

IMMERIONS HEATERS

XS RANGE



XS RANGE APPLICATION

The XS range is designed as a competitively priced, easy to install immersion heater, suitable for the majority of **vented**, domestic, **copper** cylinders. A vented cylinder is one where the water supply comes from a cold water tank, often in the loft, and is not connected directly to the mains water supply. A vented system operates at low pressure.

A vented cylinder is one where the water supply comes from a cold water tank, often in the loft, and is not connected directly to the mains water supply. Unvented cylinders are connected directly to the mains water supply. Unvented systems operate at low pressure while unvented systems operate at higher pressure.

The XS range comes with a range of element materials to suit soft, hard and very hard waters.

All easily accessible live components are insulated. This is not the case on most equivalent products sold by other manufacturers.

All standard models are manufactured to the latest safety standard, BS EN 60335-2-73.

Element Sheath Materials

- Copper - suitable for soft or normal waters.
- Nicalloy 800 - equivalent to Aqualoy, Superloy and Incoloy 800.
- Nicalloy 825 - suitable for hard or aggressive waters.
- Nicalloy 825 - equivalent to Incoloy 825.
- Nicalloy 825 - Suitable for very hard or aggressive waters.
- Nicalloy 825 - If the heater exhibits a kettling effect (produces a growling noise) try a Nicalloy 825 element.

| LIST NUMBERS | | | kW LOAD @ 240V | IMMERSED LENGTH mm (in) | THERMOSTAT | |
|--------------------|--------------------------|--------------------------|----------------------|-------------------------------|------------|---------|
| COPPER ELEMENTS | NICALLOY 800 ELEMENTS | NICALLOY 825 ELEMENTS | | | Model | Range |
| XS731 | XS831 | XS931 | 3 | 230 (9") | TSDR0702 | 0-60°C |
| XS732 | XS832 | XS932 | 3 | 280 (11") | TSDR0702 | 0-60°C |
| XS733 | XS833 | XS933 | 3 | 380 (15") | TSDR0702 | 0-60°C |
| XS734 | XS834 | XS934 | 3 | 460 (18") | TSDR1104 | 13-65°C |
| XS735 | XS835 | XS935 | 3 | 610 (24") | TSDR1802 | 35-65°C |
| XS736 | XS836 | XS936 | 3 | 685 (27") | TSDR1802 | 35-65°C |
| XS737 | XS837 | XS937 | 3 | 760 (30") | TSDR1802 | 35-65°C |
| XS738 | XS838 | XS938 | 3 | 910 (36") | TSDR1802 | 35-65°C |

MOUNTING

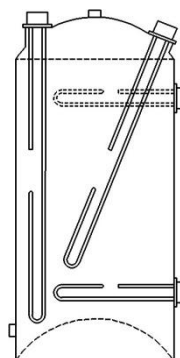
Top or side entry as illustrated in the diagram.

All heaters are screwed 2 1/4" BSP and are supplied with a WRAS approved fibre gasket.

It is important when installing a top entry immersion heater that its immersed length should be as long as possible to give the greatest volume of heated water in the cylinder. Due to convection an immersion heater will only heat the contents of the tank above the immersion heater. An approximate guide is the cylinder height less 150mm.

To enhance the efficiency of the standard immersion heater two options are available :

- 1) Fit two side entry immersion heaters. One at the bottom and the second at the top of the cylinder. The bottom immersion heater, when wired correctly, will heat the entire cylinder on off peak tariffs while the top immersion heater can be used to boost the temperature of the water quickly when required.
- 2) Fit a top entry immersion heater. This must be longer in length to reach towards the bottom of the cylinder.



Alternative Fixing Positions

TEMPERATURE CONTROL

All standard models are supplied with a factory fitted dual purpose safety thermostat rated 16 Amps. The thermostat incorporates a manual reset, over-temperature, safety cut-out function to prevent the temperature of the water in the tanks from exceeding 98°C, i.e. prevent boiling.

OPERATING TEMPERATURE & PRESSURE

Standard models have a maximum operating temperature of 65°C and a maximum operating pressure of 3.5 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 to BS EN 60335 Section 2.73. Elements are brazed into the brass boss. Thermostat pockets are of copper construction and not suitable for stainless steel cylinders.

The IP21 rated terminal enclosure is constructed from a tough, V0 grade polymer and is provided with a cord grip to accept heat resisting cable.

COMMON VARIATIONS

Please contact our Technical Department for further details.

- o Various kW loadings and voltages.
- o Low watts density elements to prolong the life and prevent 'kettling' or 'growling' noises from the heater.
- o Heater fitted with 3 core cable.
- o Heater fitted with 3 core cable and plug.