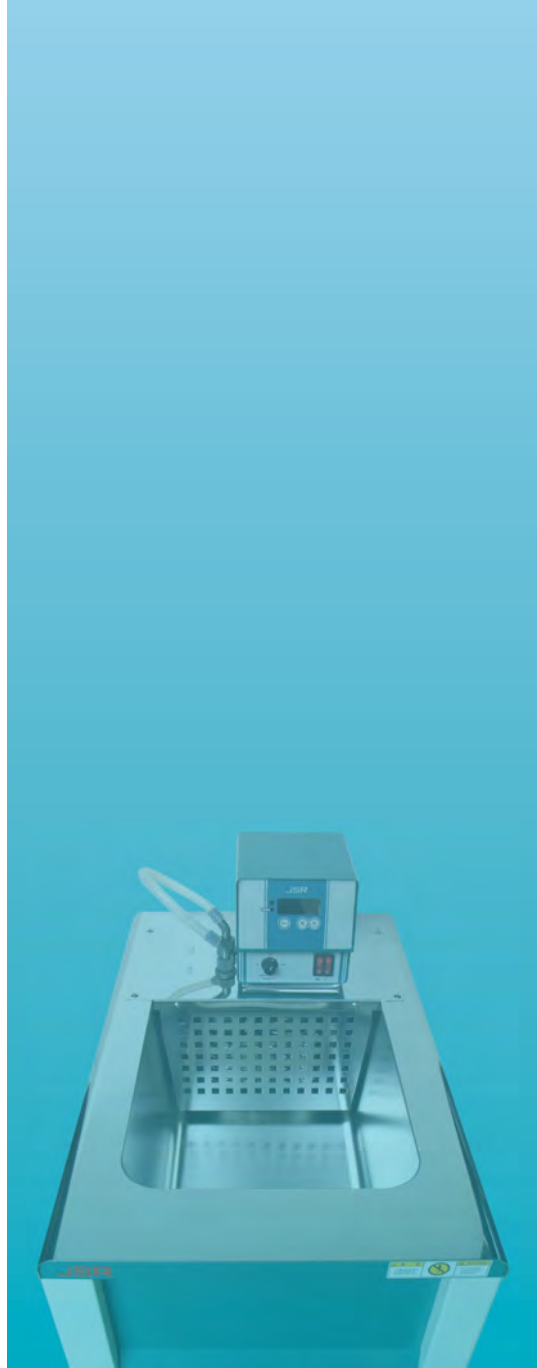


BATHS



JSR

[주] 제이에스리서치
JS Research Inc.

Laboratory

WATER BATH

JSWB-Series Heated Bath



- ▶ amb. +5 °C ~ 80 °C (99 °C)
- ▶ Constant Temperature
- ▶ Timer On / Off



MODEL	CAPACITY	TEMPERATURE	ACCURACY
JSWB-06T(L)	6 L	JSWB-TL	± 0.1 °C
JSWB-11T(L)	11 L	amb. + 5 °C ~ 80 °C	
JSWB-22T(L)	22 L	JSWB-T	
JSWB-30T(L)	30 L	amb. + 5 °C ~ 99 °C	

JSOB-Series Digital Oil Bath



- ▶ amb. +10 °C ~ 250 °C
- ▶ Constant Temperature
- ▶ Timer On / Off



MODEL	CAPACITY	TEMPERATURE	ACCURACY
JSOB-100T	11 L	amb. + 10 °C ~ 250 °C	± 1.0 °C
JSOB-200T	20 L		
JSOB-300T	33 L		

JSVB-Series Visco-Sight Bath



- ▶ amb. +5 °C ~ 99 °C
- ▶ Constant Temperature
- ▶ Timer On / Off
- ▶ Glass Window
- ▶ Internal Circulation



MODEL	CAPACITY	TEMPERATURE	ACCURACY
JSVB-30T	31 L	amb. + 5 °C ~ 99 °C	± 0.1 °C

JSEB-Series Extraction Bath



- ▶ amb. +5 °C ~ 99 °C
- ▶ Constant Temperature
- ▶ Timer On / Off
- ▶ 6 to 10 Multi-Extraction Ports



