



Pilot Operated Pressure Regulator 6" 25P

Description

The 25P is a self-actuated pilot-operated pressure regulator. Downstream pressure is fed back through an external sensing line to the pressure pilot, which adjusts the opening of the main valve so as to maintain the set pressure. The valve meets Class IV shut-off specifications but is not suitable for dead-end service.

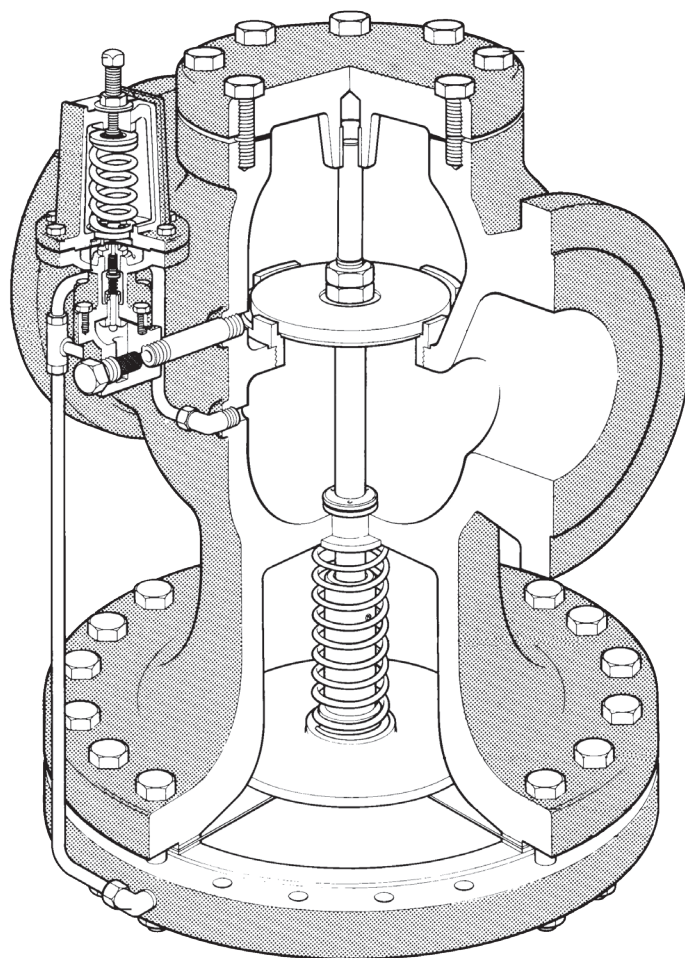
Typical applications

The 25P is a reliable, accurate regulator to reduce steam from a high supply pressure to the most efficient operating pressure of the equipment, and to protect the equipment from dangerously high pressures.

