FREEZE-SAFE

FREEZE-SAFE Classified Location Flexible Heated Mats for Low Temperature Applications

Based on its patented THERMOPOLYMER[®] technology, Watlow has embedded a safe, low watt density heating element into a thermoplastic elastomer mat.

Watlow's FREEZE-SAFE hazardous location Thermo Plastic Elastomer (TPE) heated mats are custom designed for your application in sizes or shapes up to 20×25 inch (508 x 635 mm). Consult the factory for larger sizes.

FREEZE-SAFE heated mats are designed for use in classified locations. (Class 1, Div. II, Group A, B, C, D). Class 1, Div. II are locations where explosive vapor conditions could exist in the event of abnormal operation, an accident, or component failure. Flammable gases and liquid groups (such as acetylene, hydrogen, ethylene, gasoline and propane) are included in this classification. Refer to articles 500 through 505 of the National Electric Code for more information on the use of electrical devices in classified locations.

The hazardous location heated mat can be used in a variety of ways. These flexible panels provide spot supplemental heat-tracing while simplifying installation and maintenance. Nearly any curved 3-D shape can be wrapped with a Watlow FREEZE-SAFE flexible heated mat. Multiple heaters can be used to cover the entire surface.

Performance Capabilities

- Watt densities from 0.1 to 1 watt per square inch
- Operating wattage from 5 to 350W
- Operating voltages from 12 to 48V, 120 or 240V
- Ambient operating temperatures from -40 to 24°C (-40 to 75°F)
- Maximum heater surface temperature 50°C (122°F)
- Supplied with 18 gauge, three conductor STOW cord, maximum length is 18 inches
- UL[®] 515 listed
- Tested to meet a 5VA flammability rating

Applications

- · Electrical box heating
- · Liquid line, cylinder, tube and pipe freeze protection
- Petrochemical refining
- Power generation water injection
- Warming applications
- Low temperature processing



Features and Benefits

THERMOPOLYMER heated mats are free from seams and joints

· Safe for use in classified and outdoor environments

Mats are hermetically sealed against liquids and explosive vapors

- Prevents nuisance faults
- Prevents heater damage due to dangerous leaks

Excellent resistance to UV, non-aromatic fuels, abrasion and tearing

Provides toughness and durability

Reduced maintenance cost

 Allows for easy removal and installation for valve and pipeline maintenance

Long heater life

- Low watt density
- Made to fit unusual shapes
- Custom designed and molded by the factory to accommodate curved or other odd shapes

Availability

Hazardous location heater panels are custom designed for your application. Consult factory for details and pricing.

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