

Electric Heat Tracing Products

Self-Regulating Heating Cables

Features:

- Semiconductive Self-Regulating Heating Matrix
- Cut-to-Length Parallel Circuitry
- Nickel-Plated Copper Bus Wires
- Metallic Braids for Grounding Purposes
- Polyolefin or Fluoropolymer Overjacket
- Worldwide Approvals



BSX

Freeze Protection and Temperature Maintenance up to 65°C
 Maximum Exposure Temperature 85°C
 Available Watt Densities at 10°C 9, 15, 25, 32 W/m
 Supply Voltage 230 V



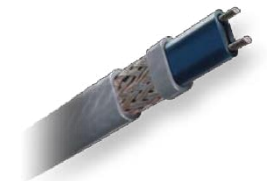
RSX

Freeze Protection and Temperature Maintenance up to 65°C
 Maximum Exposure Temperature 85°C
 Available Watt Densities at 10°C 48 W/m
 Supply Voltage 230 V



KSX

Freeze Protection and Temperature Maintenance up to 121°C
 Maximum Exposure Temperature 121°C
 Available Watt Densities at 10°C 15, 31, 48, 64 W/m
 Supply Voltage 230 V



HTSX

Freeze Protection and Temperature Maintenance up to 121°C
 Maximum Exposure Temperature 250°C
 Withstands Temperatures Associated with Steam Purging
 Available Watt Densities at 10°C 9, 18, 27, 37, 48, 64 W/m
 Supply Voltage 230 V



VSX

Freeze Protection and Temperature Maintenance up to 149°C
 Maximum Exposure Temperature 250°C
 Withstands Temperatures Associated with Steam Purging
 Available Watt Densities at 10°C 15, 32, 48, 64 W/m
 Supply Voltage 230 V



Heat Tracing Systems Accessories

- Power, Splice and Termination Kits
- Mechanical Thermostats
- Electronic Control and Monitoring Modules
- Power Distribution and Control Panels
- System Communications Software



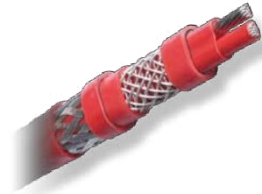
Power-Limiting Heating Cables

Features:

- PTC Coiled Resistor Alloy Heating Element
- Cut-to-Length Parallel Circuitry
- Nickel-Plated Copper Bus Wires
- Metallic Braids for Grounding Purposes
- Fluoropolymer Overjacket
- Worldwide Approvals

HPT

Freeze Protection and Temperature Maintenance up to 149°C
Maximum Exposure Temperature 260°C
Available Watt Densities at 10°C 14, 28, 42, 57 W/m
Supply Voltage 230 V



Constant Watt Heating Cables

Features:

- Nichrome Heating Element
- Cut-to-Length Parallel Circuitry
- 3.3 mm Copper Bus Wires
- Metallic Braids for Grounding Purposes
- Fluoropolymer Overjacket
- Worldwide Approvals

FP

Freeze Protection and Temperature Maintenance up to 65°C
Foundation Heating Maximum Exposure Temperature 200°C
Maximum Watt Densities at 10°C 25 W/m
Supply Voltage 230 V and 400V



Mineral Insulated Heating Cables

Features:

- High Temperature Magnesium Oxide Dielectric
- High Power Output Capabilities
- Available in Three Outer-Sheath Materials

MI

Freeze Protection and Temperature Maintenance up to 500°C
Maximum Exposure Temperature 600°C
Available Watt Densities up to 260 W/m
Supply Voltage up to 600 V



Series Resistance Heating Cables

Features:

- Long Circuit Lengths with Fewer Power Points
- Stabilised Designs Possible Using Thermon Software
- Metallic Braids for Earthing Purposes

TESH

Long Line Freeze Protection and Temperature Maintenance
Maximum Exposure Temperature 260°C
Available Watt Densities up to 25 W/m
Supply Voltage up to 750 V



Skin Effect Heating Systems

Features:

- Rugged Heat Tube to Generate Heat
- Circuit Lengths up to 25 km
- Each System Fully Factory-Engineered

ThermTrac

Power Outputs up to 165 W/m
Operating Voltages up to 5 kV
Maintenance Temperatures up to 200°C
Exposure Temperatures up to 260°C



Instrument Tubing Bundles Products

Electrically Heated Instrument Tubing for Freeze Protection and Temperature Maintenance

Tube Trace Type SE/ME

Approved for hazardous (classified) locations.

TubeTrace with BSX Self-Regulating Heat Trace

Use for water freeze protection and low temperature maintenance

Tube Temperature Range	5°C to 65°C
Maximum Exposure Temperature	85°C



TubeTrace with HTSX Self-Regulating Heat Trace

Use where temperature exposure to steam purge is expected.

Tube Temperature Range	5°C to 121°C
Maximum Exposure Temperature	250°C

TubeTrace with VSX Self-Regulating Heat Trace

Use where high temperature exposure is a consideration.

Tube Temperature Range	5°C to 149°C
Maximum Exposure Temperature	250°C



TubeTrace with HPT Power-Limiting Heat Trace

A “cut-to-length” heat tracing for higher temperature maintenance.

Also used for freeze protection where high temperature exposure is a factor. HPT power-limiting cables represent the best choice for maintaining temperatures up to 204°C that can be “cut-to-length” in the field.