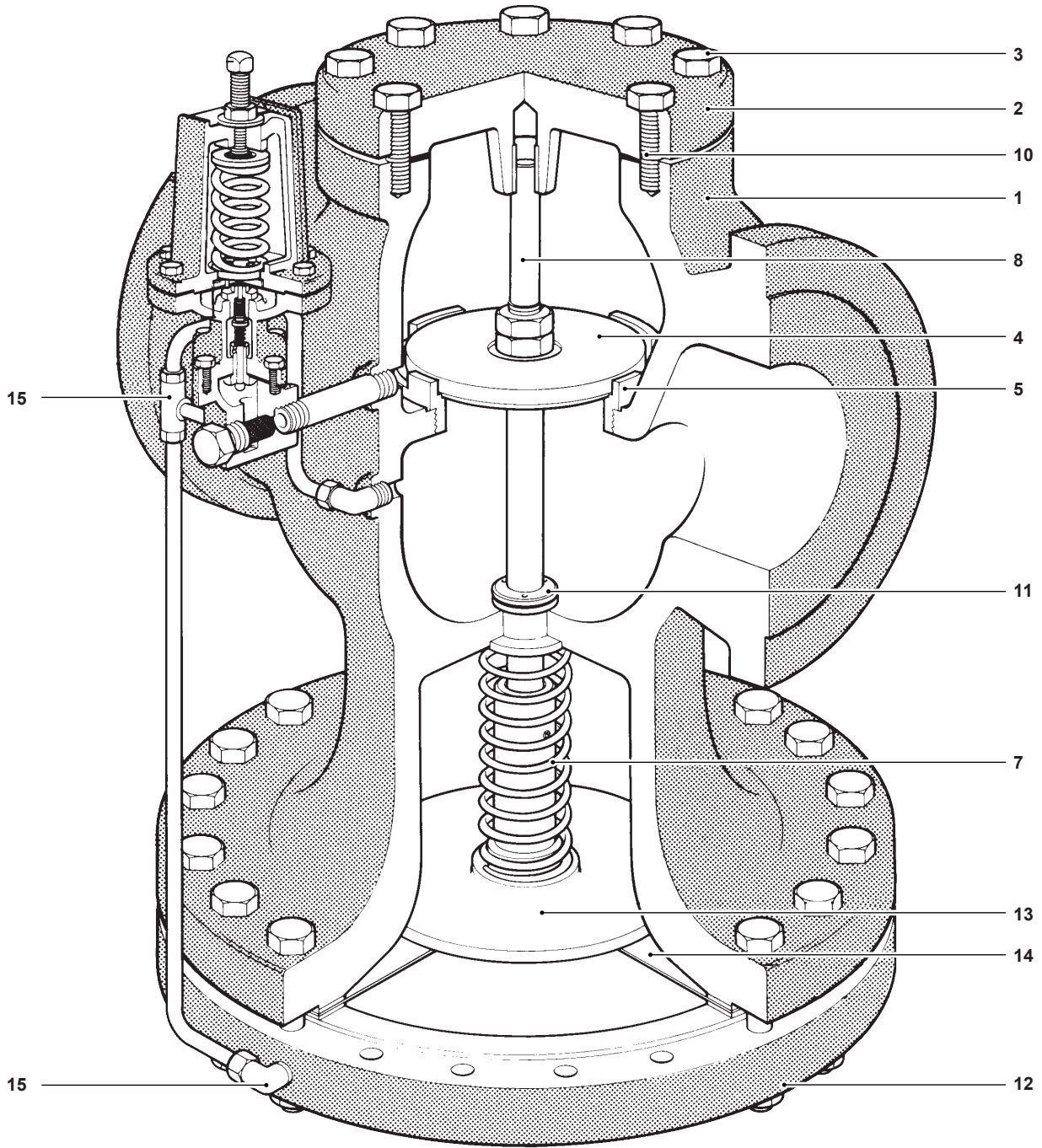
Model	25P	
Sizes	6"	
Connections	ANSI 125, 250	ANSI 150, 300
Construction	Cast iron	Cast steel
Options	Reduce orifice designated by "S"	

