F/AWC Series

F Series
-10 °C ... +40 °C
3 models with 250, 500, and 1000 W cooling capacity

The recirculating coolers of the F Series have very low procurement costs and convince with robust technology for continuous operation:

- Up to 1000 W of cooling capacity
- Compact design
- Easy access filling
- Level indicator
- May be used with water, water-glycol, JULABO Thermal G

AWC100
+20 °C ... +40 °C
Air-to-water recirculating cooler

Ideal for simple cooling tasks: The AWC100 requires very little space and has a very low procurement cost.

FL Series

FL Series
-25 °C ... +40 °C
22 models with up to 20 kW of cooling capacity for laboratory and industrial applications

The recirculating coolers of the FL Series are suited for a wide range of cooling tasks:

- Up to 20 kW of cooling capacity
- Easy access filling from above
- Feed pressure indicator (from FL1201) and level indicator
- Large compensation volume
- Permissible return temperature up to +80 °C
- May be used with water, water-glycol, Thermal bath fluid

The removable venting grid makes it easy to clean the condenser. As a result, the instrument always delivers its full cooling capacity.

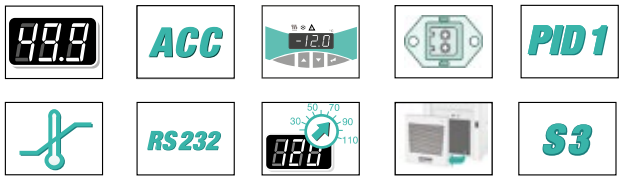
FC Series

FC Series
-25 °C ... +80 °C
11 models for heating and cooling tasks with up to 2.5 kW of cooling capacity

FC models offer high temperature stability and are also equipped with integrated heating:

- Up to 2.5 kW of cooling capacity
- 1.2 kW of heating capacity
- Extended working temperatures up to +80 °C
- Adjustable feed/return temperature ratio
- Filling level indicator
- Two LED displays

Models FC1200T, FC1600T, FCW2500T
- External Pt100 sensor connection
- Analog connections for external programming and temperature recorder



on models FC1200T, FC1600T, FCW2500T

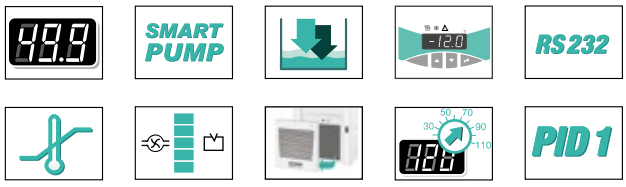
Sophisticated electronics with digital and analog connections for RS232, standby, alarm, external Pt100 sensor, temperature recorder, programming.

SemiChill Series

SemiChill Series
-20 °C ... +130 °C
5 basic models for industrial applications up to 10 kW of cooling capacity, customizable

The SemiChill models are characterized by maximum reliability in continuous operation and under harsh environmental conditions. The modular concept permits custom configurations according to your requirements:

- Five basic models, individually configurable
- Up to 10 kW of cooling capacity
- Up to 12 kW of heating capacity
- Seal-free immersion pumps, maintenance-free and electronically adjustable
- Feed pressure indicator and level indicator
- Overload protection for pump motor and refrigeration unit



on models with professional electronics

Available with optional DI-filter or micro-filter housing.

Please refer to the page 2 for a description of the icons shown above.

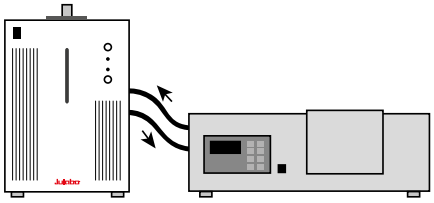
Air-to-Water Recirculating Cooler AWC100

for working near ambient temperature

The AWC100 model requires very little space and has a very low procurement cost.

