

FP Range of Hazardous Area Ex d Certified Immersion Heaters

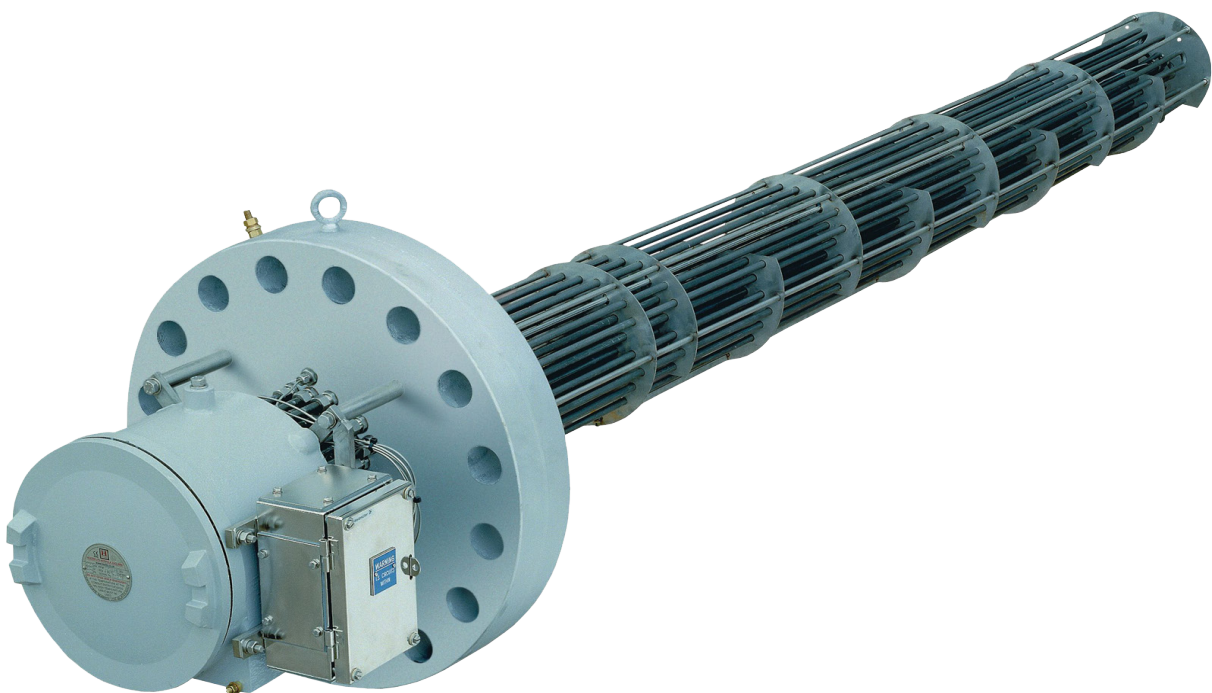
The FP electric heater comprises a large range of process immersion heaters, certified for use in hazardous areas and are custom built to meet client specifications.

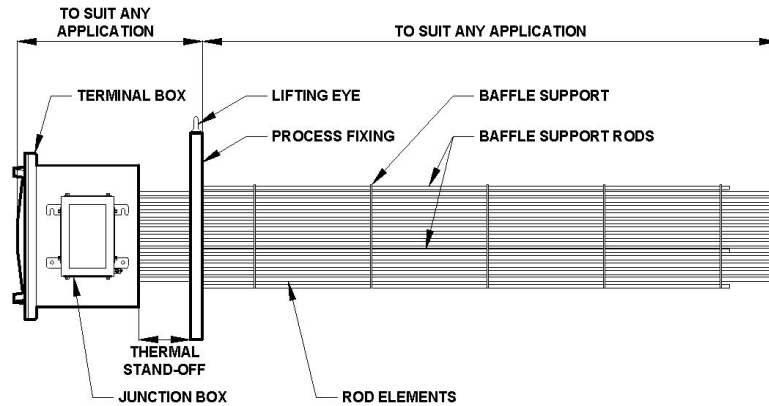
FEATURES

- Certified to ATEX or IECEx standards
- Terminal box is certified weatherproof to IP66 as well as Type 4 or 4X standards
- Temperature classifications T1 to T6
- Up to 1400kW
- Elements are specially sealed to prevent moisture ingress
- Elements are individually replaceable on site without the need for special tools
- Withdrawable type elements are available to facilitate replacement without draining the vessel
- Suitable and certified for use in high ambient temperatures (e.g. Middle East)
- Anti-condensation heaters fitted, if required

TYPICAL APPLICATIONS

- Crude oil / hydrocarbon liquids
- Molecular sieve regeneration
- Glycol (TEG & MEG) reboilers
- Heat transfer oils
- Industrial gases
- Tank heating
- Natural gas
- Heating medium
- Fuel gas
- Water
- Fuel oils





Nominal Flange Size		kW LOAD with Maximum Immersed Length of 3665 mm		
Inch	mm	1 w/sq cm	2.5 w/sq	7.44 w/sq cm
6	150	30	80	200
8	200	60	160	400
10	250	100	260	650
12	300	150	380	950
14	350	180	460	1150
16	400	245	620	1550
18	450	325	800	2000
20	500	400	980	2500
24	600	585	1460	3650
30	750	1110	2780	5000
36	900	1610	4040	n/a
40	1000	1995	5000	n/a

Certification ATEX / IECEx (Ex) II 2 G/D
 Ex d IIC T1 to T6 Gb
 Ex tb IIIC T85 to T450°C Db IP66
 EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31
 CSA (CEC/NEC) Class I, Div 1, Groups A, B, C, D; T1 to T6, Enclosure Type 4 or 4X
 CSA (CEC) Ex d IIC; T1 to T6 Gb, IP66 (CAN)
 CSA (NEC) Class I, Zone 1, AEx d IIC; T1 to T6 Gb, IP66 (USA)
 CU TR (formerly GOST), CNEEx, CCOE, Inmetro, KGS

Terminal Box Manufactured from low temperature carbon steel or stainless steel throughout, with screwed-on lid to suit the hazardous environment

Elements Manufactured from 80/20 NiCr resistance wire with high purity compacted magnesium oxide powder sheathed within corrosion / erosion resistant tube, eg:

- Incoloy 800/825
- Inconel 600/625
- Titanium
- 316/316L stainless steel
- 321 stainless steel
- Monel

Internals Elements are supported in a baffle type support assembly to prevent vibration and element deformation

Voltage Suitable for voltages up to 690V (600V CAN and USA)