MULTICOIL[™] Tubular Heaters

Multiple Coils and Thermocouples Packaged in One Sheath for Quick Installation

The tubular element with multiple coils and/or thermocouples inside one sheath from Watlow® answers the need for a versatile, innovative tubular heater. Watlow's patented method of packaging a thermocouple inside of a heater with one or more resistance coils, gives the ability to sense a heaters' internal temperature accurately, every time.

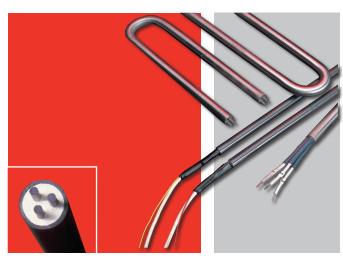
Moreover, this is the first tubular heater in the industry with three-phase capability. The three coil, three-phase heater will offer a compact package solution while delivering the full power required in a compact heater package. Previously three separate heaters would have been required to do the same job; therefore Watlow's MULTICOIL™ heater capabilities save money.

Performance Capabilities

- Watt densities up to 60 W/in² (9.3 W/cm²)
- Sheath temperatures up to 1600°F (870°C)
- 304 and 316 stainless steel sheath temperatures up to 1200°F (650°C)

Typical Applications

- Foodservice
- Process
- Medical
- Milled groove
- Plastics
- Plating
- Oven heating
- Semiconductor



Features and Benefits

Three-phase capability

 Results in one element versus three, lower amperage, reduced installation time and lower overall cost

Single-ended (Sensor not available with this package)

 Allows for mounting in a ¹/₂ inch NPT or ³/₄ inch NPT fitting with three-phase capability

Multiple coil operations

Reduces inventory by allowing dual voltage capability

Versatile forming capabilities

Forms into many configurations

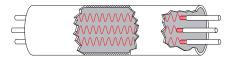
Internal construction with sensor

 Allows space savings because drilling and tapping of flange is unnecessary; plus, the interior thermocouple eliminates contamination buildup around the external sensing tip, reducing the possibility of false readings



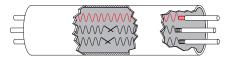
Options

Option A



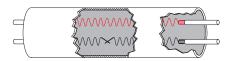
3-phase tubular, 0.475 and 0.490 inch diameter.

Option C



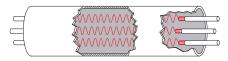
1-phase tubular with one resistance wire and two thermocouples, 0.475 and 0.490 inch diameter.

Option D



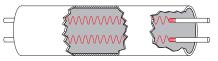
1-phase tubular with one resistance coil and one thermocouple, 0.375, 0.430, 0.475 and 0.490 inch diameter.

Option E



1-phase tubular with three different one phase circuits, 0.475 and 0.490 inch diameter.

Option F



1-phase tubular with two resistance coils, 0.375, 0.430, 0.475 and 0.490 inch diameter.

Specifications

Termination Styles

 Lead wires 392°F (200°C) Sil-a-Blend® or 482°F (250°C) GGS.

Moisture Seals (Required)

Moisture seal options include:

- Epoxy with temperature rating up to 356°F (180°C).
 Typical applications include water/oil immersion.
- Lavacone with temperature rating up to 221°F (105°C).
 Typical application includes air heating.
- High-temperature ceramic rated up to 2800°F (1538°C).
- Contact a Watlow representative for other moisture seal options.

Mounting options

- Mounting brackets
- Locator washers
- Mounting collars
- Water-tight bulkheads

Maximum trim length

 237 in. (6020 mm), heater designs with trim length greater than 120 in. (3048 mm) must be reviewed by your Watlow representative.

Sheath materials

 Alloy 600, 800, 840, 304 and 316 stainless steel, contact a Watlow representative for other sheath material options.

Internal thermocouple options

 Type K is used. Contact a Watlow representative for Type J thermocouple options.

Watlow® is a registered trademark of Watlow Electric Manufacturing Company.

MULTICOIL™ is a trademark of Watlow Electric Manufacturing

Sil-A-Blend® is a registered trademark of Radix Wire Company.

To be automatically connected to the nearest North American Technical Sales Office:

1-800-WATLOW2 • www.watlow.com • inquiry@watlow.com