chillers – technical data

Model	Order No.	Working temperature range °C	Temperature stability °C	Cooling capacity (kW) at bath temperature in °C			Pump capacity		Cooling of refrigerant unit	Filling volume liters	Dimensions W x D x H cm
				+20	0	-20	Pressure bar	Flow rate l/min			

#### Air-to-water recirculating cooler

<b>AWC100</b>	<b>9 630 100</b>	+20 ... +40		0.55 <sup>1)</sup>	-	-	0.2	2.9	Air	0.9	20 x 34 x 30
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#### Compact recirculating coolers, F series

<b>F250</b>	<b>9 620 025</b>	-10 ... +40	±0.5	0.25	0.18	-	0.35	15	Air	1.7 ... 2.6	24 x 40 x 52
<b>F500</b>	<b>9 620 050</b>	0 ... +40	±0.5	0.5	0.25	-	0.5	24	Air	5 ... 7.5	37.5 x 44 x 59
<b>F1000</b>	<b>9 620 100</b>	0 ... +40	±0.5	1	0.35	-	1	23	Air	7 ... 9.5	37.5 x 49 x 64

#### Recirculating coolers, FL series

<b>FL300</b>	<b>9 660 003</b>	-20 ... +40	±0.5	0.3	0.2	0.1	0.35	15	Air	3 ... 4.5	25 x 50 x 60
<b>FL601</b>	<b>9 661 006</b>	-20 ... +40	±0.5	0.6	0.4	0.2	1	23	Air	5.5 ... 8	32 x 50 x 60
<b>FL1201</b>	<b>9 661 012</b>	-20 ... +40	±0.5	1.2	0.9	0.3	1	23	Air	12 ... 17	50 x 76 x 64
<b>FL1203</b>	<b>9 663 012</b>	-20 ... +40	±0.5	1.2	0.8	0.2	0.5 ... 3	40	Air	12 ... 17	50 x 76 x 64
<b>FL1701</b>	<b>9 661 017</b>	-20 ... +40	±0.5	1.7	1.1	0.4	1	23	Air	12 ... 17	50 x 76 x 64
<b>FL1703</b>	<b>9 663 017</b>	-20 ... +40	±0.5	1.7	1	0.3	0.5 ... 3	40	Air	12 ... 17	50 x 76 x 64
<b>FLW1701</b>	<b>9 671 017</b>	-20 ... +40	±0.5	1.7	1.1	0.4	1	23	Water	12 ... 17	50 x 76 x 64
<b>FLW1703</b>	<b>9 673 017</b>	-20 ... +40	±0.5	1.7	1	0.3	0.5 ... 3	40	Water	12 ... 17	50 x 76 x 64
<b>FL2503</b>	<b>9 663 025</b>	-20 ... +40	±0.5	2.5	1.5	0.55	0.5 ... 3	40	Air	24 ... 30	60 x 76 x 115
<b>FL2506</b>	<b>9 666 025</b>	-15 ... +40	±0.5	2.5	1	-	0.5 ... 6	60	Air	24 ... 30	60 x 76 x 115
<b>FL4003</b>	<b>9 663 040</b>	-20 ... +40	±0.5	4	2.4	0.65	0.5 ... 3	40	Air	24 ... 30	60 x 76 x 115
<b>FL4006</b>	<b>9 666 040</b>	-20 ... +40	±0.5	4	1.9	0.05	0.5 ... 6	60	Air	24 ... 30	60 x 76 x 115
<b>FLW2503</b>	<b>9 673 025</b>	-20 ... +40	±0.5	2.7	1.7	0.4	0.5 ... 3	40	Water	24 ... 30	60 x 76 x 115
<b>FLW2506</b>	<b>9 676 025</b>	-15 ... +40	±0.5	2.5	1	-	0.5 ... 6	60	Water	24 ... 30	60 x 76 x 115
<b>FLW4003</b>	<b>9 673 040</b>	-20 ... +40	±0.5	4.3	2.2	0.45	0.5 ... 3	40	Water	24 ... 30	60 x 76 x 115
<b>FLW4006</b>	<b>9 676 040</b>	-15 ... +40	±0.5	4	1.7	-	0.5 ... 6	60	Water	24 ... 30	60 x 76 x 115
<b>FL7006</b>	<b>9 666 070</b>	-20 ... +40	±0.5	7	5.1	1.55	0.5 ... 6	60	Air	39 ... 47	78 x 85 x 148
<b>FL11006</b>	<b>9 666 110</b>	-20 ... +40	±0.5	11	7.5	3	0.5 ... 6	60	Air	39 ... 47	78 x 85 x 148
<b>FL20006</b>	<b>9 666 200</b>	-25 ... +40	±0.5	20	10	2.5	0.8 ... 6	80	Air	15 ... 37	95 x 115 x 161
<b>FLW7006</b>	<b>9 676 070</b>	-20 ... +40	±0.5	7.4	7	1.3	0.5 ... 6	60	Water	39 ... 47	78 x 85 x 148
<b>FLW11006</b>	<b>9 676 110</b>	-20 ... +40	±0.5	11.5	7.3	2.7	0.5 ... 6	60	Water	39 ... 47	78 x 85 x 148
<b>FLW20006</b>	<b>9 676 200</b>	-25 ... +40	±0.5	20	12	3	0.8 ... 6	80	Water	15 ... 37	95 x 115 x 161

