

# "P" & "P5" Pilot

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Pressure Pilot for HD Regulating Valves

PILOT-OPERATED REGULATING VALVES

## Pressure Pilot

- **Max Inlet Pressure: 300 PSIG**
- **Reduced Outlet Pressure Range: 3-200 PSIG**
- **Minimum Inlet Pressures:**
  - 15 PSIG when used with standard main valve
  - 5 PSIG when used with low pressure main valve
- **P-Pilot** (Standard) ± 1 PSIG accuracy
- **P5-Pilot** (Special) ± 0.5 PSIG accuracy



### PRESSURE-ADJUSTING SPRING RANGES

"P" Pressure Range	"P5" Pressure Range	Identifying Colors
3-25 PSIG	1-10 PSIG	yellow
20-100 PSIG	10-25 PSIG	blue
80-200 PSIG	-	red

### MATERIALS

Pilot Body & Cover	Ductile Iron or Cast Steel
Gasket	Grafoil
Diaphragm	Phosphor Bronze
Head & Seat Assembly	Hardened SST (55 Rc)

### TYPICAL APPLICATIONS

The "P" & "P5" Pressure Pilots are used with the HD Regulator to control steam pressure in steam mains or for process equipment. Pilot operated regulators will maintain constant downstream pressure even when the inlet pressure to the valve fluctuates or steam usage varies.

### FEATURES

- The "P" Pilot can maintain downstream pressure to ±1 PSIG
- "P5" Pilot can maintain downstream pressure to ±0.5 PSIG
- Choices of three overlapping pressure ranges
- Pressure control spring can be changed in line
- Pilot is easily installed using only four bolts
- Full port strainer and blowdown valve on pilot adapter for ultimate protection from dirt and scale
- Can be used with temperature and solenoid control pilot
- Solid floating diaphragm is more failure resistant
- Watson McDaniel's pilots can be used with other manufacturers' regulators

### OPTIONS

- Pressure pilot can be used with temperature pilot to eliminate the need for two separate regulators
- Solenoid pilot can be added for remote on/off control of regulator
- "P5" Pilot will maintain ± 0.5 PSIG accuracy

### 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)

### HOW TO ORDER

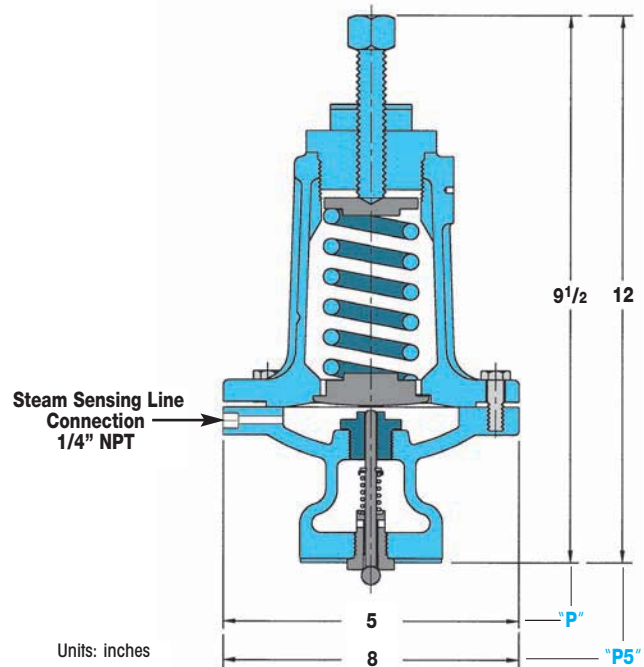
#### "P", "P5" PRESSURE PILOT

Specify: • Reduced pressure range –

Example: "P" Pilot at 3-25 PSIG, yellow

#### REGULATOR BODY

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



# "BP" Pilot

Back Pressure Pilot for HD Regulating Valves

## Back Pressure Pilot

- **Max Inlet Pressure: 300 PSIG**
- **Back Pressure Range: 10-200 PSIG**
- **Minimum Inlet Pressures:**
  - 15 PSIG when used with standard main valve
  - 5 PSIG when used with low pressure main valve



PILOT-OPERATED REGULATING VALVES

PRESSURE-ADJUSTING SPRING RANGES	
Pressure Range	Identifying Colors
10-25 PSIG	yellow
20-100 PSIG	blue
80-200 PSIG	red

MATERIALS	
Pilot Body & Cover	Ductile Iron
Gasket	Grafoil
Diaphragm	Phosphor Bronze
Head & Seat Assembly	Hardened SST (55 Rc)

### TYPICAL APPLICATIONS

The "BP" Back-Pressure Pilot used with the HD regulator, maintains upstream pressure in steam systems. These regulators are commonly used to supply flash steam to low pressure mains.

### FEATURES

- The "BP" Pilot can maintain upstream pressure to  $\pm 1$  PSIG
- Choices of three overlapping pressure ranges
- Pressure adjusting spring can be changed with regulator in line
- Pilot is easily installed using only four bolts
- Full port strainer and blowdown valve on pilot adapter for ultimate protection from dirt and scale
- Solid floating diaphragm is more failure resistant
- Watson McDaniel's pilots can be used with other manufacturers' regulators

### OPTIONS

- Can be used with solenoid pilot for on/off control

### 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)

### HOW TO ORDER

#### "BP" BACK PRESSURE PILOT

Specify: • Reduced pressure range –  
 Example: **"BP" Pilot at 20-100 PSIG, blue**

#### REGULATOR BODY

Specify: • HD regulator body  
 • Regulator size or capacity  
 • End connections (threaded, 150/300# flanged)

