

Standard FP Cast Line Heaters

EXHEAT's range of cast aluminium line heaters provide a compact and efficient heating solution for constant flow liquids or gases. Cast heaters are increasingly being selected over traditional pressure vessel type heaters for the following reasons:

- Suitable for high process design pressures
- Cost effective (especially if all standard options are taken)
- Increased safety due to the encasement
- Available on shorter lead times (especially if all standard options are taken)
- Compact size with a reduced footprint
- High reliability and increased service life
- Uniform heat distribution
- Resistant to any internal vibrations
- Excellent heat transfer and residual heating from the aluminium casting

The design incorporates electric heating elements and an indirect process heating coil embedded within marine grade cast aluminium. This provides excellent heat transfer properties combined with low surface temperatures.

EXHEAT has developed a series of standard cast heaters which serve a broad variety of processes and design conditions. These heaters are highly cost effective, can be ordered simply by model number and are available with short lead times for delivery.

FEATURES

Certified to ATEX, IECEx, CSA or other standards

Certified under EN/IEC 60079-0, 60079-1, 60079-7, 60079-31 and standards per CEC/NEC 500

Flameproof IP66 rated terminal enclosure

Cellular glass insulated with stainless steel cladding

Maximum design pressure and temperature of 430 barg at up to 400°C

RTD Pt100 sensors for process control and over-temperature protection

Wall or floor, vertical or horizontal mounting

Multiple heating elements allow for step control, alternatively, solid state relay or thyristor control can be employed

Process connections available using standard flanged or compression joints



TYPICAL APPLICATIONS

Seal gas	Air
Natural gas	Biogas
Paint heating	Nitrogen
CO ₂	Solvent
Instrument air	Pasteurisation

Certification	ATEX / IECEx  II 2 G/D Ex d IIC T1 to T6 Gb Ex tb IIIC T85 to T450°C Db IP66 EN/IEC 60079-0, EN/IEC 60079-1, EN/IEC 60079-7, EN/IEC 60079-31 CCOE (India), KGS (Korea), Inmetro (Brazil) CSA (Canada and US), CU TR (formerly GOST)
Enclosure	Natural stainless steel or painted mild steel
Elements	XX Small: Hairpin type 316/L sheathed with 80/20 nickel chrome resistance wire embedded in high purity magnesium oxide X Small: Cartridge type stainless steel 316/L sheathed with 80/20 nickel chrome resistance wire embedded in high purity magnesium oxide Small / Medium / Large: Hairpin type nickel alloy N08800 (Alloy 800) sheathed with 80/20 nickel chrome resistance wire embedded in high purity magnesium oxide
Casting	Marine grade aluminium Gr. LM25 (Al-Si7Mg)
Cladding	Stainless steel ASTM A366 TP316 2B finish
Insulation	Cellular glass insulation (-260°C / +430°C)
Process Coil	Stainless steel Gr. 316L Duplex S31803 All with NACE MR1075 compliance
Design Code	Designed SEP (Sound Engineering Practice) in accordance with the PED for installation within the European Union; designed in accordance with ASME B31.3, EN 13445 or PD5500
CE Marked	In accordance with relevant EC Directives
Voltage	Up to 690V (subject to duty)
Delivery	From 6 weeks
Duty	XX Small: up to 3kW X Small: up to 10kW Small: up to 24kW Medium: up to 40kW Large: up to 70kW
Optional Accessories	Sunshade: 316 stainless steel (120 degree adjustment for X Small cast heater)

