

## 'FP' Rod-Type Immersion Heaters

The FP range of Flameproof rod-type immersion heaters is a highly adaptable solution that can be customised to suit the process requirements of our clients. They are suitable for heating all types of process liquids and gases which are non-corrosive to the materials of construction.



### FEATURES

Certified to meet the requirements of the ATEX Directive 94/9/EC and IECEx

Mild steel or 316 stainless steel terminal enclosure with weatherproof protection to IP65

Choice of built in process temperature sensors

Suitable for ambient temperatures from -50°C to +60°C

Mounting of the heater can be by a threaded boss or an industry standard flange

Designed for horizontal installation (vertical mounting version available on request)

Can be supplied with the terminal box mounted away from the fixing boss/flange for high process temperatures

### TYPICAL APPLICATIONS

Pre-heating oil/water

Processing equipment

Cleaning and rinsing tanks

Heating medium

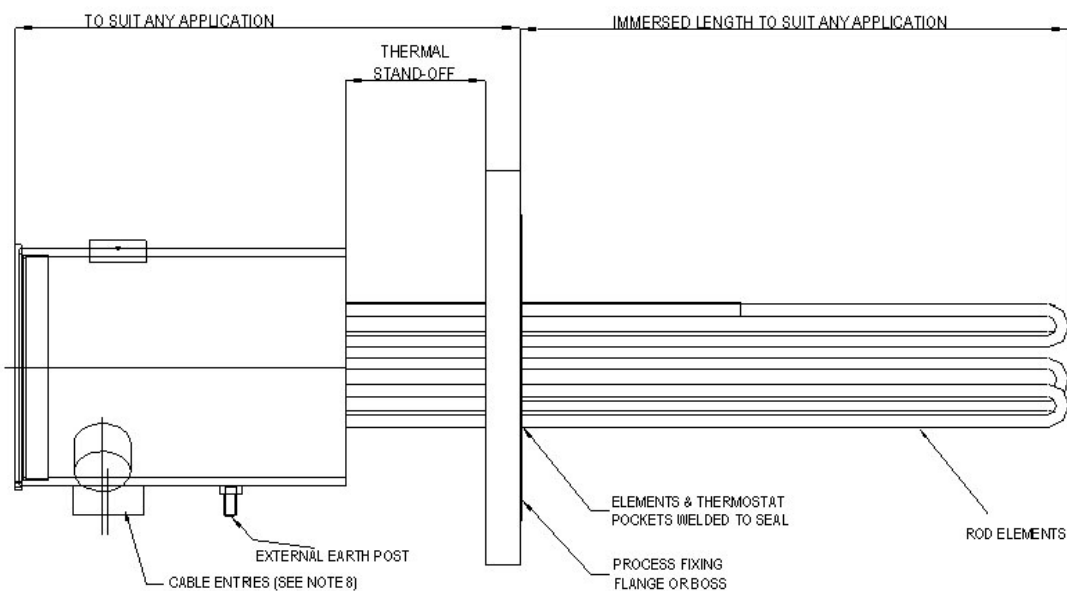
Boiler equipment

Frost protection

Heat transfer systems

Tank heating

# Product Specification



Terminal box type	Minimum Flange Size Without Stand off		kW LOAD with a maximum immersed Length of 3665mm	
	ins	mm	Max. Cable Entries	Max. No. of Elements Without Stand off
FP4	3	75	1 off M25 & 1 off M20	6
FP6	6	150	1 off M32 & 2 off M25	15
FP8	8	200	2 off M25 & 1 off M40	21
FP10	10	250	2 off M32 & 1 off M25	39
FP12	12	300	3 off M32 & 1 off M20	54

# Product Specification

<b>Certification</b>	<p>ATEX certified Ⓜ II 2 G/D IECEX &amp; ATEX certified Ex'd' IIC T1 to T6 Ex tD A21 IP66 T450 to 85°C CSA certified Class I, Div 1, Gas Groups A, B, C &amp; D EN/IEC 60079-0, EN/IEC 60079-1, EN/IEC 61241-0 &amp; EN/IEC 61241-1 CCOE (India) &amp; KGS (Korea)</p>
<b>Enclosure</b>	<p>Mild steel or 316 stainless steel, external and internal earths, screwed terminal cover, finished in epoxy paint (if required)</p>
<b>Elements</b>	<p>A choice of rod-type elements comprising of 80/20 nickel chrome resistance wire, compacted in high purity magnesium oxide insulating powder and encased in either Incoloy or stainless steel sheath, secured by either brazing or welding depending upon the process application</p>
<b>Controls</b>	<p>Heater over-temperature protection is fitted as standard (optional process temperature sensing devices can be incorporated in the form of thermostats, RTD's or thermocouples)</p>
<b>Mounting</b>	<p>Any threaded boss or flange in any material can be specified within the limits of the design parameters Heater terminal box can be either 'direct-on' or 'stand-off', depending on process temperature</p>
<b>Rating</b>	<p>To suit process requirements</p>
<b>Voltage</b>	<p>Any electrical supply up to 690V</p>