

Air Vents for Hot and Chilled Water Systems

Sparco Automatic Vent for Hot Water or Steam Heating

The Sparco brand HV190 is a tiny-sized automatic air vent for hot water and steam systems. Installs in baseboards, radiators, convectors and high points in piping systems to remove the trapped air that prevents the free movement of water or steam. The nickel plated valve has a quick venting design and ball check providing positive shut-off.



- Rated up to 125 psig for water systems, and up to 10 psig for steam heating systems.
- Maximum temperature for the vent is up to 240° F.
- 1/8" bottom pipe connection. ■ Height, 1 1/4"

Description	Order No.
Hygrovent HV190 Auto Air Vent for hot water or steam. 1/8" npt connection.	SA1090

Bell & Gossett Air Vents for Hot Water



1/8" pipe connection

These Bell & Gossett Model 67 and Model 7 float type automatic air vents are designed for Hot Water radiators, baseboards, convectors, radiant panels, small unit heaters and expansion tanks. Install at the high point of the system where air can be expected to collect. Install these vents only in a vertical position with the vent connection pointing up.

The **Model 67** (same as Hoffman No. 77) has a 1/8" bottom male pipe connection.
 ■ Operating pressure up to 50 pounds psi @ 240° F. ■ 3 1/4" tall x 1 1/2" wide

The **Model 7** also has a 1/8" bottom male pipe connection.
 ■ Operating pressure up to 75 pounds psi @ 240° F. ■ 4 1/8" tall x 2 1/4" wide

Description	Order No.
Model 67(77), 1/8" male pipe conn., 50 psig	BI 1055
Model 7, 1/8" male pipe conn., 75 psig	BI 1050
7A 1/4" waste connector with 1/4" tubing to drain water expelled from vents above	BI 1056

Vents Manual or Automatically

Hoffman Model 508 (formerly model 500) vent air from hot water systems manually with a coin, or automatically. Disc-type vent, built-in check valve. 1/8" male pipe connection. Operating press. to 50 psig. Temp. to 240° F.



Description	Order No.
Manual/Auto 508 vent. 1/8" pipe, 50 psi, 240°	HK1085

Air Vents for Hot Water Heating & Cooling

These Sparco brand air vents bring 2 to 3 times more air venting capacity than other models. The compact design takes up little space, and the advanced construction allows air venting up to 150 pounds psi.



Only 2" high!
Fits almost anywhere!

- Always install in the upright position at highest point in the plumbing.
- 2" high x 1 1/8" wide. Rated to 240°.
- Select 1/8" or 1/4" pipe connection.

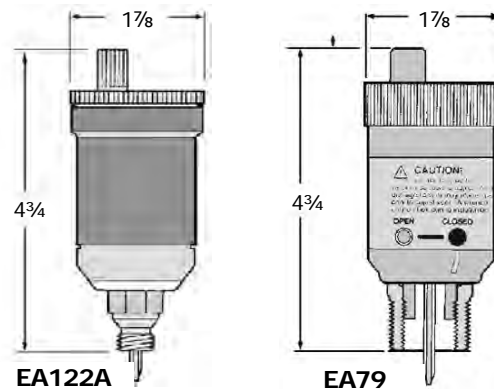
Description	Order No.
Sparco FV147 air vent, 1/8" pipe, 150 psi	SA1050
Sparco FV147A air vent, 1/4" pipe, 150 psi	SA1055

Honeywell-Braukmann Air Vents for Hot Water or Cooling Systems

These automatic air vents are high quality, open-close vents for hot water heating systems. Installed at high point in system, both models include safety drain connections and vent caps. Easily serviceable with a built-in shut-off valve: Turn vent body counterclockwise to open; clockwise to close. Choose from two models:

■ **Model EA122A** is used on water systems up to 230° F. and has a 1/8" male pipe thread connection; operating pressure up to 90 psig.

■ **Model EA79** is used on water systems up to 250° F. and has a 3/4" male x 1/2" female dual pipe connection; operating pressure up to 150 psig.



