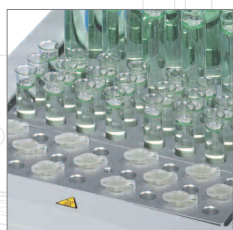


# Scientific Equipment

## Catalogue

Precision temperature control, sample preparation and life sciences products for the world's laboratories



# 8 Shaking water baths

## Liquids

We recommend the following liquids for use in Grant baths:

- 50 to 50°C: Silicone fluid: Bayer Baysilone fluid M3
- 30 to 30°C: 50% water 50% antifreeze  
(inhibited ethylene glycol)
- 0 to 30°C: 80% water 20% antifreeze  
(inhibited ethylene glycol)
- 5 to 99.9°C: Water
- 50 to 150°C: Dow Corning silicone fluid DC200/20
- 150 to 260°C: Dow Corning silicone fluid DC210H/100

# 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 techniques from optimised shaking through to everyday shaking requirements.
- **Wide range of accessories** to provide exactly the right solution for your application – from basic through to sophisticated needs, each model represents excellent value-for-money.



**Combined orbital/linear shaking bath OLS200**  
for optimisation and flexibility of application



**GLS Aqua 12 Plus and 18 Plus**  
for general and everyday requirements

## showcase – combined orbital/linear shaking bath

Model OLS200 range 0 to 99°C, stability  $\pm 0.1^\circ\text{C}$

Patented, combined orbital and linear shaking mechanism of the OLS200 allows optimisation of aeration, shear forces and degree of mixing for maximum and reproducible yields.

- Precision digital temperature control
- Stability  $\pm 0.1^\circ\text{C}$
- Easy changeover from linear to orbital shaking
- Adjustable shaking speed and stroke length
- $0^\circ$  to  $99^\circ\text{C}$  operating range\*
- Polycarbonate lid included as standard
- 3-year warranty

Unique shaking mechanism allows orbital and linear shaking in one product – simply change the orientation of the shaking tray to change from one mode to the other

Powerful drive mechanism: – quiet operation; smooth consistent shaking over a wide speed range

Quality construction for years of reliable operation in the laboratory



Can be operated below ambient/ to  $0^\circ\text{C}$  with accessory cooling

Individual displays/controls for temperature and shaking speed

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

\* accessory cooling required for operation below ambient

## Linear shaking bath – GLS Aqua Plus series

Grant quality and design combined with the temperature stability and functions you need in a linear shaking bath for your laboratory. The baths now share the same stylish, modern looks associated with the Grant Aqua Plus range.




- Ambient + 5°C to 99°C operation
- Digital PID control for quick heat-up and precision control throughout the temperature range
- Stability  $\pm 0.2^\circ\text{C}$
- Programmable temperature and shaking presets
- User-settable sample protection and fixed thermal cut-out
- Choice of two models – 12 and 18 litre
- Front panel lock-out
- 3-year warranty





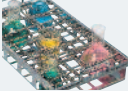



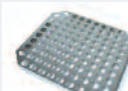

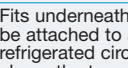
## Shaking water baths » Specifications

### Shaking water baths – summary of specifications

- = standard
- ✗ = not available

	Orbital/linear shaking bath		Linear shaking bath	
	OLS200		GLS Aqua12 Plus	GLS Aqua18 Plus
	 h: 300 mm d: 555 mm w: 325 mm		 h: 270 mm d: 390 mm w: 335 mm	 h: 270 mm d: 570 mm w: 335 mm
Minimum working volume	9 litres		5 litres	8 litres
Temperature range	0 to 99*		ambient + 5 to 99	
Stability @ 37°C	± 0.1		± 0.1	
Uniformity @ 37°C	± 0.1		± 0.1	
Temperature setting/display	digital/3-digit LED		digital/3-digit LED	
Temperature display resolution	0.1		0.1	
Shaking speed range	orbital rpm	20 to 200	-	
	linear strokes/min	40 to 360**	40 to 400**	
Orbital shaking	radius rpm	9	-	
Linear shaking	stroke length mm	18, 28, 36	18	
Shaking speed setting/display	digital/3-digit LED		digital/3-digit LED	
Shaking speed display resolution	strokes/min	1	1	
Shaking tray area	mm	375 x 235	240 x 235	420 x 235
Flask immersion	min./max. mm	0/90	0/60	
Overall power consumption	120V/230V kW	1.15/1.5	0.8/0.8	1.15/1.5
Supply voltage	V	120 or 230		
Safety	overtemperature/low liquid level	adjustable cut out		

### Options and accessories

	<b>Replacement Polycarbonate lids, blue*</b> (optional)	AQL26	AQL12	AQL26
	<b>Stainless steel sloping lid*</b> (optional)	LS200	LU14	LU28
	<b>Universal tray – with springs</b> Designed for ultimate versatility as to the types and sizes of vessel which can be accommodated. Adjustable spring configuration for maximum flask capacity	UT200	UT12	UT18
	<b>Plain tray</b> Will accommodate containers, bags and miscellaneous vessels	UTP	UTP12	UTP18
	<b>Test tube tray</b> Compatible with H1 Test tube racks	TT200	TT12	TT18
	<b>Test tube racks</b> Choice of 7 variants to accommodate different tube diameters and microtubes	H1*** (Holds up to 5 H1 racks)	H1*** (Holds up to 3 H1 racks)	H1*** (Holds up to 5 H1 racks)
	<b>Base trays</b>	✗	SBT14	SBT28
	<b>Immersion cooler</b> Accessory cooling is required for operation around or below room temperature	CS200G	✗	✗
	<b>Heat exchange coil</b> Fits underneath the shaking tray and is designed to be attached to a supply of cooling tap water or a refrigerated circulator. Can be used down to 2°C above the temperature of the coolant. See page 3.9	CW200	✗	✗

\* accessory cooling required for operation around/below ambient temperature \*\* depending on load

\*\*\*H1 rack options H1-10 48 x 10 mm tubes Ø 10 mm H1-13 44 x 13 mm tubes Ø 13 mm H1-16 24 x 16 mm tubes Ø 16 mm H1-19 21 x 19 mm tubes Ø 19 mm  
H1-25 12 x 25 mm tubes Ø 25 mm H1-30 10 x 30 mm tubes Ø 30 mm H1-LE 48 x 1.5 ml microtubes



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.