HEATED FILTER ASSEMBLIES

UFS Heated Filter assemblies are design specifically for engine testing, continuous emissions monitoring and stack gas applications. Our simple design uses a silicone heating jacket which is form fitted to eliminate “cold spots” and provide a fast, even transfer of heat. If the heater ever needs maintenance the silicone heating jacket can easily be replaced in the field. The entire unit is encased in durable high temperature thermal plastic case good up to 450°F which can be mounted either vertical or horizontal. We offer 3 standard sizes to accommodate a wide range of flows to suit each specific application. All of our units use industry standard cartridges which help minimize inventory. Each of our Heated Filter Assemblies are available with either a J-Type or K-Type Thermocouple. We also offer the option of dual thermocouples in case of a thermocouple failure. The housing is designed with a ¼ turn bayonet type handle to make changing the filter cartridge simple and safe even at high temperatures.

Features:
- User Friendly Design
- Rugged Construction
- Choice of K-Type or J-Type Thermocouple
- Accepts Industry Standard Filter Cartridges
- Quick Release Bayonet-Type Closure
- 450°F Maximum Temperature (232°C)

Applications:
- Automotive Emission Testing
- Continuous Emissions Monitoring
- Stack Gas Testing

TECHNICAL INFORMATION

<table>
<thead>
<tr>
<th>J-TYPE Thermocouple</th>
<th>HFM-H130STR-HJ</th>
<th>HFM-H140STR-HJ</th>
<th>HFM-H254STR-HJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Pressure (psig)</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Maximum Temperature (ºF)</td>
<td>450</td>
<td>450</td>
<td>450</td>
</tr>
<tr>
<td>Internal Volume (cc)</td>
<td>85</td>
<td>233</td>
<td>1030</td>
</tr>
<tr>
<td>Weight of Housing (lbs)</td>
<td>9.0</td>
<td>13.0</td>
<td>24.0</td>
</tr>
<tr>
<td>Principle Dimensions: (inches)</td>
<td>4.75</td>
<td>4.75</td>
<td>6.63</td>
</tr>
<tr>
<td>Diameter of Heat Module</td>
<td>11.50</td>
<td>16.00</td>
<td>19.00</td>
</tr>
<tr>
<td>Overall Length with Handle</td>
<td>8.50</td>
<td>13.00</td>
<td>16.00</td>
</tr>
<tr>
<td>Overall Length without Handle</td>
<td>6.00 Square</td>
<td>6.00 Square</td>
<td>8.00 Square</td>
</tr>
<tr>
<td>Base Plate Dimensions</td>
<td>5.34</td>
<td>9.58</td>
<td>12.72</td>
</tr>
<tr>
<td>Element Removal Clearance</td>
<td>25-64-S</td>
<td>25-178-S</td>
<td>51-250-S</td>
</tr>
<tr>
<td>Filter Element Codes: (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disposable (Silica) Element</td>
<td>25-64-S</td>
<td>25-178-S</td>
<td>51-250-S</td>
</tr>
<tr>
<td>Stainless Steel Element (2)</td>
<td>SS-25-64-S</td>
<td>SS-25-178-S-AW</td>
<td>SS-51-230-S-AW</td>
</tr>
<tr>
<td>Volts</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Amps</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Watts</td>
<td>180</td>
<td>180</td>
<td>180</td>
</tr>
<tr>
<td>Frequency</td>
<td>50/60 Hz</td>
<td>50/60 Hz</td>
<td>50/60 Hz</td>
</tr>
<tr>
<td>Housing Port</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/2&quot;</td>
</tr>
</tbody>
</table>

Notes:  
(1) Replace “□” with designated grade, i.e. 30, 40, 50, 60, 70, 80  
(2) Replace “□” with micron rating, i.e., 01, 03, 10, 25, 50, 100, 200
HEATED FILTER ASSEMBLIES

Heated Module Controller:

A complete packaged solution may be provided with our digital temperature controller that maintains accuracy of +/- 1%. Once the controller reaches its set point it will turn off and not turn on again until the temperature drops by 5°F. As a safety feature the controller will sound an audible alarm if the temperature exceeds 15°F above the set point. This option allows us to provide a turnkey system to meet your demands.

Two Models Available:

Model #HFM-Controller-SDC-J
Model #HFM-Controller-SDC-K

Product Highlights:

- Affordable and Compact
- Compatible with a wide range of heaters and applications
- Easy-to-use programmable digital controller, self-contained, plug and play design
- Includes thermocouple and power output cords

Specifications:

- Small Unit Size:
  - 5.5 in L x 4.25 in W x 1.75 in H
  - 140mm L x 108mm W x 45mm H
- On-Off control
- Temperature Control Range: 32-999°F (°F models) or 0-700°C (°C models)
  - Accuracy: +/- 1% FS
- Includes J-type or K-type thermocouple sensor
  - 5-foot (1.5 m) factory installed
- 120 VAC or 240VAC power input
- Relay output rated for 10A @ 240VAC
- Sensor break options
- Upper and lower limits of the setpoint can be adjusted
- Set-point value can be adjusted by using a single key
- Hysteresis adjustable between 1 and 99°F/°C
- Exposure Temperature: 32-158°F (0-70°C)
  - 80% humidity non-condensing
- 5-foot (1.5 m) input power cord
  - 120VAC unit = NEMA 5-15 plug
  - 240VAC unit = NEMA 6-15 plug
- 5-foot (1.5 m) output power cord
  - 120VAC unit = NEMA 5-15R receptacle
  - 240VAC unit = NEMA 6-15R receptacle
- Internal buzzer for alarm condition / error

Ordering Information:

To order please contact us at 1-800-311-5561. We have inventory on an extensive range of components to provide fast delivery of complete turnkey systems. Filter housings and silicone heater jackets are stocked to expedite our services. Your fitting/connection requirements will need to be specified to finalize your order. Lastly, the module is tested for 24 hours prior to shipping to guarantee performance.