MODEL	CAPACITY	TEMPERATURE	ACCURACY
JSEB-60T	6 Ports	amb. +5 °C ~ 99 °C	± 0.5 °C
JSEB-62T	2 x 3 Ports		
JSEB-82T	2 x 4 Ports		
JSEB-102T	2 x 5 Ports		

JSIB-Series Circulation Bath



- ▶ amb. +5 °C ~ 99 °C
- ▶ Constant Temperature
- ▶ Timer On / Off
- ▶ Internal and external Circulation Pump
- ▶ Flow Rate : 8 L/min
- ▶ Pressure : 0.3 bar



MODEL	CAPACITY	TEMPERATURE	ACCURACY
JSIB-11T	11 L	amb. +5 °C ~ 99 °C	± 0.1 °C
JSIB-22T	22 L		
JSIB-50T	48 L		
JSIB-100T	100 L		

JSRC-C(L) Series Refrigerated Circulation Bath



- ▶ - 20 (- 40) °C ~ 120 °C
- ▶ Constant Temperature
- ▶ Timer On / Off
- ▶ Internal and external Circulation Pump
- ▶ Flow Rate : 10 L/min
- ▶ Pressure : 0.5 bar



MODEL	CAPACITY	TEMPERATURE	ACCURACY
JSRC-06C(L)	7 L	JSRC-C	± 0.1 °C
JSRC-13C(L)	11 L	-20 °C ~ 120 °C	
JSRC-22C(L)	20 L	JSRC-CL	
JSRC-30C(L)	30 L	-40 °C ~ 120 °C	

JSCT-Series JSCTC-Series Ultra-Low Cold Trap Bath

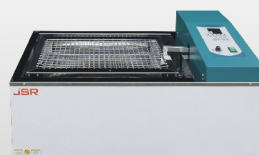


- ▶ Minimum Temperature
-25 °C ~ - 85 °C
- ▶ On/Off Temperature Control



MODEL	CAPACITY	MINIMUM TEMPERATURE
JSCT-25C	7.2 L	- 25 °C
JSCT-55ULT		- 55 °C
JSCT-85ULT		- 85 °C
JSTC-55ULT	2.8 L	- 55 °C
JSTC-85ULT		- 85 °C

JSSB-Series Shaking Water Bath



- ▶ amb. +5 °C ~ 99 °C
- ▶ Constant Temperature
- ▶ Timer On / Off
- ▶ Shaking Speed 20 ~ 120 rpm
- ▶ 25 mm stroke reciprocal motion



MODEL	CAPACITY	TEMPERATURE	ACCURACY
JSSB-30T	30 L	amb. +5 °C ~ 99 °C	± 0.2 °C
JSSB-50T	50 L		

Laboratory

WATER BATH

Controller

▶ JSC-0D [BASIC]



- ▶ $\pm 0.1\text{ }^{\circ}\text{C}$ Digital PID Controller with automatic START/STOP timer max. 99min 59sec / 99hr 59min / 99day 23hr
- ▶ Digital LED displays operating status such as TEMP and remaining TIME
- ▶ Temperature calibration
- ▶ Auto-tuning function
- ▶ Class A Pt-100 Ω sensor
- ▶ Audio Visual Alarms
- ▶ 정밀한 PID 컨트롤러는 온도를 $\pm 0.1\text{ }^{\circ}\text{C}$ 단위로 제어
- ▶ 예약 / 정지 타이머 내장
99분59초/99시간59분/99일23시간
- ▶ 온도 보정, 오토튜닝 기능 내장
- ▶ Class A Pt-100 Ω 온도센서
- ▶ 안전한 작동을 위한 다양한 시청각적 알람

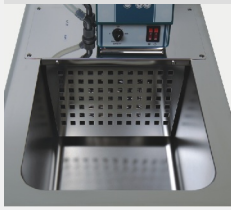
▶ JSC-7S Controller for Shaking Water Bath



