

## 6 Shaking water baths

### OLS26 Aqua Pro Orbital / Linear shaking bath

Offering ultimate flexibility and usability for all applications

### LSB12 & LSB18 Aqua Pro Linear shaking water baths

Excellent usability for routine applications

Shaking water baths »

# Shaking water baths

World-renowned shaking water baths from Grant: high precision temperature control combined with a robust, high quality, patented orbital and linear shaking mechanism that works smoothly and consistently even in demanding applications.

- **High quality, robust design with unique magnetically coupled shaking mechanism** for maximum reliability, consistency and quiet operation
- **Flexible choice of combined orbital / linear shaking or linear only shaking** for all routine and demanding techniques
- **Extensive range of accessories** to provide the right solution for your application. Varied vessels types can be securely held using high quality, springs, clamps or racks

**3**  
year warranty



Combined orbital/linear shaking bath OLS26  
For ultimate flexibility and usability

LSB12 and LSB18  
Excellent usability for all routine applications

## Liquids

We recommend the following liquids for use in Grant shaking water baths:

5°C to 99°C: Water

## Shaking water baths » OLS26 Aqua Pro combined orbital/linear shaking bath

## Combined orbital/linear shaking bath

**Model OLS26** Amb +5°C to 99°C. Extend lower range to 0°C using accessory cooling.  
Stability  $\pm 0.1^\circ\text{C}$

Patented, combined orbital and linear shaking mechanism of the OLS26 allows optimisation of aeration and shear forces mixing, for reproducible results.

- Precision digital temperature control
- 0°C to 99°C operating range\*
- Stability  $\pm 0.1^\circ\text{C}$
- Easy changeover from linear to orbital shaking
- Adjustable shaking speed and stroke length
- Polycarbonate lid included as standard
- Drain tap for convenient emptying
- 3 year warranty
- For flexibility, tray sold separately

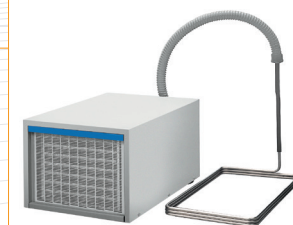
OLS26 model shown

Tray sold separately. Three options:  
Universal tray - with adjustable springs  
Flask tray - mix and match flask clamps  
Test tube / microtube tray - extensive choice of racks available

Universal tray flask capacity: 3 x 1000ml, 6 x 500ml, 18 x 100ml, 28 x 50ml, 45 x 25ml

Powerful drive mechanism - soft start, quiet operation for smooth shaking over a wide speed range

Can be operated below ambient to 0°C with accessory cooling - CC26



Heater and temperature sensor mounted under tank - large available working area; easy to clean and keep clean

User defined high-temp alarm and cut-out - provides sample protection

Countdown timer with audible alarm - for accurate reaction timing (1-999 mins)

Unique shaking mechanism allows orbital and linear shaking in one product - simply rotate the tray carrier 180° to change between modes.

Grant non-drip polycarbonate lid included as standard - improves performance, limits evaporation and conserves energy

Front panel lock - disables front panel controls preventing settings being accidentally changed

User calibration - single or dual for optimum accuracy at your working temperature

Digital PID temperature control circuitry - with sensitive Pt1000 temperature control probe

Conveniently located drain tap for easy emptying

\* accessory cooling required for operation below ambient



Individual displays / controls for temperature and shaking speed


Two adjustable temperature and shaking speed presets

#### Applications:









- General use - defrosting, cooling/warming liquids, temperature control of samples
- Life-science - microbiological assays, tissue studies, cell cultivation fermentation, bacterial culture, biochemical assays, enzyme assay
- Industrial - materials testing, corrosion testing
- Biopharm - solubility testing of medical coatings, dissolution, cooling crystallisation
- Food & beverage - extractions, food digestion

## OLS26 Aqua Pro shaking water bath » Specifications

## OLS26 Shaking water bath – summary of specifications

	Orbital/linear shaking bath
	OLS26
	 <p>13.8 kg h: 325 mm d: 565 mm w: 335 mm</p>
Tank size	26L
Minimum working depth	70 mm
Temperature range	ambient +5 to 99°C. 0 to 99°C with accessory cooling
Uniformity (DIN 12876-3) @ 70°C	±0.1°C
Stability (DIN 12876-3) @ 70°C	±0.1°C
Display	2 x LED (individual displays and controls for temperature and shaking speed)
Orbital and Linear shaking speed	20 to 200 rpm (depending on load)
Orbital shaking radius	9 mm
Shaking speed display resolution	1 rpm
Linear shaking stroke length	18, 28, and 36 mm
Shaking tray area	380 x 235 mm
Timer	1 to 999 mins
Heater power 120V / 230V	1.05 / 1.4 kW
Drain tap	yes
Safety	over temperature protection / low liquid level cut-out
Supply voltage	110-120V or 220-230V

