QB Dry block heating systems

for test tubes, microtubes and microplates ambient +5°C to 200°C

Dry block heating systems combining superb temperature control and uniformity with high quality design and great versatility. A premium product range at an affordable price.

- Accurate, reproducible, rapid and safe heating of your samples due to advanced temperature control combined with high quality, precision-engineered blocks providing excellent thermal contact
- Versatile range of interchangeable heating blocks to fit any sample tube or plate – from our standard range of blocks, or custom-made blocks to suit your application
- Full range of models and options for basic through to more sophisticated applications



Applications:
 General use - incubating samples at set temperatures, heating block for boiling of solutions in tubes
 Life-science - cell digestion, DNA/RNA extraction, post sequencing PCR clean-up - dry down step, boiling in vitro DNA/RNA/protein samples, incubating invitro reactions/digestions, extraction of DNA for real-time PCR analysis, denaturing nucleic acid and protein samples

- Industrial digestion of environmental samples for chemical oxygen demand analysis, soil digests, maintaining temperatures
- Biopharm conductivity testing
- Clinical acylcarnitines derivatisation, MRSA and PBP2 latex testing, heating flush/media used in egg recovery, fertility to keep test tubes at correct temperature during egg collection

Showcase - mid range/general purpose example

Model QBD2* stability and uniformity ±0.1°C, range ambient +5 to 130°C

A versatile general purpose system with two removable/interchangeable blocks and a comprehensive specification to suit most dry block heating applications in the laboratory.

- Stability and uniformity ±0.1°C
- Digital temperature control for optimum precision
- Heating range ambient +5°C to 130°C, with rapid heat-up time
- Range of convenient features including alarms, single and dual point calibration, programmed start/stop, 'offset' for known sample temperature variation and choice of external or internal probes
- External probe available for accurate temperature control in a tube



and 96-well microplates used in molecular biology and biotechnology applications

Microplate or microtube blocks for 0.2 ml tubes, strips



Wide range of interchangeable blocks (order blocks separately)– extraction tool supplied as standard for easy and safe removal of blocks.



Custom blocks – for virtually any tube or vessel

High power heater for fast heat-up – from 25°C to 100°C in only 20 minutes

Over temperature cut-out protects your samples and your workplace



Optional safety cover

 protects samples from contamination and users from accidental contact with hot blocks



Convenient timer facility, with audible buzzer, for reaction timing and function timing, e.g. delayed heater switch-on/turn-off

Simple to use rotory dial plus two keys for fast, accurate set-up

Compact footprint and sloping fascia optimise benchspace and ensure clear visibility during setup and in use

High quality, robust construction in streamlined coolwall aluminium and chemical-resistant plastic – durable in demanding environments

* see summary table on page 7.3-7.4 for accessories and for other models in the range

Dry block heaters» QB series » Models and specifications

Dry block heating systems with interchangeable blocks – models									
Temperature range ambient + 5 to 130°C		High performance digital							
ambient + 5 to 200°C									
ambient + 5 to 100°C	QBD1	QBD2	QBD4	QBH2					
= standard	1 block system	2 block system	4 block system	2 block system					
	h: 100mm d: 230mm w: 200mm weight: 2kg	h: 100mm d: 280mm w: 200mm weight: 2.5kg	h: 100mm d: 380mm w: 200mm weight: 4kg	h: 100mm d: 280mm w: 200mm weight: 2.5kg					
Temperature range °C		ambient +5 to 200							
Temperature setting range °C		15 to 200							
Setting resolution °C		0.1							
Stability @ 37°C, ± °C		0.1							
Uniformity within the block @ 37°C, ± °C	0.1			0.1					
across similar blocks @ 37°C, \pm °C	0.2			0.2					
Temperature display, LED		•							
Display resolution °C		0.1							
Heat up time 25° to 100°C mins		15							
Three programmable temperature/ time segments plus end-of-program segments		•							
Reaction timer, with audible buzzer		1 to 999 mins							
Function timer for delay of heater start-up/switch-off		up to 72 hours							
Off-set adjustment		•							
Two-point calibration of internal and external probes		•							
High/low temperature alarms, settable to within 0.5°C of set temperature		•							
Fault indication display		•		•					
Power W	150	300	600	300					
Supply voltage V		120 or 230							
Safety over temperature cut-out	thermal fuse			thermal fuse					
Extraction tool for easy and safe block removal	•			•					

Dry block heaters » QB series » Options and accessories

Options and accessories								
 = not available = available 		QBD1	QBD2	QBD4	QBH2			
Interchangeable blocks*								
No. of blocks		140 x 50 x 63mm	1	2	4	2		
QB-0		Plain block without holes	•	•	•	•		
QB-10		for 24 x ø 10mm test tubes, 50mm hole depth	•	•	•	•		
QB-12		for 24 x ø 12mm test tubes, 50mm hole depth	•	•	•	•		
QB-13		for 12 x ø 13mm test tubes, 50mm hole depth	•	•	•	•		
QB-16		for 12 x ø 16mm test tubes, 50mm hole depth	•	•	•	•		
QB-17H	000	for 10 x Falcon tubes tall 17mm ø test tubes, 75mm hole depth	•	•	•	•		
QB-18		for 12 x ø 18mm test tubes, 50mm hole depth	•	•	•	•		
QB-24	00	for 5 x ø 24mm test tubes and universal bottles, 50mm hole depth	•	•	•	•		
QB-50		for 4 x 50ml centrifuge test tubes, glass universals, 50mm hole depth ø 29mm	•	•	•	•		
QB-H	annen er	for 56 x 0.2ml microtube, 14mm hole depth, ø 6.5mm	•	•	•	•		
QB-E0		for 24 x 0.5ml microtube, 30mm hole depth, ø 8mm	•	•	•	•		
QD-L1		for 24 x 1.5ml microtube, 35mm hole depth, ø 10.8mm	•	•	•	•		
		for 24 x 2.0ml microtube, 35mm hole depth, ø 11mm	•	•	•	•		
QD-LJ	888	for 12 x 5.0ml microtube, 53.5mm hole depth, ø 16.7mm	•	•	•	•		
QB-DN		Dolphin nose tube 24 x ø 11.13mm to ø 6.1mm	•	•	•	•		
External Pt100	00 tempe	erature probe						
QBEP	QBEP Standard probe. For in-sample or in-block temperature control; encased in stainless steel sheath, ø 3 mm x 30 mm long, with 350 mm of cable		•	•	•	•		
QBEP-WM	QBEP-WM Short-form probe. For in-sample or in-block temperature control; encased in stainless steel sheath, or 3 mm x 14 mm long, with 350 mm of cable		•	•	•	•		
		molecular biology and biotechnology app x 100 x 75 mm supplied with additional ex						
QDP-H			-	•	-			
QDP-FL	Universal block for standard 96-well plates (u-well, v-well, flat bottom, high temperature) Uniformity ± 0.5°C between wells; supplied with hinged, double layer lid to create an insulated incubation chamber		-	•	-			
Safety covers (not required with QDP-FL Microtiter blocks)								
Made from tough clear acrylic for maximum visibility whilst preventing accidental touching of a hot block or contamination of samples from splashes Clearance height 85 mm		QBL1	QBL2	QBL4	QBL2			

* Custom blocks available - please enquire



Pricing on any accessories shown can be found by keying the part number into the search box on our website. The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

www.wolflabs.co.uk

Tel : 01759 301142 Fax : 01759 301143 sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.