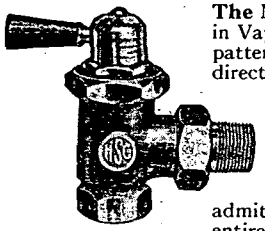
HOFFMAN "CONTROLLED HEAT" EQUIPMENT

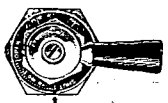


No. 7—Hoffman Adjustable Modulating Valve

The No. 7 Hoffman Adjustable Modulating Valve—For use in Vapor or Vapor Vacuum systems, is made in ¾ in. size, angle pattern only, having a range of adjustment up to 200 sq. ft. of direct cast-iron radiation.

After installation, whether the system is in operation or cold, the port of each valve is adjusted for the size of the radiator to which it is attached. Adjustment is simple; loosen a locknut; turn valve handle until proper number of graduations are visible on the dial plate; then tighten locknut. The valve handle may then be moved to admit sufficient steam to heat a quarter, half, three-quarter, or entire radiator. The valve stem stuffing box has a frictionless metallic fibre packing that will last indefinitely and require no attention, giving at the same time, a valve action so free that the pressure of only one finger is required to open the valve.

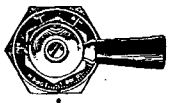
TOP DIAL PLATE ADJUSTMENT



Dial set for 200 sq. ft.



Port Area for 200 sq. ft. Radiator

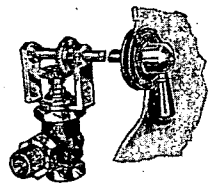


Dial set for 50 sq. ft.

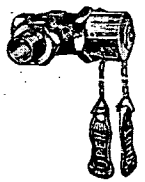


Port Area for 50 sq. ft. Radiator

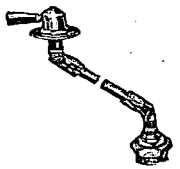
The visible adjustment aids the designing engineer by enabling heating contractor to make a final accurate adjustment which compensates for slight irregularities in pipe sizes, failure to ream pipe, installation of extra fittings not foreseen in original layout, etc. The advantages of an adjustable port in forced hot water systems to secure proper balance makes the **No. 7 Valve** especially adaptable for such use.



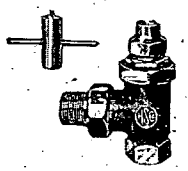
Bevel Gear



Chain Pull

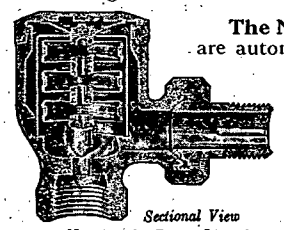


Extension Stem



Lock Shield

Straight extension stems in any length can be furnished on receipt of measurements.



Sectional View Nos. 8 and 9 Return Line Valves

The Nos. 8 and 9 Hoffman Return Line Valves—These valves are automatic, non-adjustable, thermostatic and relieve all air and condensation without the loss of steam from radiators, pipe coils, indirect radiation, steam mains and risers, steam kettles, sterilizers and other devices where it is desired to get full efficiency and economy without waste of steam.

In service, they have established a reputation for efficiency and consistency of operation with the same degree of sensitiveness under either high or low pressure.

The body of the valve is made of cast steam metal; cap and tail piece are hot brass forgings; the thermostat of a special Hoffman alloy. In continued operation the thermostats will not break, stretch or lose their tension, giving long life and perfect operation.

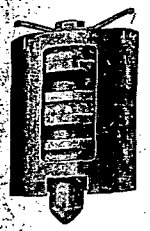
The valve consistently operates under a pressure range from 13 in. of vacuum to 50 lb. steam pressure. Water at a temperature of approximately 12 deg. less than the temperature corresponding to the steam pressure causes full valve opening and free discharge of condensation.

For dimensions of Nos. 7, 8 and 9 Valves, see Page 821

Write for Descriptive Circular—Hoffman "Controlled Heat"

HOFFMAN "CONTROLLED HEAT" EQUIPMENT

Nos. 8 and 9 Hoffman Return Line Valves (continued)

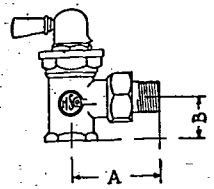


Interchangeable Thermo Member

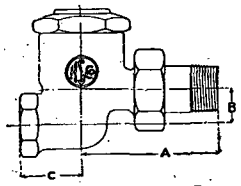
The thermostatic member is removable and may be changed from one valve to another of the same size without adjustment. This feature is appreciated by engineers who require the removal of the thermostat from the valves, until the system is thoroughly cleaned, and likewise by contractors complying with this practice.

The No. 8 Valve has ½ in. pipe connections, ¼ in. port and is furnished in Angle, Straightway, Right and Left-hand Offset Patterns. The normal capacity is 200 sq. ft. of cast iron radiation.

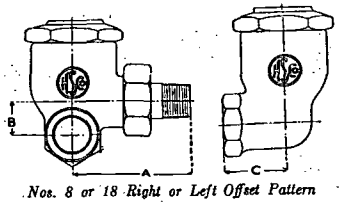
The No. 9 Valve with ¾ in. connection is made in Angle and Straightway Patterns only, and is suitable for 600 sq. ft. of cast iron radiation. For pressures up to 15 lb. valve has ⅜ in. port, for higher pressures $\frac{3}{16}$ in. port.



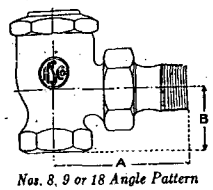
No. 7 Angle Pattern



Nos. 8, 9 or 18 Straightway Pattern



Nos. 8 or 18 Right or Left Offset Pattern



Nos. 8, 9 or 18 Angle Pattern

Data and Dimensions

Style	Size In.	Diameter Valve Port In.	Maximum Capacity Sq. Ft.	Dimensions A	B	C
No. 7 Angle	¾	..	200	2 7/8†	1 3/8	...
No. 19 Angle	¾	..	200	2 3/4†	1 1/2	...
No. 8 Angle	½	¼	200	2 29/32†	1 9/32	...
No. 8 Straightway	½	¼	200	2 29/32†	2 5/32	1 13/32
No. 8 Offset	½	¼	200	2 29/32†	2 5/32	1 5/16
No. 18 Angle	½	¼	100	2 3/4†	1 1/4	...
No. 18 Straightway	½	¼	100	2 3/4†	2 1/8	1 3/8
No. 18 Offset	½	¼	100	2 3/4†	2 1/8	1 3/8
No. 9 Angle	¾	⅜*	600	3 1/32	1 11/32	...
No. 9 Straightway	¾	⅜*	600	3 1/32	...	...

*No. 9 Valve furnished with ⅜ in. port for pressures above 15 lb.
†Nos. 7, 19, 8 and 18 Valves can be supplied where specified to meet standard roughing measurements of National Heating and Piping Contractors' Association.

The No. 11 Hoffman Vapor Vacuum Valve is used for venting the return mains in vapor vacuum systems or for other conditions where a large venting capacity is required and where return of air through vent port must be prevented. The vent port is ¾ in. in diameter.

Pipe connection, ¾ in. Maximum guaranteed operating pressure, 15 lb.



No. 16

NO. 15 VALVE

In conjunction with the Loop a special valve for venting the entire system is used—the No. 15 Hoffman Vacuum Valve—which permits free venting of air through its ¾ in. vent port and prevents air returning to the system by means of a light check, which is thoroughly reliable in fulfilling its requirements.

The No. 15 Valve is intended for use only in connection with Hoffman Differential Loops.



No. 11