

# "T" Pilot

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## Temperature Pilot for HD Regulating Valves

PILOT-OPERATED REGULATING VALVES

# Temperature Pilot

- **Max Inlet Pressure: 300 PSIG**
- **Temperature Control Range: 60-260 °F**
- **Minimum Inlet Pressures:**
  - 15 PSIG** when used with standard main valve
  - 5 PSIG** when low pressure temperature pilot is used with low pressure main valve

**Low Pressure Temperature Pilot must be used in conjunction with a low pressure main valve for applications where inlet steam pressure is less than 15 PSIG. SPECIFY WHEN ORDERING.**



### TYPICAL APPLICATIONS

The "T" Temperature Pilot is used with the HD regulator to control temperature in various processes and systems. Some examples are:

- Oil heaters
- Process heaters
- Dryers
- Ovens
- Vats
- Jacketed Kettles

### FEATURES

- Temperature adjustment made simple and easy by rotating an adjustment knob to the desired temperature setting
- Thermostatic sensing bulb comes with an 8-ft. or 15-ft. length capillary
- Capillary is armor-protected to resist damage
- Overheat protection bellows is incorporated into sensing bulb; 200°F overheat protection up to 350°F
- Full port strainer and blowdown valve on pilot adapter for ultimate protection from dirt and scale

### OPTIONS

- Temperature Pilot can be combined with Pressure and Solenoid pilots
- Additional capillary lengths can be ordered in 5-ft. increments; up to 25-ft. maximum length
- Wells\* for isolating sensing bulb from process liquid are available in 316 stainless steel or brass
- Extended length wells are available
- 316 Stainless Steel Sensing Bulb
- Other options available; consult factory

**\* Thermowells:**

Wells isolate sensing bulb from the process liquid and are available in Brass or Stainless Steel. When placed on the side of a tank or vessel, the sensing bulb can be removed without having to drain the process fluid.

### TEMPERATURE-ADJUSTING RANGES

Temperature Ranges*	Identifying Colors
60 - 120 °F (16 - 49 °C)	yellow
100 - 160 °F (38 - 71 °C)	black
120 - 180 °F (49 - 82 °C)	blue
160 - 220 °F (71 - 104 °C)	red
200 - 260°F (93 - 127 °C)	green

\* Other ranges available; consult factory.

### MATERIALS

Body	Ductile Iron/Cast Steel
Head & Guide	Stainless Steel
Seat	Stainless Steel
Sensing Bulb:	
T	Copper Bulb
TU	Copper Bulb w/Brass Union Hub
TUBW	Copper Bulb w/Brass Well
TUSW	Copper Bulb w/Stainless Steel Well
TBW	Copper Bulb w/Brass Well & Grommet
TSW	Copper Bulb w/Stainless Steel Well & Grommet

### Pressure & Temperature Pilot combination

Controls downstream pressure and process temperature, eliminating the need for a separate pressure regulator