- Plug it in, switch it on, and you're ready to go
- Whisper quiet
- Saves energy (compressor-free design)
- Water loop cooled by fan air
- Uniform pump capacity
- Cooling performance adjustable in two steps
- Filling level indicator

Ambient temperature: +20 °C

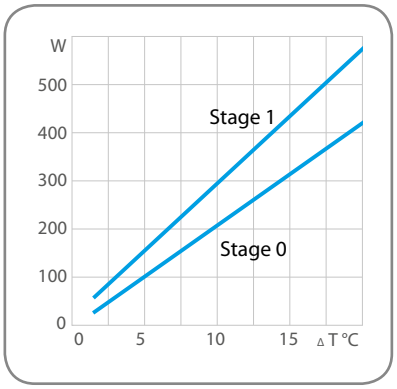


AWC100 is designed to cool water in closed loops. The unit permanently removes heat from water as it flows through the machine.

Applications

Cooling of Peltier elements, particularly for automated analysis units and CCD cameras, polarimeters, refractometers, electrophoresis chambers, condensers for glass apparatus

Example for determining cooling capacity



Ambient temperature: +20 °C
Return temperature: +30 °C
ΔT: +10 °C
Cooling capacity (stage 1): 300 W

AWC100

Order No.	**9 630 100**		
Model	**AWC100**		
Working temperature range °C [1]	+20 ... +40		
Temperature stability °C	-		
Cooling capacity[1] W	**+20 °C**	**+10 °C**	**+5 °C**
Stage 0	400	220	120
Stage 1	550	300	180
Pump capacity Flow rate / Pressure	l/min	2.9	
	bar	0.2	
Filling volume liters	0.9		
Dimensions cm	W × L × H		
	20 × 34 × 30		

1) Cooling capacity depends on the temperature differential between the return flow and ambient environment. Included in delivery: 2 barbed fittings each for tubing 8 and 10 mm ID (pump connections M10x1 female)

Compact Recirculating Coolers

for simple cooling tasks

JULABO F models require very little space and have very low procurement costs.

Recirculating coolers of the F Series are a great way to replace costly tap water and are ideal for basic cooling tasks.

- Environmentally-friendly operation with low energy consumption
- Compact design
- Splash-proof membrane keypad with LED temperature display
- Straightforward filling and draining
- Filling level indicator
- May be used with water, water-glycol, JULABO Thermal G

For cooling of

- Rotary evaporators
- Kjeldahl instruments
- Measuring cells
- Automated analysis systems
- CCD cameras
- Polarimeters, refractometers
- Condensers for glass apparatus
- Calorimeters
- Soxhlet apparatuses

Included in delivery with F250: 2 barbed fittings each for tubing 8 and 10 mm ID (pump connections M10x1 female)
Included in delivery with F500, F1000: 2 barbed fittings each for tubing 8 and 12 mm ID (pump connections M16x1 male)

F250			
Order No.	**9 620 025**		
Model	**F250**		
Working temperature range °C	-10 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 0.25	**+10 °C** 0.22	**+5 °C** 0.21
	0 °C 0.18	**-5 °C** 0.09	**-10 °C** -
Pump capacity Flow rate / Pressure	l/min	15	
	bar	0.35	
Filling volume liters	1.7 … 2.6		
Dimensions cm	W × L × H 24 × 40 × 52		

F500			
Order No.	**9 620 050**		
Model	**F500**		
Working temperature range °C	0 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 0.5	**+10 °C** 0.4	**+5 °C** 0.3
	0 °C 0.25	**-5 °C** -	**-10 °C** -
Pump capacity Flow rate / Pressure	l/min	24	
	bar	0.5	
Filling volume liters	5 … 7.5		
Dimensions cm	W × L × H 37.5 × 44 × 59		

F1000			
Order No.	**9 620 100**		
Model	**F1000**		
Working temperature range °C	0 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 1	**+10 °C** 0.7	**+5 °C** 0.55
	0 °C 0.35	**-5 °C** -	**-10 °C** -
Pump capacity Flow rate / Pressure	l/min	23	
	bar	1	
Filling volume liters	7 … 9.5		
Dimensions cm	W × L × H 37.5 × 49 × 64		

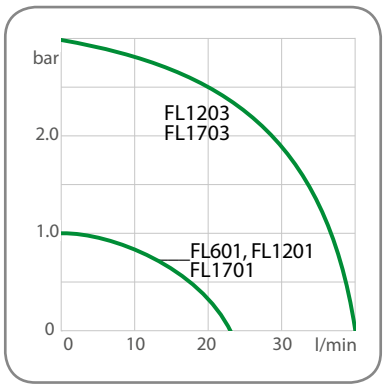
FL Recirculating Coolers

compact models with up to 1.7 kW of cooling capacity
for installation below a lab bench

The compact FL models are suited for a wide variety of cooling tasks.
Installation under a lab bench saves valuable space.
2 variants: Air-cooled (FL) and water-cooled (FLW).