Tube Temperature Range	5°C to 204°C
Maximum Exposure Temperature	260°C

Custom CEMS and Analyzer Bundles

Many analyzer applications have specialty tubing requirements, all of which Thermon can provide within our instrument tubing bundles. Examples of tube materials and finishes that are available include:

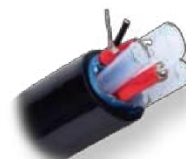
- Fluoropolymer tubing 316 and 304 stainless, welded or seamless, Monel, titanium, Inconel 825, and Alloy 20 readily available.
- Optional Electropolished (EP), Chemical Passivation (CP), and performance coatings such as SilcoNert are also available on stainless steel tubing
- Double containment tubing or multiple tube materials can be provided in a common bundle.



“NI” Non-insulated (and non-heated) Bundle

Other TubeTrace options can include:

- Auxiliary conductors
- Unheated tubes
- Factory installed temperature sensor(s)
- Special markings and identification as required



Electrically Heated Instrument Tubing for Freeze Protection of High Temp Steam Lines

Tube Trace Type SEI/MEI – HT, HTX & HTX2

Isolated “cut-to-length” heat trace for high temperature exposure, suitable for ambient sensing control.

TubeTrace Type SEI/MEI – HT

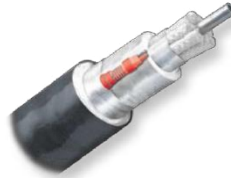
Maintain 5°C
Continuous Exposure 399°C

TubeTrace Type SEI/MEI – HTX

Maintain 5°C
Continuous Exposure 593°C

TubeTrace Type SEI/MEI – HTX 2

Maintain 5°C
Intermittent Exposure 593°C



Tube Trace Accessories

Every type of tubing bundle requires proper termination to ensure reliable performance and Thermon offers a complete range of termination kits. Because Thermon manufactures the electrical heat tracing as well, all of the power connection and termination accessories are fully coordinated and approved.



Steam Heated Instrument Tubing for Freeze Protection and Temperature Maintenance

Steam or Fluid “Light Traced” (SI/MI)

For freeze protection and lower temperature maintenance. The tracer tube is isolated from the process tube(s), so process tube temperatures will be significantly lower than the tracer tube temperature.

Tube Temperature Range 5°C to 121°C
Maximum Exposure 205°C



Steam or Fluid “Heavy Traced” (SP/MP)

For freeze protection and process maintenance. The tracer tube is in direct contact with the process tube(s), so process tube temperatures will be very close to the tracer tube temperature.

Standard Tracer Temperature Range 5°C to 205°C
Maximum Exposure 205°C



Steam Tracing Products

Heat Transfer Compounds to Maintain High Temperatures

Features:

- “Thermonized” with Thermon Heat Transfer Compounds
- Consistent Heat Transfer Properties
- Less Than 20% of Cost for Steam Jacketing

“Snap Trace” Performed Extrusions for Straight Piping available in 1,22 m

- Significantly Reduces Installation Time
- No Surface Preparation Required
- Use with up to 208°C Fluid/Steam



HT Compounds for Piping, Valves and Irregular Surfaces

Maximum temperature ratings shown

T-3: 371°C

T-99: 1000°C

T-80: 163°C

T-85: 190°C

T-802: 135°C Two part compound



Isolated Steam Tracers for Lower Maintain Temperatures

“Safe Trace” SLS-IT: 24°C to 93°C

“Safe Trace” DLS-IT: 5°C to 54°C

SLST-IT Isolated Tracing Secured with Fastening Tape

“Safe Trace” BTS: od 38°C up to 121°C

“Safe Trace” Provides Increased Safety

- Safe Trace Tracers Comply with Tests for Skin Exposure (per ASTM Std C -1005/1057)
- Safety Yellow Jacket Alerts Plant Personnel to Potentially Dangerous Conditions

“Safe Trace” Provides Predictable Heat Transfer

- Permits Winterization for Any Size Pipe
- Eliminates Hot/Cold Spots Associated with Bare Tubing and Spacer Blocks
- Suitable for Temperature -Sensitive Processes



Steam Supply / Condensate Return Lines

Thermo Tube Type SL Pre-Insulated Tubing

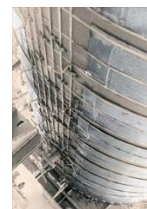
- Ideally Suited to Transport Liquids, Gases or Refrigerants
- Non-hygroscopic Glass Fiber Insulation for Efficiency
- Protective Outer Jacket Resists Weather and Moisture
- ThermoTube Can be Installed in Cable Trays, Angles, Channels, Struts and on I-Beams
- All Tubing Types Available



Tank and Hopper Heating Products

Tank and Vessel Heating Units – HeetSheet

- Ensures reliable and controlled heating (or cooling)
- Multiple flow paths allowed for heating and cooling media
- No risk of cross-media contamination
- Lightweight stainless steel construction for easy installation



Hopper and Chute Heating – HT Module

- Fluoropolymer Insulated High Temperature 1,3 mm² Lead Wires
- Operating Temperature up to 427°C
- Maximum Exposure Temperature 538°C
- Maximum Watt Density 4650 W/m²
- Supply Voltages 120-600 V