<sup>1)</sup> Cooling capacity depends on the temperature differential between the return flow and ambient environment.



# RECIRCULATING COOLER AND CHILLER

FC | SemiChill



Product brochure  
online at  
[www.julabo.com](http://www.julabo.com)

## SemiChill recirculating cooler for industrial applications

The SemiChill series offers powerful recirculating coolers for applications specifically in the semiconductor industry. Five models with cooling capacities from 2.5 to 10 kW (air- and water-cooled) are available. The working temperature range extends from +5 °C to +35 °C (optionally from -20 °C to +130 °C). Different pumps and electronic modules can be selected. Requirements ranging from simple to sophisticated can be covered, such as flow rate and conductivity measurements, external control or integration via analog signal, RS232 or EtherNet. The program is completed with accessories and options, such as DI filter, micro filter, USB adapter, etc.

- Five basic models, individually configurable
- High cooling capacity and powerful circulating pumps
- Optional with integrated heater with a heating capacity of up to 12 kW
- Gasket-free immersion pumps, maintenance-free and electronically adjustable
- Feed pressure indicator and level indicator
- Sealed filling port (Ø 70 mm)
- Overload protection for pump motor and refrigeration unit



Filter housings for DI-filter  
and micro filter (optional)



### Custom instrument configuration

- > Control electronics
- > Pump capacity
- > Working temperature
- > Interfaces
- > Heating capacity
- > Filter housings

Configure your perfect instrument.  
It would be our pleasure to advise you.

## FC recirculating cooler with integrated heating.

- Extended working temperatures up to +80 °C
- Ratio of feed/return temperature adjustable
- Level indicator

### Models FC1200T, FC1600T, FCW2500T

- External Pt100 sensor connection
- Analog connections for external programming and temperature recorder



### Recirculating coolers and chillers – technical data

Model	Order No.	Working temperature range °C	Temp. stability °C	Cooling capacity (kW) at bath temperature in °C			Pump capacity		Cooling of refrigerant unit	Filling volume liters	Dimensions W × D × H cm
				+20	0	-20	Pressure bar	Flow rate l/min			

#### SemiChill Recirculating Coolers

SC2500a <sup>1*</sup>	9500025XXP3H0D0M0	+5 ... +35	±0.1	2.5	1.5	-	3.5	33	Air	21 ... 33	49 × 62 × 105
SC2500w <sup>1*</sup>	9500026XXP3H0D0M0	+5 ... +35	±0.1	2.5	1.5	-	3.5	33	Water	21 ... 33	49 × 62 × 105
SC5000a <sup>2,3*</sup>	9500050XXP3H0D0M0	+5 ... +35	±0.1	5.0	2.5	-	3.5	33	Air	43 ... 60	59 × 67 × 112
SC5000w <sup>2,3*</sup>	9500051XXP3H0D0M0	+5 ... +35	±0.1	5.0	2.5	-	3.5	33	Water	43 ... 60	59 × 67 × 112
SC10000w <sup>2,3*</sup>	9500101XXP3H0D0M0	+5 ... +35	±0.1	10.0	5.0	-	3.5	33	Water	43 ... 60	59 × 67 × 112

