

# "TRP" Pilot

Temperature Pilot for HD Regulating Valves

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PILOT-OPERATED REGULATING VALVES

## Temperature Pilot

- Max Inlet Pressure: 300 PSIG
- Temperature Control Range: 20-250 °F
- Min Inlet Pressures: 15 PSIG standard main valve  
5 PSIG low pressure main valve

### TYPICAL APPLICATIONS

The "TRP" 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 and Jacketed Kettles.

### FEATURES

- Ductile Iron pilot body
- Stainless steel valve and seat
- Standard capillary is copper with 316 stainless steel armor in 10 feet length

### OPTIONS

- **Additional Capillary Length:** Available up to 25-ft. in 5-ft. increments.
- **Special Materials:** Sensing bulb, wells, and capillary are available in special corrosion resistant materials.
  - 316 stainless steel capillary
  - 316 stainless steel armor with standard capillary
  - Kynar-covered capillary
- **Finned Bulb:** Special finned sensing bulb for improved temperature sensitivity when controlling air temperature in heating ducts
- **Thermowell or Separable Socket:** Available in stainless steel or copper
- **Temperature Sensing Dial:** Indicates temperature of process being controlled



The "TRP" will control lower temperatures than the standard "T" Pilot

### MATERIALS

Pilot Body	Ductile Iron
Valve and Seat	Stainless steel
Support Bracket	Aluminum
Bulb & Capillary	Copper (optional stainless steel)
All Other Parts	Brass

### HOW TO ORDER

#### "TRP" TEMPERATURE PILOT

Specify:

- Temperature range from the chart or indicate the temperature of the process you wish to control
- The length of capillary required

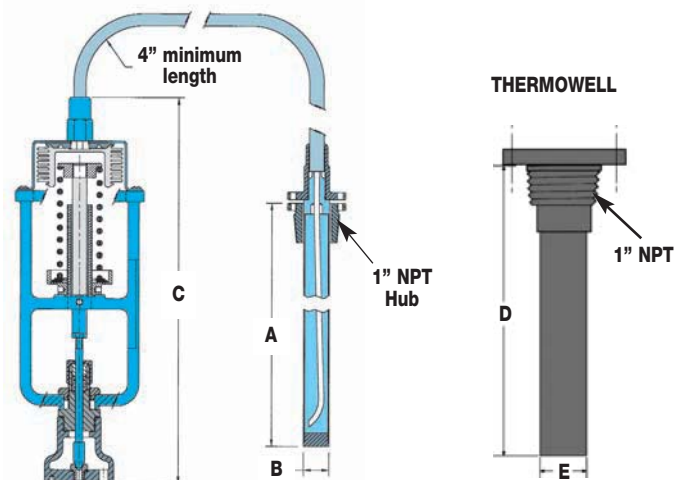
#### REGULATOR BODY

Specify:

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

### DIMENSIONS – inches

Std. Bulb Range °F	Bulb Length		Bulb Diameter		Body Height C		Thermowell or Separable Socket	
	A	B	w/Dial	w/o Dial	D	E		
40-65°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
65-85°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
85-110°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
110-135°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
135-160°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
160-190°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
190-210°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
210-245°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
245-275°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
275-310°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
305-365°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
365-415°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		
415-435°	12 <sup>1</sup> / <sub>4</sub>	1.0	1 <sup>1</sup> / <sub>4</sub>	16 <sup>11</sup> / <sub>64</sub>	13	1.1		



**"S" Pilot**

Electric Pilot for On/Off Control of HD Regulating Valves

# Solenoid Pilot

- For Electrical On-Off Control of Regulating Valves
- Max Inlet Pressure: 250 PSIG

PILOT-OPERATED  
REGULATING VALVES

## TYPICAL APPLICATIONS

Typically used for automatic operation, remote control, programmed cycling, sequential function interlocks with other equipment, and emergency shut-off in case of power failure.

## HOW IT WORKS

The **"S" Solenoid Pilot** can be used in conjunction with Pressure, Temperature, or Air Pilots to electrically control on/off operation of the **HD** Regulator. When the solenoid pilot is used, the regulator can be turned on or off by electrically activating or de-activating the solenoid.

### Normally Closed (nc) – Standard

The normally closed Solenoid Pilot remains closed in the non-activated state. The regulating valve will remain closed until an electrical signal is sent to the solenoid pilot. This is known as a fail-safe condition.

### Normally Open (no) – Optional

The normally opened Solenoid Pilot remains open in the non-activated state. The regulating valve will function normally unless an electrical signal is used to shut-off the solenoid pilot.

## FEATURES

- Available normally opened (no) or normally closed (nc)
- Full-port strainer and blow-down valve on pilot adapter to eliminate failure caused by contaminated steam systems

## OPTIONS

- Normally open solenoid
- NEMA Ratings: NEMA 4 and NEMA 7
- Voltage: 24 VAC, 220 VAC, 240 VAC

## MINIMUM OPERATING PRESSURES

Minimum Inlet Pressure:

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

Minimum Differential Pressure:

- 10 PSI** (Standard Main Valve)
- 3 PSI** (Low Pressure Main Valve)

## STANDARD SOLENOID PILOTS AVAILABLE

Steam Inlet Pressure	0-180 PSIG 180-250 PSIG
NEMA Ratings	NEMA 1 – Standard NEMA 4 – Waterproof (optional) NEMA 7 – Explosion-proof (optional)
Voltage	110 Volts AC (standard) 24 Volts AC (optional) 220 Volts AC (optional) 240 Volts AC (optional)

## MATERIALS

Pilot Body & Cover	Ductile Iron
Gasket	Grafoil
Cover Screws	Steel, GR5
Internals	Stainless Steel

## HOW TO ORDER

### "S" SOLENOID PILOT

- Specify:
- Inlet Steam Pressure range:  
0-180 PSIG or 180-250 PSIG
  - NEMA rating: NEMA 1, NEMA 4 or NEMA 7  
(if not specified NEMA 1 Standard will be supplied)
  - Control Voltage: 24, 110, 220 or 240 VAC

### REGULATOR BODY

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