

## Electric Pilot with ES Spring Return Actuator

Electric Pilot	EP
Body Material	Steel
Max Inlet Pressure	300 PSIG
Reduced Outlet Pressure Range	3-200 PSIG
Inlet Pressure Range (with HD Standard main valve)	15-300 PSIG
(with HD-LP Low-Pressure main valve)	5-20 PSIG
Minimum Differential Pressure (with HD Standard main valve)	10 PSI
(with HD-LP Low-Pressure main valve)	3 PSI

## ES Electric Actuator Specifications

Power Supply	24VAC
Nominal Current (A)	0.7
Max Current (A)	0.7
Max Power Consumption (W)	9
Force	448 lbs
Stem Velocity	0.011 in/sec
Nominal 3/4" Travel Time	60 sec
Duty Cycle, IEC 60034-1,8	S2 30min S4-1200 c/h - 50% ED
Ambient Temperature	14 to 140°F
Actuator Weight	12.3 lbs

## Typical Applications

The **Electric Pilot** is used with HD regulators for a variety of application including On/Off Control. The control signal range is 4-20mA or 0-10V. A Low-Pressure version (-LP) is available for 5-20 psig steam supply pressures.

## Features

- **Fail-Safe Mode:** An integrated power spring is used to drive the valve fully closed or open in the event of power loss to the actuator.
- **Integral Positioner:** Accepts 4-20mA or 0-10 VDC control signals, eliminating the need for a separate I/P transducer.

## OPERATING PRESSURES

Inlet Pressure Range:

**15-300 PSIG** (Standard Main Valve)

**5-20 PSIG** (Low Pressure Main Valve)

## MATERIALS for Pilot

Pilot Body & Cover	Cast Steel
Seat Gasket	302 SS
Head & Seat Assembly	Hardened SST (55 Rc)



## Options &amp; Associated Control Loop Accessories

- PID Electronic Controllers (TR890 Series)
- Thermocouples
- RTD's
- Pressure Transmitters

Models	Valve Inlet Pressure PSIG	Code	Actuator	Code	Power Supply	Code	Control Signal
EP	Standard	ESA	Spring-- Fail-Open	1	24 VAC	0	4-20mA
EP-LP	Low-Pressure (5-20 psig)	ESB	Spring-- Fail-Closed	1		1	0-10V

## How to Size / Order

## EP - ELECTRIC PILOT

Specify: • Fail Close/Open - Power Supply - Control Signal

Example: **EP-ESB-10:** Spring Fail-Closed, 24VAC, 4-20mA Signal

## REGULATOR BODY

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

## Additional Technical Information

Motor Protection	Electric motor current monitoring with safety cut-off
Set Value Feedback	4-20mA or 0-10 VDC selectable, split range operation
Valve Positioner Function	Integrated positioner, deadband 0.6 to 5%, shutoff min
Automatic Start-up	Recognizing the end position(s) and auto-scaling set and feedback values
Internal Fault Monitoring	Torque, set value, temperature, power supply
Diagnostic Function	Stores accumulated operation data (motor & total run time, number of starts) and data sets of current values (set value, feedback value, torque, temp, and error messages)
Cable Glands	2x M20x1.5 & 1x M16x1.5