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TI-P305-01-US Issue 1

Pilot Operated Temperature Regulator with Electric Override 6" 25TE

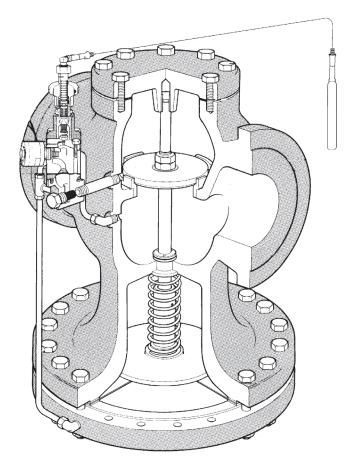
Description

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 (2.4 meters) and 15ft (4.6 meters).

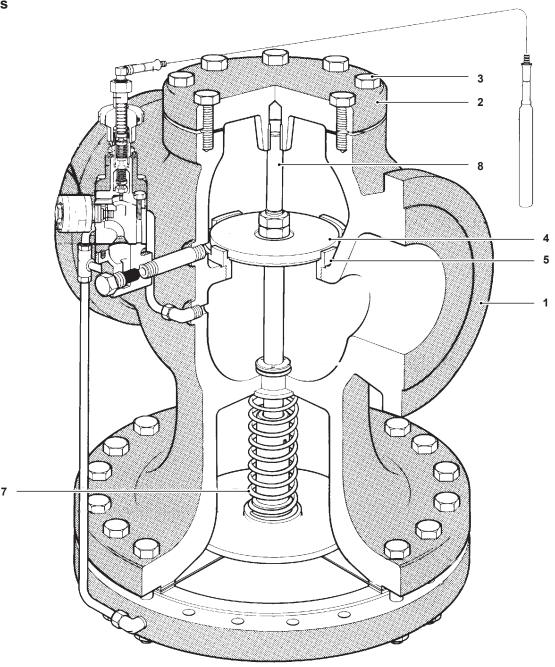
Model	25TE			
Sizes	6"			
Connections	ANSI 125, 250 ANSI 150, 300			
Construction	Cast iron Cast steel			
Options	Reduced Orifice Designated by "S" Non-Standard capillary tubing length in 5 ft. (1.5 m) intervals to a maximum of 50 ft. (See TI-P235-07-US)			
Electric pilot specifications	115v/ Holding Inrush: Normall 200 psi g (14 bar g)	NEMA 4 and 7 (CandD) 115v/60Hz olding: 23 VA nrush: 45 VA ormally closed oar g) Maximum operating pressure		
Electric pilot options 140 psi g (10 bar g) Maximum operator pressure (for faster response time 230 volt coil		er response time)		

