



Introduction

The standard range of LPC Withdrawable Immersion Heaters are manufactured from 316 s/s for heating fluids within harsh environments and designed for long life and protection against corrosion. The terminal housing which is mounted to the flange, contains wiring connections and control equipment which can be supplied to suit the customers' requirements. The benefit of the unit being "withdrawable" is that all elements and control equipment can be changed **without** draining the tank.

Ordering Procedure

Use the table below to select the appropriate heater from our standard range. If you are unsure of your requirements then please specify: Solution to be heated; Working temperature; Supply Voltage; Working Pressure; Size of Tank; Kilowatt load; Size of Flange & Control Equipment required.

Technical Specifications

Watts	Volts	Flange Size (BS4504 PN10/16)	Thermostat (0-40°C standard)	Over-temp Cut-Out (65°C standard)	Lo-Temp Alert (15°C standard)	Heater Material	Total Immersed Length (mm)	Product Code
2KW	240/415V	4"NB RF	✓	✓	✗	316 S/S	730	HHD0178
4KW	240/415V	4"NB RF	✓	✓	✗	316 S/S	953	HHD0179
6KW	240/415V	4"NB RF	✓	✓	✗	316 S/S	1263	HHD0180
8KW	240/415V	4"NB RF	✓	✓	✗	316 S/S	1441	HHD0181
2KW	240/415V	6" NB	✓	✓	✓	316 S/S	730	HHD0129
4KW	240/415V	6" NB	✓	✓	✓	316 S/S	953	HHD0130
6KW	240/415V	6" NB	✓	✓	✓	316 S/S	1263	HHD0131
8KW	240/415V	6" NB	✓	✓	✓	316 S/S	1441	HHD0132

Voltages Available: 240V, 220V, 120V (or special on request)
 Max Working Pressure: 200psi
 Resistance Tolerance: ±7%
 Max Immersed Length: 3.7Mtrs
 Max Heated Length: 1.45Mtrs

Materials

The standard range of heaters are manufactured in 316 s/s. Depending on the application, the immersions can be manufactured from a number of other materials e.g. mild steel (for use in oil baths and heat-transfer oil systems), or as requested by the customer.

The brass cartridge heating elements are manufactured in house and are double insulated with bundy-sheathed (copper coated mild steel) cores. Although we restrict each cartridge heater to a maximum of 35 watts per square inch and 17amp per element, only the size of flange regulates the number of cartridges that we can fit into the unit. As such there is almost no restriction on the watts and volts ratings that LPC can manufacture.

Polycarbonate terminal enclosures that conform to IP67 are supplied on the standard range of units. Terminal enclosures can also be supplied in Stainless Steel, Coated Mild Steel, & Aluminium as required.

Control Equipment

We always recommend the use of a cut-out to protect against overheating. As you can see above, some standard products also have a heater fail alert (or lo-temp indicator) fitted, pre-set and locked at 15°C. Units can be supplied with special thermocouples and PT100 probes for use with more sophisticated control systems.

Testing

All heaters manufactured are pressure tested to 200 PSI for a minimum of 1 hour, elements are flash tested to 1500V, Ohms values are $\pm 7\%$ and insulation resistance tests are greater than 100 M Ω at 500V d.c. Thermal cut-outs and thermostats (when required) are pre-set by immersion in water and heating to the required setting using a digital thermometer to $+1/-3$ °C.

Addition information

- All LPC Withdrawable Immersion Heaters are supplied with installation instruction, a parts list and wiring diagrams.
- All units carry a 1 Year warranty against manufacturing faults.
- Spare parts are available (usually ex-stock) for all standard units.
- Installation should only be carried out by suitably qualified contractors.
- LPC also design & manufacture a vast range of fixed flanged immersion heaters, over-the-side heaters and screwed immersion heaters, as well as many other types of industrial heating element.