

spirax sarco

Pilot Operated Temperature Regulator with Electric Override 6" 25TE

The 25TE has all the features of the 25T with the addition of an electric pilot. An electrical signal can override the temperature pilot. This valve meets Class IV shut-off specifications but is not suitable for dead-end service. Standard capillary tubing lengths are 8ft and 15ft.

Model	25TE	
Sizes	6"	
Connections	ANSI 125, 250	ANSI 150, 300
Construction	Cast Iron	Cast Steel
Options	Reduced Orifice Designated by "S" Non-Standard capillary tubing length in 5 ft. intervals to a maximum of 50 ft. (See TI-1-1123-US)	
Electric Pilot Specifications	Enclosure: NEMA 4 & 7 (C&D) 115v/60Hz Holding: 23 VA Inrush: 45 VA Normally closed 200 psig Max. operating pressure	
Electric Pilot Options	140 psig Max. operating pressure (for faster response time) 230 volt coil	

Typical Applications

Temperature control applications where the valve must also respond to an electrical program timer, safety or limit switch, or remote manual switch.

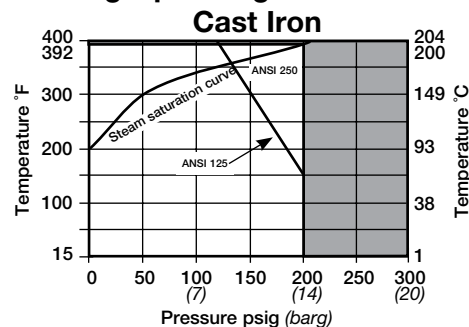
Sample Specification

Temperature Regulators shall be of the pilot-actuated, diaphragm-operated type with electric override. The main valve shall be single-seated, with hardened stainless steel trim; the valve body shall be cast iron. The pilots shall be removable without disturbing the control connections. The temperature setting shall be adjustable without the use of tools, and the set point shall be indicated on a calibrated dial. The thermostatic system shall be solid fill, and shall incorporate overheat protection. The electric pilot shall have a NEMA 4&7 (C&D) enclosure with 115v (230v) 60 Hz coil.

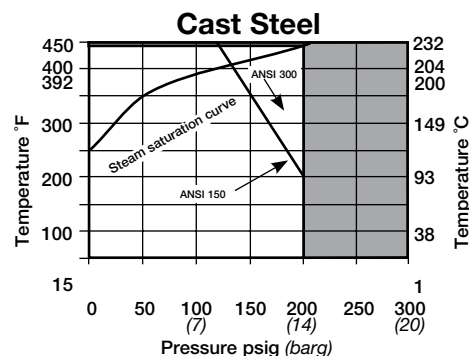
Capacities

The valve is sized according to the temperature control requirements. For selection and sizing, see TI-1-1124-US.

Limiting Operating Conditions



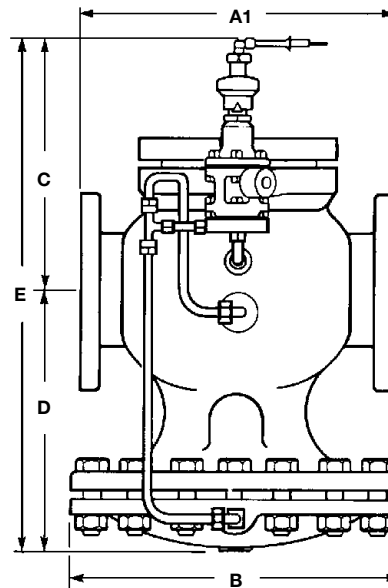
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Cv Values

Size	6"	6" "S"	*The temperature of the sensing bulb must not exceed 350°F (177°C)
C _v value	280	156	



Dimensions (nominal) in inches and millimeters

Size	Ansi 125/150		Ansi 250/300		D	E	Weight
	A1	A1	B	C			
6"	18.1	18.9	19.75	17.2	17.1	34.3	595 lb
	460	481	502	437	435	872	270 kg

