



### Thermostatic baths

- Temperature regulation by a hydraulic thermostat with comparative scale.
- Inner tank made of stainless steel.
- Shelf to cover the resistance.
- Temperatures adjustable from room temperature  $\pm 5^{\circ}\text{C}$
- To  $100^{\circ}\text{C}$  (AG series).
- To  $200^{\circ}\text{C}$  (AC series).
- Heating by sealed electric resistances.

Model	IDL-AG5	IDL-AC5	IDL-AG12	IDL-AC12	IDL-AG20	IDL-AC20
Reference	506005	506105	506012	506112	506020	506120
Temperature range $^{\circ}\text{C}$	35-100	35 -200	35-100	35-200	35-100	35-200
Volume (litres)	5	5	12	12	20	20
Inner measures cm Height x Width x Depth	15x30x14	15x30x14	15x30x31	15x30x31	15x48x30	15x48x30
Outer measures cm Height x Width x Depth	19x36x24	19x36x24	19x37x40	19x37x40	19x55x39	19x55x39
Power Kw	0,6	1	1,2	1,5	1,6	2
Price						

#### Accessories:

- 506006 Lid with handle for baths 5 l
- 506013 Lid with handle for baths 12 l
- 506021 Lid with handle for baths 20 l
- 506106 Lid with reducing disk for bath 5 l
- 506113 Lid with reducing disk for bath 12 l
- 506121 Lid with reducing disk for bath 20 l
- 506009 Reducing disk set
- 506003 Thermometer 0-100°C
- 506004 Thermometer 0-200°C

### Thermostatic baths with electronic regulation and digital readout

- Electronic regulation and digital readout.
- Shows actual temperature and pre-setted temperature.
- Resistance -covering trays included.
- Inner tubs stamped in stainless steel.
- Epoxy finish on the outside.
- Temperatures adjustable from room temperature  $\pm 5^{\circ}\text{C}$  up to  $99^{\circ}\text{C}$ .
- Accuracy  $\pm 0,5^{\circ}\text{C}$ .
- Heating by plated electric resistance.
- Optical and acustical alarms.
- Frontal draining system.
- Power supply: 220V/50Hz.



Model	S-22	S-24	S-28
Reference	506322	506324	506328
Temperature range $^{\circ}\text{C}$	30-99	30-99	30-99
Volume (litres)	6	13	27
Inner dimensions mm Height x Width x Depth	15x30x15	15x30x30	15x60x30
Outer dimensions mm Height x Width x Depth	21x45x21	21x45x35	21x75x35
Power Kw	0,5	1	2
Price			

#### Accessories:

506332 Lid and set of 2 concentric disks (S-22)

506334 Lid and set of 2 concentric disks (S-24)

506338 Lid and set of 2 concentric disks (S-28)

### Thermostatic water baths with water circulation

- High accurate PID temperature controller with digital readout.
- Temperature regulable from room temperature up to  $99^{\circ}\text{C}$ .
- Uniformity:  $\pm 0,05^{\circ}\text{C}$ .
- Accuracy:  $\pm 0,02^{\circ}\text{C}$ .
- 3 preset temperature values ( $25^{\circ}\text{C}$ ,  $37^{\circ}\text{C}$  and  $56^{\circ}\text{C}$ ).
- Displays set temperature and actual temperature.
- Tank dimensions: 49 x 30 x 15 cm.
- Capacity: 22 liters.
- Roof lid for bath included.
- Weight: 12,5 Kg.
- Consumo: 1 Kw.
- Voltage: 220V-50Hz.



598020 Thermostatic water bath with lid

## Precision thermostatic baths

- Baths for culture incubation and inactivation, microprocessor controlled.

### Technical features:

- Quick heating PI control.
- Temperature digital display in 0,1°C increments.
- Accurate reproducible temperatures.
- Membrane control panel.
- Double protection against overheating:
  - Electronic, depending of the pre-set temperature, for samples protection.
  - Self shut down if detects a low water level, to heating element protection.
- Causes of a possible error are shown on the display.
- Temperature range: from room temperature +5°C up to 99,9°C.
- Accuracy: 0,1°C.
- Inner tank, perforated shelf, heating elements and stainless steel lid.
- Interlocking system to avoid condensed entrance in tubes,...
- Drain tap included
- GS-TÜV
- 230V 50/60Hz



