



## PEREGRINE COOLANT HEATERS Information sheet

Please refer to our sheet IN999 which is used in conjunction with this information sheet, and covers non-pumped heaters. As a rule, **PEREGRINE** coolant heaters are supplied as a complete kit which comprises the thermostatically controlled heater unit (MC heaters are non-thermostatic), heater mounting brackets, high temperature hose, hose clips, a kit of installation fittings to suit the application in question, together with installation notes and installation drawing to suit. The heaters can however be supplied without fittings and hose if required. **ALL** parts are available as spares.

There are several standard types of coolant heater available; MC, T, D, DW, DS, DSW, GS, GSW, DH, DHW, X, XW, XP and XPW, all heaters including the letter 'W' being WEATHERPROOF heaters.

As can be seen on P999, most of the heaters are available with alternative hose connections or BSPF connections. These standard connections are detailed on IN999 from **1** to **7**. Pumped heaters are usually supplied with 1/2" or 3/4" hose connections.

On the reverse of IN999, you will find a chart showing each canister type against each available connection size. Wattages are then shown for each variety, detailing whether the heater should be fitted horizontally or vertically. For example, a 'D' type canister with 5/8" hose connections (**.2**) when fitted with a 1000 watt element can be fitted either vertically (**V**) or horizontally (**H**) to give adequate water flow.

All **PEREGRINE** coolant heaters are fitted with low watts-density elements to ensure a long reliable life and to obviate the localised 'boiling' associated with high element surface temperatures. Thermostats are adjustable 35-80°C as standard, or an alternative range adjustable 0-40°C on request. Standard Voltages are; 42, 47, 55, 110, 220 & 240 volt AC. 12 & 24 volt DC available as specials. 3 phase available on all 'X' type heaters. Please our website [www.preheat.co.uk](http://www.preheat.co.uk), and read below for details of individual heater types.

### TYPE MC.

The MC heater is a small unit, used primarily in private car and small commercial applications. The heater is non-thermostatic, fitted vertically and has size **1** connections. Wattages range from 150 w to 500 w.

### TYPE T.

The 'T' type heater is a vertically mounted unit, used in applications such as stand-by generators, emergency pumps, large commercial vehicles etc. The heater is thermostatically controlled, has size **1,2,3,4,5** connections and is supplied in wattages 250w to 1500w.

### TYPE D and DW.

The 'D' and 'DW' heaters are thermostatically controlled, twin element heaters with half the watts-density of the 'T' type heaters. They may be fitted vertically or horizontally (see chart), and are used primarily applications where the extra protection of a second element is desirable. Available with size **1,2,3,4,5** connections, and in wattages 500 w to 3000 w.

### TYPE DS, and DSW.

The 'DS' and 'DSW' heaters have been designed as *short* versions of the 'T' type heater, specifically for installations where there is insufficient height to accommodate the longer 'T' type unit. The 'DS' can in most cases be mounted horizontally or vertically (see chart). Available with size **1,2,3,4,5** connections and in wattages 250 w to 1000 w.

**PLEASE TURN OVER**

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The 'DS' and 'DSW' heaters have been designed as *short* versions of the 'T' type heater, specifically for installations where there is insufficient height to accommodate the longer 'T' type unit. The 'DS' can in most cases be mounted horizontally or vertically (see chart). Available with size **1,2,3,4,5** connections and in wattages 250 w to 1000 w.

### TYPE GS and GSW.

The 'GS' and 'GSW' type heaters have been designed as a *short* version of the 'D' and 'DW' type heaters, specifically for installations where there is insufficient height to accommodate the longer 'D' type unit. The 'GS' can in most cases be mounted horizontally or vertically (see chart). Available with size **1,2,3,4,5** connections and in wattages 500 w to 2000 w.

### TYPE DH and DHW.

The 'DH' and 'DHW' heaters are horizontally mounted and designed for use on small 'V' engines, having a single inlet from the engine and twin outlets to return heated coolant fluid to each side of the block, thus heating the engine evenly. Available with size **1,3** connections and in wattages of 350 w to 2000 w.

### TYPE X and XW.

The 'X' and 'XW' heaters are a higher wattage unit for use on larger engines. They are available for 3-phase supply as well as standard single-phase voltages. The heaters may be mounted horizontally or vertically in every case. The lengths of the heater units vary with wattage (see chart). The higher wattage units are controlled via a contactor. Available with size **1,2,3,4,5,6,7,8,9** connections and in wattages of 500 w to 8000 w as standard.

### TYPE XP and XPW.

The 'XP' and 'XPW' heaters are similar units to the 'X' and 'XW' heaters mentioned above, but with an added pump to force the heated water around the engine. In the case of pumped heaters, all the water in the system will tend to be heated to the same temperature, rather than the temperature gradient produced by the thermosyphen method, and a wattage approximately 50% higher is desirable to achieve this. Generally connections are 4 or 5.

### SPECIALS.

The above descriptions relate to our standard ranges of heaters. We are able to manufacture *specials* as required, with such connections, voltages and wattages as specified by **you**.

We manufacture various water heating elements for direct insertion into engine water galleries, housings, radiators etc. and can offer replacements for existing units given the relevant details. Please do not hesitate to contact our sales department should you need any further information or wish to discuss any application or problem.

### ORDERING.

If you are uncertain how to order the type of heater that you require, please ask for our sheet "IN1510" which will explain.

If you are uncertain what type or what wattage heater you require, please do not hesitate to contact our Sales Department on the usual numbers.