Description	Order No.
Model EA122A1002. 1/8" male pipe. For hot water to 230° F. Max pressure to 90 psi.	HN1234
Model EA79A1004. 3/4" male x 1/2" female pipe. Hot water to 250° F. Max press, 150 psi	HN1233

Air Vents for Hot and Chilled Water Systems

Coin Operated Air Vent

These small & inexpensive manually operated hot water air vents are specifically made for radiators. Vents "bleed" by turning the valve with either a coin or a key (available separately).

- Operating pressure to 150 psig;
- Maximum temperature rating to 250° F.
- 1/8" male pipe connection



1/8" bottom connection.
Use coin to open & close vent.

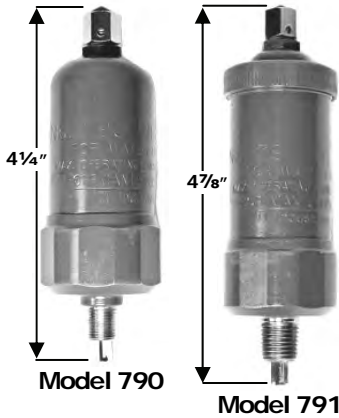
Description	Order No.
Manually operated radiator air vent	CG1385
Optional Key for operating above	CG1390

Large Air Vents for Main Water Lines

Hoffman brand air vents for main water lines are the "work horses" of the industry. Both models 78 and 79 below are used for hot or cold water, and can discharge moisture entrained in the vented air from the top 1/8" pipe size safety drain connection.

- The **Model 78** has a Heavy-Duty Cast Brass body with a 3/4" male pipe connection. Maximum operating pressure to 150 psig, temperature to 240° F.
- The **Model 79** has a more modest, steel-formed body, and has a dual pipe connection: 3/4" male x 1/2" female — You can connect the outside thread into a 3/4" pipe fitting, or connect a 1/2" pipe nipple into the inside 1/2" connection. Operating pressure to 75 psig, temperature to 240° F.

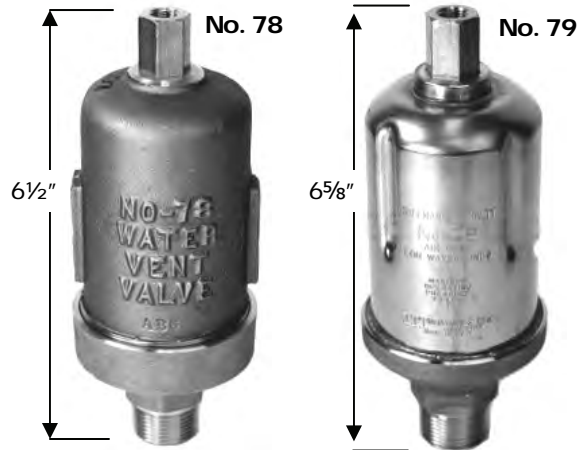
Hot Water Air Vents for Convectors, Radiators and Small Mains



Hoffman models 790 and 791 air vents have a top connection (1/8" male pipe) allowing for discharging water; or leave cap on to prevent discharge.

Model 790 is for convectors, baseboard and wall radiation.

- It has an 1/8" male pipe bottom connection
 - Maximum operating pressure to 30 psig
 - Temperature to 240°
- Model 791 is designed for convectors & small mains.
- 1/4" bottom connection
 - Maximum pressure to 50psi, temp. to 240° F



Description	Order No.
Model 78, 3/4" pipe, pressure to 150 psig	HK1075
Model 79, 3/4 x 1/2", pressure to 75 psig	HK1080

Description	Order No.
Model 790, 1/8" pipe, 30 psig, temp. to 240° F	HK1090
Model 791, 1/4" pipe, 50 psig, temp. to 240° F	HK1095

Model 550

Convector Air Chamber

The Hoffman Model 550 Air Chamber is for use on both steam and water convectors which are not provided with built-in air chambers or air collection fittings. Solid brass construction with a 1/4" NPT bottom connection and 1/8" NPT top connection. 6 cubic inch air volume. Maximum water pressure to 100 psig; maximum steam pressure to 25 psig.