- Easy filling from above
- Feed pressure indicator (FL1201 and above) and level indicator (all models)
- Large compensation volume
- Circulating pumps designed for continuous operation
- Permissible return temperature up to +80 °C
- Low liquid level protection with visual and acoustic signals
- May be used with water, water-glycol, Thermal bath fluid
- Overload protection for pump motor and cooling machine

Pump capacity
Bath fluid: water



Included in delivery: 2 barbed fittings each for tubing 8 and 12 mm ID (pump connections M16x1 male)
2 barbed fittings for tubing ¾" ID with models FL1203 and FL(W)1703 (pump connections G ¾" male)

FL300

Order No.	**9 660 003**		
Model	**FL300**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 0.3	**+10 °C** 0.25	**0 °C** 0.2
	-5 °C 0.18	**-10 °C** 0.15	**-20 °C** 0.1
Pump capacity Flow rate / Pressure	l/min	15	
	bar	0.35	
Filling volume liters	3 … 4.5		
Dimensions cm	W × L × H 25 × 50 × 60		

FL601

Order No.	**9 661 006**		
Model	**FL601**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 0.6	**+10 °C** 0.5	**0 °C** 0.4
	-5 °C 0.37	**-10 °C** 0.33	**-20 °C** 0.2
Pump capacity Flow rate / Pressure	l/min	23	
	bar	1	
Filling volume liters	5.5 … 8		
Dimensions cm	W × L × H 32 × 50 × 62		

FL1201

Order No.	**9 661 012**		
Model	**FL1201**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 1.2	**+10 °C** 1	**0 °C** 0.9
	-5 °C 0.75	**-10 °C** 0.6	**-20 °C** 0.3
Pump capacity Flow rate / Pressure	l/min	23	
	bar	1	
Filling volume liters	12 … 17		
Dimensions cm	W × L × H 50 × 76 × 64		

FLW1701

Order No.	**9 671 017**		
Model	**FLW1701**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 1.7	**+10 °C** 1.5	**0 °C** 1.1
	-5 °C 0.98	**-10 °C** 0.85	**-20 °C** 0.4
Pump capacity Flow rate / Pressure	l/min	23	
	bar	1	
Filling volume liters	12 … 17		
Dimensions cm	W × L × H 50 × 76 × 64		

FLW1703

Order No.	**9 673 017**		
Model	**FLW1703**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 1.7	**+10 °C** 1.4	**0 °C** 1
	-5 °C 0.88	**-10 °C** 0.75	**-20 °C** 0.3
Pump capacity Flow rate / Pressure	l/min	40	
	bar	0.5 - 3	
Filling volume liters	12 … 17		
Dimensions cm	W × L × H 50 × 76 × 64		

FL1203

Order No.	**9 663 012**		
Model	**FL1203**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 1.2	**+10 °C** 0.9	**0 °C** 0.8
	-5 °C 0.65	**-10 °C** 0.5	**-20 °C** 0.2
Pump capacity Flow rate / Pressure	l/min	40	
	bar	0.5 - 3	
Filling volume liters	12 … 17		
Dimensions cm	W × L × H 50 × 76 × 64		

FL1701

Order No.	**9 661 017**		
Model	**FL1701**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 1.7	**+10 °C** 1.5	**0 °C** 1.1
	-5 °C 0.98	**-10 °C** 0.85	**-20 °C** 0.4
Pump capacity Flow rate / Pressure	l/min	23	
	bar	1	
Filling volume liters	12 … 17		
Dimensions cm	W × L × H 50 × 76 × 64		

FL1703

Order No.	**9 663 017**		
Model	**FL1703**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 1.7	**+10 °C** 1.4	**0 °C** 1
	-5 °C 0.88	**-10 °C** 0.75	**-20 °C** 0.3
Pump capacity Flow rate / Pressure	l/min	40	
	bar	0.5 - 3	
Filling volume liters	12 … 17		
Dimensions cm	W × L × H 50 × 76 × 64		

FL Recirculating Coolers

powerful models with up to 4.3 kW of cooling capacity, tower version

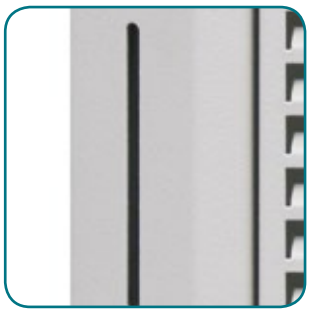
The FL models shown here have higher cooling capacity, powerful circulating pumps, and internal bath volumes of up to 30 liters. 2 variants: Air-cooled (FL) and water-cooled (FLW).

