

## Valve Type 90 for One Pipe Steam Operating Description

### OPERATING DESCRIPTION

Ammark's Type 90 Thermostatic Radiator Valve for one-pipe steam automatically controls room temperature by modulating steam supply to each radiator. This valve may be installed in gravity or vacuum one-pipe steam systems. All valves are supplied with NPT internal threads on the inlet and an NPT threaded union on the outlet. All Ammark TRVs are supplied with a threaded cap, which protects the valve stem during installation.



Ammark one pipe steam valves must be installed upright with steam flow in the direction of the arrow on the valve body. Select a control which allows unrestricted flow of ambient room air around the sensor. Ammark control Type 63 remote sensor or Type 66 remote sensor wall/cabinet mount is recommended for optimum efficiency, as shown below.



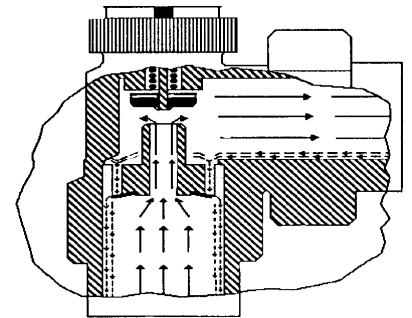
Type 90 Valve with  
Type 63 Remote Sensor



Type 90 Valve with  
Type 66 Remote Sensor  
for Wall/Cabinet Mount

The cut-away illustrates the flow of steam (solid arrows) through the valve's center tube. Return condensate (dotted arrows) flows in the opposite direction of the steam flow. A check valve permits the condensate to drain into the supply pipe while restricting the flow of steam to the center tube.

The valve disk is illustrated in the open position, allowing steam to pass through the valve body into the radiator. Throughout the operating cycle, the position of the valve disk modulates the steam flow into the radiator to accurately maintain the set temperature level.



### AWARDS

- US Patent 4,412,648
- Award for Energy Innovation, United State Department of Energy
- Governor's Award for Energy Innovation, New Jersey Department of Commerce and Economic Development, Energy Division

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