Capacities

For selection and sizing data, see TI-P717-08-US



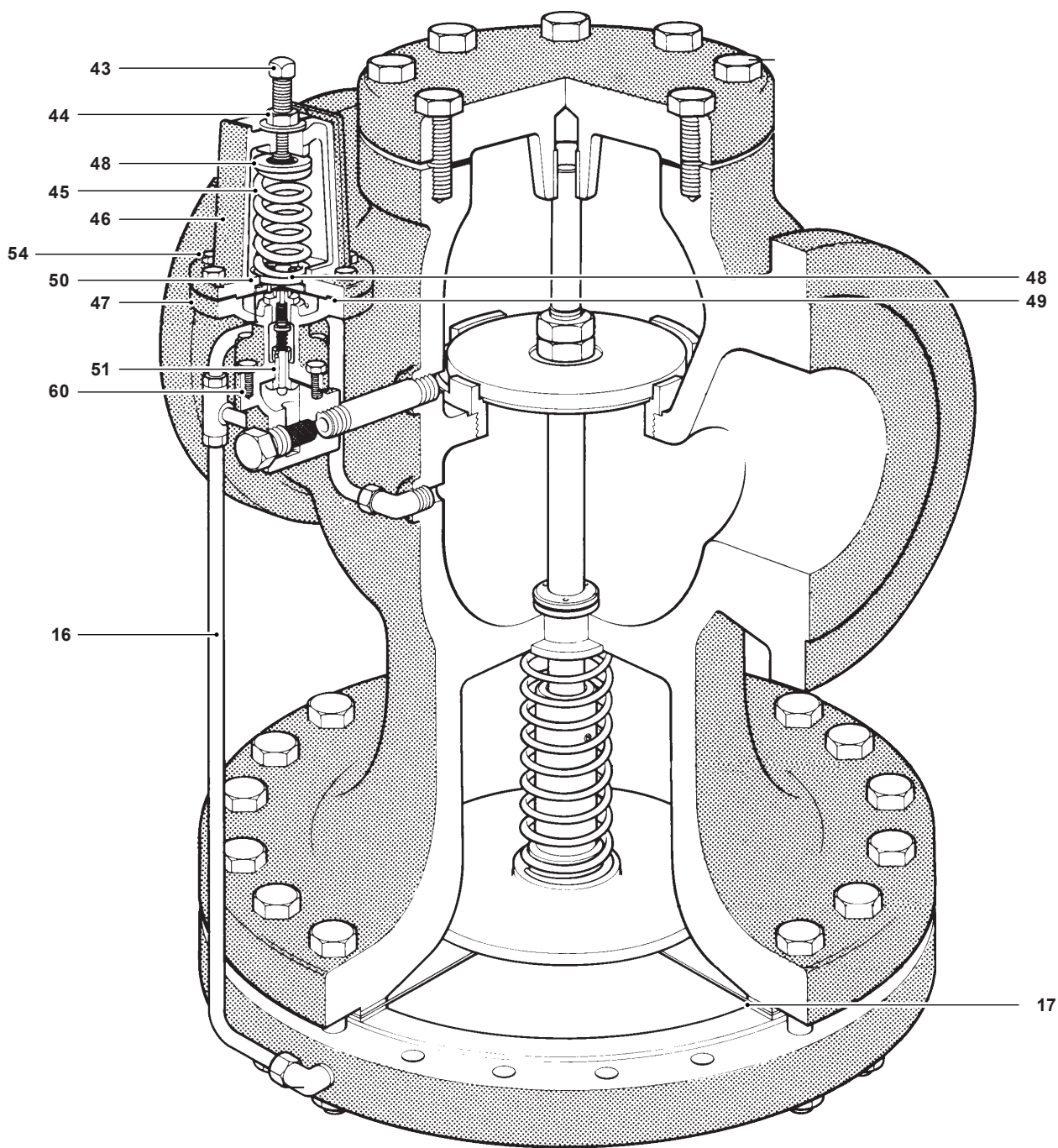
Materials



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

No.	Part	Material
8	Valve stem	Stainless steel AISI 304
10	Cover gasket	Graphite BS 2815 A
11	Stem bushing	Brass ASTM B16
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 AISI 301
15	Tube and orifice	Brass ASTM B16

Materials (continued)

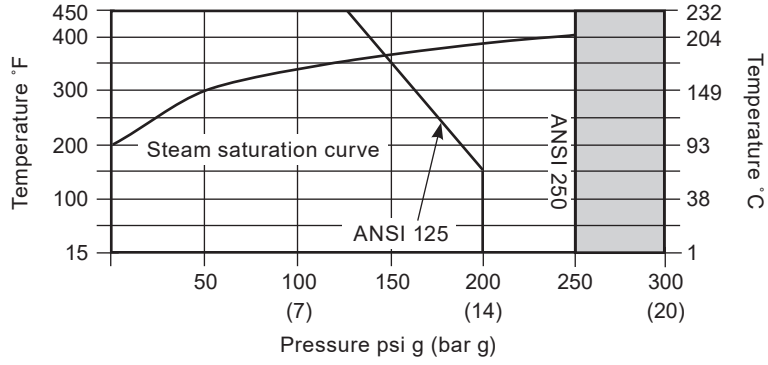


No.	Part	Material	
16	Tubing assembly	Copper	ASTM B280 (122)
17	Diaphragm gasket (2)	Graphite	BS 2815 A
43	Adjustment screw	Stainless steel	AISI 304
44	Jam nut	Brass	ASTM B16
45	Pilot valve Spring	Steel	AISI 1060
46	Upper diaphragm case	Cast iron	ASTM A 126 CL B
		Cast steel	ASTM A 216 WC B
47	Lower diaphragm case	Cast iron	ASTM A 126 CL B
		Cast steel	ASTM A 216 WC B