- Powerful circulating pumps up to 60 l/min; 6 bar
- By-pass valve to adjust pump pressure
- Rollers make it easy to move the units
- Early warning function when condenser is dirty
- Overload protection for pump motor and cooling machine
- Stainless steel bath tank
- BlackBox function with error memory for remote diagnosis
- Stakei connection for connecting a solenoid valve

Applications

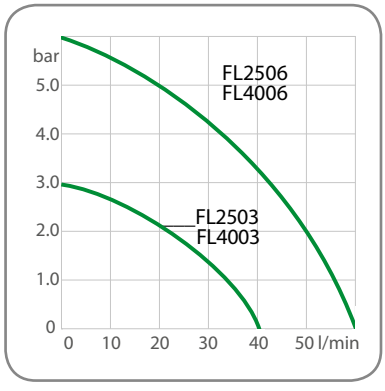
Rotary evaporators, bio-reactors/fermenters, Soxhlet apparatuses, distillation systems, vacuum systems, gas chromatographs, spectrometers, semiconductor applications, metering and adhesive technology, diffusion pumps, mass spectrometers, electron microscopes

Filling level indicator
for all models



Practical recessed grip

Pump capacity
Bath fluid: water



Included in delivery: 2 barbed fittings for tubing ¾" ID with models FL/FLW2503 and FL/FLW4003 (pump connections G ¾" male). 2 barbed fittings for tubing 1" ID with models FL/FLW2506 and FL/FLW4006 (pump connections G 1¼" male)

FLW2503

Order No.	**9 673 025**		
Model	**FLW2503**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 2.7	**+10 °C** 2.5	**0 °C** 1.7
	-5 °C 1.35	**-10 °C** 1	**-20 °C** 0.4
Pump capacity Flow rate / Pressure	l/min	40	
	bar	0.5 - 3	
Filling volume liters	24 … 30		
Dimensions cm	W × L × H 60 × 76 × 115		

FL2503

Order No.	**9 663 025**		
Model	**FL2503**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 2.5	**+10 °C** 2.2	**0 °C** 1.5
	-5 °C 1.35	**-10 °C** 1.2	**-20 °C** 0.55
Pump capacity Flow rate / Pressure	l/min	40	
	bar	0.5 - 3	
Filling volume liters	24 … 30		
Dimensions cm	W × L × H 60 × 76 × 115		

FLW2506

Order No.	**9 676 025**		
Model	**FLW2506**		
Working temperature range °C	-15 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 2.5	**+10 °C** 1.9	**0 °C** 1
	-5 °C 0.65	**-10 °C** 0.3	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min 60 bar 0.5 - 6		
Filling volume liters	24 … 30		
Dimensions cm	W × L × H 60 × 76 × 115		

FLW4003

Order No.	**9 673 040**		
Model	**FLW4003**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 4.3	**+10 °C** 3	**0 °C** 2.2
	-5 °C 1.75	**-10 °C** 1.3	**-20 °C** 0.45
Pump capacity Flow rate / Pressure	l/min 40 bar 0.5 - 3		
Filling volume liters	24 … 30		
Dimensions cm	W × L × H 60 × 76 × 115		

FLW4006

Order No.	**9 676 040**		
Model	**FLW4006**		
Working temperature range °C	-15 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 4	**+10 °C** 3	**0 °C** 1.7
	-5 °C 1.20	**-10 °C** 0.7	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min 60 bar 0.5 - 6		
Filling volume liters	24 … 30		
Dimensions cm	W × L × H 60 × 76 × 115		

