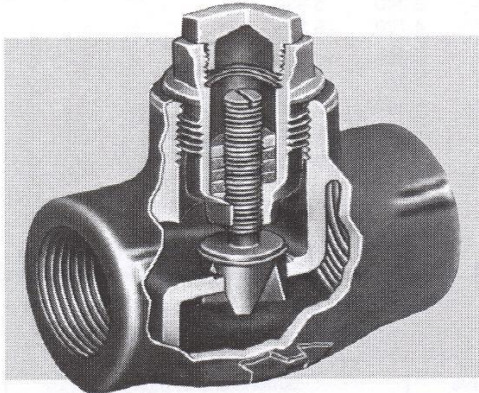




LIMITING ORIFICE GAS VALVES

Bulletin **187**

November 2002



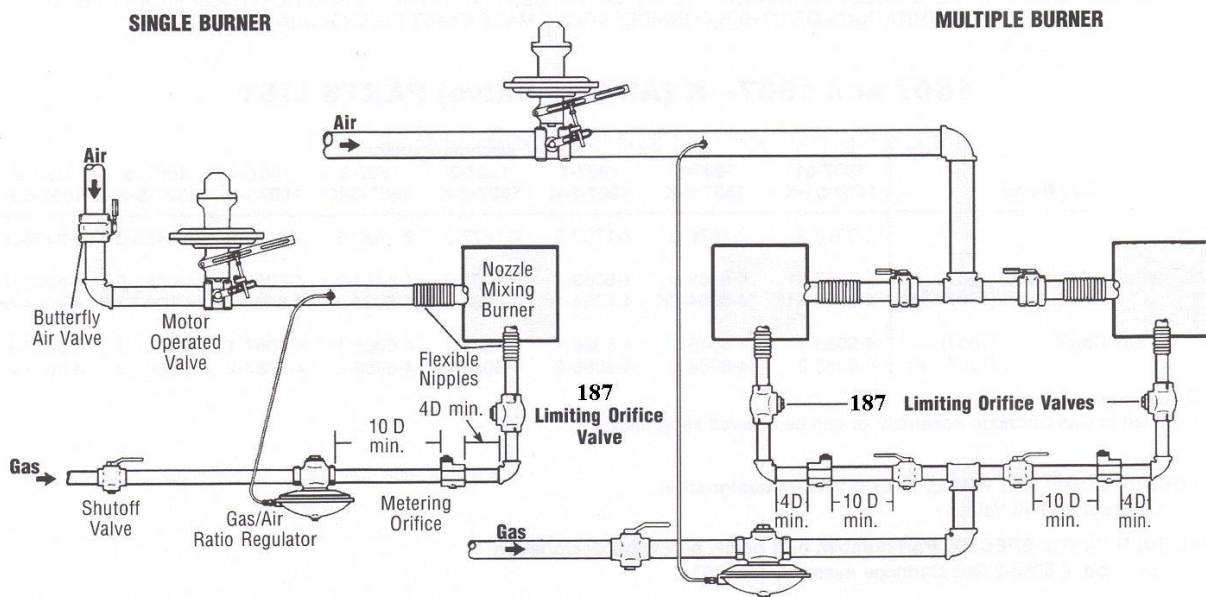
187 Limiting Orifice Valves provide "fine tuning" for air/gas ratio adjustment.

An **187** Limiting Orifice Valve is used to set air/gas ratio on a nozzle-mix burner. It has a V-port plug that can be adjusted sensitively and accurately with a screwdriver. Turning the screw counterclockwise increases flow. A cap conceals the adjustment and discourages tampering with the setting. If an adjustment is needed, replace top cap on valve body to reduce air or gas leaks.

The V-port adjustment is in a removable gas cartridge assembly, simplifying inspection or replacement. **187** Valves have brass internals; **187** -K Valves have iron internals for coke gas and others corrosive to brass; **187** -TK Valves are for hot gases.

Limiting Orifice Valves are not designed for shutting off gas. Use an approved plug valve or cock.

TWO TYPICAL PIPING ARRANGEMENTS FOR LIMITING ORIFICE VALVES



Install **187** Valve as close as possible to burner. Normal practice is to select limiting orifice valve pipe size same as ratio regulator (**CONTITHERM** #7218 or #7216), or as burner gas connection if several burners are fed by one regulator. There is no performance advantage in using the smallest possible **187** for the flow and pressure drop available.