#### FC Recirculating Coolers

FC600	9 600 060	-20 ... +80	±0.2	0.6	0.33	-	0.5	20	Air	6 ... 8	35 × 54 × 49
FC600S	9 600 063	-10 ... +80	±0.2	0.5	0.22	-	1.2	22	Air	6 ... 8	35 × 54 × 49
FC1200	9 600 120	-20 ... +80	±0.2	1.3	0.6	-	0.5	20	Air	8 ... 11	46 × 61 × 49
FC1200S	9 600 123	-15 ... +80	±0.2	1.2	0.5	-	1.2	22	Air	8 ... 11	46 × 61 × 49
FC1600	9 600 160	-20 ... +80	±0.2	1.65	0.8	-	0.5	20	Air	8 ... 11	46 × 61 × 49
FC1600S	9 600 163	-15 ... +80	±0.2	1.55	0.65	-	1.2	22	Air	8 ... 11	46 × 61 × 49
FC1200T	9 600 126	-10 ... +80	±0.2	1.1	0.4	-	3.5	28	Air	8 ... 11	46 × 61 × 49
FC1600T	9 600 166	-15 ... +80	±0.2	1.45	0.5	-	3.5	28	Air	8 ... 11	46 × 61 × 49
FCW600	9 601 060	-20 ... +80	±0.2	0.6	0.33	-	0.5	20	Water	6 ... 8	35 × 54 × 49
FCW600S	9 601 063	-10 ... +80	±0.2	0.5	0.22	-	1.2	22	Water	6 ... 8	35 × 54 × 49
FCW2500T	9 601 256	-25 ... +80	±0.2	2.5	2	0.25	3.5	28	Water	8 ... 11	46 × 61 × 49

<sup>1)</sup> with option H1: current consumption = plus 5 A <sup>2)</sup> with option H5: current consumption = plus 7 A <sup>3)</sup> with option H12: current consumption = plus 11 A

\*) with integrated heater: heating capacity H1 = 1 kW, H5 = 5 kW, H12 = 12 kW



# WATER BATHS AND SHAKING WATER BATHS

## PURA | SW Series



Product brochure  
online at  
[www.julabo.com](http://www.julabo.com)

### Outstanding. Innovative. Economic.

JULABO sets the new standard with its new PURA water bath series. This new era of innovative and high-performance technology exceeds all known conventional water bath technology, offering the additional benefits you have been asking for. Even in the design and development phase the focus was set on innovative functionality, modern design, and completely new technology. The result is brilliant. With its high-performance innovative functions, PURA makes everyday work in the laboratory significantly easier.

### PURA water baths

- Working temperature ranges from +18 °C to +99.9 °C
- Bright display
- Splash-proof protected power switch
- Built-in dry running protection
- Ease of use
- Built-in drain tap
- Built-in drip off design
- USB data port
- No disturbing elements in the bath
- Integrated timer



Accessories at  
[www.julabo.com](http://www.julabo.com)



## PURA™

*Modern by Design. Practical.*

*Clean. Intuitive. Connected.*

## Experienced and Safe.

A shaking water bath from JULABO offers optimal convenience for the user with a spray water-protected membrane keypad and a bright MULTI-DISPLAY (LED) for indication of up to four different values. Microprocessor technology with PID temperature control ensures optimal temperature stability in the water bath. Adjustable upper and lower temperature warning functions protect the samples. A low liquid level triggers a full shut-off. JULABO shaking water baths are suitable for continuous unsupervised operation. The bath tank and all parts that contact the bath fluid are made of high-quality stainless steel.



## Shaking Water Baths

- Working temperature ranges from +20 °C to +99.9 °C
- Dry-running protection with acoustic and optical alarm
- Warning and cut-off protection for high/low temperature
- Adjustable shaking frequency from 20 bis 200 rpm
- Drain-screw for emptying
- Removable bottom cover plate and shaking insert

### PURA – technical data

Model	Order No..	Working temperature range °C	Temperature stability °C	Heating capacity kW	Possible test tube racks (accessories)	Bath opening/ bath depth W x L / D cm	Filling volume liters	Dimensions without cover W x D x H cm
PURA 4	9 550 404	+18 ... +99.9	±0.2	0.8	1	12 x 27 / 17	0.4 ... 4.8	21 x 38 x 30
PURA 10	9 550 410	+18 ... +99.9	±0.2	1.3	2	22 x 27 / 17	1 ... 10	31 x 38 x 30
PURA 14	9 550 414	+18 ... +99.9	±0.2	1.3	3	30 x 27 / 17	1 ... 14	42 x 38 x 30
PURA 22	9 550 422	+18 ... +99.9	±0.2	2	5	54 x 27 / 17	2 ... 22	63 x 38 x 30
PURA 30	9 550 430	+18 ... +99.9	±0.2	2	7	76 x 27 / 17	2 ... 30	85 x 38 x 30