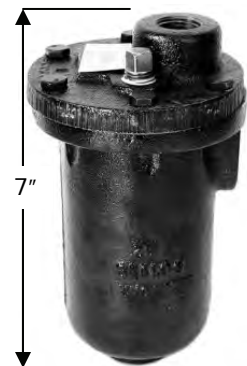


Description	Order No.
550 Convector Air Chamber	HK1087

High Pressure Water Venting Valve

Hoffman 792 is a High Pressure Water Venting Valve for releasing air from hot, cold water or glycol mains; hydronic heating and chilling systems; storage and processing tank filters, and centrifugal pumps.

- Cast iron body with stainless steel interior.
- Max. operating press. @ 250 psig, discharging 25 cubic feet per minute of air.
- Max. temp. @ 300° F.
- 3/4" female pipe bottom connection;
- 1/2" pipe top connection
- 7" height



Description	Order No.
792 Vent	HK1096

Air Vents for Steam Heating

Vents for Steam Mains, Condensate Pumps and More!

Hoffman 75 & 75H Main Vents



3/4" male x 1/2" female dual connection

Used on low-pressure steam heating systems running at 15 pounds psi and under. These float-type vents have a single non-adjustable port for large air venting capacity.

- Both models have dual pipe connections: 3/4" male x 1/2" female pipe.
- The Model 75 has a maximum steam pressure to 15 psig; operates efficiently up to 3 psig.
- The Model 75-H has a maximum pressure to 15 psig; operates efficiently up to 10 psig.
- Not for vacuum service.
- Both models 5 3/4" high x 2 1/2" width.

Description	Order No.
Model 75, 3/4 x 1/2", set @ 3 psig	HK1060
Model 75-H, 3/4 x 1/2", set @ 10 psig	HK1065

Gorton 1 and 2 Main Vents



Super Capacity Air Vent for Steam Mains

Used as Main Vents on low-pressure steam heating systems running at 15 pounds psi and under. Especially great for the end of steam mains on one-pipe steam heating systems. Larger than standard discharge capacities make Gorton Air Vents the popular choice for steam heating professionals!

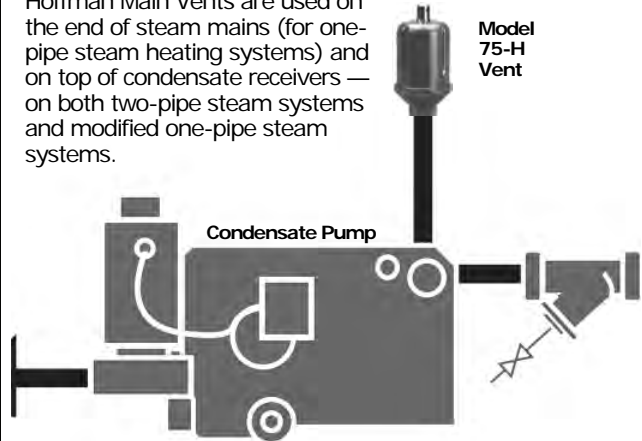
- Model No. 1 has dual pipe connections: 3/4" male x 1/2" female pipe.
- The Model No. 2 has a 1/2" male pipe connection. Gets rid of twice as much air as the No. 1 model.
- Gang air vents together for even more air relieving capacity — See "Ganged" picture below.

Description	Order No.
<u>Model 1</u> , Size 3/4" male X 1/2" female dual pipe connection: Install one or more of these (Ganging allows more air venting) at end of the short main, or the main running to the warmer side of the building. Install two or more of these at the end of the long main, or the main running to the colder side of the building.	GX1030
<u>Model 2</u> , 1/2" male pipe connection: This unit gets rid of lots of air! Install one or more at the end of the long main, or the main running to the colder side of the building. 6 3/8" tall vent.	GX1035

— Application Examples —

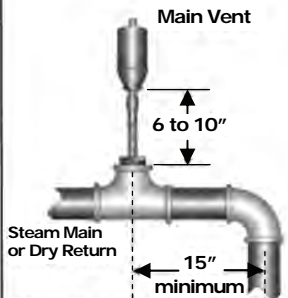
Installation on top of Condensate Tank

Hoffman Main Vents are used on the end of steam mains (for one-pipe steam heating systems) and on top of condensate receivers — on both two-pipe steam systems and modified one-pipe steam systems.