Code	Volume L	Outer Dimensions WxDxH	Tank Inner Dimensions WxDxH	Power W	Weight Kg	Price
506202	7	325x395x255 mm	245x200x145 mm	1000	8	
506203	14	485x440x255 mm	400x245x145 mm	1500	12	
506204	21	685x440x255 mm	600x245x145 mm	1500	21	
506205	40	495x490x445 mm	410x296x325 mm	1500	28	
506209	20	485x440x315 mm	400x245x205 mm	1500	16	

### Accessories:

- 506221 Tube rack for 20 tubes up to 18 mm
- 506222 Tube rack for 5 tubes up to 31 mm
- 506223 Tube rack for 20 tubes up to 13 mm
- 506224 Tube rack for 12 nursing bottles up to 56 mm
- 506225 Level control

## Shaking thermostatic baths

- Microprocessor controlled, digital readout for selected temperature and for working temperature.
- Upper lid with a safety device to avoid condensed entrance in vessels (Erlenmeyer,...)
- All elements in contact with water are made of stainless steel: heating element, lid, inner tank...
- Extractable shaking system made of stainless steel
- Shaking speed range from 10 to 250 r.p.m.
- Tank inner dimensions: 450x300x210mm. (Working height 145mm).
- Double overheating safety device with electronic self shut down if temperature exceed 4°C the selected temperature and electromechanics > 130°C.

# Baños termostáticos

## Thermostatic baths



- Models 501086 and 501092 with speed digital readout and freezing coil, to be connected to the tap water or to an external freezer.
- Power: 1500 wat.
- 230V 50/60Hz

Code	Temperature range	Motion	Vibration orbit	Weight Kg	Price
501083	from room +5°C a 99,9°C	to and fro	22 mm	30	
501086	from room +5°C a 99,9°C	to and fro	22 mm	30	
501092	from room +5°C a 99,9°C	Orbital	14 mm	35	

(Models: 501086 and 501092, working temperature range from tap water temperature +3°C.)

### Accessories:

- |   |   |
|---|---|
| 506231 Universal tray for 50ml up to 500 ml Erlenmeyer clamps | 506242 Tube rack for 372 tubes with diameter up to 12mm |
| 506241 Tube rack for 243 tubes with diameter up to 17 mm      | 506243 Tuber rack for 63 tubes with diameter up to 31mm |
|   | 506225 Level control                                    |

### Thermolab-shaking thermostatic bath with 4 working stations

#### THERMOLAB

- Suitable for routine and investigation applications, incubations, Western blots, Dot blots, 4 different temperatures hybridizations.
- 4 separated incubation chambers, with individual temperature control for each chamber..
- Microprocessor temperature control with digital readout.
- Overheating and low water level safety device
- All elements in contact with water are made of stainless steel.
- Temperature range from room temperature +5°C up to 99,9°C.
- Exact reproducibility and accuracy 0,1°C.
- External dimensions: 592x556x270 mm.
- Inner dimensions for each working station: 128x128x110mm
- Inner tube racks with adjustable height.
- Suitable for 1,5ml microtubes and up to 50ml tubes.



● 501070

- To and fro motion regulable speed from 1 up to 50 r.p.m.
- Orbit: 22 mm.
- Weight: 28 Kg.
- Power 1300 W.
- 230V 50/60 Hz.

Code	Temperature range	Motion	Orbit	Weight Kg	Price
501070	room +5°C up to 99,9°C	To and fro	22 mm	28	

### Accessories:

- 501710 Tube rack for 7 tubes up to 31 mm diameter
- 501711 Tube rack for 19 tubes up to 17 mm diameter
- 501712 Tube rack for 32 microtubes up to 12 mm diameter

### Circulating cryothermostat

- Heating and cooling of samples from -30°C up to +100°C.
- Suitable for external systems temperature control (refractometers, polarimeters, photometers, viscometers, spectrophotometers, fermentator, evaporators, rheometers, electrophoresis systems,...)
- Simultaneous operation on chamber.
- Low noise levels.
- "Active Cooling Control", along all temperature range.
- Frontal ventilation grate extractable for an easy condenser cleaning.
- Accesible frontal drainage without lateral ventitation grates.
- Maximum pressure pump 15 L/min.
- Safety class according to DIN-12876-1:
  - S1 (Class I): Overheating safety self shut down and dry bath protection, for non-flammable fluids, ED and MB models.
  - S3 (Class III) Overheating safety self shut down and dry bath protection, for flammable fluids, MC models.
- PID temperature control with digital display.
- MB and MC series have the following additional functions:
  - 3 -point calibration
  - RS232.
  - Keypath with calibration, limits, programming functions...
  - Temperature control with drift compensation.
  - Warning system and alarm for low liquid level.
  - Alarm for high/low prefixed temperature.
  - Electronically adjustable pump capacity in stages between 11 and 16 L/min. (only MC models).
  - High temperature cut-off adjustable via display.
- 230V/50Hz



