

**Julabo**  
THE TEMPERATURE CONTROL COMPANY

**Cool Savings!**

*Chill  
& Conserve!*



**Recirculating Coolers / Chillers**

## JULABO Recirculating Cooler F Series

# Compact and economical!



F250



F500



F1000

### 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 EG

#### Ideal for cooling:

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

JULABO Order No.	JULABO Model	Working temp. range °C	Temp. stability °C	Cooling capacity kW					Pump capacity Flow rate/pressure		Filling volume liters	Dimensions W x L x H in
				+20	+10	+5	0	-5 °C	l/min	psi		
9 620 025	F250	-10 ... +40	±0.5	0.25	0.22	0.21	0.18	0.09	15	5.08	1.7 ... 2.6	9.5 x 16 x 21
9 620 050	F500	0 ... +40	±0.5	0.50	0.40	0.30	0.25	--	24	7.25	5 ... 7.5	14.8 x 17.3 x 23.2
9 620 100	F1000	0 ... +40	±0.5	1.00	0.70	0.55	0.35	--	23	14.5	7 ... 9.5	14.8 x 19.3 x 25.2

Included with F250: 2 each barbed fittings for tubing 8 and 10 mm inner dia. (pump connections M10x1 female)

Included with F500, F1000: 2 each barbed fittings for tubing 8 and 12 mm inner dia. (pump connections M16x1 male)

# JULABO Recirculating Coolers FL Series

**Strong**  
**Efficient**  
**Economic**



**Save Water and  
Preserve our  
Environment!**

## Compact

FL300 to FLW1703

Up to 1.7 kW cooling capacity  
Installation beneath lab benches



## Strong

FL2503 to FLW4006

Up to 4.0 kW cooling capacity  
Small footprint



## Super Strong

FL7006 to FLW20006

Up to 20.0 kW cooling capacity  
Extra Power



## Strong

Strong JULABO recirculating coolers for a wide range of cooling applications in laboratories and production.

## Efficient

JULABO recirculating coolers are highly efficient with very low energy consumption. Save time with intuitive operation and easy unit start-up.

## Economic

JULABO recirculating coolers replace wasteful tap water cooling, reduce operating budgets and preserve natural resources.

### Advantages

- Save precious tap water
- Efficient and constant during all seasons
- No pressure fluctuations within the application - constant flow/pressure
- Your cooling processes are immune to ambient conditions
- Cooling at low temperatures guarantees optimal condensation
- Continuous operation at ambient temperatures up to +40 °C

Removable venting grid with drain at front bottom



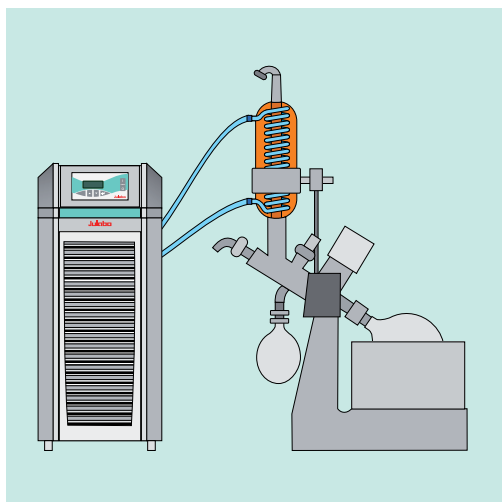
Pressure indicator from model FL1201 upwards



# The perfect model for each application



\*Costs vary based upon location.

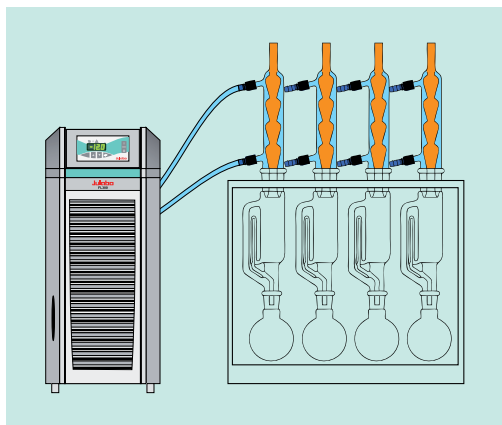


## Evaporation and concentration

Commonly used in laboratories for synthetic chemistry, organic chemistry, scale-ups, or in R&D labs for pharmaceuticals, chemicals, cosmetics, and nutritional chemistry. Evaporation and concentration without consumption of water, elevated efficiency even at cooling temperatures as low as -10 °C regardless of ambient conditions.