Installation at End of Steam Main

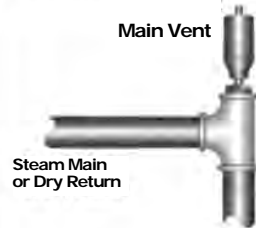
Correct Installation



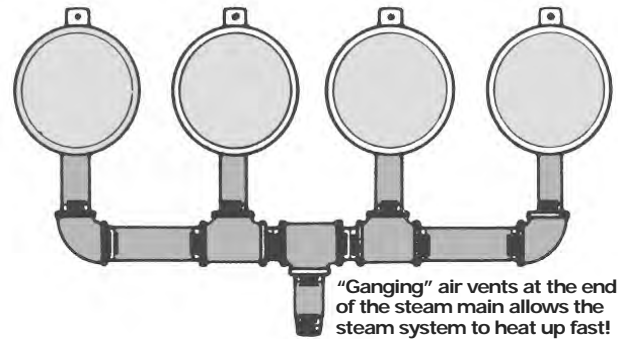
Here the vent is protected from water hammer with a 15" cushion between the vent and the elbow at the end of the steam supply main or dry return pipeline.

Incorrect Installation

Here the vent is installed in a dangerous position. Water hammer in your steam lines ram into the pipe tee and send hydraulic shock waves up into the vent, shortening its life.



Gorton vents "Ganged" together



"Ganging" air vents at the end of the steam main allows the steam system to heat up fast!

Special Vents for Steam Heating Systems



Model 4

Quick Valve Thermostatic Main Air Vent

The **Hoffman Model 4** Quick Valve is a thermostatic air vent for steam heating systems and steam process equipment.

- Operates on temperature change only and will not close against water.
- The valve must be installed 6 to 10" above the horizontal return and 18" above the boiler water line.
- Dual connection shank: 1/2" female (inside) pipe x 3/4" male (outside) pipe.
- Maximum operating pressure: 25 psig.
- Height: 2 5/8"

Description	Order No.
Model 4, Thermostatic Quick Valve Air Vent	HK1015



Model 3

Steam Air Line & Paul Systems Valve

This **Hoffman Model 3** Steam Air Line Valve is for Air Line or Paul Systems.

Paul Systems were popular in the first half of the 1900's. Many systems remain in good working order, especially in larger buildings.

- Thermostatic vent only - No float.
- 1/8" NPT inlet and 1/4" NPT outlet.
- The maximum operating pressure goes from 25 psig down to 30" vacuum.
- The Paul System Valve hooks up to an exhauster, removing system air.
- Height: 2 1/4"

Description	Order No.
Model 3, for Paul or Air Line Systems only	HK1010

Thermostatic Main Vent with Float for both 1- and 2- pipe Steam Heating

This **Hoffman Model 4A** Float-Type Thermostatic Vent is found in residential or small one- or two-pipe steam heating applications, usually one-pipe systems.

- Dual connection of 1/2" female NPT x 3/4" male NPT.
- Single, non-adjustable port.
- Install 6 to 10" above the horizontal return, and 18" above the water line.
- Maximum operating pressure to 2 psig.



Description	Order No.
Model 4A, Thermostatic main vent with float	HK1020

Steam Unit Heater Air Vent

The **Hoffman Model 74** Steam Unit Heater Air Valve is made specifically for steam unit heater applications. This float-type thermostatic vent has a single non-adjustable port.

- Dual connection allows for 1/2" female NPT or 3/4" male NPT piping connection.
- Make certain to install the Air Valve 6 to 10" above the horizontal return, and 18" above the boiler water line.
- Maximum operating pressure is 35 psig.
- Air Vent height: 6 1/8"



Description	Order No.
Model 74, air vent for steam unit heater	HK1055

Main Vent for One-Pipe Vacuum Steam Heating Systems



This **Hoffman Model 76** Main Steam Vent is a "Vacuum Valve" used on medium and large size one-pipe vacuum steam heating systems.

- Float type thermostatic vent with a single, non-adjustable port.
- 1/2" female x 3/4" male dual thread.
- Max. Operating Pressure to 3 psig.
- Overall max. pressure to 15 psig.
- Air vent height: 6 1/2"

Description	Order No.
Model 76, Main Vent for one-pipe vacuum	HK1070



Spirax-Sarco 6A Steam Air Vent

The **Spirax-Sarco Model 6A** air vent is Premium Quality. It has both a float and thermostatic bellows for use where air, condensate and steam may be present, as in one-pipe steam heating systems.