Typical applications

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

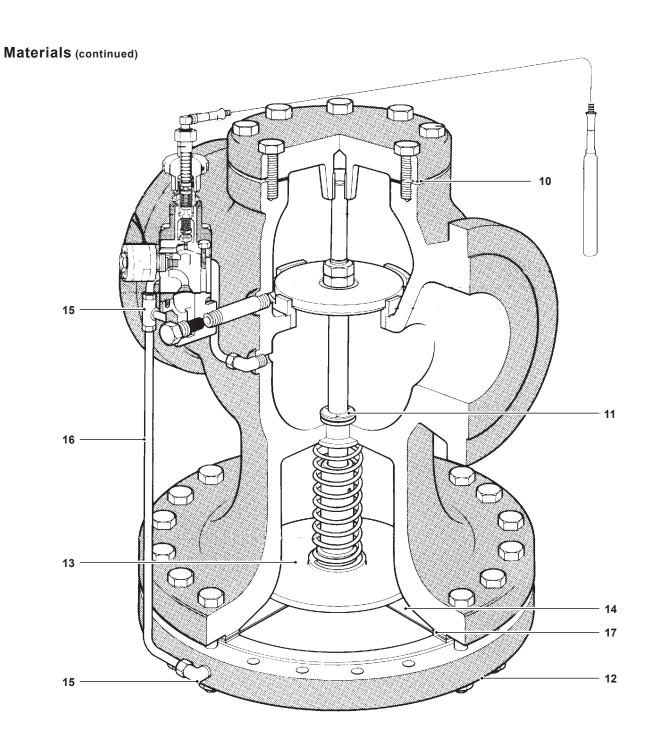


Materials



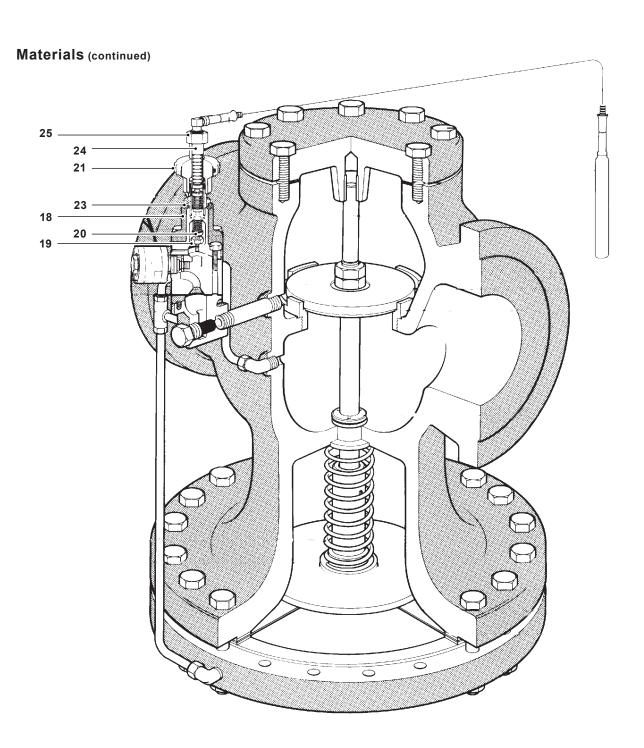
No.	Part	Material	
_	Value Dadu	Cast iron	ASTM A 126 CL B
1	1 Valve Body	Cast steel	ASTM A 216 WC B
	2 Cover	Cast iron	ASTM A 126 CL B
2		Cast steel	ASTM A 216 WC B
3	Cover Bolts	Steel	AISI 1038
4	Main Valve Head	Stainless steel	ASTM A 743 CA 40
5	Main Valve Seat	Stainless steel	ASTM A 743 CA 40
7	Valve Return Spring	Stainless steel	AISI 302
8	Valve Stem	Stainless steel	AISI 304

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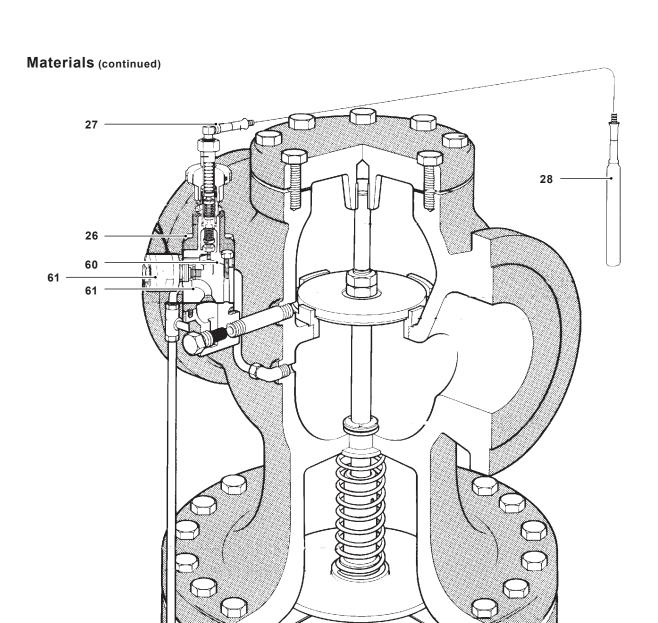
No.	Part	Material	
10	Cover Gasket	Graphite	BS 2815A
11	Stem Bushing	Stainless steel	
42	12 Lower Diaphragm Case	Cast iron	ASTM A 126 CL B
12		Cast steel	ASTM A 216 WC B
13	Diaphragm Plate	Stainless steel	ASTM A 743 CA 40
14	Main Diaphragm (2 ply)	Stainless steel	ASTM A240
15	Tube and Orifice	Brass	ASTM B16
16	Tubing Assembly	Copper	ASTM B280 (122)
17	Diaphragm Gasket	Graphite	BS 2815A

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No.	Part	Material	
40	18 Pilot Valve Body	Cast iron	ASTM A 126 CL B
16		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

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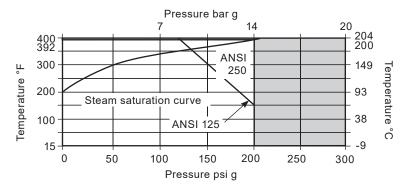


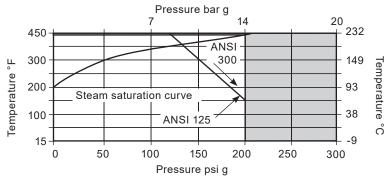
No.	Part	Material	
26	Pilot Mounting Screws	Steel 5/16"-18x1	ASTM A449
27	Capillary Tube	Varies with style selected	
28	Bulb	Varies with style selected	
29	Electric Pilot Adaptor	Cast iron	ASTM A126 CL B
60	Pilot Gasket	Graphite	
61	Electric Solenoid Valve		

Limiting operating conditions

Cast iron

Cast steel





The product **should not** be used in shaded area.

Standard temperature ranges

30 °F to 90 °F	(0 °C to 32 °C)
60 °F to 120 °F	(16 °C to 49 °C)
160 °F to 220 °F	(71 °C to 104 °C)
100 °F to 160 °F	(38 °C to 71 °C)
200 °F to 260 °F	(93 °C to 127 °C)
120 °F to 180 °F	(49 °C to 82 °C)
260 °F to 320 °F	(127 °C to 160 °C)

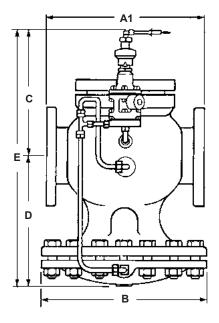
Cv values

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

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

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

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	17.2	17.1	34.3	595 lb
6	(460)	(480)	(502)	(437)	(434)	(871)	(270 kg)

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 4and7 (CandD) enclosure with 115v (230v) 60 Hz coil.

Capacities

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