



Pilot Operated Back Pressure Regulator 6" 25BP

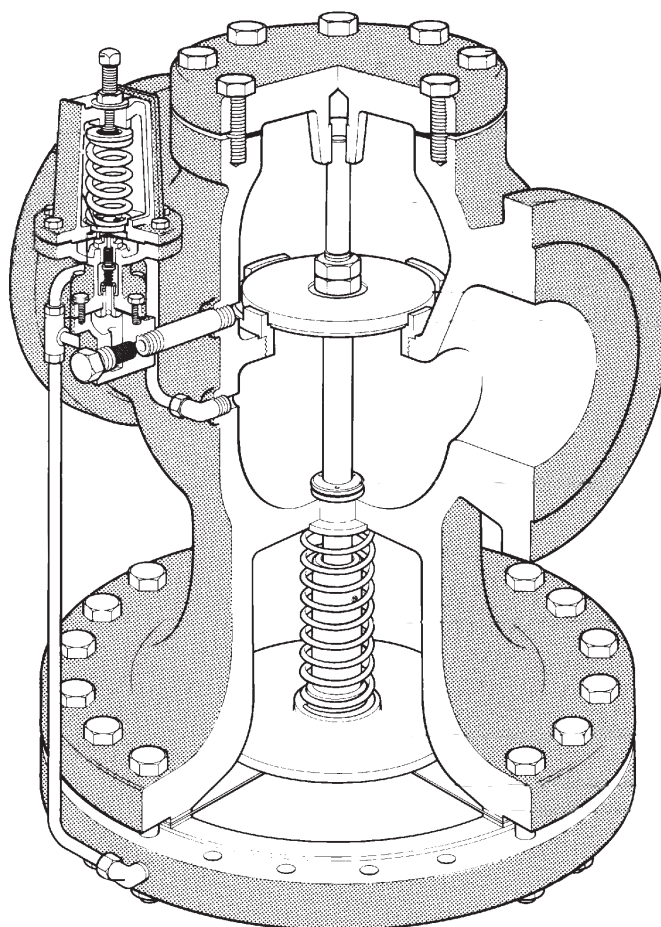
Description

The 25BP Back Pressure Regulator maintains a constant upstream pressure in a piping system. The reverse-acting pressure pilot opens the main valve when the sensed upstream pressure increases. The valve meets Class IV shut-off specifications but is not suitable for dead-end service. The 25BP is NOT a safety valve and should NEVER be used as such.