- The 6A will discharge air, while preventing the discharge of condensate or steam. An outlet check valve prevents re-entry of air.
- Cast iron body with stainless steel internals. 3/4" male pipe connection; Maximum operating pressure to 15 psig; 7" height.

Description	Order No.
Model 6A, for Steam Heating, 3/4" connection	SG1010

Air Vents for One-Pipe Steam Heating

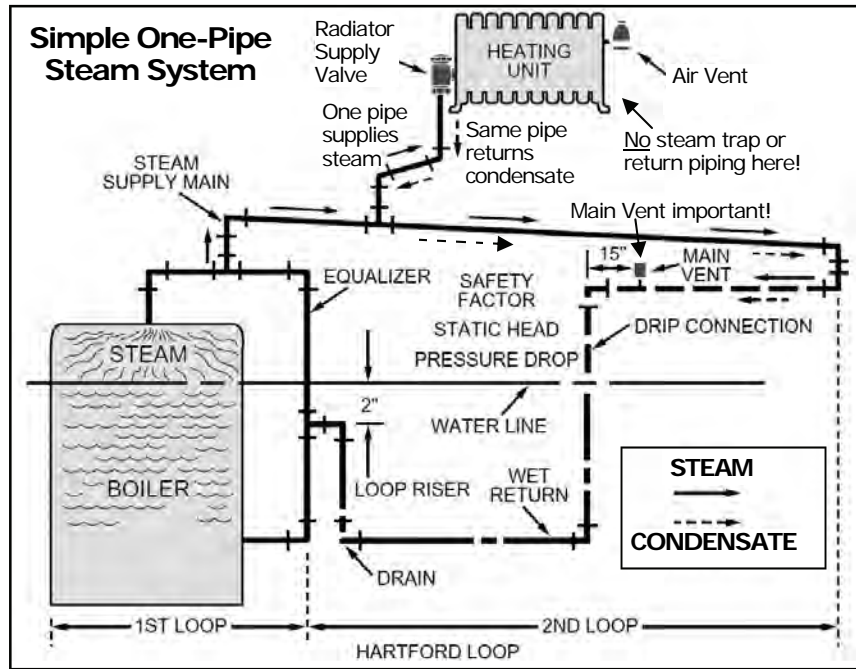
Huh? One-Pipe Steam?"

If you have a boiler producing steam to heat the building, and the radiators have an air vent installed on the side and there is no steam trap installed on the radiator, you most likely have a one-pipe steam heating system: Only one pipe supplies the steam and allows for condensate (steam turned into water) to leave the radiator and head back for the boiler — where the condensate, once again, is heated into steam. These systems need good air vents!



One-pipe steam systems don't have radiator steam traps like this . . .

Here's a guy working on a steam trap — which you don't have on your radiators if you have a one-pipe steam heating system.



Gorton Air Vents — Great for One-Pipe Steam

These Gorton air vents have received critical acclaim as one of the best one-pipe steam heating vents on the market. By installing a correctly-sized Gorton air vent on each radiator, and a main vent near the end of your condensate return line, you will balance your one-pipe steam heating system.

Well, at least in theory. Air needs to be removed from your steam heating system. Air trapped in your system will prevent steam from getting where it needs to go — And if the steam heat can't get there, you're one "cold" camper.



◀ **Models 4, 5, 6, C and D** are used on radiators. Select from different air venting capacities — Big radiators need more venting capacity than small radiators.



Model 1

Models 1 and 2 are high capacity air vents for the end of steam mains, unit heaters, condensate receiver tanks and more!

■ The Model 1 is found in both homes and smaller commercial buildings.

■ The Model 2 is generally used in larger commercial buildings where large steam heating systems are found.

