

Circulation Heaters Available for Quick Shipment

The STARFLOW™ circulation heater is engineered to heat a flowing gas stream to a maximum outlet temperature of 1000°F (537°C). The 316L stainless steel chamber houses a small diameter sheathed element, which allows 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 requiring a clean environment and in atmospheres containing 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 time

Internal starwound element

- Provides fast, efficient heating

Sheathed element

- Provides the ability to heat in clean or impure streams

Flexibility in configurations

- Allows adaptability to any process

316L stainless steel

- Provides a rugged and corrosion resistant construction

Electropolishing available on all wetted surface

- Reduces particulate contamination

Note: Contact your Watlow representative for ultra-high purity applications

Low pressure loss

- Minimizes flow restriction

Note: Not suitable for use as a pressure vessel

Type J or K thermocouples

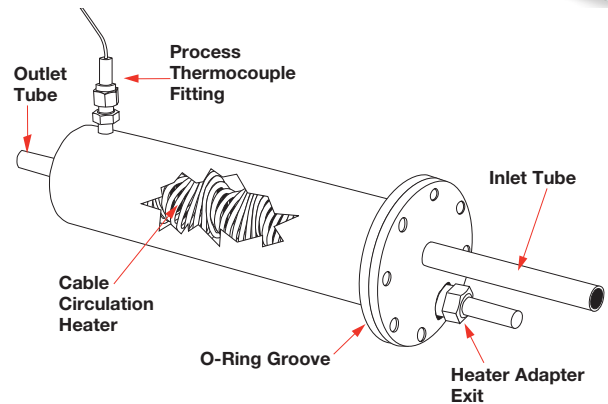
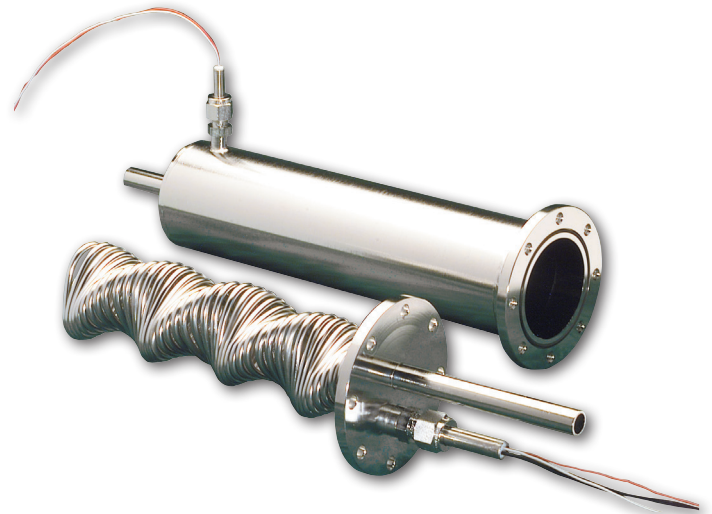
- Provides precise control and high-limit safety

Replaceable heater and thermocouple

- Reduces replacement cost

Shipment from stock

- Reduces downtime



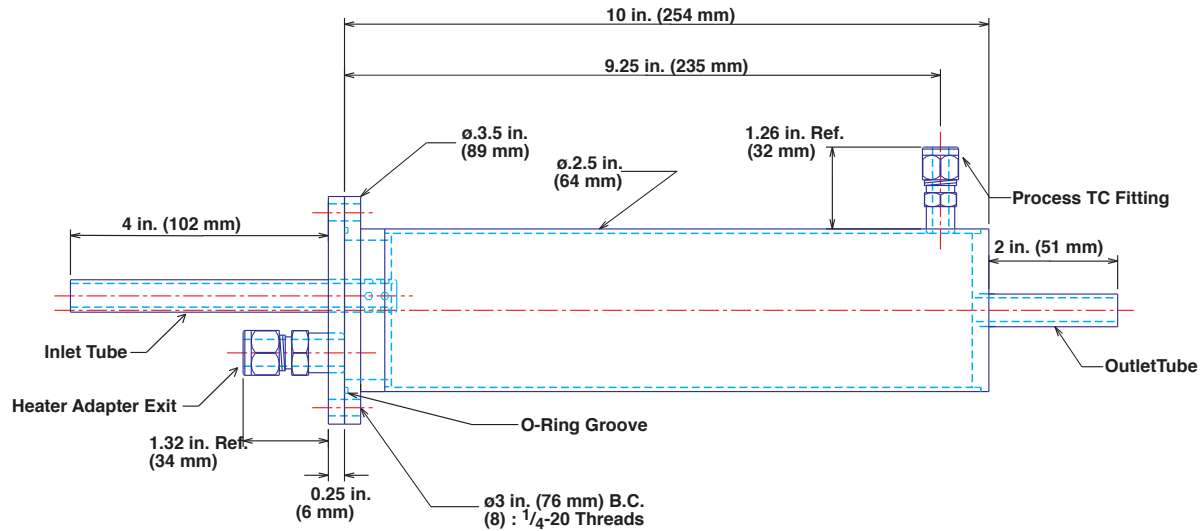
Performance Capabilities

- Temperatures up to 1000°F (537°C), 316L stainless steel sheath
- Maximum watt densities to 30 W/in² (4.7 W/cm²)
- Maximum voltage up to 240V

Typical Applications

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

Dimensional Drawing



Ordering Information

Part Number

① ②	③ ④	⑤ ⑥	⑦ ⑧ ⑨ ⑩	⑪	⑫	⑬	⑭
CH	Type of Inlet	Type of Outlet	Heater Wattage	Internal T/C Calibration (Heater)	Surface Finish of Assembly and Heater	Process T/C Calibration (Assembly)	O-Ring Material
CH							

③ ④	Type of Inlet
ET	1/4 in. (6 mm) O.D. tube
JT	1/2 in. (13 mm) O.D. tube

⑤ ⑥	Type of Outlet
ET	1/4 in. (6 mm) O.D. tube
JT	1/2 in. (13 mm) O.D. tube

⑦ ⑧ ⑨ ⑩	Heater Wattage
0375	120V, 375 W
0500	120V, 500 W
0750	120V, 750 W
1500	240V, 1500 W
2000	240V, 2000 W
3000	240V, 3000 W

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 K
K	Type K

⑭	O-Ring Material
A	FKM (FPM) 500°F (260°C)
M	Alloy X750 1300°F (704°C)
T	PTFE encapsulated FKM (FPM) 392°F (200°C)

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