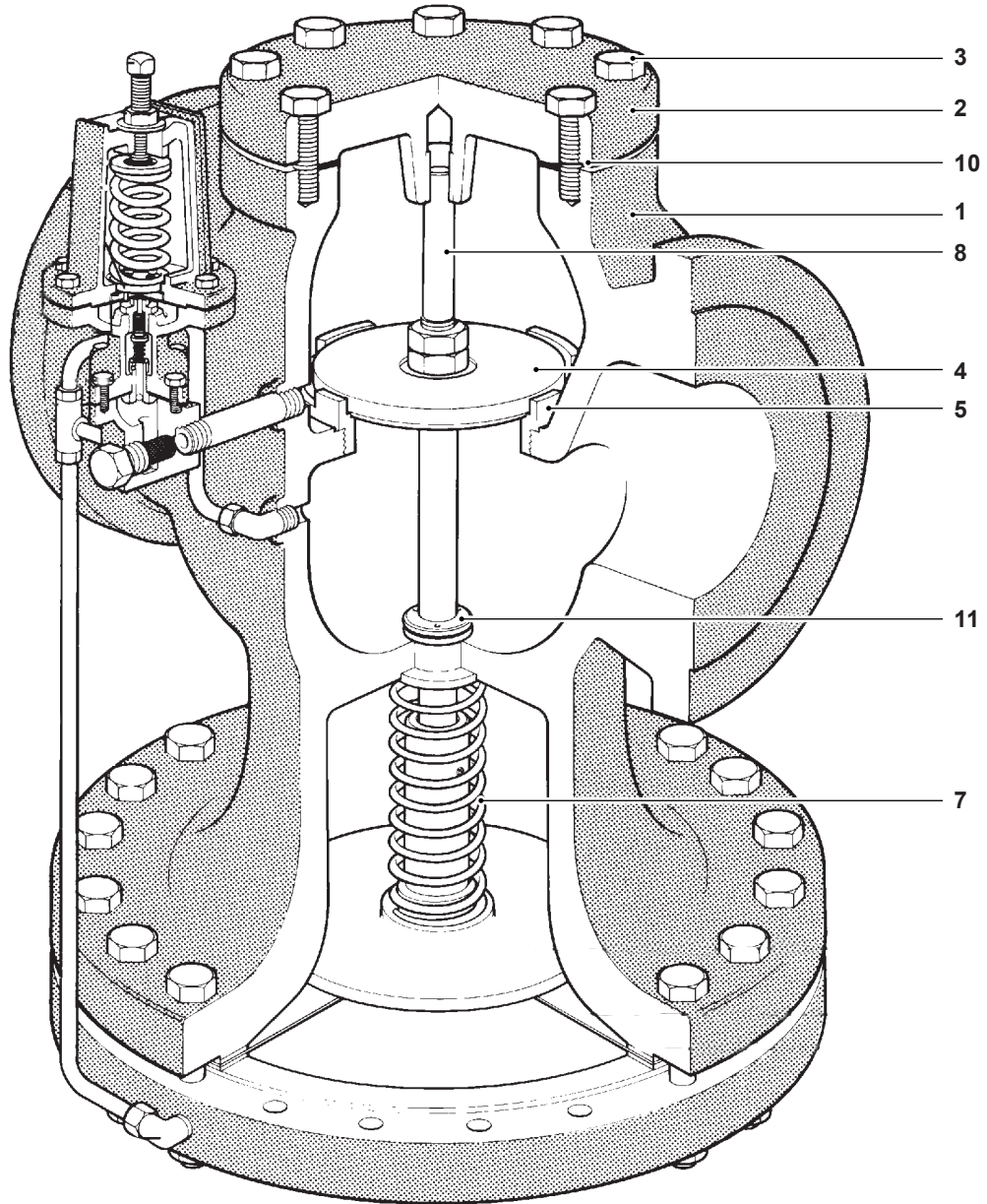
Typical applications

The modulated release of surplus steam so as to ensure that the set maximum pressure in the steam space or upstream piping will not be exceeded. Flash steam recovery systems to release excess flash steam so as to limit the flash tank pressure. For elimination of non-critical loads, see TI-P717-07-US

Model	25BP	
PMO	250 psi g (17 bar g)	
Sizes	6" (DN150)	
Connections	ANSI 125, 250	ANSI 150, 300
Construction	Cast iron	Cast steel
Options	Reduced Orifice Designated by "S"	

