

## ENQUIRY / TECHNICAL DATA

### Threaded Flange Heater

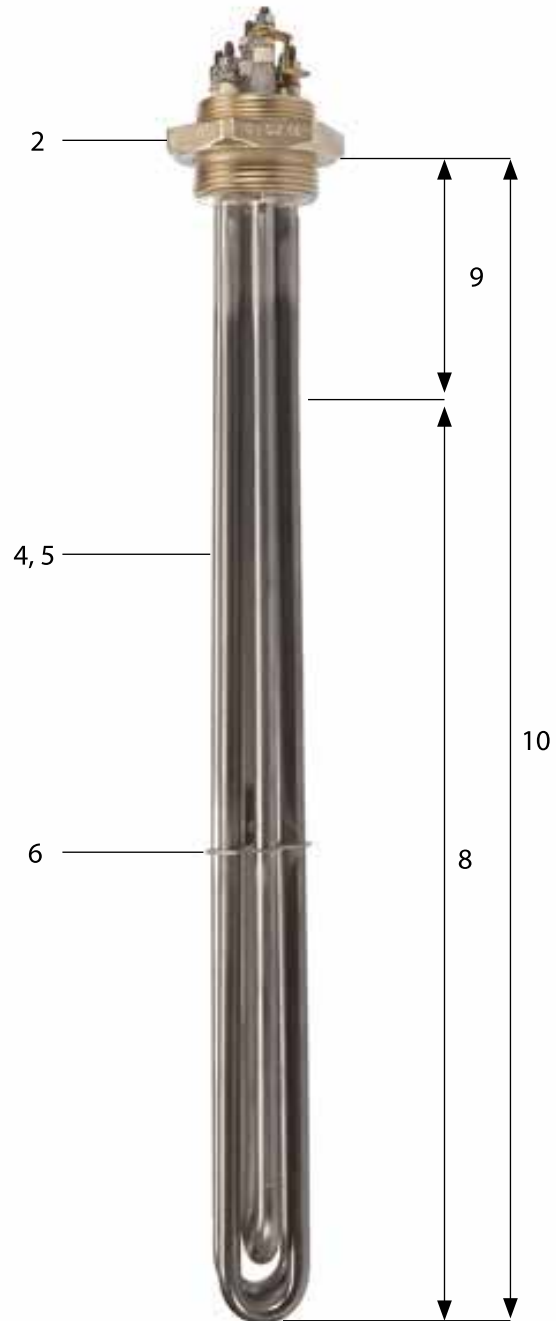
#### Input data

- A. Application
- B. Type of plug
- C. Type of fluid
- D. Pressure
- E. Inlet and outlet temperature
- F. Flow rate (mass or volume)
- G. Environment of operation
- H. Voltage (V)
- J. Max. immersion length
- K. Directives, standards, construction codes

#### HSCO thermal design and offer

Design procedure to optimize your product

1. Power
2. Type of plug
3. Watt density ( $W/cm^2$ )
4. Number of heating elements
5. Material / Tube diameter
6. Type and number of baffles
7. Type of assembly (welding or brazing)
8. Heating length (HL)
9. Cold length (NC)
10. Immersion length (CL)
11. Temperature control and safety, type of sensor
12. Connecting box / Cable gland
13. Other components
14. Quotation: price and delivery time





### Temperature

- Fluid temperature <110°C, no offset
- Fluid temperature >110°C, offset between the protecting box and the tank is recommended

### Pressure

Brazed connection up to 15 bars of fluid pressure.

### Tube materials

- Stainless steel
  - AISI 321 (1.4541)
  - AISI 316L (1.4404)
  - AISI 309 (1.4828)
- High-performance nickel alloys
  - Incoloy 800 (1.4876)
  - Incoloy 825 (2.4858)
  - Inconel 600 (2.4816)
- Others
  - Titanium
  - Copper (nickel-plating on request)
- Specific coating
  - Teflon™ (PTFE)
  - Halar (ECTFE)

### Tube diameter

- 6.5 / 8.5 / 11/12.5/16 mm

### Threaded Plug

- Common diameters: ½", ¾", 1", 1¼", 1½", 2", 2½", M45, M77
- Materials: Brass, stainless steel or steel on request
- Connection: brazed or welded, depending on the application

### Mounting

- Vertical or horizontal position

### Terminals

- Threaded steel or stainless steel rod: M4x0.7 (tubes ø6.5, ø8.5 and ø10), M5x0.8 (tubes ø13.5), M6x1 (tubes ø16).
- Plain rod, flat terminal, tab or cable on request
- Sealing and electrical insulation through epoxy resin or silicone, and ceramic end seal.

### Electrical

- Voltage: VAC or VCC
- Cabling according to main voltage VAC/VCC 1PH + N or 3PH
- For heating power from 100 W to 35 kW

### Standard documentation

- Heater wiring diagram
- Instruction manual
  
- Supplied according to directives, standard and construction code