

Grant Block Heater QBH High Temperature



Product Overview

For applications within the range ambient + 5 to 200°C.

For two interchangeable blocks; features include simple programming, timers, user calibration, adjustable overtemp cut-out, accessory external temperature probe; assorted accessory blocks for tube diameters from 0.2ml to 29mm.

Digital control for high accuracy setting and high performance temperature control.

Product Features

Three models for 1, 2 or 4 interchangeable blocks, for applications up to 130°C.

Of robust construction, in streamlined coolwall aluminium and chemical-resistant plastic, with an exciting contemporary design.

The sloping fascia ensures clear visibility both for set-up and in operation, while the profile and the footprint are minimised.

ambient + 5°C to 200 °C operation

front-panel programming interface allowing set-up of three temperature/time segments, plus an end-of-program segment for control of indefinite hold temperature

adjustable overtemperature cut-out for sample protection

stability $\pm 0.1^\circ\text{C}$, uniformity $\pm 0.1^\circ\text{C}$

easy interactive user interface - a sensitive rotor plus two keys and digital display, for fast and accurate set-up

reaction timer with audible buzzer, from 1 minute to 72 hours

function timer for delay of heater start-up or switch-off by up to 72 hours

off-set adjustment for high accuracy of operating temperature

two-point user recalibration of internal and external probes

safety features

- overtemperature protection by thermal fuse
- variable high and low temperature alarms, settable to within 0.5°C of the set temperature
- fault indication display

external Pt1000 temperature probe, allows in-sample or in-block temperature control (available as an accessory)

block extraction tool included as standard, for easy and safe block removal

Product Specifications

Specification			QBD1	QBD2	QBD4	QBH2
Temperature range		°C	ambient + 5 to 130			amb. +5 to 200
Temperature setting range		°C	15 to 130			15 to 200
Stability	@37°C	°C	±0.1			±0.1
Uniformity						
within the block	@37°C	°C	±0.1			±0.1
across similar blocks	@37°C	°C	±0.2			±0.2
Temperature display			LED			LED
Display resolution		°C	0.1			0.1
Heat up time	25 to 100°C	mins	15			20
Power		W	150	300	600	300
Supply voltage		V	115 or 230 (50-60Hz)			115 or 230 (50-60Hz)
Overall dimensions	w/d/h	mm	200/230/100	200/280/100	200/380/100	200/280/100
Safety	overtemperature		thermal fuse			thermal fuse

Product Accessories

Interchangeable blocks

Block dimensions: 140 x 50 x 63 mm

The 63mm depth ensures precision temperature control for test tube applications.

The threaded hole accommodates either the extraction tool or a thermometer.

Order ref.	Tube Ø/type	Holes per block	Hole depth mm
QB-0	plain block	--	
QB-10	10mm	24	50
QB-12	12mm	24	50
QB-13	13mm	12	50
QB-16	16mm	12	50
QB-18	18mm	12	50
QB-24	24mm and universal bottles	5	50
QB-50	50ml centrifuge tubes, glass universals	4	50
QB-H	0.2ml micro tube	56	14
QB-E0	0.5ml micro tube	24	30
QB-E1	1.5ml micro tube	24	35
QB-E2	2.0ml micro tube	24	35

Polycarbonate safety covers

Tough clear polycarbonate covers maintain visibility while preventing anyone from accidentally touching a hot block. They also protect against splashing and are particularly recommended for use during high temperature operation.

Cover	Model
QBL1	for QBA1, QBD1
QBL2	for QBA2, QBD2, QBH2
QBL4	for QBD4

External temperature probe

QBEP: Pt1000 sensor encased in a stainless steel sheath, 3mm x 30mm, fitted with 350mm of cable.

QBEP	for QBD1, QBD2, QBD4, QBH2
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Microlitre blocks for QBD2, QBH2, QBA2

Alternative double-size blocks are available for models QBD2, QBH2 and QBA2, for:

- 0.2ml tubes, strips or microplates
- standard/high temperature 96 well microtitre plates: u-well, v-well, or flat bottom

These are particularly useful in the fields of molecular biology and biotechnology.

QDP-H block for 0.2ml microplates, strips or individual tubes

With 96 holes in microplate configuration, the block accommodates one 96-well plate, 8 x 12- or 12 x 8-well strips or up to 96 individual capped tubes.

A snug fit is ensured in the precision drilled wells, for excellent uniformity: $\pm 0.3^{\circ}\text{C}$ within tubes across the block.

QDP-FL universal block for standard 96-well plates

Accommodates the most commonly used types of 96-well microtitre plate: u-well, v-well, flat bottom, high temperature. Also suitable for cell culture plates.

Undrilled aluminium block, black anodised for efficient heat transfer; supplied complete with hinged lid.

The double layer lid creates an insulated incubation chamber for good sample uniformity, whilst the outer surface stays cool for user comfort; uniformity: $\pm 0.5^{\circ}\text{C}$ between wells.

Order ref.	Tube type	Holes / block	Hole \varnothing mm	Hole depth mm	Block dimensions mm
QDP-H	0.2ml	96	6.2	14	140/100/75
QDP-FL	96-well plates	-	-	-	140/100/75

An additional extraction tool is supplied with each of the QDP-H and QDP-FL blocks, for easy and safe block removal.