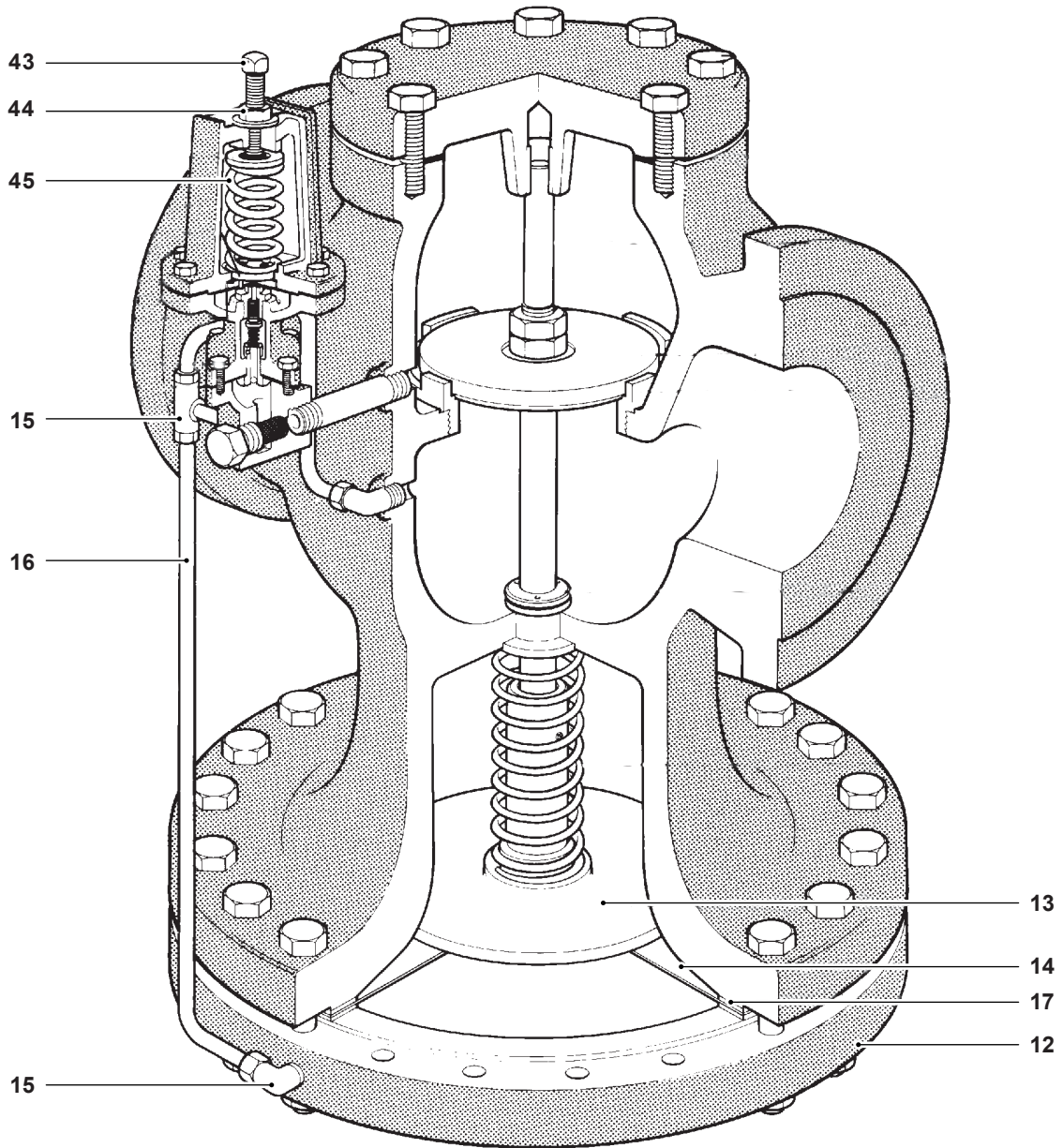


Materials



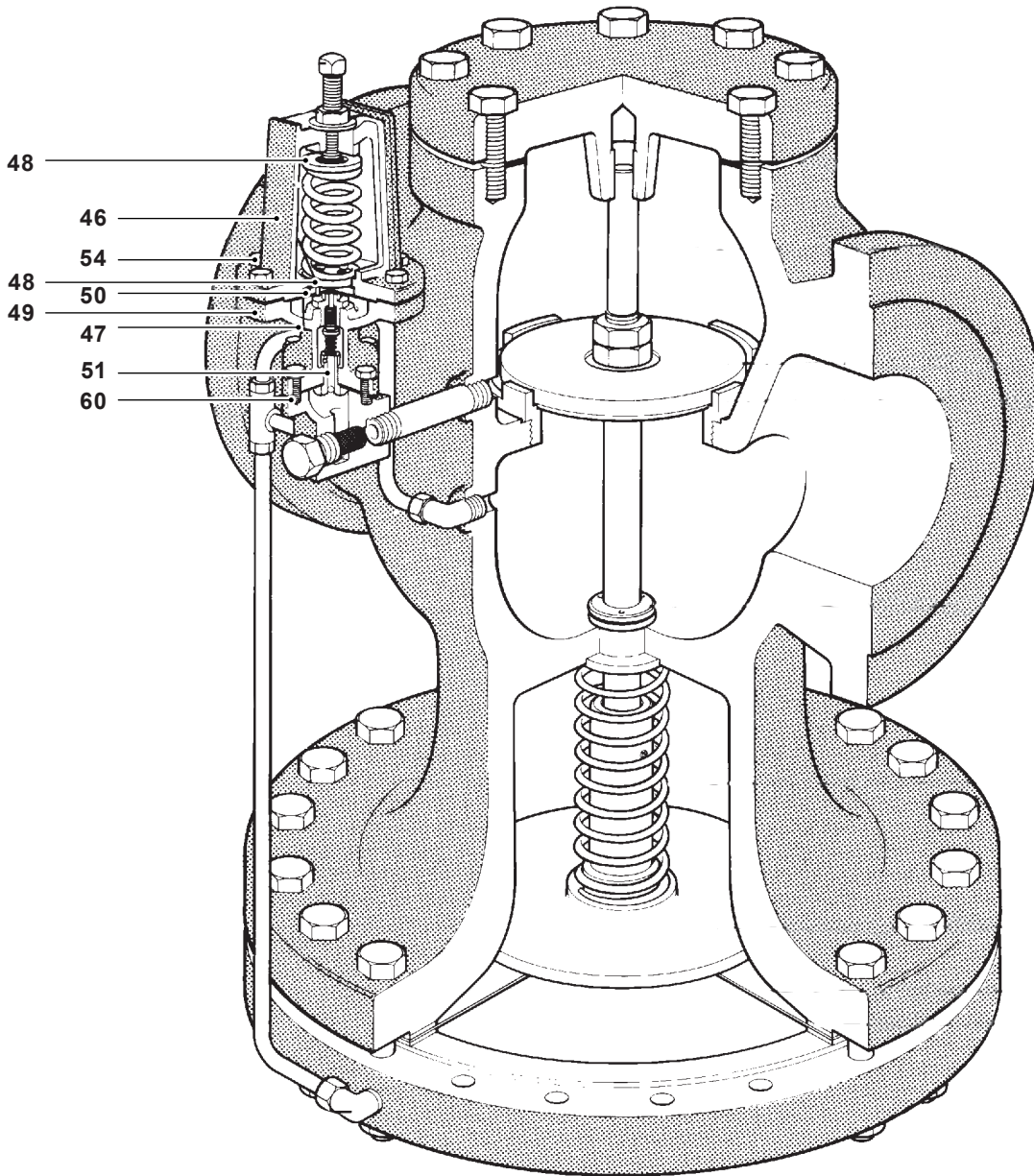
No.	Part	Material	
1	Valve Body	Cast iron	ASTM A 126 CL B
		Cast steel	ASTM A 216 WC B
2	Cover	Cast iron	ASTM A 126 CL B
		Cast steel	ASTM A 216 WC B
3	Cover Bolts	Steel	AISI 1038
4	Main Valve Head	Stainless steel	ASTM A 743 CA 40
5	Main Valve Seat	Stainless steel	ASTM A 743 CA 40
7	Valve Return Spring	Stainless steel	AISI 302
8	Valve Stem	Stainless steel	AISI 304
10	Cover Gasket	Graphite	BS 2815 A
11	Stem Bushing	Brass	ASTM B16