### Cooling and temperature control of 1 to 4 rotary evaporators

JULABO Model	FL300 F250	FL601 F500	FL1201 FL1203 F1000	FL1201 FL1203 F1000	FL1701 FL1703	FL2503 FL4003
Flask size	50 ml to 1 liter	up to 2 liters		up to 4 liters		up to 20 liters
Number of rotary evaporators	1	2	3-4	1	2	1-2

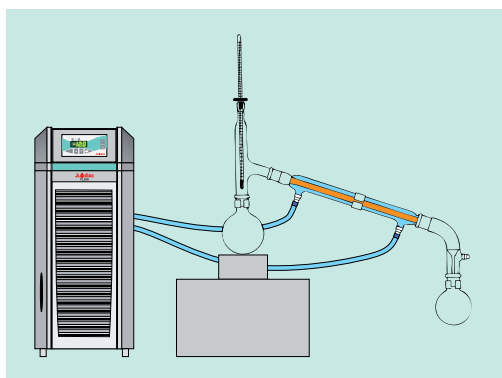


## Extraction

Quality control applications in laboratories for determination of fat content and extractable substances in food, animal feed, etc. used in the feed, animal nutrition, and dairy industries.

Extraction without consumption of cooling water, consistently reproducible condensation temperatures, without influence of ambient or seasonal temperature fluctuations.

JULABO Model	FL300 F250	FL601 F500	FL601 F500	FL1201 F1000	FL1701 FL1201	FL1701	FL2503
Number of condensers	2	4	6	8	12	18	24



## Distillation

Common applications in QA laboratories for determination of alcohol, ethanol, or carboxylic levels. Primarily used in the food, beverage, animal feed, cosmetics, and detergent industries as well as in waste water treatment plants.

Distillation without use of tap water, with more effective and reproducible cooling and consistent analysis conditions.

JULABO Model	FL1201 F1000	FL2503	FL2503	FL4003
Number of distillation units	1	2	3	4

And much more ...

JULABO recirculating coolers can be used with fermenters, bioreactors as well as numerous other cooling applications.

**Consult with JULABO experts for all application possibilities.**

## Compact

JULABO Order No.	JULABO Model	Working temp. range °C	Temp. stability °C	Cooling capacity kW					Pump capacity		Filling volume liters	Dimensions W x L x H in
				+20	+10	0	-10	-20 °C	Flow rate/pressure l/min psi			
9 660 003	FL300	-20 ... +40	±0.5	0.3	0.25	0.2	0.15	0.1	15	5.1	3 ... 4.5	9.8 x 19.7 x 23.6
9 661 006	FL601	-20 ... +40	±0.5	0.6	0.5	0.4	0.33	0.2	23	14.5	5.5 ... 8	12.6 x 19.7 x 23.6
9 661 012	FL1201	-20 ... +40	±0.5	1.2	1.0	0.9	0.6	0.3	23	14.5	12 ... 17	19.7 x 29.9 x 25.2
9 663 012	FL1203	-20 ... +40	±0.5	1.2	0.9	0.8	0.5	0.2	40	7.3 - 43.5	12 ... 17	19.7 x 29.9 x 25.2
9 661 017	FL1701	-20 ... +40	±0.5	1.7	1.5	1.1	0.85	0.4	23	14.5	12 ... 17	19.7 x 29.9 x 25.2
9 663 017	FL1703	-20 ... +40	±0.5	1.7	1.4	1.0	0.75	0.3	40	7.3 - 43.5	12 ... 17	19.7 x 29.9 x 25.2

water-cooled models

9 671 017	FLW1701	-20 ... +40	±0.5	1.7	1.5	1.1	0.85	0.4	23	14.5	12 ... 17	19.7 x 29.9 x 25.2
9 673 017	FLW1703	-20 ... +40	±0.5	1.7	1.4	1.0	0.75	0.3	40	7.3 - 43.5	12 ... 17	19.7 x 29.9 x 25.2

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

2 each barbed fittings for tubing 3/4" inner dia. with models FL1203 and FL(W)1703 (pump connections G 3/4" male)

## Strong

JULABO Order No.	JULABO Model	Working temp. range °C	Temp. stability °C	Cooling capacity kW					Pump capacity		Filling volume liters	Dimensions W x L x H in
				+20	+10	0	-10	-20 °C	Flow rate/pressure l/min psi			
9 663 025	FL2503	-20 ... +40	±0.5	2.5	2.2	1.5	1.2	0.55	40	7.3 - 43.5	24 ... 30	23.6 x 29.9 x 45.3
9 666 025	FL2506	-15 ... +40	±0.5	2.5	1.9	1.0	0.3	--	60	7.3 - 87	24 ... 30	23.6 x 29.9 x 45.3
9 663 040	FL4003	-20 ... +40	±0.5	4.0	3.4	2.4	1.5	0.65	40	7.3 - 43.5	24 ... 30	23.6 x 29.9 x 45.3
9 666 040	FL4006	-20 ... +40	±0.5	4.0	2.9	1.9	0.9	0.05	60	7.3 - 87	24 ... 30	23.6 x 29.9 x 45.3

water-cooled models

9 673 025	FLW2503	-20 ... +40	±0.5	2.7	2.5	1.7	1.0	0.4	40	7.3 - 43.5	24 ... 30	23.6 x 29.9 x 45.3
9 676 025	FLW2506	-15 ... +40	±0.5	2.5	1.9	1.0	0.3	--	60	7.3 - 87	24 ... 30	23.6 x 29.9 x 45.3
9 673 040	FLW4003	-20 ... +40	±0.5	4.3	3.0	2.2	1.3	0.45	40	7.3 - 43.5	24 ... 30	23.6 x 29.9 x 45.3
9 676 040	FLW4006	-15 ... +40	±0.5	4.0	3.0	1.7	0.7	--	60	7.3 - 87	24 ... 30	23.6 x 29.9 x 45.3

