spirax sarco

Pilot Operated Temperature Regulator 6" 25T

The 25T is a self actuated pilot-operated temperature regulating valve. The temperature pilot has a calibrated dial for accurate temperature setting, and is available with a variety of solid-fill sensing bulbs (see TI-1-1123-US). Standard capillary tubing lengths are 8 feet and 15 feet. This valve meets Class IV shut-off specifications but is not suitable for dead-end service.

Model	25T	
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)	

Typical Applications

Storage steam water heaters, instantaneous heat exchangers and converters, air handling coils, tank heating coils, steam jacketed vessels, steam chests, molds and platens.

Capacities

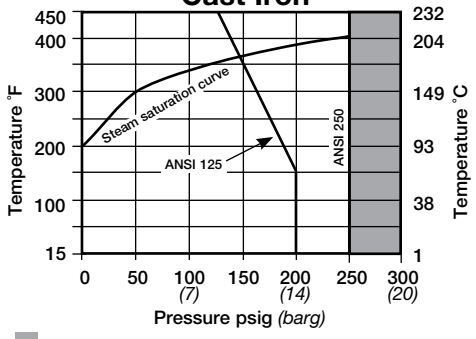
The regulator is sized according to the temperature control requirements. For selection and sizing data, see TI-1-1124-US.

Sample Specification

Temperature Regulators shall be of the pilot-actuated, diaphragm-operated type. 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.

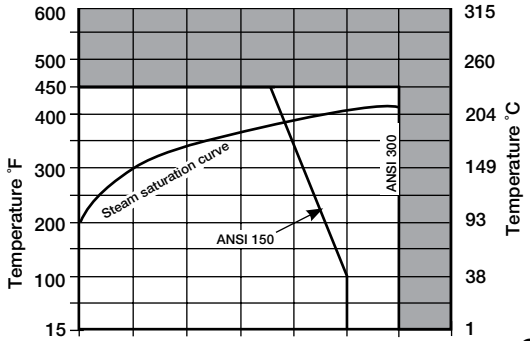
Limiting Operating Conditions

Cast Iron



The product should not be used in shaded area.

Cast Steel



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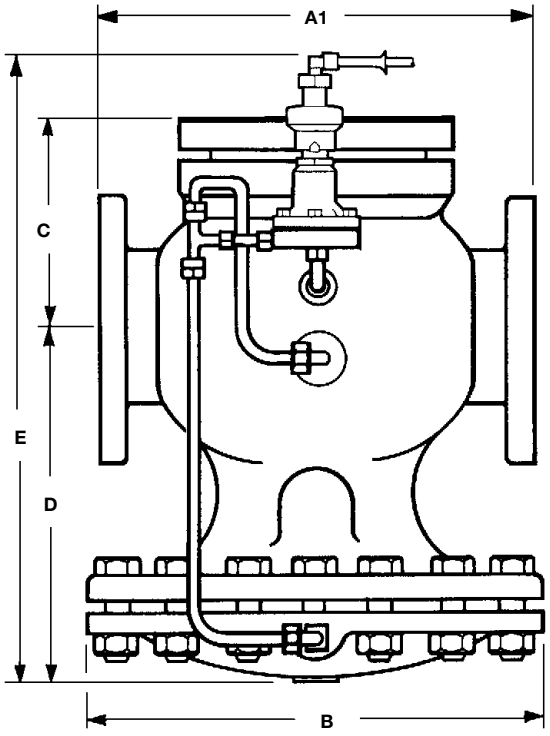
C_v Values

Size	6"	6" "S"
C_v value	280	156



*The temperature of the sensing bulb must not exceed 350˚F *(177˚C)*

Standard Temperature Ranges

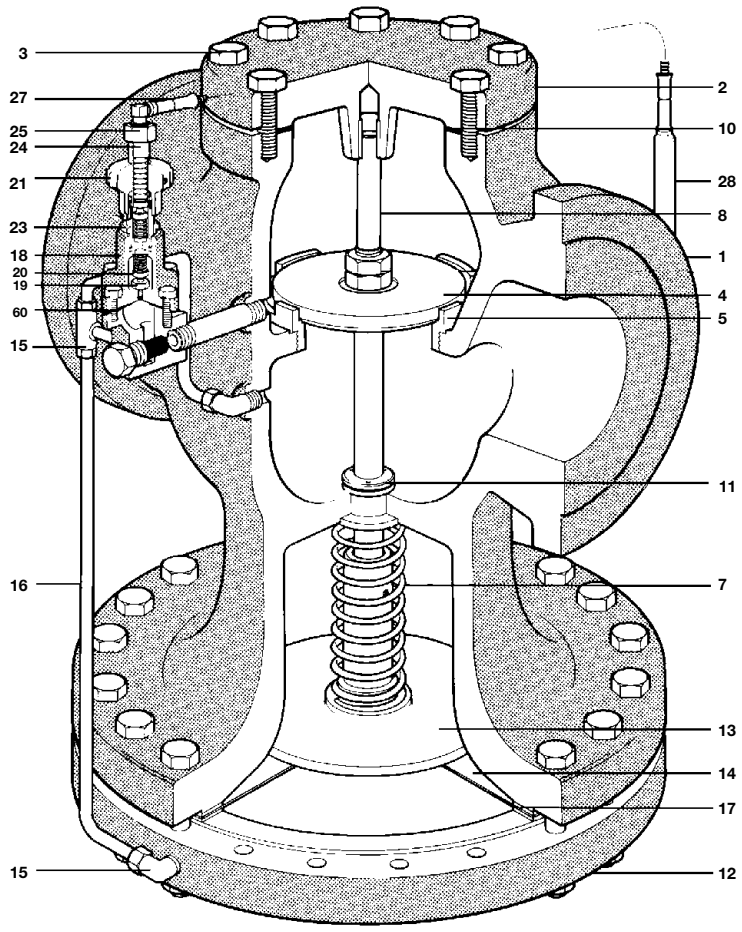
30˚F to 90˚F	*0˚C to 32˚C*		
60˚F to 120˚F	*15˚C to 50˚C*	160˚F to 220˚F	*70˚C to 105˚C*
100˚F to 160˚F	*40˚C to 70˚C*	200˚F to 260˚F	*95˚C to 125˚C*
120˚F to 180˚F	*50˚C to 80˚C*	260˚F to 320˚F	*125˚C to 160˚C*

Dimensions (nominal) in inches and millimeters

	Ansi 125/150	Ansi 250/300					
Size	A1	A1	B	C	D	E	Weight
6"	18.1	18.9	19.75	12.6	17.1	29.7	595 lb
	460	*481*	*502*	*321*	*435*	*756*	*270 kg*

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.

Pilot Operated Temperature Regulator
6" 25T



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 2815 A
11	Stem Bushing	Brass	ASTM B 16
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	Orifice	Brass	ASTM B16
16	Tubing Assembly	Copper	ASTM B280 (122)
17	Diaphragm Gasket	Graphite	BS 2815 A
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	Phenolic	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
27	Capillary Tube	Varies with style selected	
28	Bulb	Varies with style selected	
60	Pilot Gasket	Graphite	

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-3-2071-US and TI-1-1121-US.

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