



# Heated Filter Assemblies

## 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

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.



J-TYPE Thermocouple	HFM-H130STR-HJ	HFM-H140STR-HJ	HFM-H254STR-HJ
K-TYPE Thermocouple	HFM-H130STR-HK	HFM-H140STR-HK	HFM-H254STR-HK
Port Connection	SS Tube Fitting for 3/8" Tube OD	SS Tube Fitting for 3/8" Tube OD	SS Tube Fitting for 1/2" Tube OD
Maximum Pressure (psig)	30	30	30
Maximum Temperature (°F)	450	450	450
Internal Volume (cc)	85	235	1030
Weight of Housing (lbs)	9.0	13.0	24.0
Principle Dimensions: (inches)			
Diameter of Heat Module	4.75	4.75	6.63
Overall Length w/ Handle (w/o Handle)	11.50 (8.50)	16.00 (13.00)	19.00 (16.00)
Base Plate Dimensions	6.00 Square	6.00 Square	8.00 Square
Element Removal Clearance	5.34	9.58	12.72
Filter Element Codes:			
Particulate Element (Standard)	25-64-□S	25-178-□S	51-254-□S
<b>*Other Elements Available- View Drawing</b>			
Volts	120	120	120
Amps	1.5	1.5	1.5
Watts	180	180	180
Frequency	50/60 Hz	50/60 Hz	50/60 Hz

Tube Stubs Supplied per Customer Specifications

## 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.