FL2506

Order No.	**9 666 025**		
Model	**FL2506**		
Working temperature range °C	-15 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 2.5	**+10 °C** 1.9	**0 °C** 1
	-5 °C 0.65	**-10 °C** 0.3	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min 60 bar 0.5 - 6		
Filling volume liters	24 … 30		
Dimensions cm	W × L × H 60 × 76 × 115		

FL4003

Order No.	**9 663 040**		
Model	**FL4003**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 4	**+10 °C** 3.4	**0 °C** 2.4
	-5 °C 1.95	**-10 °C** 1.5	**-20 °C** 0.65
Pump capacity Flow rate / Pressure	l/min 40 bar 0.5 - 3		
Filling volume liters	24 … 30		
Dimensions cm	W × L × H 60 × 76 × 115		

FL4006

Order No.	**9 666 040**		
Model	**FL4006**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 4	**+10 °C** 2.9	**0 °C** 1.9
	-5 °C 1.40	**-10 °C** 0.9	**-20 °C** 0.05
Pump capacity Flow rate / Pressure	l/min 60 bar 0.5 - 6		
Filling volume liters	24 … 30		
Dimensions cm	W × L × H 60 × 76 × 115		

FL Recirculating Coolers

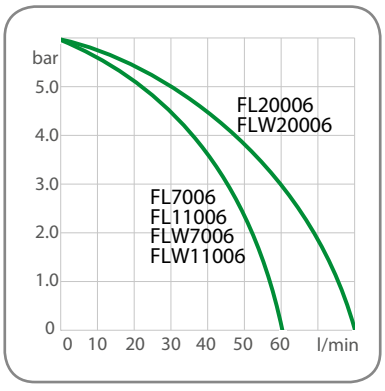
very powerful units, up to 20 kW of cooling capacity

The powerful FL models are suitable for a wide range of cooling tasks in industrial environments, such as removal of large process heat. 2 variants: Air-cooled (FL) and water-cooled (FLW).

- High cooling capacity of up to 20 kW
- Powerful circulating pumps
- Large power reserves with all applications
- Early warning function when condenser is dirty
- Low water consumption (on FLW models)
- Overload protection for pump motor and cooling machine
- Stainless steel bath tank
- BlackBox function with error memory for remote diagnosis
- Stakei connection for connecting a solenoid valve or a booster pump

Included in delivery: 2 Barbed fittings for tubing 1″ ID
(pump connections G 1¼″ male)

Pump capacity
Bath fluid: water



Rollers add flexibility

Drain tap located behind removable venting grid

Pump pressure indicator for models from FL1201

Pump pressure adjustable for models from 3 bar

FLW7006

Order No.	**9 676 070**		
Model	**FLW7006**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 7.4	**+10 °C** 7	**0 °C** 5.5
	-5 °C 4.30	**-10 °C** 3.1	**-20 °C** 1.3
Pump capacity Flow rate / Pressure	l/min	60	
	bar	0.5 - 6	
Filling volume liters	39 … 47		
Dimensions cm	W × L × H 78 × 85 × 148		

FLW11006

Order No.	**9 676 110**		
Model	**FLW11006**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 11.5	**+10 °C** 9	**0 °C** 7.3
	-5 °C 6.05	**-10 °C** 4.8	**-20 °C** 2.7
Pump capacity Flow rate / Pressure	l/min	60	
	bar	0.5 - 6	
Filling volume liters	39 … 47		
Dimensions cm	W × L × H 78 × 85 × 148		

FLW20006

Order No.	**9 676 200**		
Model	**FLW20006**		
Working temperature range °C	-25 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 20	**+10 °C** 15	**0 °C** 12
	-5 °C 9.50	**-10 °C** 7	**-20 °C** 3
Pump capacity Flow rate / Pressure	l/min	80	
	bar	0.8 - 6	
Filling volume liters	15 … 37		
Dimensions cm	W × L × H 95 × 115 × 161		

FL7006

Order No.	**9 666 070**		
Model	**FL7006**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 7	**+10 °C** 6.4	**0 °C** 5.1
	-5 °C 4.05	**-10 °C** 3	**-20 °C** 1.55
Pump capacity Flow rate / Pressure	l/min	60	
	bar	0.5 - 6	
Filling volume liters	39 … 47		
Dimensions cm	W × L × H 78 × 85 × 148		