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### SENSING BULBS AVAILABLE

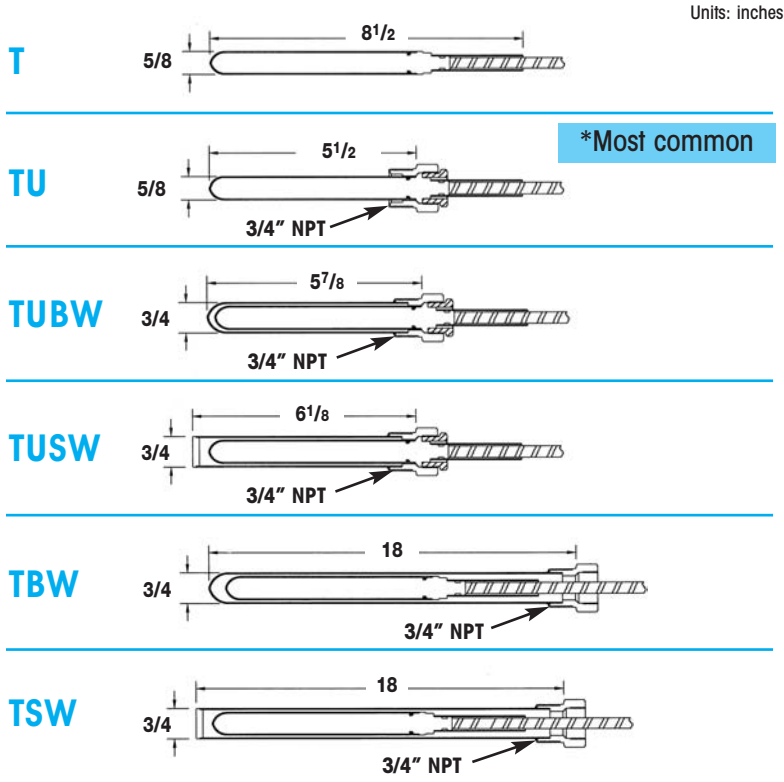
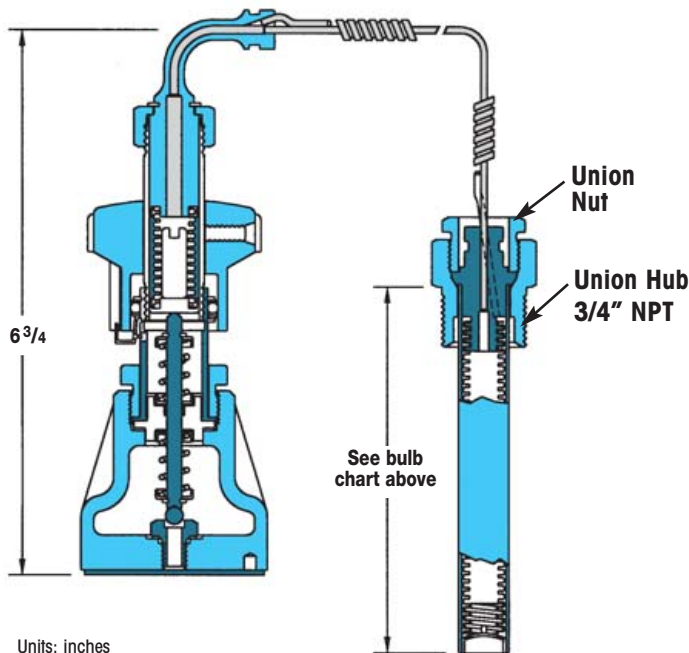


Diagram below shows "T" Pilot TU Option for Bulb



- T** Plain copper bulb
  - TU** Union connected copper bulb that can be screwed into the side of tank  
\* most common selection
  - TUBW** Type TU bulb with a **brass well**. The well, which isolates bulb from process fluid, can be placed in the side of a tank allowing the sensing bulb to be removed without having to drain the tank of liquid
  - TUSW** Type TU bulb with a corrosion resistant **stainless steel well**. The well, which isolates bulb from process fluid, can be placed in the side of a tank allowing the sensing bulb to be removed without having to drain the tank of liquid
  - TBW** Type T bulb with an **extended length brass well**. The extended well allows deeper insertion of sensing bulb into tanks.
  - TSW** Type T bulb with **extended length stainless steel well**. The extended well allows deeper insertion of sensing bulb into tanks.
- Other options available; consult factory.**

### HOW TO ORDER

#### "T" TEMPERATURE PILOT

Specify:

- Temperature range from the chart or indicate the temperature of the process you wish to control
- The length of capillary required; 8-ft. is standard
- Bulb type needed:  
T, TU, TUBW, TUSW, TBW & TSW

Example: **TU, 8 FT CAP, 60-120°F, yellow**

#### REGULATOR BODY

Specify:

- **HD** regulator body
- Regulator size or capacity of steam required
- End connections (threaded, 150/300# flanged)

### MINIMUM OPERATING PRESSURES

Minimum Inlet Pressure:

- 15 PSIG** (Standard Main Valve)
- 5 PSIG** (Low Pressure Main Valve with Low Pressure Temperature Pilot)

**Low Pressure Temperature Pilot must be used in conjunction with a Low Pressure Main Valve for applications where inlet steam pressure is below 15 PSIG. SPECIFY WHEN ORDERING.**