Series 2000

Pressure and/or Temperature Pilot Operated Steam Regulators (continued)

A complete Series 2000 Regulator consists of:

– Main valve
– Control pilot or combination of pilots
– Hardware kit

There are a number of types of pilot control valves available:

- **Series SPS Spring Pressure Control Pilots –** for self-contained pressure regulation.
- **Series AP Air Pressure Control Pilots –** for remote pressure control using air pressure (requires an air pressure signal).
- **Series STPA Self-Contained Temperature Control Pilots –** for direct control of temperature in heated fluids.
- **Series 315 PNT and Series 240 PNT Pneumatic Temperature Control Pilots –** for rapidly changing load requirement applications (requires an air pressure signal and an AP Air pressure Control Pilot).
- **Series SLD Solenoid Pilots –** for remote control or safety overrides.

Different types of pilot valves can be used in combination to control more than one function or as a safety override. For example, a temperature pilot may be used in conjunction with a spring pressure pilot to control both temperature and pressure. Or, a temperature pilot may be used with a solenoid pilot to provide automatic shutdown when an over-temperature condition occurs.

For computer aided selection of steam regulators or pilots, please refer to the "Steam Specialty Component Selectors" on the Hoffman Specialty website, www.hoffmanspecialty.com. Or, for a stand-alone version of ESP-Plus, contact your local Hoffman Specialty Representative (see back cover for listing).

How to Select Series 2000 Pilots

Series SPS Spring Pressure Control Pilots

– for self-contained pressure regulation.

1. Determine the reduced steam outlet pressure to be maintained downstream of main valve.
2. Use the Spring Pilot Ordering Information Chart to:
   a) Select a model number (based on the outlet pressure determined above).
   b) Determine the part number (based on the model number).

Series AP Air Pressure Control Pilots – for remote pressure control using air pressure (Air PRV Regulator is also required)

1. Determine the reduced steam outlet pressure to be maintained downstream of main valve.
2. Determine the air loading pressure available from the Air PRV or Pneumatic Temperature Pilot.
3. Use the Air Loading Data Graph to select a model number that meets the requirements of the outlet steam pressure and available air loading pressure as determined above.
4. Use the Air Pilot Ordering Information Chart to determine the part number (based on the model number).
5. Use the Air PRV Regulator Ordering Information Chart to determine the part number.

Series STPA Self-Contained Temperature Control Pilots – for direct control of temperature in heated fluids.

1. Determine the process temperature of the fluid whose temperature is being controlled.
2. Determine the length of capillary tube required between the main valve and the temperature monitoring point.
3. Use the Self-Contained Temperature Pilot Ordering Information Chart to:
   (a) Select a model number (based on the temperature range and capillary range as determined above).
   (b) Determine the part number (based on the model number).
4. (Optional) Use the Well Ordering Information Chart to:
   (a) Select a model number (based on desired bulb material).
   (b) Determine the part number (based on the model number).

How to Select Series 2000 Pilots (continued)

Series 315 PNT Pneumatic Temperature Pilot –
For Shop Quality Air

1. Determine the process temperature of the fluid whose temperature is being controlled.
2. Determine bulb material compatible with process fluid.
3. Use Model 315 PNT Pneumatic Temperature Pilot Ordering Information to select model (based on temperature range and bulb material as determined above).
4. (Optional) Use the Well Ordering Information Chart to:
   (a) Select a model number (based on bulb material).
   (b) Determine the part number (based on the model number).
5. Determine the reduced steam outlet pressure to be maintained downstream of main valve.
6. Determine the air loading pressure available from the Air PRV or Pneumatic Temperature Pilot.
7. Use the Air Loading Data Graph to select a model number that meets the requirements of the outlet steam pressure and available air loading pressure as determined above.
8. Use the Air Pilot Ordering Information Chart to determine the part number (based on the model number).
9. Use the Air PRV Regulator Ordering Information Chart to determine the part number.

Series 240 PNT Pneumatic Temperature Control Pilot –
For Control Quality Air

1. Use Model 240 PNT Pneumatic Temperature Pilot Ordering Information to determine part number.
2. Determine the reduced steam outlet pressure to be maintained downstream of main valve.
3. Determine the air loading pressure available from the Air PRV or Pneumatic Temperature Pilot.
4. Use the Air Loading Data Graph to select a model number that meets the requirements of the outlet steam pressure and available air loading pressure as determined above.
5. Use the Air Pilot Ordering Information Chart to determine the part number (based on the model number).
6. Use the Air PRV Regulator Ordering Information Chart to determine the part number.

Electro-Pneumatic Transducer

1. Use the Electro-Pneumatic Transducer Ordering Information Chart to determine the part number.
2. Use the Air Loading Graph to select a model number that meets your desired outlet steam pressure (based on your available air loading pressure).
3. Use the Air PRV Regulator Ordering Information Chart to determine the part number.

Solenoid Pilots for on/off control

1. Determine which operating mode, "Normally Open" or "Normally Closed", is better suited for your application by reading the descriptive information.
2. Use the Ordering Information Chart to:
   (a) Select a model number (based on the operating mode and the inlet steam pressure operating range).
   (b) Determine the part number (based on the model number).

Hardware Kits

1. Use the Hardware Kit Ordering Information Chart to:
   (a) Select a kit (based on the main valve size and the type of pilot(s) used.
   (b) Determine the part number (based on the kit selected).