## Accessories

 <p>Universal tray - with adjustable springs. Highly versatile for a variety of vessel types.</p>	Universal tray	TU26
 <p>Flask / plate tray - with threaded holes to accept flask clamps or holder for deep well plates (≥2ml). See options below.</p>	Flask / plate tray	TF26
 <p>Test tube tray - compatible with SR racks or can be used alone to accommodate bags and miscellaneous vessels. See rack options below.</p>	Test tube tray	TS26 (holds up to 5 SR racks)
 <p>Base tray - stainless steel perforated allows bath to be used as an unstirred bath.</p>	Base tray	SBT26
 <p>Cooling coil - source of constant cooling to enable bath to be operated at or below ambient, down to 0°C.</p>	Immersion cooler	CC26
 <p>Heat exchange coil - can be attached to a cold water supply or refrigerated circulator. Can be used down to 2°C above the temperature of the coolant.</p>	Heat exchange coil	CW26
 <p>With access hole for cooling coil</p>	Stainless steel sloping lid (optional)	LS200
	Replacement polycarbonate lid (unsuitable for use with cooling coil)	AQL26

## Flask clamps and plate holder

Part Number	Description	TF26 Capacity
SC-25	for 25ml flask	28
SC-50	for 50ml flask	24
SC-100	for 100ml flask	15
SC-250	for 250ml flask	8
SC-500	for 500ml flask	6
SC-1000	for 1000ml flask	3
SH-DWP	1 x deep well plate	4