- ▶ Integrated Digital PID Controller
- ▶ Temperature control with $\pm 0.1\text{ }^{\circ}\text{C}$
- ▶ Shaking speed control within $\pm 1\text{ rpm}$
- ▶ Automatic STOP timer
Max. 99min 59sec / 99hr 59min / 99day 23hr
- ▶ Dual digital LED displays
TEMP, RPM and remaining TIME
- ▶ Temperature calibration
- ▶ Shaking speed calibration
- ▶ Slow Start and Stop Control
- ▶ Auto-tuning function
- ▶ Class A Pt-100 Ω sensor
- ▶ 온도, 속도, 타이머 통합제어 PID 컨트롤러
- ▶ 온도제어 정밀도 : $\pm 0.1\text{ }^{\circ}\text{C}$
- ▶ 교반속도 제어 정밀도 : $\pm 1\text{ rpm}$
- ▶ 타이머 설정 최대 99분 59초/99시간 59분 /99일 23시간
- ▶ 현재온도, 교반속도, 잔여시간 디스플레이
- ▶ 온도 및 속도 보정 기능
- ▶ 작동 시 가속 및 감속 속도 제어
- ▶ 오토튜닝 기능 내장
- ▶ Class A Pt-100 온도센서

Performance & Convenience

Construction



- ▶ Durable epoxy powder coated metallic casing
- ▶ High quality stainless steel 304 bath
- ▶ 내구성이 뛰어난 에폭시 분체 도장과 스테인레스 스틸 304 배스

Seamless Bath



- ▶ Easy to clean Electro-Polished seamless SUS304 Bath with perforated stainless steel bottom plate
- ▶ 부식에 강한 전해 연마 처리된 Stainless Steel (SUS304) 배스는 코너에 이음새가 없어 세척과 유지보수가 간편

Lids



- ▶ Stainless steel flat cover to help reduce heat losses and evaporation
- ▶ 온도유지와 물의 증발을 방지하기 위한 커버

Circulation Pump



- ▶ Stainless Steel or magnetic driven pump for internal and external circulation of bath fluid
- ▶ Stainless Steel 또는 Magnetic Pump는 용액을 내부 또는 외부로 순환

Safety

DUAL OVER TEMP. CUT-OFF

- 1) Digital system cut-off heater and AUDIO VISUAL ALARM in case +2°C above set temperature
- 2) Analog system cut-off heater 10% above set temp.

MAX TEMP CUT-OFF heater and AUDIO VISUAL ALARM

- ▶ when if +1°C above maximum limit

SENSOR DISCONNECTION ALARM

LOW WATER LEVEL SENSOR (Specific models only)

OVER CURRENT CUT-OFF : Electrical Leakage Breaker or Fuse

이중과열방지장치

- 1) 설정온도 +2 °C 초과 시 히터 차단 및 시청각알람
- 2) 콘트롤러 오류로 지정 온도 10% 초과 시 히터차단

최고온도알람기능 : 작동 한계온도 +1°C 초과시 히터 차단

센서단락알람

저수위감지센서 (일부모델)

누전차단기 (퓨즈) : 전기누설 시 주전원 차단

Drain



- ▶ Drain for easy emptying of bath fluid [Depends model]
- ▶ 배수용 드레인 밸브 장착 [일부모델]

Maintenance



- ▶ Easy to maintain refrigeration system
- ▶ 편리한 유지보수

Digital OIL BATH

HIGH TEMP
UP TO 250 °C
Immersion Heating



Digital Oil Bath

JSOB-Series Digital Oil Bath is suitable for high temperature applications using oil as a thermal media up to 250 °C such as heat transfer, dipping and melting experiment

Specifications

Heating	Direct Immersion Sheath Heater
Temp. Range	ambient + 10 °C ~ 250 °C
Accuracy	± 1.0 °C at 120.0°C (JSOB-200T)
Uniformity	± 3.0 °C at 120.0°C (JSOB-200T)
Control	Microprocessor PID Control Auto START / STOP Timer
Sensor	Class A Pt-100 Ω Sensor
Safety	Over-Temperature Cut-Off Over Current Cut-Off
Material	Body : Epoxy Powder Coated Steel Bath : Stainless Steel 304
Electric	220 ± 10% VAC 50/60Hz 1-Phase

Plug config.



