

FP-C Standard Flameproof Removable Core Immersion Heaters

The FP-C range of standard-design flameproof removable single and multi-core heaters offer hazardous area heating solutions for oil and similar applications where low heat density is required. Designed for convenience, the elements can be withdrawn for inspection without system drain down. A standard heater consists of a single element (or multiple cores) fitted into a mounting flange. A robust Ex d terminal enclosure protects the electrical connections. The watts density of the element core fitted depends upon the media to be heated and the kilowatt rating required.

The FP-C standard removable core-type immersion heater range is certified for use in hazardous areas where the atmosphere is classified as a Zone 1 or 2 (IIA, IIB, IIC) gas group, or a Zone 21 or 22 (IIIA, IIIB, IIIC) dust group.

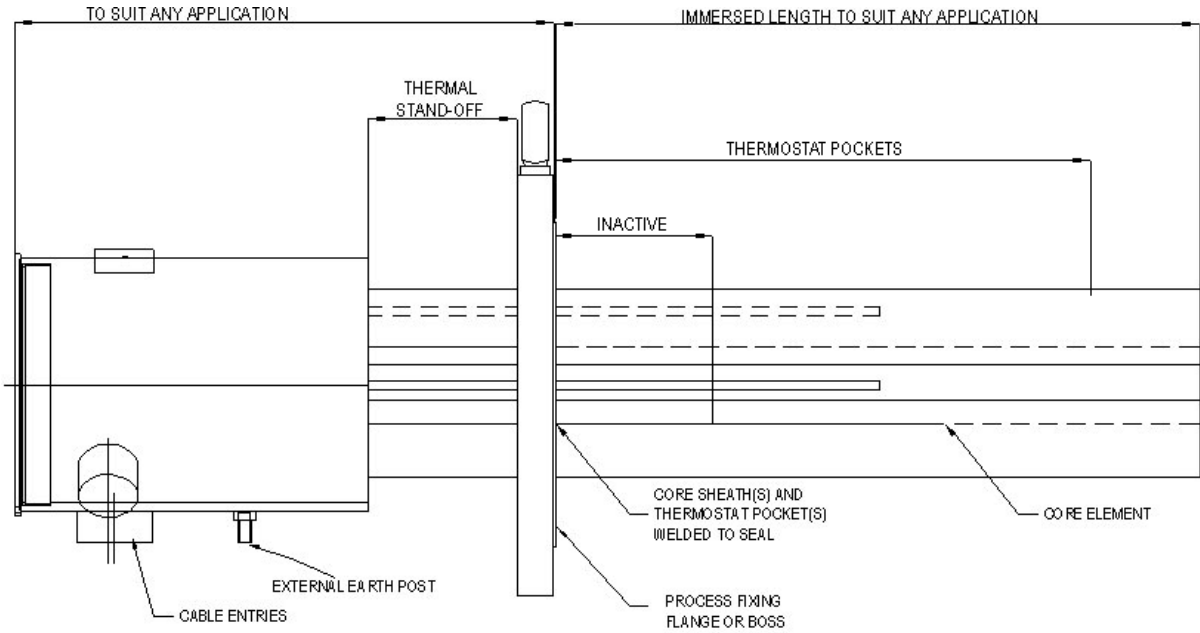


FEATURES

- Mild steel or 316 stainless steel terminal enclosure with weatherproof protection to IP66 or Enclosure Type/ NEMA 4 or 4X
- Choice of built in process temperature sensors
- Suitable for ambient temperatures from -60°C to +60°C (subject to cert parameters)
- Mounting of the heater can be by a threaded NPT or BSP 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

TYPICAL APPLICATIONS

- Bitumen tanks
- Boiler equipment
- Cleaning and rinsing tanks
- Compressors
- Crankcase lubrication
- Frost protection
- Heat transfer systems
- Lube oil reservoirs
- Oil purifiers
- Oil separation/filtration
- Oil separators
- Pre-heating oil/water
- Processing equipment
- Refrigeration packages
- Turbines
- Water/glycol cooling



RATING (kW)	MODEL	IMMERSED LENGTH (MM)	INACTIVE LENGTH (MM)	SURFACE LOAD (W/cm ²)	VOLTAGE	WEIGHT (KG)
0.5	FP4-CS1-0.5-22-FS3-400	550	100	0.6	230/400V	13
0.5	FP4-CS1-0.5-22-FS3-415	550	100	0.6	240/415V	13
0.5	FP4-CS1-0.5-22-FS3-440	550	100	0.6	254/440V	13
1	FP4-CS1-1-22-FS3-400	550	100	1.3	230/400V	13
1	FP4-CS1-1-22-FS3-415	550	100	1.3	240/415V	13
1	FP4-CS1-1-22-FS3-440	550	100	1.3	254/440V	13
2	FP4-CS1-2-29-FS3-400	750	100	2	230/400V	14
2	FP4-CS1-2-29-FS3-415	750	100	2	240/415V	14
2	FP4-CS1-2-29-FS3-440	750	100	2	254/440V	14
3	FP4-CS1-3-41-FS3-400	1050	100	2	230/400V	15
3	FP4-CS1-3-41-FS3-415	1050	100	2	240/415V	15
3	FP4-CS1-3-41-FS3-440	1050	100	2	254/440V	15
4	FP4-CS1-4-53-FS3-400	1350	100	2	230/400V	17
4	FP4-CS1-4-53-FS3-415	1350	100	2	240/415V	17
4	FP4-CS1-4-53-FS3-440	1350	100	2	254/440V	17
5	FP4-CS1-5-67-FS3-400	1700	100	2	230/400V	19
5	FP4-CS1-5-67-FS3-415	1700	100	2	240/415V	19
5	FP4-CS1-5-67-FS3-440	1700	100	2	254/440V	19

ATEX/IECEX as standard - other certifications available on request.

Certifications	ATEX/IECEX Ⓔ II 2 G/D Ex d IIC T1 to T6 Gb Zone 1 and 2 ATEX/IECEX Ex tb IIIC T450°C to T85°C Db Zone 21 and 22 (IP66) CSA (CEC/NEC) Class I, Div 1, Groups A, B, C, D; T1 to T6, Enclosure Type/NEMA 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 (EAC), CNEx, CCOE (CCEs), Inmetro & KGS
Enclosure	Mild steel as standard - 316 stainless steel & painted options available on request
Elements	316L Stainless steel plain surface tube as standard – mild steel & extended surface available on request
Controls	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 terminated within transmitters)
Mounting	3" NB 150lb ANSI RF Blind 316L Stainless Steel Flange as standard - Any threaded NPT or BSP 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
Rating	To suit process requirements within the design and certification parameters
Voltage	Any electrical supply up to 690V AC (600V CSA) +/-10% tolerance