**Flexotherm™** manufactures heated sample lines expressly for use in the chemical analysis of exhaust gases.

Our heated lines are designed to be tough enough to endure the rigors of life in a test cell and in the field. The power leads are mated with your current equipment for instant compatibility.

**FEATURES**

- Nearly indestructible hose-end caps
- High performance insulation and pressure tested hose cores
- Inner sample cores of PFA, Teflon™, PTFE Teflon™, or 316 Stainless Steel
- Stainless Steel braid provides outstanding resistance to heat, pressure, pulsing, flexing and vibration
- Heating elements are made of high grade heat conducting alloys
- The positive braid lock ensures that strain is absorbed by the braid and not the core
- Extreme flexibility in any temperature conditions
- Innovative Re-Core design for quick repair on damaged or contaminated sample core
- Variety of operational voltages
- Customer specified temperature range
- Rapid access to electrical terminals and tube junctions

<table>
<thead>
<tr>
<th>Length (feet)</th>
<th>Watts</th>
<th>Amps at 120 VAC*</th>
<th>Amps at 230 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>375</td>
<td>3.11</td>
<td>1.55</td>
</tr>
<tr>
<td>50</td>
<td>750</td>
<td>6.22</td>
<td>3.10</td>
</tr>
<tr>
<td>75</td>
<td>1125</td>
<td>9.33</td>
<td>4.65</td>
</tr>
<tr>
<td>100</td>
<td>1500</td>
<td>12.44</td>
<td>6.20</td>
</tr>
</tbody>
</table>

* At 68°F Ambient Temp.
## HEATED SAMPLE LINES

<table>
<thead>
<tr>
<th>Series</th>
<th>Tube Material</th>
<th>Tube Size</th>
<th>Voltage</th>
<th>Sensor Type</th>
<th>Operational Temperature</th>
<th>Exterior Sleeve Type</th>
<th>Port Type</th>
<th>Options</th>
<th>Line Length</th>
<th>Lead Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>GT</td>
<td>E - PTFE Teflon®</td>
<td>4/2 - 1/4&quot; O.D. x 1/8&quot; I.D. (0.635cm x 0.318cm)</td>
<td>A - 110 / 115 / 120 VAC</td>
<td>E - E-Type Thermocouple</td>
<td>376°F ± 20°F (191°C ± 11°C)</td>
<td>A - Aluminized Gray Silicone</td>
<td>P - Profiled w/ Data (Specify Process)</td>
<td>8MS - 8mm Tube Stub</td>
<td>810.225.2222</td>
<td></td>
</tr>
<tr>
<td>GD</td>
<td>PE - PEEK</td>
<td>4/3 - 1/4&quot; O.D. x 3/16&quot; I.D. (0.635cm x 0.476cm)</td>
<td>B - 208 VAC</td>
<td>J - J-Type Thermocouple</td>
<td>257°F (125°C)</td>
<td>AC - Armored Cover</td>
<td>SL - Slaved each end</td>
<td>6S - 3/8&quot; (0.9525cm)</td>
<td>810.225.2222</td>
<td></td>
</tr>
<tr>
<td>GS</td>
<td>S - 316 Stainless Steel</td>
<td>6/4 - 3/8&quot; O.D. x 1/4&quot; I.D. (0.953cm x 0.635cm)</td>
<td>C - 220 / 230 / 240 VAC</td>
<td>K - K-Type Thermocouple</td>
<td>257°F (125°C)</td>
<td>SSBT - Stainless Steel Braided Teflon®</td>
<td>SN - SilcoNert® Coating (Ammonia Resistant)</td>
<td>4S - 1/4&quot;</td>
<td>810.225.2222</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EPS - Electropolished Stainless Steel</td>
<td>6/5 - 3/8&quot; O.D. x 5/16&quot; I.D. (0.953cm x 0.794cm)</td>
<td>D - 440 / 450 / 460 VAC</td>
<td>R - RTD</td>
<td>257°F (125°C)</td>
<td></td>
<td></td>
<td></td>
<td>810.225.2222</td>
<td></td>
</tr>
</tbody>
</table>

**Operational Temperature**: Specify in Degrees_______________________ (please specify °F or °C)

**Exterior Sleeve Type**
- M - Black Mesh
- S - Aluminized Rust-Red Silicone
- CT - Corrugated tubing

**Port Type**
- MX - Mex (specify size, length, etc.)
- 6S - 3/8" (0.9525cm) Tube Stub
- 4S - 1/4"

**Options**
- P - Profiled w/ Data (Specify Process)
- SL - Slaved each end
- SN - SilcoNert® Coating (Ammonia Resistant)
- PP - Power Pass Through
- TP - Thermocouple Pass Through
- SR - Stainless Steel 1/16" Braided Strain Relief

**Line Length**
Customer Specification (Please specify in inches or meters)

**Lead Length**
Customer Specification (Please specify in inches or meters)
**HEATED SAMPLE LINES**

**Warning: Please read instructions carefully before operating with this product.**

Before using the Flexotherm™ Heated Sample Line in your application, please refer to the harness type you specified in your build and follow the suggestions for proper usage below:

**Slave Harness:** If the line was built with a “slave” harness, confirm proper connection. Slave Harnesses utilize a RED loom covering. These harnesses are used for small connection heaters or hot pockets. These feeds provide live power when the heating element is on. There is no other form of control on the RED harness. Exercise caution and assure the load connected to this harness conforms to the line’s operating temperature and duty cycle.

**Feed-Through Harness:** If the line was built with a “Feed-Through” harness, confirm proper connection. Feed-Through harnesses utilize a BLUE loom covering. These are basically a built-in extension cord assembly that includes an AC Power Lead and an associated thermocouple extension line. There are no connections to the heated line power or temperature sensor. These harnesses are used to control another device (Line, Filter, Hot Pocket, etc.) that may be attached to the end of the heated line. One end of the harness must be connected to a separate temperature controller with the other end connected to the auxiliary device.

While using the Flexotherm™ Heated Sample Line in your application, please adhere to the following recommendations to ensure that your line is not damaged:

**Avoid Combustibles:** Never operate in a combustible or wet environment. This line is not suited for combustible material or gases.

**Compatibility:** Properly connect the line to a Neptech Inc. Temperature Controller. (Note: Neptech Inc. cannot guarantee compatibility with other types of temperature controllers,) (Use only PID Capable Controllers)

**Connections:** Prior to applying power, make sure the temperature sensor is properly connected

**Placement:** Avoid direct contact of lines. Excess heat will damage and overheat the line. This will cause line failure