Materials (continued)



No.	Part	Material	
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 (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

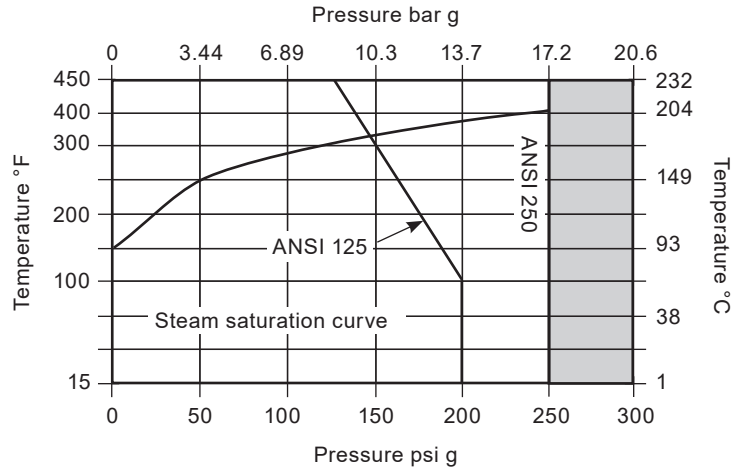
Materials (continued)



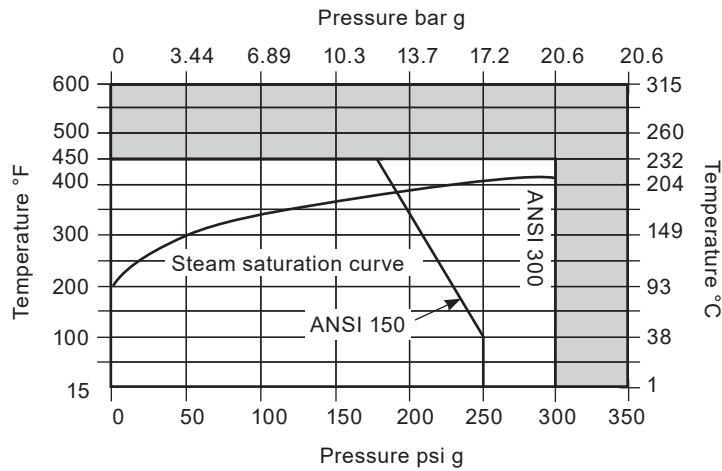
No.	Part	Material	
46	Upper Diaphragm Case	Cast iron	ASTM A 126 CL B
		Cast steel	ASTM A 216 WC B
47	Lower Diaphragm Case	Cast iron	ASTM A 126 CL B
		Cast steel	ASTM A 216 WC B
48	Spring Plate	Steel	ASTM A569
49	Diaphragm	Stainless steel	ASTM A240
50	Diaphragm Plate	Brass	ASTM B36
51	Head & Seat Assembly	Stainless steel	AISI 440
		Stainless steel	AISI 440F
54	Diaphragm Case Screws	Steel 5/16" - 18 x 1"	ASTM A449
60	Pilot Gasket	Graphite	

