

## FL Recirculating Coolers

compact models with up to 1.7 kW 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.

- Easy filling from above
- Feed pressure indicator (FL1201 and above) and filling 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, and JULABO Thermal bath fluids
- Overload protection for pump motor and cooling machine

Practical recessed grip



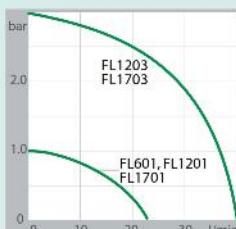
Drain tap located behind removable venting grid.



Rollers add flexibility



**Pump capacity**  
Bath fluid: Water



JULABO Order No.	JULABO Model	Working temp. range °C	Temp. stability °C	Cooling capacity kW					°C	Pump capacity Flow rate/pressure l/min bar	Filling volume liters	Dimensions W x L x H cm
				+20	+10	0	-10	-20	°C			
9 660 003	FL300	-20 ... +40	±0.5	0.3	0.25	0.2	0.15	0.1		15	0.35	3 ... 4.5
9 661 006	FL601	-20 ... +40	±0.5	0.6	0.5	0.4	0.33	0.2		23	1.0	5.5 ... 8
9 661 012	FL1201	-20 ... +40	±0.5	1.2	1.0	0.9	0.6	0.3		23	1.0	12 ... 17
9 663 012	FL1203	-20 ... +40	±0.5	1.2	0.9	0.8	0.5	0.2		40	0.5 - 3.0	12 ... 17
9 661 017	FL1701	-20 ... +40	±0.5	1.7	1.5	1.1	0.85	0.4		23	1.0	12 ... 17
9 663 017	FL1703	-20 ... +40	±0.5	1.7	1.4	1.0	0.75	0.3		40	0.5 - 3.0	12 ... 17
water-cooled models												
9 671 017	FLW1701	-20 ... +40	±0.5	1.7	1.5	1.1	0.85	0.4		23	1.0	12 ... 17
9 673 017	FLW1703	-20 ... +40	±0.5	1.7	1.4	1.0	0.75	0.3		40	0.5 - 3.0	12 ... 17

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)



### Applications

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

## FL Recirculating Coolers

powerful models with up to 4.3 kW 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.

- 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

**Filling level indicator**  
all models



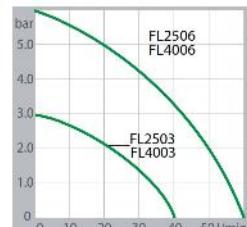
**Pump pressure adjustment**  
models from 3 bar pressure



**Pump pressure indicator**  
on FL1201 and above



**Pump capacity**  
Bath fluid: Water

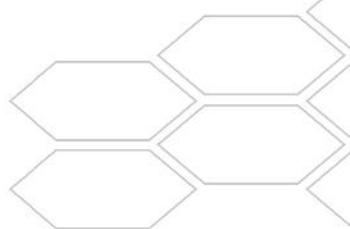


JULABO Order No.	JULABO Model	Working temp. range °C	Temp. stability °C	Cooling capacity kW +20 +10 0 -10 -20 °C						Pump capacity Flow rate/pressure l/min bar	Filling volume liters	Dimensions W x L x H cm	
9 663 025	FL2503	-20 ... +40	±0.5	2.5	2.2	1.5	1.2	0.55		40	0.5 - 3.0	24 ... 30	60 x 76 x 115
9 666 025	FL2506	-15 ... +40	±0.5	2.5	1.9	1.0	0.3	--		60	0.5 - 6.0	24 ... 30	60 x 76 x 115
9 663 040	FL4003	-20 ... +40	±0.5	4.0	3.4	2.4	1.5	0.65		40	0.5 - 3.0	24 ... 30	60 x 76 x 115
9 666 040	FL4006	-20 ... +40	±0.5	4.0	2.9	1.9	0.9	0.05		60	0.5 - 6.0	24 ... 30	60 x 76 x 115
water-cooled models													
9 673 025	FLW2503	-20 ... +40	±0.5	2.7	2.5	1.7	1.0	0.4		40	0.5 - 3.0	24 ... 30	60 x 76 x 115
9 676 025	FLW2506	-15 ... +40	±0.5	2.5	1.9	1.0	0.3	--		60	0.5 - 6.0	24 ... 30	60 x 76 x 115
9 673 040	FLW4003	-20 ... +40	±0.5	4.3	3.0	2.2	1.3	0.45		40	0.5 - 3.0	24 ... 30	60 x 76 x 115
9 676 040	FLW4006	-15 ... +40	±0.5	4.0	3.0	1.7	0.7	--		60	0.5 - 6.0	24 ... 30	60 x 76 x 115

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)



| FL7006 to FLW11006



### Applications

Electron microscopes, lasers, mills, and kneaders, pilot plants, plastics industry, drying of gases, general industrial applications

## FL Recirculating Coolers

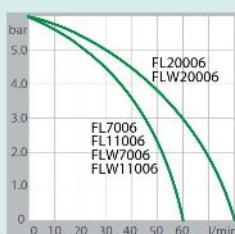
very powerful units, up to 20 kW cooling capacity

The powerful FL models are suitable for a wide range of cooling tasks in industrial environments, such as removal of large process heat.

- High cooling capacity of up to 20 kW
- Powerful circulating pumps
- Large power reserves with all applications
- Low water consumption on FLW models
- Overload protection for pump motor and cooling machine
- *BlackBox* function with error memory for remote diagnosis

### Pump capacity

Bath fluid: Water



JULABO Order No.	JULABO Model	Working temp. range °C	Temp. stability °C	Cooling capacity kW					Pump capacity Flow rate/pressure l/min	Filling volume liters	Dimensions W x L x H cm
9 666 070	<b>FL7006</b>	-20 ... +40	±0.5	7.0	6.4	5.1	3.0	1.55	60	0.5 - 6.0	39... 47
9 666 110	<b>FL11006</b>	-20 ... +40	±0.5	11.0	9.0	7.5	5.0	3.0	60	0.5 - 6.0	39... 47
9 666 200	<b>FL20006</b>	-25 ... +40	±0.5	20.0	15.0	10.0	6.0	2.5	80	0.8 - 6.0	15... 37
water-cooled models											
9 676 070	<b>FLW7006</b>	-20 ... +40	±0.5	7.4	7.0	5.5	3.1	1.3	60	0.5 - 6.0	39... 47
9 676 110	<b>FLW11006</b>	-20 ... +40	±0.5	11.5	9.0	7.3	4.8	2.7	60	0.5 - 6.0	39... 47
9 676 200	<b>FLW20006</b>	-25 ... +40	±0.5	20.0	15.0	12.0	7.0	3.0	80	0.8 - 6.0	15... 37

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