FL11006

Order No.	**9 666 110**		
Model	**FL11006**		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 11	**+10 °C** 9	**0 °C** 7.5
	-5 °C 6.25	**-10 °C** 5	**-20 °C** 3
Pump capacity Flow rate / Pressure	l/min	60	
	bar	0.5 - 6	
Filling volume liters	39 … 47		
Dimensions cm	W × L × H 78 × 85 × 148		

FL20006

Order No.	**9 666 200**		
Model	**FL20006**		
Working temperature range °C	-25 ... +40		
Temperature stability °C	±0.5		
Cooling capacity kW	**+20 °C** 20	**+10 °C** 15	**0 °C** 10
	-5 °C 8	**-10 °C** 6	**-20 °C** 2.5
Pump capacity Flow rate / Pressure	l/min	80	
	bar	0.8 - 6	
Filling volume liters	15 … 37		
Dimensions cm	W × L × H 95 × 115 × 161		

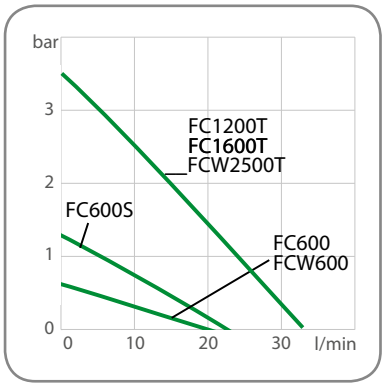
FC Recirculating Coolers

for heating and cooling tasks

FC models offer high temperature stability and feature integrated heating in addition.
2 variants: Air-cooled (FC) and water-cooled (FCW).

- Extended working temperatures up to +80 °C
- Two LED displays
- Adjustable feed/return temperature ratio
- Filling level indicator

Pump capacity
Bath fluid: water



What cooling capacity do you need for your application?

The JULABO temperature control specialists can already calculate an ideal cooling capacity for you based on little data. JULABO merely needs three values, which you can determine easily for your application in most cases:

| 1
Temperature of the cooling water prior to entering the application

| 2
Temperature of the cooling water after exiting the application

| 3
Cooling water flow rate in liters per minute

Send these three values to **info.de@julabo.com.** You will promptly receive a recommendation regarding the most suitable JULABO recirculating cooler.

FCW600

Order No.	**9 601 060**		
Model	**FCW600**		
Working temperature range °C	-20 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 0.6	**+10 °C** 0.47	**+5 °C** 0.4
	0 °C 0.34	**-10 °C** 0.21	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	20	
	bar	0.5	
Filling volume liters	6 … 8		
Dimensions cm	W × L × H 35 × 54 × 49		

FCW600S

Order No.	**9 601 063**		
Model	**FCW600S**		
Working temperature range °C	-10 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 0.5	**+10 °C** 0.37	**+5 °C** 0.3
	0 °C 0.235	**-10 °C** 0.1	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	22	
	bar	1.2	
Filling volume liters	6 … 8		
Dimensions cm	W × L × H 35 × 54 × 49		

FC600

Order No.	**9 600 060**		
Model	**FC600**		
Working temperature range °C	-20 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 0.6	**+10 °C** 0.47	**+5 °C** 0.4
	0 °C 0.34	**-10 °C** 0.21	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	20	
	bar	0.5	
Filling volume liters	6 … 8		
Dimensions cm	W × L × H 35 × 54 × 49		

FC600S

Order No.	**9 600 063**		
Model	**FC600S**		
Working temperature range °C	-10 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 0.5	**+10 °C** 0.37	**+5 °C** 0.3
	0 °C 0.235	**-10 °C** 0.1	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	22	
	bar	1.2	
Filling volume liters	6 … 8		
Dimensions cm	W × L × H 35 × 54 × 49		

Included in delivery: 2 barbed fittings each for tubing 8 and 12 mm inner dia. (pump connections M16x1 male)

FC Recirculating Coolers

for heating and cooling tasks

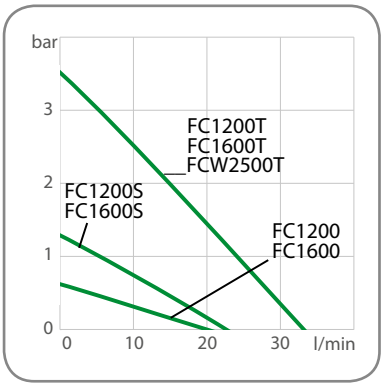
FC models offer high temperature stability and feature integrated heating in addition.
2 variants: Air-cooled (FC) and water-cooled (FCW).