### Shaking water baths – technical data

Model	Order No..	Working temperature range °C	Temperature stability °C	Heating capacity kW	Shaking frequency U/min	Shaking stroke mm	Bath opening/ bath depth W x L / D cm	Filling volume liters	Dimensions without cover W x D x H cm
SW22	9 550 322	+20 ... +99.9	±0.2	2	20 ... 200	15	50 x 30 / 18	8 ... 20	70 x 35 x 26
SW23	9 550 323	+20 ... +99.9	±0.02	2	20 ... 200	15	50 x 30 / 18	8 ... 20	70 x 35 x 26



## INSTRUMENTS FOR SPECIAL REQUIREMENTS

Calibration Baths | Forcing Test Circulators | Visco Baths | Immersion Coolers | Flow-Through Coolers | Laboratory Temperature Controllers | Refrigerators for Chemicals | Wireless Communication & Software



Product brochure online at [www.julabo.com](http://www.julabo.com)

### Wide range of applications for the right temperature

JULABO offers instruments for different lab applications, such as the calibration of temperature sensors, cooling of chemicals or the determination of the 'best before' date of beer.

### Wireless communication & software

JULABO networking solutions and EasyTEMP simplify and automate your workflows. JULABO temperature control instruments are comfortably controlled and monitored via PC or Tablet PC.



WirelessTEMP™



### Calibration baths, Visco baths, and forcing test circulators – technical data

The calibration baths provide a temperature stability of up to  $\pm 0.005$  °C, the Visco baths of  $\pm 0.01$  °C and the beer forcing test heating/refrigerated circulators of  $\pm 0.05$  °C.

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

#### Calibration Baths

SL-8K	9 352 508	+50 ... +300	3	-	-	-	0.4 ... 0.7	22 ... 26	Ø 12 / 17	8	22 x 46 x 47
SL-14K	9 352 514	+50 ... +300	3	-	-	-	0.4 ... 0.7	22 ... 26	Ø 12 / 31	14	22 x 46 x 61
FK-30SL	9 352 627	-30 ... +200	2	0.46	0.34	0.15	0.4 ... 0.7	22 ... 26	Ø 12 / 17	14	32 x 45 x 79
FK-31SL	9 352 628	-30 ... +200	2	0.46	0.34	0.15	0.4 ... 0.7	22 ... 26	Ø 12 / 31	24	32 x 45 x 91

#### Visco Baths

ME-31A	9 162 331	+20 ... +60	2	-	-	-	0.23 ... 0.45	11 ... 16	9 x 9 / 3x / 37	31	50 x 20 x 56
ME-16G	9 162 616	+20 ... +100	2	-	-	-	0.23 ... 0.45	11 ... 16	7.6 x 7.6 / 2x / 31	16	Ø 29 x 48
ME-18V	9 162 518	+20 ... +150	2	-	-	-	0.23 ... 0.45	11 ... 16	9 x 9 / 2x / 27.5	18	36 x 24 x 54

#### Beer Forcing Test Bath

F38-ME	9 162 638	-38 ... +80	2	0.92	0.66	0.32	0.23 ... 0.45	11 ... 16	35 x 41 / 27	45	46 x 70 x 89
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Accessories at  
[www.julabo.com](http://www.julabo.com)



## Immersion coolers, flow-through coolers – technical data

Model	Order No.	Working temperature range °C	Temperature stability °C	Cooling capacity (kW) at bath temperature in °C (Medium: Ethanol)			Immersion probe / flexible corrugated tubing cm	Dimensions W × D × H cm
				+20	0	-20		
FT200	9 650 820	-20 ... +30	-	0.25	0.15	0.04	9 × 4	18 × 27 × 39
FT400	9 650 840	-40 ... +30	-	0.45	0.30	0.14	12 × 5	20 × 30 × 43
FT900	9 650 890	-90 ... +30	-	0.3	0.27	0.24	65 × 1.5 flexibel	38 × 55 × 60
FT402	9 650 842	-40 ... +30	±0.5	0.45	0.30	0.14	12 × 5	20 × 30 × 43
FT902	9 650 892	-90 ... +30	±1	0.3	0.27	0.24	65 × 1.5 flexibel	38 × 55 × 60
FT903	9 650 893	-90 ... +30	±1	0.3	0.27	0.25	5.6 × 14.0	38 × 55 × 60
FD200	9 655 825	+10 ... +30	-	0.22	-	-	-	18 × 27 × 39

