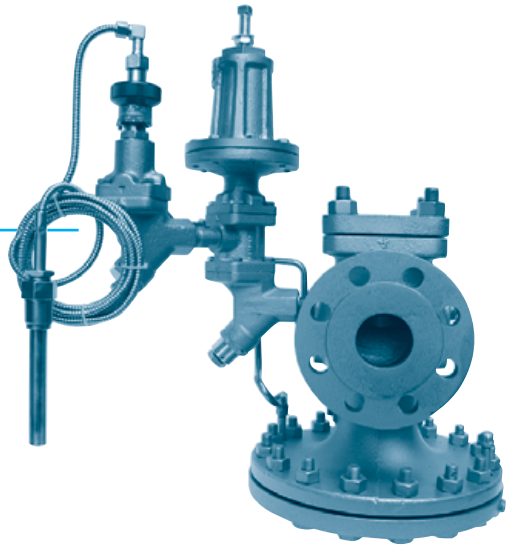
HDPT

Pilot-Operated Pressure & Temperature Regulating Valve

HD Regulating Valve with "P" Pressure & "T" Temperature Pilots



- Max Inlet Pressure: 300 PSIG
- Reduced Outlet Pressure Range: 3-200 PSIG
- Temperature Control Range: 60-260 °F
- Min Inlet Pressures:
  - **15 PSIG** standard main valve with standard temperature pilot
  - **5 PSIG** low pressure main valve with low pressure temp. pilot

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 **HD** Regulator with both the **"P" Pressure Pilot** and **"T" Temperature Pilot** is used to simultaneously control both pressure and temperature in process applications.

Using both the temperature and pressure pilot on the same regulator eliminates the need for two separate regulators to control temperature and pressure.

FEATURES

- **Pressure and temperature pilot combination eliminates the need for two separate regulators**
- **Choice of three overlapping pressure ranges**
- **Pilot is installed using only four bolts**
- **Full port strainer and blowdown valve on pilot adapter for ultimate protection from dirt and scale**
- **Watson McDaniel's pilots can be used with other manufacturers' valves**

OPTIONS

- **Solenoid Pilot can be added for electrical On/Off control of the regulator**

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.

PRESSURE-ADJUSTING SPRING RANGES

Pressure Ranges	Identifying Colors
3-25 PSIG	yellow
20-100 PSIG	blue
80-200 PSIG	red

MINIMUM OPERATING PRESSURES

Minimum Inlet Pressure:

15 PSIG (Standard Main Valve with Standard Temperature Pilot)

5 PSIG (Low Pressure Main Valve with Low Pressure Temperature Pilot)

Minimum Differential Pressure:

10 PSI (Standard Main Valve)

3 PSI (Low Pressure Main Valve)

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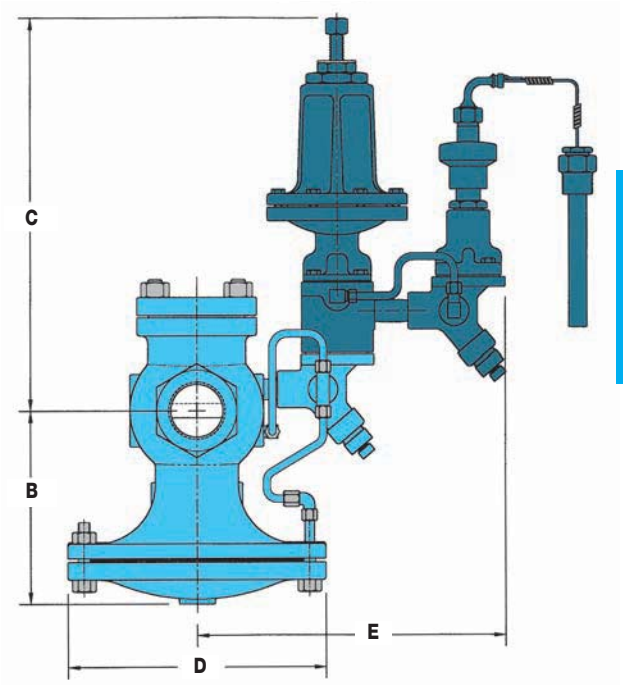
Pilot-Operated Pressure & Temperature Regulating Valve

DIMENSIONS HD-Series – *inches / pounds*

Size	Face-To-Face			B	C	D	E	Weight (lbs)	
	NPT	150#	300#					NPT	FLG
1/2"	4 3/8			5 1/2	14 1/2	6 1/2	10 1/4	18	
3/4"	4 3/8			5 1/2	14 1/2	6 1/2	10 1/4	18	
1"	5 3/8	5 1/2	6	6 1/4	14 1/2	7	10 1/4	23	35
1 1/4"	6 1/2			7 3/8	14 1/2	8 3/4	10 3/4	43	
1 1/2"	7 1/4	6 7/8	7 3/8	7 3/8	14 1/2	8 3/4	10 3/4	43	60
2"	7 1/2	8 1/2	9	8 1/4	14 1/2	10 7/8	11 1/4	65	85
2 1/2"		9 3/8	10	9	14 1/2	11 3/4	11 1/4		105
3"		10	10 3/4	8 7/8	14 1/2	13 1/4	12		145
4"		11 7/8	12 1/2	10 7/8	14 1/2	14 3/4	13		235
6"		15 1/8	16	14 1/8	15	19 3/4	14 1/4		470

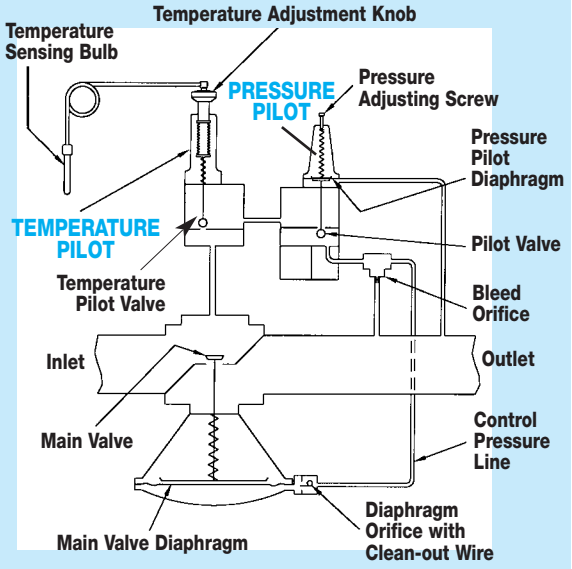


MATERIALS

Body	**Ductile Iron**
Cover	**Ductile Iron**
Gasket	Grafoil
Cover Screws	Steel
Pilot Adapter	**Ductile Iron/Cast Steel**
Screen	Stainless Steel
Tubing	Copper
Valve Seat	Hardened SST (55 Rc)
Valve Disc	Hardened SST (55 Rc)
Diaphragm	Phosphor Bronze

HOW IT WORKS

A pressure pilot and temperature pilot can be used together to control the operation of the regulator. The pressure pilot limits the outlet pressure of the regulator when the temperature pilot calls for steam. The temperature pilot senses the temperature of the process that is being controlled and opens or closes the regulator accordingly. Using a pressure-temperature pilot combination eliminates having to use two separate valves.



HOW TO ORDER

"T" TEMPERATURE PILOT

Specify:
- Temperature range from the chart or indicate the set 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

"P" PRESSURE PILOT

Specify:
- Pressure range from the chart

REGULATOR BODY

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