- Models starting from a cooling capacity of 1.1 kW at +20 °C
- Heating capacity 1.2 kW

Models FC1200T, FC1600T, FCW2500T

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

Pump capacity
Bath fluid: water



Included in delivery: 2 barbed fittings each for tubing 8 and 12 mm ID (pump connections M16x1 male)

FC1200

Order No.	**9 600 120**		
Model	**FC1200**		
Working temperature range °C	-20 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 1.3	**+10 °C** 0.95	**+5 °C** 0.75
	0 °C 0.66	**-10 °C** 0.37	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	20	
	bar	0.5	
Filling volume liters	8 … 11		
Dimensions cm	W × L × H 46 × 61 × 49		

FC1200S

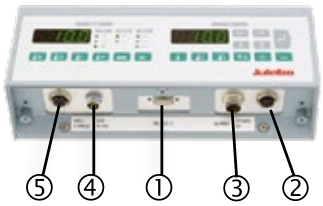
Order No.	**9 600 123**		
Model	**FC1200S**		
Working temperature range °C	-15 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 1.2	**+10 °C** 0.85	**+5 °C** 0.65
	0 °C 0.555	**-10 °C** 0.26	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	22	
	bar	1.2	
Filling volume liters	8 … 11		
Dimensions cm	W × L × H 46 × 61 × 49		

FC1200T

Order No.	**9 600 126**		
Model	**FC1200T**		
Working temperature range °C	-10 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 1.1	**+10 °C** 0.75	**+5 °C** 0.55
	0 °C 0.45	**-10 °C** 0.15	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	28	
	bar	3.5	
Filling volume liters	8 … 11		
Dimensions cm	W × L × H 46 × 61 × 49		

Digital/analog connections

① RS232 interface
② Standby input
③ Alarm output



FC1200T, FC1600T, FCW2500T offer in addition:

④ External Pt100 sensor
⑤ External programming, Temperature recorder

FCW2500T

Order No.	**9 601 256**		
Model	**FCW2500T**		
Working temperature range °C	-25 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 2.5	**+10 °C** 2	**+5 °C** 1.8
	0 °C 1.4	**-10 °C** 0.8	**-20 °C** 0.25
Pump capacity Flow rate / Pressure	l/min	28	
	bar	3.5	
Filling volume liters	8 … 11		
Dimensions cm	W × L × H 46 × 61 × 49		

FC1600

Order No.	**9 600 160**		
Model	**FC1600**		
Working temperature range °C	-20 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 1.65	**+10 °C** 1.25	**+5 °C** 1
	0 °C 0.86	**-10 °C** 0.47	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	20	
	bar	0.5	
Filling volume liters	8 … 11		
Dimensions cm	W × L × H 46 × 61 × 49		

FC1600S

Order No.	**9 600 163**		
Model	**FC1600S**		
Working temperature range °C	-15 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 1.55	**+10 °C** 1.15	**+5 °C** 0.9
	0 °C 0.755	**-10 °C** 0.36	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	22	
	bar	1.2	
Filling volume liters	8 … 11		
Dimensions cm	W × L × H 46 × 61 × 49		

FC1600T

Order No.	**9 600 166**		
Model	**FC1600T**		
Working temperature range °C	-15 ... +80		
Temperature stability °C	±0.2		
Heating capacity kW	1.2		
Cooling capacity kW	**+20 °C** 1.45	**+10 °C** 1.05	**+5 °C** 0.8
	0 °C 0.65	**-10 °C** 0.25	**-20 °C** -
Pump capacity Flow rate / Pressure	l/min	28	
	bar	3.5	
Filling volume liters	8 … 11		
Dimensions cm	W × L × H 46 × 61 × 49		

SemiChill Recirculating Coolers

for highest requirements in industrial environments

The SemiChill models are characterized by maximum reliability in continuous operation and under harsh environmental conditions. All parts in contact with the bath fluid are made of stainless steel or high grade plastic. The modular design permits custom configurations according to your requirements.