Standard Temperature Ranges

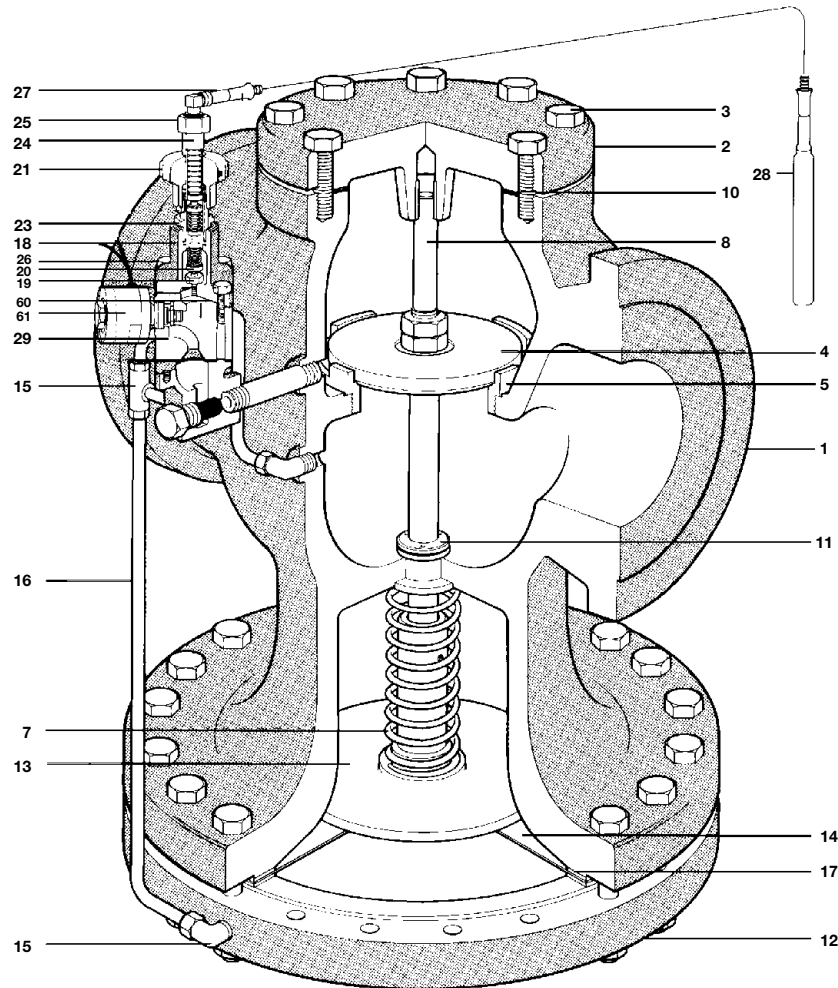
30°F to 90°F	0°C to 32°C		
60°F to 120°F	15°C to 50°C	160°F to 220°F	70°C to 105°C
100°F to 160°F	40°C to 70°C	200°F to 260°F	95°C to 125°C
120°F to 180°F	50°C to 80°C	260°F to 320°F	125°C to 160°C

Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only. In the interests of development and improvement of the product, we reserve the right to change the specification.

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Pilot Operated Temperature Regulator with Electric Override

6" 25TE



Construction Materials

No.	Part	Material	
1	Valve Body	Cast Iron	ASTM A 126 CL B
		Cast Steel	ASTM A 216 WC B
2	Cover	Cast Iron	ASTM A 126 CL B
		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
7	Valve Return Spring	Stainless Steel	AISI 302
8	Valve Stem	Stainless Steel	AISI 304
10	Cover Gasket	Graphite	BS 2815A
11	Stem Bushing	Stainless Steel	
12	Lower Diaphragm Case	Cast Iron	ASTM A 126 CL B
		Cast Steel	ASTM A 216 WC B
13	Diaphragm Plate	Stainless Steel	ASTM A 743 CA 40
14	Main Diaphragm (2 ply)	Stainless Steel	ASTM A240
15	Tube & Orifice	Brass	ASTM B16
16	Tubing Assembly	Copper	ASTM B280 (122)
17	Diaphragm Gasket	Graphite	BS 2815A
18	Pilot Valve Body	Cast Iron	ASTM A 126 CL B
		Cast Steel	ASTM A 216 WC B
19	Pilot Valve Seat	Stainless Steel	AISI 303

20	Pilot Valve Head	Stainless Steel	AISI 440A
21	Adjustment Knob	Phenolk	ASTM D 700 Ty2
23	Extension Nut	Brass	ASTM B 16
24	Case Tube	Brass	ASTM B 135 (330)
25	Retaining Nut	Brass	ASTM B 16
26	Pilot Mounting Screws	Steel 5/16"-18x1	ASTM A449
27	Capillary Tube	Varies with style selected	
28	Bulb	Varies with style selected	
29	Electric Pilot Adaptor	Cast Iron	ASTM A126 CL B
60	Pilot Gasket	Graphite	
61	Electric Solenoid Valve		

Installation

The regulator should be installed in a horizontal line with suitable bypass and isolating valves. A steam trap should be installed upstream to prevent condensate from reaching the valve. The trap and regulator should both be protected with a strainer separator set. The thermostatic bulb must be carefully located in the medium being heated. Complete installation instructions are given in IM-3-000-US.

Maintenance

Complete installation and maintenance instructions are given in IM-3-000-US and ADVP 3029, a copy of which is supplied with each valve. Available spare parts are shown on TI-3-0271-US and TI-1-1121-US.

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