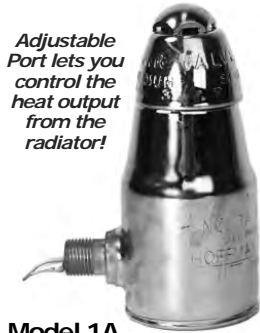


Model 2

Description	Order No.
Model 4 , Standard Vent for the room where thermostat installed, 1/8" angle pipe. Height: 2 ³ / ₈ "	GX1005
Model 5 , Vent for standard radiators that are normally easy to heat, 1/8" angle pipe. Height: 2 ³ / ₈ " <i>EQUAL TO Four standard type air valves</i>	GX1010
Model 6 , Vent for larger radiators and those harder to heat, 1/8" angle pipe. Height: 2 ³ / ₈ " <i>EQUAL TO Eight standard type air valves</i>	GX1015
Model C , Vent for even larger and harder to heat radiators, 1/8" angle pipe. Height: 2 ³ / ₈ " <i>EQUAL TO Fifteen standard type air valves</i>	GX1020
Model D , Vent for your largest and/or hardest to heat radiators. 1/8" angle pipe. Height: 2 ³ / ₈ " <i>EQUAL TO Twenty-seven standard type air valves</i>	GX1025
Model 1965, 3/8" Main Vent : Use one for short main, or main running to warm side of building; use two or three vents at end of the long main or main running to cold side of building. 3/8" straight male pipe connection. Height: 3 ³ / ₈ "	GX1040
Model 1, 3/4" Main Vent : Same as above but with 3/4" straight pipe connection	GX1030
Model 2, Main Vent : Install one or more of these air eliminators at the end of the long main, or the main running to the cold side of the building. 1/2" straight connection. Height: 6 ³ / ₈ "	GX1035

Air Vents for One-Pipe Steam Heating Systems

Hoffman Specialty Radiator Vents for One-Pipe Steam



Adjustable Port lets you control the heat output from the radiator!

Model 1A

The **Hoffman 1A** is a great radiator air vent for one-pipe steam heating systems. The adjustable port on top of the vents lets you be in control of air discharge from the radiator.

Got a hard-to-heat radiator? Crank that baby up to level 6 and watch that radiator heat up!

Got a radiator that's too hot? Crank that baby down to level 1 and allow more air to stay in the radiator — reducing heat output.

Maximum operating pressure: 1½ psi steam.
Pipe connection: 1/8"

Description	Order No.
Model 1A vent, 1/8"	HK1005

One-Pipe Radiator Example

Air Vents on one-pipe steam systems are critical to efficient steam heating operation. Air vents may last from 2 to 10 years. Longevity is related to the dirt and debris that may be clogging the vents.

To extend the life of the air vent: In the summer, when the boiler is off, remove the air vents and place them in boiling vinegar. The acid in vinegar may remove the build-up of junk stuck in your vents. Call us if that doesn't work — We can sell you some new ones.

The **Hoffman 70A** is a standard radiator vent for one-pipe steam heating systems. Non-adjustable port. Not as popular as the 1A (above) or the model 40, below.

- This float-type vent is rated to work at pressures up to 11 pounds psi steam. One-pipe steam systems should generally operate with less than 2 pounds psi steam pressure.

- Pipe connection: 1/8" angle pattern



Model 70A

Description	Order No.
Model 70A vent, 1/8"	HK1050

The **Hoffman 40** is a standard radiator air vent for one-pipe steam heating systems. Non-adjustable port. Less popular than the 1A or 70A models.

- This float-type vent is rated to work at pressures up to 6 pounds psi steam. One-pipe steam systems should generally operate with less than 2 pounds psi steam pressure.

- Pipe connection: 1/8" angle pattern



Model 40

Description	Order No.
Model 40 vent, 1/8"	HK1025

One-Pipe Venting and Automatic Temperature Control



The 1PS thermostatic air valve assembly replaces the old air vent installed on the side of your radiator

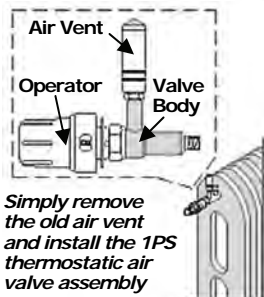
Get the temperature control you've always wanted in every room!

Don't you just hate it when the den is nice and toasty, the kitchen is as hot as a pistol, and the bedroom is as cold as Siberia? Well, forget about it — Those days are history!

