

High temperature bath/circulators

HED high temperature bath/circulators are designed to provide stable, uniform temperature control for high temperature applications.

stability $\pm 0.5^{\circ}\text{C}$, uniformity $\pm 0.25^{\circ}\text{C}$

- good long-term temperature stability and uniformity are provided by a combination of the electronic control system and the proven Grant circulation system

microprocessor controller

features include:

- digital temperature setting and display
- high and low alarms
- controlled heating rate, setting resolution $0.1^{\circ}\text{C}/\text{minute}$
- timed or continuous operation; timer setting resolution 1 minute, maximum timed period 9999 minutes

sizes: 10 and 30 litres

construction

- each bath consists of a heavily insulated stainless steel tank housed in a stove enamelled outer case, with a control unit mounted over one end of the bath, from which heater, stirrer and temperature sensors project down into the bath; a circulation tray enhances the performance, and an insulated flat lid is supplied for maximum user safety

accessory pump for external circulation

- HQ pumps are designed for circulating temperature controlled liquid around external apparatus
- for circulation through closed systems only

design features

HED bath/circulators are specially designed for use with high temperature liquids; to avoid local overheating and rapid deterioration of the liquid, the stirrer is very powerful and the heater has a very large surface area, to prevent localised overheating of the oil

- the control unit is raised to allow for a cooling airflow above the tank
- exposed or immersed parts are made from stainless steel, nickel-plated copper or appropriate plastics, to minimise the risks of corrosion
- HED bath/circulators are robust and reliable, for long-term durability

safety

- adjustable overtemperature cut-out
- float switch for low liquid level protection

Accessory HQ pump for external circulation

- separate drive motor, so there is no need to switch the pump on until the required operating temperature has been reached and the viscosity of the liquid is low enough for pumping
- lid-mounted for convenient fitting and use
- flow and return fittings are suitable for temporary or permanent connection (using 9 mm internal diameter pipe)

Bath	Pump	
HE10D	HQ10	(takes the place of a normal lid)
HE30D	HQ30	(takes the place of half of the normal two-part lid)

Specification - HED high temperature bath/circulators

			HE10D	HE30D
Temperature range	$^{\circ}\text{C}$		50 to 260	
Stability (DIN58966)	at 150°C	$^{\circ}\text{C}$	$\pm 0.25^{\circ}$	
Uniformity	at 150°C	$^{\circ}\text{C}$	$\pm 0.2^{\circ}$	
Display			LED	
Display resolution	$^{\circ}\text{C}$		1	
Tank capacity	L		10	30
Tank dimensions	l/w/d	mm	305/210/185	455/305/240
Top opening	l/w	mm	190/210	350/305
Liquid depth	min/max	mm	100/140	145/190
Height to tank rim		mm	265	320
Overall dimensions	l/w/d	mm	415/320/400	565/415/455
Safety	temp.		adjustable cut-out	
	level		float switch	
Accessory pump performance ¹	max. head	m	1.6	
	max. flow	L/min	6	
	pipe bore	mm	7.5	
Electrical power	230V 50/60 Hz	kW	1.2	2.3
	115V 50/60 Hz	kW	1.2	1.6
EMC emissions			Class A	

¹using silicone oil @ 150°C





Equipment safety

HED high temperature baths meet the requirements of IEC61010.

CE mark

The HEDs bear a CE mark to indicate that they meet the requirements of the Low Voltage and EMC Directives.

Where appropriate Grant laboratory equipment conforms to IEC 61326-1 (EN 61326-1) Class B except where indicated.

Class B equipment is for use in domestic establishments, and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.

Class A equipment is suitable for use in establishments other than domestic and those directly connected to a low voltage power supply network, which supplies buildings used for domestic purposes.

After sales service

In the United Kingdom, repairs are normally carried out within two to five working days of arrival at our factory or receipt of authorisation to repair. Alternatively, spare parts and service manuals can normally be despatched within two working days. Most distributors of Grant equipment outside the UK hold stocks of spare parts, have their own service engineers and operate a similarly prompt repair service.

Three year guarantee

Grant HED high temperature baths are robust and reliable, designed and built to provide years of trouble-free service. They are guaranteed for three years against faulty materials and workmanship. If repairs are carried out under guarantee, no charge is made for labour or materials, and within the UK we make no charge for return carriage.

As Grant Instruments is committed to a continuous programme of improvement, specifications may be changed without notice.

Grant

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