## Laboratory temperature controller – technical data

Model	Order No.	Working temperature range °C	Temperature stability °C	Max. connected load kW	Working sensor	Safety sensor	Dimensions W × D × H cm
LC4	9 700 140	-50 ... +350	< ±0.05	2	1 Pt100	1 Pt100	17 × 17 × 16
LC6	9 700 160	-100 ... +400	< ±0.03	3	2 Pt100	1 Pt100	21 × 18 × 18

## Refrigerators for chemicals – technical data

Model	Order No.	Working temperature range °C	Temperature stability °C	Working sensor Safety sensor	Inner volume liters	Inner dimensions W × D × H cm	Dimensions W × D × H cm
KRC50	8 800 705	-2 ... +12	±1	PTC	68	42 × 29 × 44	55 × 64 × 63
KRC180	8 800 718	-2 ... +12	±1	PTC	180	52 × 40 × 70	60 × 64 × 86

# The **JULABO** advantages at a glance.

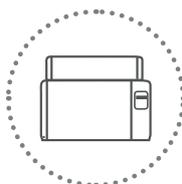
## JULABO temperature control – high-precision and speed

JULABO products include high-quality temperature control solutions to cover the temperature range from -95 °C to +400 °C.



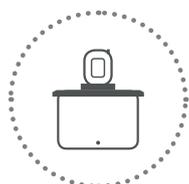
### Refrigerated Circulators

The JULABO refrigerated circulators are suitable for internal and external applications and can be used within the temperature range of -95 °C to +200 °C.



### Water Baths and Shaking Water Baths

Water baths and shaking water baths from JULABO can be used for a variety of applications in the temperature range from +18 °C to +99.9 °C.



### Heating Circulators

Heating circulators are available in various designs including Heating Immersion Circulators, Open Heating Bath Circulators, or Heating Circulators and cover the temperature range from +20 °C to +300 °C.



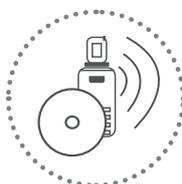
### Additional Products

In addition, the JULABO product portfolio has equipment for special applications such as Calibration Baths, Visco Baths, Beer Forcing Test Bath, Immersion/Flow-Through Coolers, Temperature Controllers and Refrigerators for Chemicals.



### Highly Dynamic Temperature Control Systems

The highly dynamic temperature control systems from JULABO can be used for demanding temperature applications ranging from -92 °C to +400 °C. The new PRESTO line offers unique high performance specifications to meet these requirements.



### Wireless Communication & Software Solutions

JULABO facilitates the automation of applications. The temperature control units can be comfortably controlled and monitored via PC.



### Recirculating Coolers

JULABO recirculating coolers are highly efficient and therefore offer an environmentally friendly and economic alternative to tap water cooling in the range of -25 °C to +130 °C.



### Accessories

The extensive range of accessories for all our instruments allows the flexible use of JULABO products in research and industry.

### Comprehensive service and on-site support

JULABO takes pride in offering customers expert advice for pairing the proper JULABO temperature control solution to their specific application. JULABO service and support options include installation and calibration, equipment qualification documentation and application training. These invaluable services ensure customer confidence in the operation and maintenance of their JULABO unit.

### Individual requirements – individual products

The wide range of JULABO offers a solution for almost any application. However, if a specific application needs more than a standard product can offer, the JULABO specialists will work out an individual solution with you.



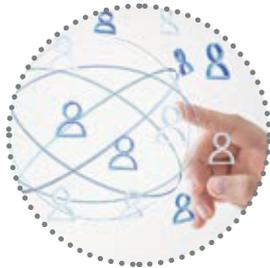
### **JULABO. Quality.**

Highest standards of quality for a long product life.



### **Green technology.**

Deliberately engineered with environmentally-friendly materials and technologies.



### **Satisfied customers.**

11 subsidiaries and more than 100 partners worldwide guarantee fast and qualified JULABO support.



### **100 % checked.**

100 % testing. 100 % quality. Every JULABO product is shipped to customers after a successful final inspection.



### **Quick start.**

Individual JULABO consultation and comprehensive manuals at your disposal.



### **Services 24/7.**

Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies and more at [www.julabo.com](http://www.julabo.com).



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