

## Valve Type 90 for One Pipe Steam Servicing 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. A mmark control Type 63 remote sensor or Type 66 remote sensor wall/cabinet mount is recommended for optimum efficiency.

### SERVICING

Steam plants should be serviced on a regular basis. If maintenance is not carried out regularly, functional parts within the plant will become faulty and will require repair or replacement.

The control portion of this one-pipe thermostatic steam valve is a sealed system. If the charge within the system is lost (through capillary breakage for example), the control must be replaced. It is not possible to repair the sealed system. If this occurs, the valve will fail open and steam will enter the radiator without any modulating control.

The internal brass assembly of this valve is in the upper portion of the valve body and can be seen when the control is disconnected. It can be replaced as a cartridge unit by a special tool (ICT) available from Ammark while the system is under pressure, or with the use of a standard hex tool when the system is not under pressure. It contains the valve seal as well as the spindle and disc. Below the upper inner assembly of the valve, is a tubular section and a perforated brass plate with EPDM disk. Condensate flows through this perforated brass plate from the radiator back into the pipe. If dirt or foreign matter accumulates at this plate, it must be removed so that condensate flow is not blocked. If any of the holes in the plate become clogged, they can be cleaned with compressed air, or a simple toothpick or equivalent tool. Exercise care when probing the holes in the plate to avoid puncturing the flapper disk lying directly beneath the perforated plate.

### 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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