



SC2500a  
SC2500w

### Applications

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

## SemiChill Recirculating Coolers

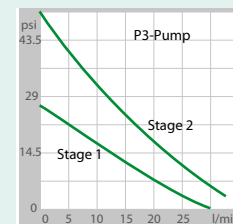
for extreme requirements in industrial environments

JULABO's SemiChill models are characterized by maximum reliability in continuous operation and under harsh environmental conditions. All parts that contact the bath fluid are made of stainless steel or high-quality plastic. The modular concept permits custom configurations according to your requirements.

- Five basic models, individually configurable
- High cooling capacities and strong pumps
- Optional integrated heater with up to 12 kW of power
- Seal-free immersion pumps, maintenance-free and electronically adjustable
- Pressure and filling level indicator
- Sealed filling port (70 mm dia.)
- Overload protection for pump motor and cooling machine

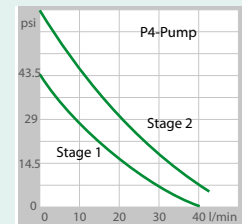
#### Pump capacity P3

Bath fluid: Water



#### Pump capacity P4

Bath fluid: Water



JULABO Order No.	JULABO Model	Working <sup>1)</sup> temp. range °C	Temp. stability °C	Cooling capacity kW			Pump type/ pump capacity	Filling volume liters	Dimensions W x L x H in
				+20	0	-10 °C			
see order index on following pages	<b>SC2500a</b>	-20 ... +80	±0.1	2.5	1.5	0.9	see order index on following pages	21 ... 33	19.3 x 24.4 x 41.3
	<b>SC2500w</b>	-20 ... +80	±0.1	2.5	1.5	0.9		21 ... 33	19.3 x 24.4 x 41.3
	<b>SC5000a</b>	-20 ... +130	±0.1	5.0	2.5	1.2		43 ... 60	23.2 x 26.4 x 44.1
	<b>SC5000w</b>	-20 ... +130	±0.1	5.0	2.5	1.2		43 ... 60	23.2 x 26.4 x 44.1
	<b>SC10000w</b>	-20 ... +130	±0.1	10.0	5.0	2.5		43 ... 60	23.2 x 26.4 x 44.1

Models with designation "a" = air-cooled; "w" = water-cooled

Pump connections: NPT 3/4" male

<sup>1)</sup> Maximum working temperature range (standard working temperature range +5... +35 °C)

## Operating and control electronics

Optional features

	Eco	Professional
Multi-Display (LED) temperature display	•	
VFD Comfort Display with simultaneous display of 3 values		•
Keypad, splash-proof	•	•
PID temperature control	•	•
3-point calibration	•	•
Pump capacity adjustable in stages	•	•
RS232 interface	•	•
'Stakei' connection for power supply (e. g. for shut-off valve)	•	•
Early warning system for low level, high and low temperature limits	•	•
High-temperature cut-off adjustable via display	•	•
Low liquid level protection with cut-off function	•	•
Classification III (DIN 12876-1)	•	•
Remote diagnosis function via integrated <i>BlackBox</i>	•	•
Connector for external Pt100 sensor for measuring and controlling the external system		•
Integrated programmer with real-time clock for 1x10 program steps		•
Quantitative resistivity measurement and display, range 0.5...5 Ω/cm		•
Flow measurement and status display (factory pre-set limit value)		•
Options for <b>Professional</b> electronics		
Scalable analog interfaces (standby input, 2 x alarm output)	--	Optional
RS485 Interface	--	Optional

## Additional options for working temperature, pump capacity, and heater

Model	Working temperature ranges				Circulating pumps		Heaters			
	Standard +5...+35 °C	Low temp. -20...+35 °C	Low/high temp I -20...+80 °C	Low/high temp II -20...+130 °C	P3 33 l/min 50.8 psi	P4 43 l/min 62.4 psi	H0 no Heater	H1 1 kW	H5 5 kW	H12 12 kW
SC2500a SC2500w	✓	Optional	Optional	--	✓	--	✓	Optional	--	--
SC5000a, SC5000w SC10000w	✓	Optional	Optional	Optional	✓	Optional <sup>1)</sup>	✓	--	Optional	Optional

✓ This feature is already included with the basic model

<sup>1)</sup> Cooling capacity reduced by 0.2 kW

## Filter housings

Please specify the desired filter option when ordering. Retrofitting is not possible. Housing is mounted on the right side of the unit.

- D1 DI-filter housing, plastic (up to +35 °C), incl. cartridge
- D2 DI-filter housing, stainless steel (up to +90 °C), incl. cartridge
- M1 Micro-filter housing, plastic (up to +35 °C), w/o cartridge
- M2 Micro-filter housing, stainless steel (up to +130 °C), w/o cartridge

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



## Order index

for custom configuration

Select one of five basic models and then the options of your choice. Please use the order index shown below to create the order number for your instrument.

The following example is for model SC5000a:

**9 5 2 1 050 07 P3 H0 D0 M1**

9	5	x	x	xxx	xx	xx	xx	xx	xx	xx
a	b	c	d	e	f	g	h			



### Custom configuration

- > Electronics
- > Pumps
- > Temperature range
- > Interfaces
- > Heating power
- > Filters

a **9 5 x x xxx xx xx xx xx xx**

#### Keypad and control electronics

- 0 Eco
- 2 Professional
- 3 Professional with analog interface module
- 7 Professional with RS485 interface

e **9 5 x x xxx xx xx xx xx xx**

#### Circulating pump (pump type, pump capacity)

- P3 33 l/min. - 50.8 psi max.
- P4 43 l/min. - 62.4 psi max.

b **9 5 x x xxx xx xx xx xx xx**

#### Working temperature range

- 0 Standard (+5 ... +35 °C)
- 1 LowTemp (-20 ... +35 °C)
- 2 Low/HighTemp I (-20 ... +80 °C)
- 3 Low/HighTemp II (-20 ... +130 °C)

f **9 5 x x xxx xx xx xx xx xx**

#### Integrated Heater

- H0 Without heater
- H1 Heating capacity 1 kW
- H5 Heating capacity 5 kW
- H12 Heating capacity 12kW

c **9 5 x x xxx xx xx xx xx xx**

#### Basic model

- 025 SC2500a
- 026 SC2500w
- 050 SC5000a
- 051 SC5000w
- 101 SC10000w

g **9 5 x x xxx xx xx xx xx xx**

#### DI-filter housing

- D0 Without DI-filter housing
- D1 DI-filter housing, plastic (to +35 °C max.)
- D2 DI-filter housing, stainless steel (to +90 °C max.)

d **9 5 x x xxx xx xx xx xx xx**

#### Voltage version<sup>1)</sup>

- 03 230 V / 50 Hz
- 07 400 V (3 Ph.) / 50 Hz
- 13 208-230 V / 60 Hz
- 16 208-230 V (3 Ph.) / 60 Hz

h **9 5 x x xxx xx xx xx xx xx**

#### Micro-filter housing

- M0 Without micro-filter housing
- M1 Micro-filter housing, plastic (to +35 °C max.)
- M2 Micro-filter housing, stainless steel (to +130 °C max.)



<sup>1)</sup> Voltage version  
**SC2500a, SC2500w** 230 V / 50 Hz or 208-230 V / 60 Hz  
**SC5000a, SC5000w, SC10000w** 400 V (3 Ph.) / 50 Hz or 208-230 V (3 Ph.) / 60 Hz