- The Macon OPSK non-electric thermostatic valve assembly includes the valve (replaces the old air vent on the side of your radiators), an air vent (goes on top of the valve) and the non-electric thermostatic operator (that works like a thermostat!).

- The temperature controlling operator attaches to the side of the valve. Simply turn the dial for the room temperature you want!

For one-pipe steam heating only.



Simply remove the old air vent and install the 1PS thermostatic air valve assembly

Order all 3 pieces for a complete assembly	Order No.
OPSK One-pipe steam kit: Includes 1/8" valve (installs in place of old air vent), new air vent & vacuum breaker (attaches to valve), and non-electric thermostatic operator (attaches to side of valve). Macon brand.	MV1200

The operator works just like a thermostat!



1 * 1 2 3 4 5 |
45 50 57 63 68 73 79 86°F

Air Vents for One-Pipe Steam Heating Systems

One-Pipe Steam Air Vents for Steam Convectors

Adjustable Port lets you control the heat output from the radiator!



Model 1B

Operating Pressure up to 1 1/2 psi steam

The **Hoffman 1B** is a great convector air vent for one-pipe steam heating systems. The "Adjustable Port" on top of the vents lets you be in control of the air discharge.

Got a hard-to-heat radiator?

Crank that baby up to level 6 and watch that radiator heat up!

Got a radiator that's too hot?

Crank that baby down to level 1 and allow more air to stay in the radiator — reducing heat output.

- Maximum operating pressure: 1 1/2 pounds psi steam
- Pipe connection: 1/8" straight connection. Max. temp: 240° F.

Description	Order No.
Model 1B air vent, 1/8" straight pipe connection	HK1007

The **Hoffman Models 41, 43 and 45** are all single, non-adjustable port air vents for steam heating pressures up to 6 pounds psi.

The internal telescopic, angle cut siphon tube within the vent assures drainage. Max. temp: 240°

- Model 41 pipe connection: 1/8" straight
- Model 43 pipe connection: 1/4" straight
- Model 45 pipe connection: Dual threads — 1/2" inside (female) x 3/4" outside (male), straight pipe connection.



Models 41, 43 & 45

Operating Pressure up to 6 psi steam

Description	Order No.
Model 41 air vent, 1/8" straight pipe connection	HK1030
Model 43 air vent, 1/4" straight pipe connection	HK1035
Model 45 air vent, dual straight pipe connection: 1/2" female x 3/4" male	HK1040

Model 71C Shown here.



Models 71-A, -B, -C

Operating Pressure up to 11 psi steam

The **Hoffman Models 71A, 71B and 71C** are all single, non-adjustable port air vents for steam heating pressures up to 11 pounds psi. Max. temp: 240° F.

The internal telescopic, angle cut siphon tube within the vent assures drainage.

- Model 71-A pipe connection: 1/8" straight
- Model 71-B pipe connection: 1/4" straight
- Model 71-C pipe connection: Dual threads — 1/2" inside (female) x 3/4" outside (male), straight pipe connection.
- Maximum operating pressure: All models, 11 pounds psi steam

Description	Order No.
No. 71-A air vent, 1/8" straight pipe connection	HK1052
No. 71-B air vent, 1/4" straight pipe connection	HK1052B
No. 71-C air vent, dual straight pipe connection: 1/2" female (inside) x 3/4" male (outside)	HK1052C

Automatic Venting for One-Pipe Steam Convectors and Radiators

The **Sparco** brand HV190 is a tiny-sized automatic air vent for hot water and steam systems. Installs in baseboards, radiators, convectors and high points in piping systems to remove the trapped air.

- Rated up to 125 psig for water systems, & to 10 psig for steam heating systems.
- Maximum temperature for the vent is up to 240° F.
- Height, 1 1/4"
- 1/8" bottom pipe connection.



Description	Order No.
Hygrovent HV190 Auto Air Vent for hot water or steam. 1/8" npt connection.	SA1090



The BIG Catalog - FREE with any order!

Jam-packed with over 600-pages of the product, repair parts & replacement components needed to keep your plumbing and heating systems purring like a kitten.

Comprehensive schematic drawings, repair part tables and ordering guides allow you to easily determine the product or repair parts you need!

Ask for Catalog No. CT1002 when you place your order.