# **IMMERSION HEATERS**

# **DP RANGE**





### **DP RANGE APPLICATION**

The DP range is designed as a top entry heater and provides a cost effective means of taking advantage of off-peak tariffs and solar generated electricity.

The heater comprises of two elements. A long element, which when wired correctly, will heat the bulk of the contents of the cylinder during off-peak tariffs or using solar electricity and a shorter element to provide a rapid boost if required.

The range features lower kW heaters intended for use with solar PV panels and allows the output of the immersion heater to be better matched to the output of the solar panels.

To provide the maximum benefit, this model should be wired through an appropriate external controller to take advantage of off-peak tariffs.

#### STANDARD RANGE

The standard DP range is designed to heat water in domestic or light duty building service applications. The range is fitted with Copper or Nicalloy 825 elements.

#### **Element Sheath Material**

Copper - suitable for soft waters.

Nicalloy 800 - equivalent to Incoloy 800 or Aqualoy or Superloy.

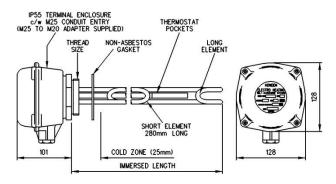
- Suitable for normal or slightly hard or aggressive waters.

Nicalloy 825 - equivalent to Incoloy 825.

- Suitable for hard or aggressive waters.

| LIST No            | LIST No.                 | kW LOADING PER<br>ELEMENT @ 240V |      | IMMERSED LENGTH |
|--------------------|--------------------------|----------------------------------|------|-----------------|
| COPPER<br>ELEMENTS | NICALLOY 825<br>ELEMENTS | SHORT                            | LONG | mm(in)          |
| DP501              | DP601                    | 2                                | 3    | 610 (24")       |
| DP502              | DP602                    | 2                                | 3    | 690 (27")       |
| DP503              | DP603                    | 2                                | 3    | 760 (30")       |
| DP504              | DP604                    | 2                                | 3    | 910 (36")       |
| -                  | DP612*                   | 2                                | 1    | 690 (27")       |
| -                  | DP622*                   | 2                                | 1.5  | 690 (27")       |
| -                  | DP632*                   | 2                                | 2    | 690 (27")       |

<sup>\*</sup> the longer element is in Nicalloy 800.



### **MOUNTING**

The heater must be installed through the top of the cylinder.

All heaters are screwed 2% BSP and are supplied with a WRAS approved fibre gasket.

It is important when installing a top entry immersion heater that it's immersed length should be as long as possible to give the greatest volume of heated water in the cylinder. An approximate guide is the cylinder height less 150mm.

#### **TEMPERATURE CONTROL**

All standard models are supplied with two factory fitted control thermostats each rated at 16A.

The short element is controlled by a 280mm (11") long, dual purpose safety thermostat.

The long element is controlled by a 457mm (18") long, dual purpose safety thermostat.

The dual purpose safety thermostats have a preset thermal cut-out mounted in the head of the thermostat to ensure the water temperature does not exceed 98°C and the cylinder does not boil.

### **OPERATING TEMPERATURE & PRESSURE**

The DP range has a maximum design temperature of  $90^{\circ}$ C and maximum operating temperature of  $70^{\circ}$ C due to the thermostats fitted. The maximum operating pressure is 5 Bar.

## **VOLTAGE**

Single phase heaters from our standard range are designed to operate at 230/240V.

Non-standard models can be supplied designed to suit operating voltages from 110V to 480V AC or DC. Please contact our Technical Department.

## **CONSTRUCTION**

Heaters are manufactured generally to BS EN 60335-2-73. Elements are brazed into the brass boss.

The terminal enclosure is moulded plastic and rated to IP55 with one M25 conduit entry.

### **COMMON VARIATIONS**

Please contact our Technical Department for further details.

Various kW loadings and voltages.