

Quick Ship

• One to three day shipment.

Cable Heaters

STARFLOW Circulation Heater

Throughout many steps in the semiconductor manufacturing process, Watlow cable circulation heaters help to improve process time and operating efficiency. Using clean, hot gases reduces wafer drying time. Flameless dry heat efficiently solders and desolders electronic circuits and boards. Heated gas streams quickly dry and cure circuit boards without using a large baking oven, saving precious floor space. Watlow's STARFLOW circulation heater is specifically designed to meet the requirements of these applications.

The STARFLOW circulation heater is engineered to heat a flowing gas stream up to temperatures of 1400°F (760°C). The 316L stainless steel chamber houses a small diameter sheathed element, which allows for quick response to both heat up and cool down cycles. Watlow's starwound coiled cable heater provides extremely efficient and reliable heating by maximizing the contact area of the gas or fluid with the element.

Because the element is sheathed, the unit can operate in gas streams that require a clean environment as well as atmospheres that contain contaminants and moisture. This provides superior performance compared to units with internally exposed or open element wires.

Features and Benefits

- **Small diameter heater** allows for quick response times.
- **Internal star wound heater element** provides fast, efficient heating.
- **Sheathed element** can run in clean or impure streams.
- **Flexibility in configurations** allows for adaptability to any process.
- **316L stainless steel construction** is rugged and corrosion resistant.



NEW PRODUCT

Cable Heaters

- **Electropolishing available on all wetted surfaces** to reduce particulate contamination.
- **Thermocouple Type J or K options** provide precise control and high limit safety.
- **Replaceable thermocouple and heating element** reduces replacement costs.
- **Shipment from stock** reduces downtime.

Applications

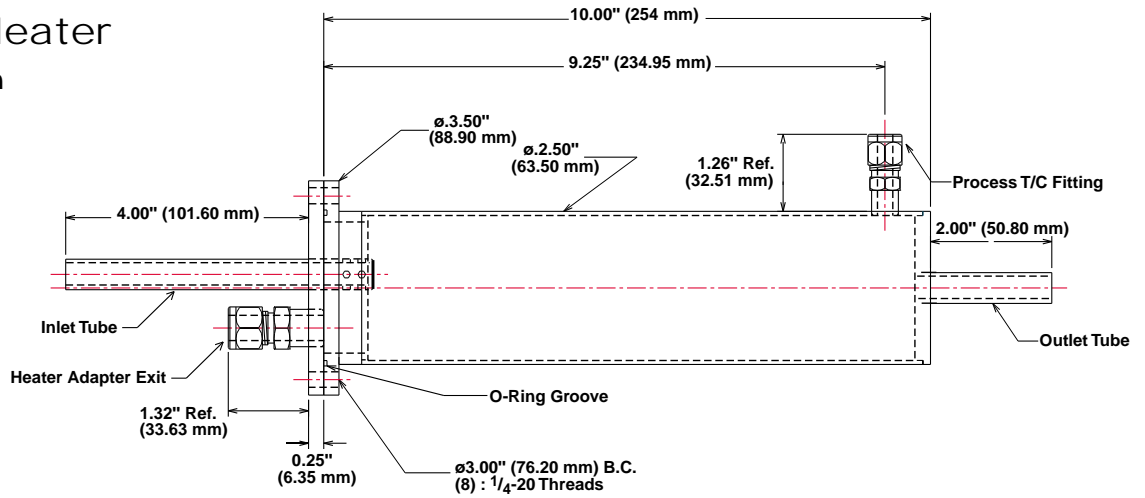
- Semiconductor processing
- Curing and drying
- Electronics
- Heat shrinking
- Thermal forming/sealing

Cable Heaters

F.O.B.: St. Louis, Missouri

STARFLOW Circulation Heater

Ordering Information



1 2 3 4 5 6 7 8 9 10 11 12 13 14
C H

3-4. Type of Inlet

ET = 1/4" (6.35 mm) O.D. tube

JT = 1/2" (12.7 mm) O.D. tube

5-6. Type of Outlet

ET = 1/4" (6.35 mm) O.D. tube

JT = 1/2" (12.7 mm) O.D. tube

7-10. Heater Wattage

0375 = 120V 375W

0500 = 120V 500W

0750 = 120V 750W

1500 = 240V 1500W

2000 = 240V 2000W

3000 = 240V 3000W

11. Internal Thermocouple Calibration (Heater)

J = Type J

K = Type K

12. Surface Finish of Assembly and Heater

X = Unfinished

E = Electropolished

13. Process Thermocouple Calibration (Assembly)

J = Type J

K = Type K

14. O-Ring Material

A = Viton® (500°F/260°C)

F = Aflas® (446°F/230°C)

T = Teflon® encapsulated Viton® (392°F/200°C)

Availability

Consult a Watlow sales engineer or the St. Louis facility for availability of custom manufactured products.

Aflas® is a registered trademark of the Asahi Glass Co., Ltd.

Viton® and Teflon® are registered trademarks of E.I. du Pont de Nemours & Company.