Temperature Pilot for HD Regulating Valves

# **Temperature** Pilot

- Max Inlet Pressure: 300 PSIG
- Temperature Control Range: 60-260 °F
- Minimum Inlet Pressures:

PILOTS

**"T" Pilot** 

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
- Ovens
- Process heaters
- Vats
- Dryers

- 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.

## \* Other ranges available; consult factory.

### MATERIALS

Body	Ductile Iron/Cast Steel
Head & Guide	Stainless Steel
Seat	Stainless Steel
Sensing Bulb:	
Т	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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## **TEMPERATURE-ADJUSTING**

Temperature Ranges*	Identifying Colors	
<b>60 - 120 °F</b> (16 - 49 °C)	yellow	
<b>100 - 160</b> °F (38 - 71 °C)	black	
1 <b>20 - 180</b> °F (49 - 82 °C)	blue	
<b>160 - 220</b> °F (71 - 104 °C)	red	
<b>200 - 260°F</b> (93 - 127 °C)	green	

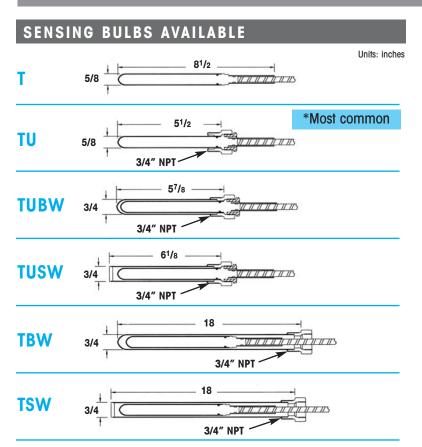
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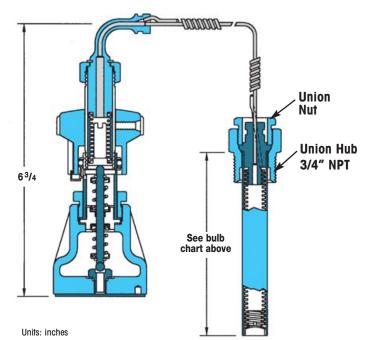


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T. TU



#### Diagram below shows "T" Pilot TU Option for Bulb



#### Plain copper bulb

Union connected copper bulb that can be screwed into the side of tank \* most common selection

PILOTS

" Pilot

- 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 liauid
- 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)
- (Low Pressure Main Valve with **5 PSIG** 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.** 