Ref.	Model	Range °C	Stability °C	Heating Kw	Cooling W 20° 0 -20°	Bath A-L-P	Dimensions A x L x P cm	Volume Max/L	Weight Kg	Price
9115612	F12-ED	-20 .. 100	± 0,03	2	150 100 -	15-16-13	20-36-56	4,5	22	
9115625	F25-ED	-28 .. 100	± 0,03	2	260 200 60	12-14-14	23-42-61	4,5	30	
9140612	F12-MB	-20 .. 100	± 0,02	2	150 100 -	15-16-13	20-36-56	4,5	22	
9140625	F25-MB	-28 .. 100	± 0,02	2	260 200 60	12-14-14	23-42-61	4,5	30	
9150612	F12-MC	-20 .. 200	± 0,02	2	150 100 -	15-16-13	20-36-56	4,5	22	
9150625	F25-MC	-28 .. 200	± 0,02	2	260 200 60	12-14-14	23-42-61	4,5	30	

Included with each unit: 2 barbed fittings for tubing 8mm and 10mm inner diameter.

**ASK US FOR REFRIGERATED/HEATING CIRCULATORS FROM 91°C UP TO 200°C**

# Baños de circulación

## Bath circulator

### Heating circulators

- Precise instrumentation control, measuring cells and closed external systems.
- Internal & external applications.
- For baths tanks up to 50 liters, with bath attachment clamp or wall thickness to 26 mm.
- Maximum pressure pump 15 L/min.
- Safety classification according to DIN-12876-1:
  - S1 (Class I): High temperature cut – off/ dry-running protection for non flammable bath fluids ED models
  - S3 (Class III): High temperature cut-off and dry protection for flammable baths Fluids (MC models)
- PID temperature control with digital display.
- MC has de following additional functions:
  - 3-point calibration
  - RS232.
  - Keypath with calibration, limits, programming functions...
  - Temperature control with drift compensation.
  - Warning systems and alarm for low liquid level.
  - Alarm for high/low prefixed temperature.
  - Electronically adjustable pump capacity in stages between 11 and 16 L/min.
  - High temperature cut – off adjustable via display.
- Thermostats up to 60°C with Acryl/ Plexiglass tank.
- 230V/50Hz



Ref.	Model	Range °C	Stability °C	Heating Kw	Cooling coil	Bath A-L-P	Dimensions A x L x P cm	Volume Max/L.	Weight Kg	Price
9115405	ED-5	20 .. 100	± 0,03	2	Integr.	15-15-15	17-33-36	4,5	7	
9115305	ED-5A	20 .. 60	± 0,03	2	Integr.	12-24-15	14-40-35	5,0	5,3	
9115413	ED-13	20 .. 100	± 0,03	2	Optional	18-30-15	39-33-37	13	8	
9150504	MC-4	20.. 200	±0,01	2	Integr.	13-15-15	21-42-38	4,5	9,6	

Included with each unit: 2 barbed fittings for tubing 8mm and 10mm inner diameter.

#### Accessories:

Wide range of accessories: tanks, tube racks, additive for water protection, cover, PT100 external probes, metal and viton tubing, bath fluids, cooling coils, connectors, etc...  
Control Software Easy-Temp free and professional control software.

**BANDELIN** *electronic*

### Ultrasonic baths

- Applications: Cleaning of laboratory glassware, surgical instruments, metals, electronic instruments, outgassing of liquids in concentration determined, cell suspension process acceleration, sonochemical process acceleration, and in general for cleaning and disinfection at same time.
- Available models from 0,9 liters up to 245 liters capacity
- Made of stainless steel.
- Drainage tap, included for models from 4,6 liters .
- Timer up to 15 min and continuous operation.
- Ultrasound frequency 35 kHz.
- H models: with temperature regulation 30°C ... 80°C
- Voltage: 220-240V / 50Hz.