Models with type designation

"a" = air cooling
"w" = water cooling

- Five basic models, individually configurable
- High cooling capacity and strong circulating pumps
- Optional with integrated heater with a heating capacity of up to 12 kW
- Seal-free immersion pumps, maintenance-free and electronically adjustable
- Pressure and filling level indicator
- Sealed filling port (70 mm Ø)
- Overload protection for pump motor and cooling machine
- Pump connections: NPT ¾" male

Applications

Semiconductor industry (etching processes, stainless steel chucks, PVD, sputtering, wet benches), packaging industry, plastics industry, metering and adhesive technology, jacketed reaction vessels, kilo labs, pilot plants

SC2500a

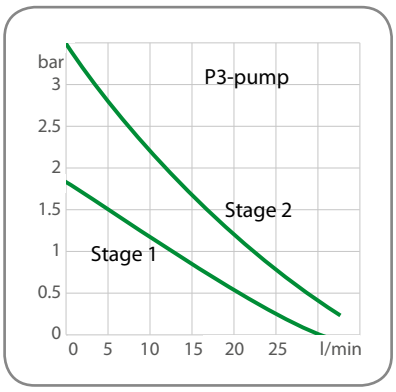
Order No.	Order index on page 21		
Model	**SC2500a**		
Working temperature range °C [1]	-20 ... +80		
Temperature stability °C	±0.1		
Cooling capacity kW	**+20 °C** 2.5	**0 °C** 1.5	**-10 °C** 0.9
Pump capacity Flow rate / Pressure	l/min bar	Order index on page 21	
Filling volume liters	21 ... 33		
Dimensions cm	W × L × H 49 × 62 × 105		

SC2500w

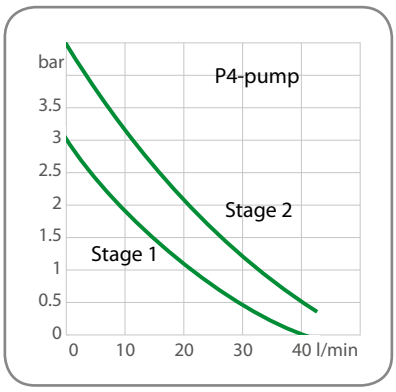
Order No.	Order index on page 21		
Model	**SC2500w**		
Working temperature range °C [1]	-20 ... +80		
Temperature stability °C	±0.1		
Cooling capacity kW	**+20 °C** 2.5	**0 °C** 1.5	**-10 °C** 0.9
Pump capacity Flow rate / Pressure	l/min bar	Order index on page 21	
Filling volume liters	21 ... 33		
Dimensions cm	W × L × H 49 × 62 × 105		

[1] Maximum working temperature range (standard working temperature range +5 ... +35 °C)

Pump capacity P3
Bath fluid: water



Pump capacity P4
Bath fluid: water



SC5000a

Order No.	Order index on page 21		
Model	**SC5000a**		
Working temperature range °C [1]	-20 ... +130		
Temperature stability °C	±0.1		
Cooling capacity kW	**+20 °C** 5.0	**0 °C** 2.5	**-10 °C** 1.2
Pump capacity Flow rate / Pressure	l/min bar	Order index on page 21	
Filling volume liters	43 ... 60		
Dimensions cm	W × L × H 59 × 67 × 112		

SC5000w

Order No.	Order index on page 21		
Model	**SC5000w**		
Working temperature range °C [1]	-20 ... +130		
Temperature stability °C	±0.1		
Cooling capacity kW	**+20 °C** 5.0	**0 °C** 2.5	**-10 °C** 1.2
Pump capacity Flow rate / Pressure	l/min bar	Order index on page 21	
Filling volume liters	43 ... 60		
Dimensions cm	W × L × H 59 × 67 × 112		

SC10000w

Order No.	Order index on page 21		
Model	**SC10000w**		
Working temperature range °C [1]	-20 ... +130		
Temperature stability °C	±0.1		
Cooling capacity kW	**+20 °C** 10.0	**0 °C** 5.0	**-10 °C** 2.5
Pump capacity Flow rate / Pressure	l/min bar	Order index on page 21	
Filling volume liters	43 ... 60		
Dimensions cm	W × L × H 59 × 67 × 112		