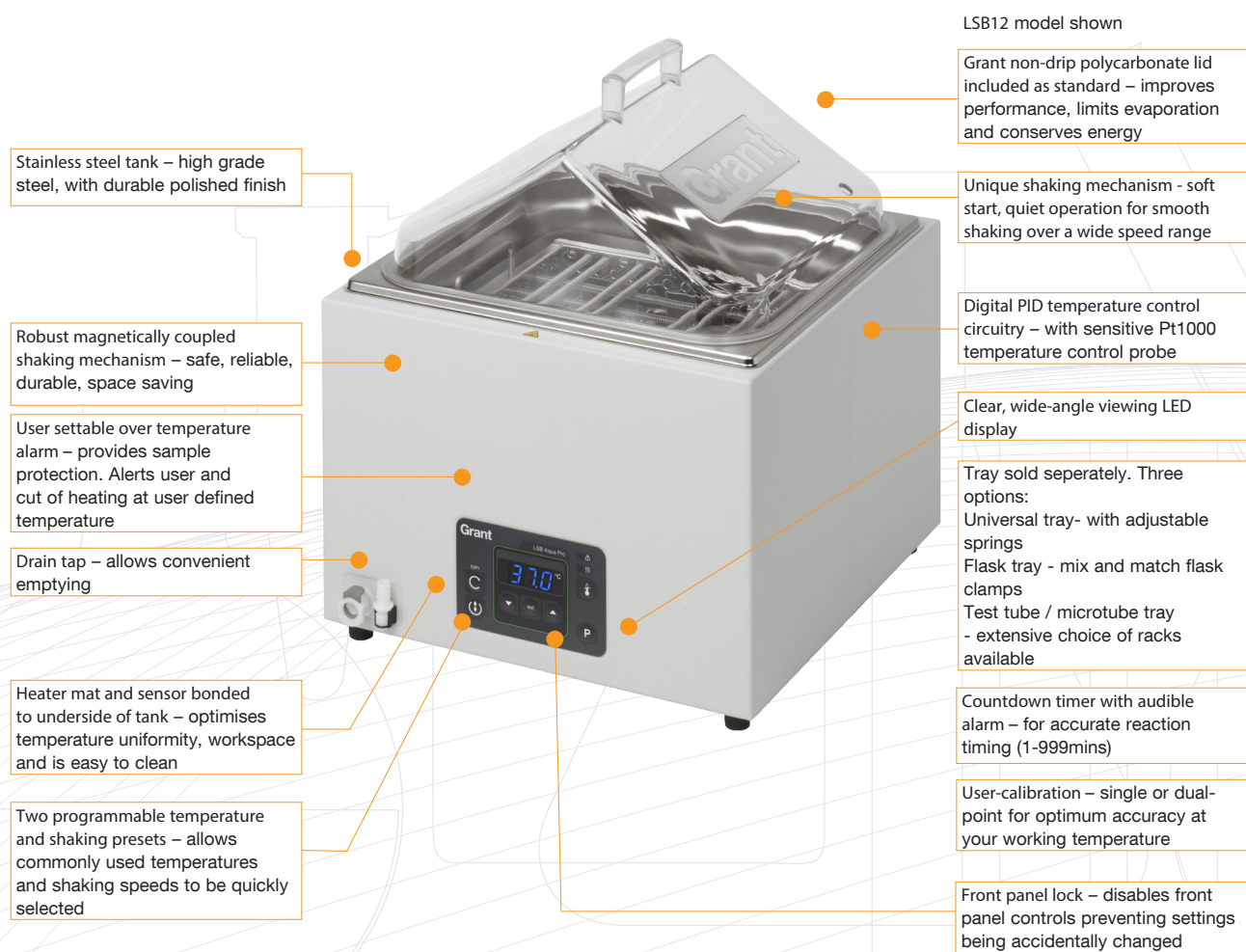
## Test tube racks / microtube racks

Part Number	Tube diameter (mm)	Rack capacity
SR-10	10	48
SR-13	13	44
SR-16	16	24
SR-19	19	21
SR-25	25	12
SR-30	30	10
Part Number	Microtube size (ml)	Rack capacity
SR-SE	0.5	119
SR-LE	1.5	48

## Shaking water baths » Linear shaking bath – LSB Aqua Pro range

## Linear shaking bath – LSB Aqua Pro range

- Ambient +5°C to 99°C operation
- Stability  $\pm 0.1^\circ\text{C}$
- Choice of two models – 12 and 18 litre
- Drain tap for convenient emptying
- 3 year warranty
- Polycarbonate lid included
- Extensive choice of accessory shaking trays. Tray sold separately





## Applications:







- Clinical/Healthcare - thawing/mixing samples
- Pharmaceutical - heating and mixing samples
- Science education in schools/universities - practical science demonstration and experimentation
- Industrial - QC testing, sample preparation



## Shaking water baths » LSB Aqua Plus range » Specifications

## LSB shaking water baths – summary of specifications

	Linear shaking bath	
	LSB12	LSB18
		
	9.2 kg h: 275 mm d: 380 mm w: 360 mm	11.2 kg h: 275 mm d: 565 mm w: 335 mm
Tank size	12L	18L
Minimum working depth	60 mm	
Temperature range	ambient +5 to 99°C	
Uniformity (DIN 12876-3) @ 70°C	±0.1°C	
Stability (DIN 12876-3) @ 70°C	±0.1°C	
Display	LED	
Linear shaking speed	20 to 200 rpm (depending on load)	
Shaking speed display resolution	1 rpm	
Linear shaking stroke length	20 mm	
Shaking tray area	240 x 235 mm	420 x 235 mm
Timer	1 to 999 mins	
Heater power 120 / 230V	0.8/0.8 kW	1.05/1.4 kW
Drain tap	yes	
Safety	over-temperature protection / low liquid cut-out	
Supply voltage	110-120V or 220-230V	

Accessories	LSB12	LSB18
 Universal tray - with adjustable springs. Highly versatile for a variety of vessel types.	Universal tray	
	TU12	TU18
 Flask / plate tray - with threaded holes to accept flask clamps or holder for deep well plates (≥2ml). See options below.	Flask / plate tray	
	TF12	TF18
 Test tube tray - compatible with SR racks or can be used alone to accommodate bags and miscellaneous vessels. See rack options below.	Test tube tray	
	TS12 (holds up to 3 SR racks)	TS18 (holds up to 5 SR racks)
 Base tray - stainless steel perforated allows bath to be used as an unstirred bath.	Base tray	
	SBT12	SBT18
 Stainless steel sloping lid	Stainless steel sloping lid	
	LU14	LU28
 Replacement polycarbonate lid	Replacement polycarbonate lid	
	AQL12	AQL26

## Flask clamps and plate holder

Part Number	Description	TF12 Capacity	TF18 Capacity
SC-25	for 25ml flask	18	33
SC-50	for 50ml flask	14	26
SC-100	for 100ml flask	9	17
SC-250	for 250ml flask	5	14
SC-500	for 500ml flask	4	6
SC-1000	for 1000ml flask	2	4
SH-DWP	1 x deep well plate	2	4

## Test tube racks / microtube racks

Part Number	Tube diameter (mm)	Rack capacity
SR-10	10	48
SR-13	13	44
SR-16	16	24
SR-19	19	21
SR-25	25	12
SR-30	30	10
Part Number	Microtube size (ml)	Rack capacity
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