Model	Litres	Dimensions (W x D x H)		Drain Tap	Power w Generator heating		Weight Kg	Price
		Inner mm	Outer mm					
57831	0,9	190 x 85x 60	205 x 100 x 155	NO	120	-	1,8	
57831H	0,9	190 x 85x 60	205 x 100 x 155	NO	120	70	1,9	
57852	1,8	150 x 140x 100	175 x 165 x 225	NO	2 x 120	-	2,6	
57852H	1,8	150 x 140x 100	175 x 165 x 225	NO	2 x 120	140	2,9	
57860	3,0	240 x 140x 100	260 x 160 x 250	NO	2 x 160	-	3,4	
57860H	3,0	240 x 140x 100	260 x 160 x 250	NO	2 x 160	140	3,6	
57863H	4,0	240 x 140x 150	260 x 160 x 310	YES	2 x 320	200	4,6	
57866	5,6	Ø 245 x 130	Ø 265 x 270	YES	2 x 240	-	5,5	
57869	9,7	300 x 240 x 150	325 x 265 x 305	YES	2 x 320	-	9,0	
57877H	13	300 x 240 x 200	355 x 325 x 305	YES	2 x 450	400	8,0	
57879BH	18,7	325 x 300 x 200	355 x 325 x 385	YES	2 x 450	600	9,8	
57880	28	500 x 300 x 200	535 x 325 x 400	YES	2 x 600	-	14,3	
57881H	28	500 x 300 x 200	535 x 325 x 400	YES	2 x 600	1.300	14,3	

### Cleaning concentrates

- 57730 STAMMOPUR DR 2 B/ 2 litres**  
Instruments disinfection ,intensive cleaner.  
DGHM certificate. Alkaline , pH 11.  
With aldehyde, phenols, chlorine.  
Bactericide, fungicide, virucide (Hepatitis B / HIV).
- 57731 TICKOPUR R 33 G/ 5 litres**  
Intensive cleaner for all type of materials:  
oils, fats, pigments, proteins....  
Universal application pH. 10
- 57732 TICKOPUR R 32 G/5 litres**  
pH10, cleaning of organic and inorganic wastes.



#### ASK FOR THE CLEANING CONCENTRATES COMPLET LIST:

Applications: cleaning of oils, fats, pigments, proteins, ink, mineral waste, lime, soot, resins, tar, fingerprints, organic and inorganic wastes, distillation waste, bactericide, fungicide, virus inactivator, Biodegradable and non-chloride ions (reaction with stainless steel).

### Ultrasonic baths DIGITAL serie

*Applications:* degassing of liquids, accelerating of chemical reactions, mixing of plasma and sera, preparing for samples in pollution analysis, preparing of liposomas in cosmetic and pharmacy, preparing for HPLC.

*Technical features:*

- Microprocessor controlled
- Timer up to 99 minutes and continuous operation.
- 10 programs data memory.
- Temperature range: 20°C ... 80°C
- Exact power adjustment from 10 to 100%
- High reproducibility of results.
- DEGAS function for a quick degassing of liquids (HPLC...)
- Made of stainless steel
- Drainage tap, included for models from 4,6 liters
- Voltage: 220-240V / 50Hz.



Model	Litres	Dimensions (W x D x H)		Drainage Tap	Power w		Weight Kg	Price
		Inner mm	Outer mm		Generator	Heating		
57882	3,0	240 x 140x 100	260 x 160 x 250	NO	2 X 240	140	4,5	
57888	5,7	300 x 150x 150	325 x 175 x 305	YES	2 X 300	280	6,0	
57886	9,0	500 x 140x 150	530 x 165 x 300	YES	2 X 300	600	4,5	
57891	13	300 x 240x 200	325 x 265 x 350	YES	2 X 450	400	8,8	
57894	18,7	325 x 300 x 200	355 x 325 x 385	YES	2 X 450	600	10,2	
57897	28	500 x 300 x 200	535 x 325 x 400	YES	2 x 600	1300	15,2	

**Accessories:**

Special accessories: for bottles, glasses, matrass, tube racks, refrigeration systems

Insert basket made in stainless steel			Lid made in stainless steel		
Code	Bath Volume L.	Price	Code	Bath Volume L.	Price
57710	0,9 L.		57720	0,9 L	
57711	1,8 L.		57721	1,8 L.	
57712	3,0 L.		57722	3,0 L.	
57713	4,0 L.		57723	4,0 L.	
57714	5,7 L		57724	5,7 L.	
57715	5,6 L.		57725	5,6 L.	
57716	9,7 L.		57726	9,7 L.	
57717	13,0 L		57727	13,0 L.	
57718	18,7 L.		57728	18,7 L.	
57719	28 L.		57729	28 L.	

