spirax sarco

TI-P237-01-US Issue 1

Electric Pilot Operated On/Off Regulator 6" 25E

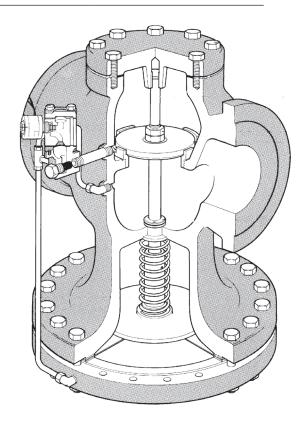
Description

The 25E is controlled by an electric pilot valve. The main valve opens wide when the pilot is energized; it closes when the pilot is deenergized. The 25E does not modulate or throttle steam at part load.

This valve meets Class IV shut-off specifications but is not suitable for dead-end service.

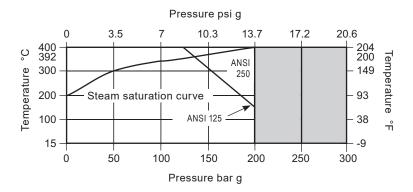
| Model | 25E | | |
|----------------------------------|---|-----------------------------|--|
| Sizes | 6" (DN150) | | |
| Connections | ANSI 125, 250 | ANSI 125, 250 ANSI 150, 300 | |
| Construction | Cast iron | Cast steel | |
| Options | Reduced Orifice Designated by "S" | | |
| Electric pilot specifications | Enclosure: NEMA 2, 3, 3S, 4, & 4X 120 VAC / 60 Hz Holding: 23 VAC Inrush: 45 VAC Normally Closed PMO: 200 psi g (13.8 bar g) TMO: 388 °F (198 °C) | | |
| Electric pilot options | C / 60Hz / 60 Hz sponse time i g (9.7 bar g) °F (183 °C) | | |

Typical applications
On/Off control of steam flow in response to remote manual or automatic electrical signals which may originate at safety switches, timers, manual switches, etc.

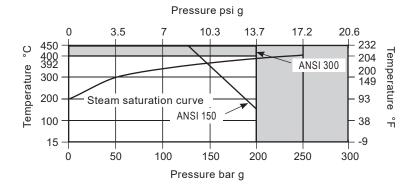


Limiting operating conditions

Cast iron



Cast steel



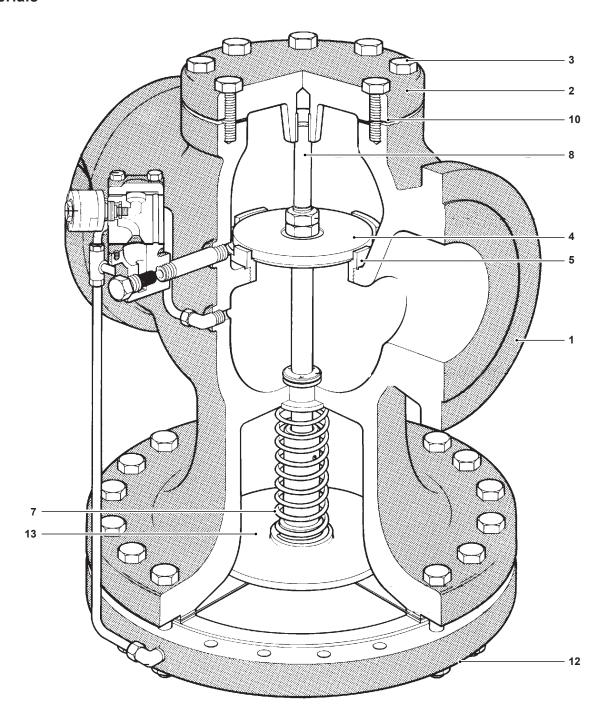
The product **should not** be used in this region.

Cv Values

| Size | 6" | 6" "S" | |
|----------|-----|--------|--|
| Cv value | 280 | 156 | |

^{*}The temperature of the sensing bulb must not exceed 350 °F (177 °C)