CEE 7/7 Schuko

or



BS 1363

Control Accuracy

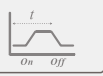
- ± 0.1 °C Digital PID Controller with automatic START/STOP timer max. 99min 59sec / 99hr 59min / 99day 23hr
- Temperature calibration, auto-tuning function
- Class A Pt-100 Ω sensor
- 정밀한 PID 컨트롤러는 온도를 ±0.1 °C 단위로 제어
- 예약 / 정지 타이머 내장 99분59초 / 99시간59분 / 99일23시간
- 온도보정, 오토튜닝 기능 내장
- Class A Pt-100 Ω 온도 센서



Heated amb.+10 °C ~ 250 °C



Timer On / Off



Constant Temperature
Controller

Performance

- ▶ Durable epoxy powder coated metallic casing
- ▶ Corrosion resistant Stainless Steel 304 bath
- ▶ Corrosion resistant stainless steel 304 sheath immersion heater directly heating oil in the bath to reach set temperature quickly
- ▶ Perforated heater cover helps convection of heated oil circulation to maintain thermal uniformity of the bath
- ▶ Maximum temperature up to 250 °C, accuracy $\pm 1.0^{\circ}\text{C}$
- ▶ 내구성이 뛰어난 에폭시 분체 도장 본체
- ▶ 내부식성이 뛰어난 Stainless Steel 304 재질의 베스
- ▶ 내구성이 뛰어난 스테인레스 스틸(SUS304) 재질의 히터가 수조 내부의 오일을 직접 가열하여 신속히 설정 온도에 도달
- ▶ 다공성 히터커버는 가열된 오일이 베스 내부로 균일하게 순환 되도록 설계되어 균일한 온도 분포
- ▶ 최고 가열 온도 250 °C, $\pm 1.0^{\circ}\text{C}$ 의 탁월한 정밀도

Convenience

- ▶ Easy to clean polished Stainless Steel 304 Bath
- ▶ Perforated stainless steel bottom plate
- ▶ Drain for easy emptying of the bath fluid
- ▶ Supplied with stainless steel flat cover with silicone packing to help reduce heat losses and evaporation
- ▶ 부식에 강한 연마 처리된 Stainless Steel(SUS304) 베스는 세척과 유지보수가 간편
- ▶ Stainless Steel 304재질의바닥 타공판
- ▶ 배수용 드레인밸브장착
- ▶ 온도유지와 증발을 방지하기 위한 실리콘 패킹 커버 포함

Safety

- ▶ DUAL OVER TEMP. CUT-OFF
- ▶ MAX TEMP CUT-OFF heater and AUDIO VISUAL ALARM
- ▶ SENSOR DISCONNECTION ALARM
- ▶ OVER CURRENT CUT-OFF FUSE
- ▶ 이중과열방지장치
- ▶ 최고온도알람기능 : 작동 한계온도+1°C 초과 시 히터 차단
- ▶ 센서단락알람
- ▶ 누전차단기 : 전기 누설 시 주전원 차단

Ordering Information

	JSOB-100T	JSOB-200T	JSOB-300T
Bath Volume (Capacity)	11 L	20 L	33 L
Dimensions Inner	300 x 220 x 170	400 x 300 x 170	430 x 300 x 260
W x D x H mm Usable	300 x 220 x 130	400 x 300 x 130	430 x 300 x 220
Outer	550 x 310 x 340	650 x 390 x 360	680 x 390 x 450
Temperature Range	ambient +10 °C ~ 250 °C		
Accuracy at 120.0°C	$\pm 1.0^{\circ}\text{C}$	$\pm 1.0^{\circ}\text{C}$	$\pm 1.0^{\circ}\text{C}$
Uniformity at 120.0°C	$\pm 3.0^{\circ}\text{C}$	$\pm 3.0^{\circ}\text{C}$	$\pm 5.0^{\circ}\text{C}$
Heater Capacity	2.0 kW	3.0 kW	3.0 kW
Power Rating	9.1 Amp	13.6 Amp	13.6 Amp
Power Plug	CEE 7/7 Schuko		