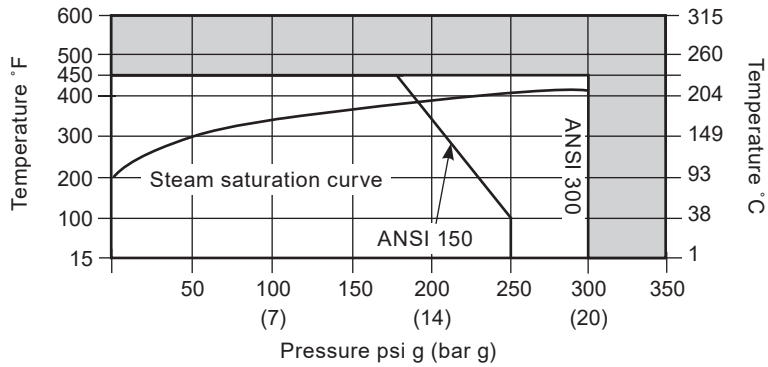
No.	Part	Material	
48	Spring plate	Steel	ASTM A569
49	Diaphragm	Stainless steel	ASTM A240
50	Diaphragm plate	Brass	ASTM B36
51	Head and seat assembly	Stainless steel	AISI 440
		Stainless steel	AISI 440F
54	Diaphragm case screws	Steel 3/16" - 18 x 1"	ASTM A449
60	Pilot gasket	Graphite	

Pressure/temperature limits

Cast Iron



Cast Steel



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

Note: Maximum temperature for Stainless Steel tubing is 600 °F (316 °C)

Downstream Pressure Ranges

For the following downstream pressures, three color-coded pilot valve springs are available:

Yellow	Blue	Red
3 to 30 psi (0.21 to 2.1 bar)	20 to 100 psi (1.4 to 6.9 bar)	80 to 250 psi (5.5 to 17.2 bar)

Cv values

Size	6" (DN150)	6" "S" (DN150 "S")
Cv value	280	156

Installation

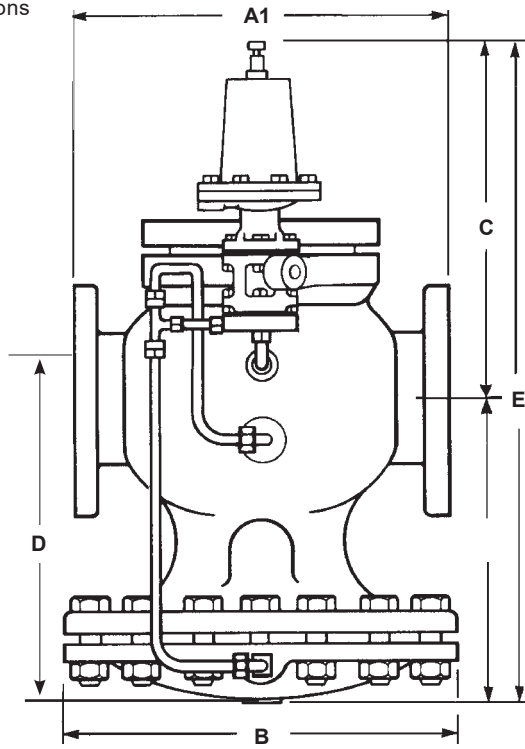
The regulator should be installed in a horizontal line with suitable bypass and isolating valves. A steam trap should be installed upstream to prevent condensate from reaching the regulator. The trap and regulator should both be protected with a strainer separator set. The pressure sensing line should be located in a straight section of the downstream piping at least 10 pipe diameters from the nearest fitting. Complete installation instructions are given in IM-3-000-US.

Maintenance

Complete maintenance instructions are given in IM-3-000-US and ADVP 3029, a copy of which is supplied with each regulator. Available spare parts are shown on TI-P335-11-US.

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

¼" NPT sensing line connections



Size	ANSI 125/150 A1	ANSI 250/300 A1	B	C	D	E	Weight
6" (DN150)	18.1 (460)	18.9 (480)	19.75 (502)	14.9 (378)	17.1 (434)	32.1 (815)	595 lb (270 kg)

Sample specification

The pressure regulator shall be of the pilot-actuated diaphragm operated type. The main valve shall be single-seated with hardened stainless steel trim; the regulator body shall be cast iron. The pilot shall be externally mounted to the regulator body.