Included: 2 each barbed fittings for tubing 3/4" inner dia. with models FL/FLW2503 and FL/FLW4003 (pump connections G 3/4" male)

2 each barbed fittings for tubing 1" inner dia. with models FL/FLW2506 and FL/FLW4006 (pump connections G 1 1/4" male)

## Super Strong

JULABO Order No.	JULABO Model	Working temp. range °C	Temp. stability °C	Cooling capacity kW					Pump capacity		Filling volume liters	Dimensions W x L x H in
				+20	+10	0	-10	-20 °C	Flow rate/pressure l/min psi			
9 666 070	FL7006	-20 ... +40	±0.5	7.0	6.4	5.1	3.0	1.55	60	7.3 - 87	39... 47	30.7 x 33.5 x 58.3
9 666 110	FL11006	-20 ... +40	±0.5	11.0	9.0	7.5	5.0	3.0	60	7.3 - 87	39... 47	30.7 x 33.5 x 58.3
9 666 200	FL20006	-25 ... +40	±0.5	20.0	15.0	10.0	6.0	2.5	80	11.6 - 87	17... 40	37.4 x 45.3 x 63.4

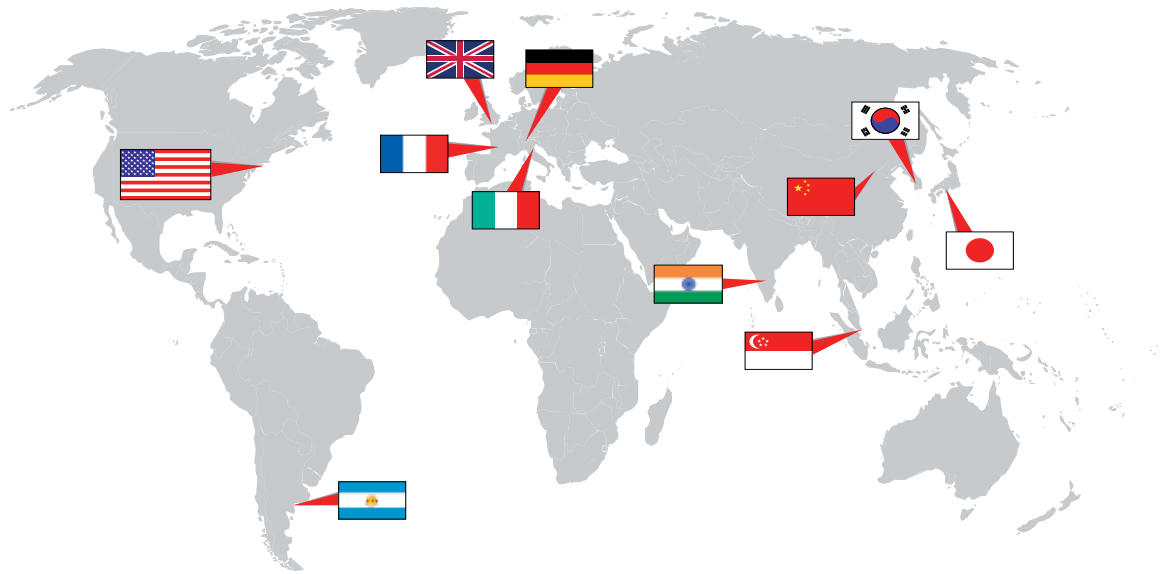
water-cooled models

9 676 070	FLW7006	-20 ... +40	±0.5	7.4	7.0	5.5	3.1	1.3	60	7.3 - 87	39... 47	30.7 x 33.5 x 58.3
9 676 110	FLW11006	-20 ... +40	±0.5	11.5	9.0	7.3	4.8	2.7	60	7.3 - 87	39... 47	30.7 x 33.5 x 58.3
9 676 200	FLW20006	-25 ... +40	±0.5	20.0	15.0	12.0	7.0	3.0	80	11.6 - 87	17... 40	37.4 x 45.3 x 63.4

Included: 2 each barbed fittings for tubing 1" inner dia. (pump connections G 1 1/4" male)



**JULABO offers an extensive selection of accessories for all models. All accessories and order information is available at [www.julabo.com](http://www.julabo.com)**



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