Materials

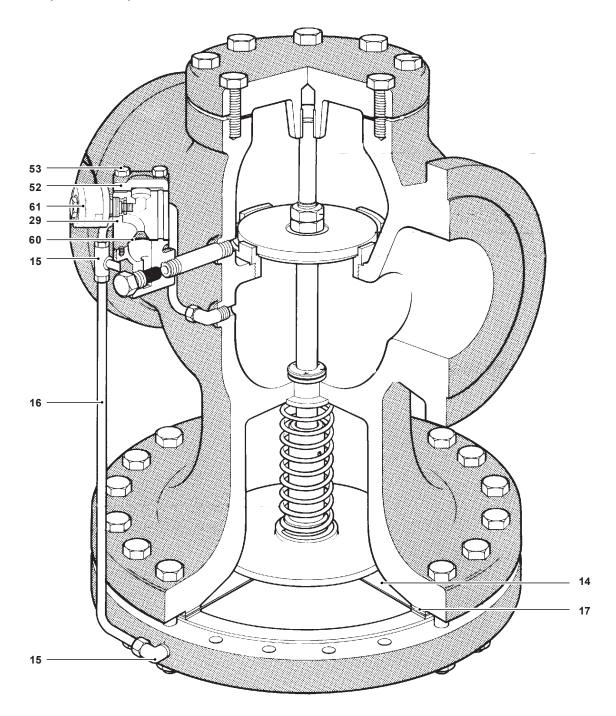


| No. | Part | Material | |
|---------|-----------------|-----------------|------------------|
| | Walana Barda | Cast iron | ASTM A 126 CL B |
| 1 | l Valve Body | Cast steel | ASTM A 216 WC B |
| | | Cast iron | ASTM A 126 CL B |
| 2 Cover | Cover | Cast steel | ASTM A 216 WC B |
| 3 | Cover Bolts | Steel | AISI 1038 |
| 4 | Main Valve Head | Stainless steel | ASTM A 743 CA 40 |
| 5 | Main Valve Seat | Stainless steel | ASTM A 743 CA 40 |

| No. | Part | Material | |
|-----|------------------------|-----------------|------------------|
| 7 | Valve Return Spring | Stainless steel | AISI 302 |
| 8 | Valve Stem | Stainless steel | AISI 304 |
| 10 | Cover Gasket | Graphite | BS 2815 A |
| 42 | 2 Lower diaphragm case | Cast iron | ASTM A 126 CL B |
| 12 | | Cast steel | ASTM A 216 WC B |
| 13 | Diaphragm Plate | Stainless steel | ASTM A 743 CA 40 |
| | | | |

Materials continued on next page

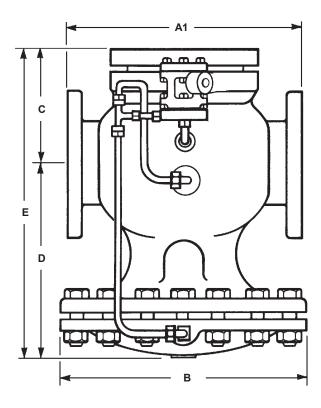
Materials (continued)



| No. | Part | Material | |
|-----|---------------------------|-----------------|-----------------|
| 14 | Main diaphragm (2 ply) | Stainless steel | ASTM A240 |
| 15 | Orifice | Brass | ASTM B16 |
| 16 | Tubing Assembly | Copper | ASTM B280 (122) |
| 17 | Diaphragm Gasket | Graphite | BS 2815 A |
| | | | |

| No. | Part | Material | |
|-----|-----------------------|-------------|-----------------|
| 29 | Electric Pilot Adapto | r Cast iron | ASTM A126 CL B |
| 52 | Electric Pilot Cover | Cast iron | ASTM A 126 CL B |
| 53 | Cap Screws | Steel | ASTM A449 |
| 60 | Pilot Gasket | Graphite | |
| 61 | Electric Solenoid Va | lve | |

Dimensions/weights (approximate) in inches (mm) and lbs (kg)



| Size | ANSI 125/150 A1 | ANSI 250/300 A1 | В | С | D | E | Weight |
|------|--------------------|--------------------|-------|-------|-------|-------|----------|
| 6" | 18.1 | 18.9 | 19.75 | 8.9 | 17.1 | 26.1 | 595 lb |
| | (460) | (480) | (502) | (226) | (434) | (663) | (270 kg) |

Capacities

The valve is sized according to the temperature control requirements. For selection and sizing, see TI-P235-18-US.

Sample specification

The On/Off operation of the main valve shall be controlled by an electric solenoid pilot which may be removed without disturbing the control tubing connections. The main valve shall be single-seated, with hardened stainless steel trim; the valve body shall be Cast iron. The electric pilot shall have a NEMA 2, 3, 3S, 4, & 4X enclosure with 120 VAC / 60 Hz coil.

Installation

The valve should be installed in a horizontal pipe with suitable by-pass and isolating valves. A steam trap must be installed upstream to prevent condensate from reaching the valve. The trap and valve should both be protected with a strainer separator set.

Maintenance

Complete installation and maintenance instructions are given in

IM-P717-02-US and ADVP 3029, a copy of which is supplied with each valve. Available spare parts are shown on TI-P235-02-US and TI-P335-11-US.