Limiting operating conditions

Cast iron



Cast steel



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

Upstream pressure ranges

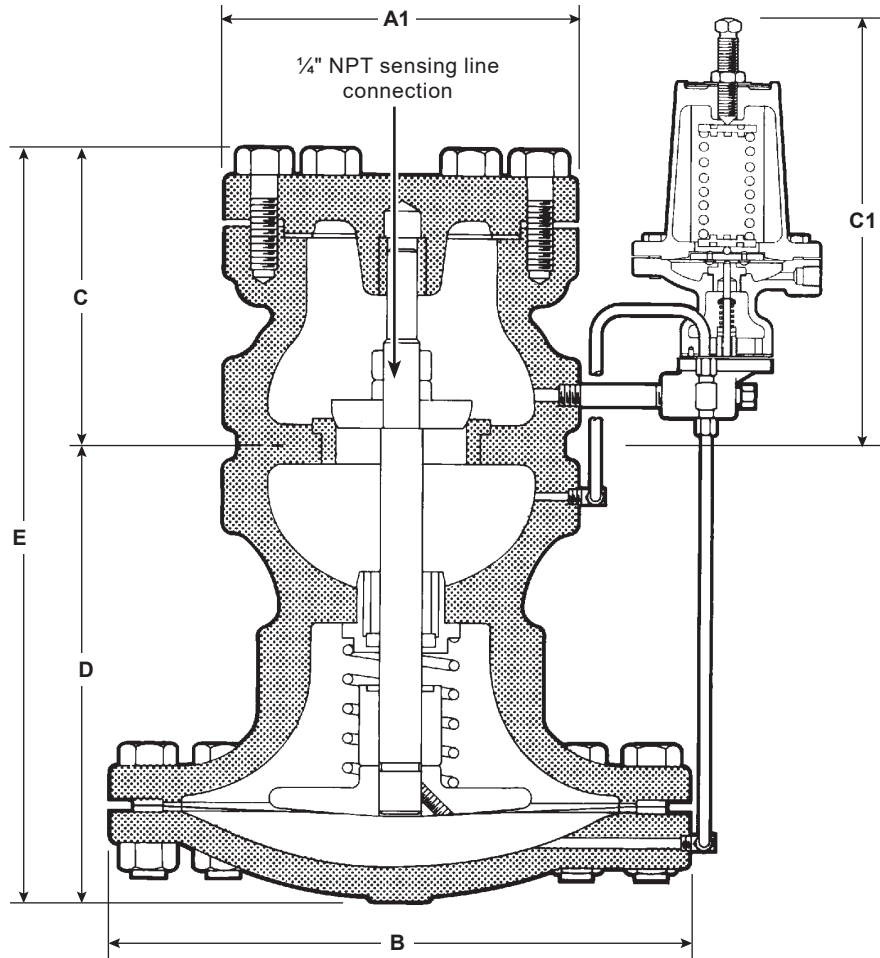
For the following upstream pressures, three color-coded pilot valve springs are available:

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"	6" "S"
Cv value	280	156

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



Size	ANSI 125/150	ANSI 250/300	B	C	C1	D	E	Weight
	A1	A1						
6"	18.1 (459)	18.9 (481)	19.75 (502)	9.2 (233)	11.4 (289)	17.1 (435)	28.5 (724)	595 lb (270 kg)

Capacities

For selection and sizing data, see TI-P717-07-US.

Sample specification

The back pressure regulator 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

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 either in the upstream piping, or in the steam space. Complete installation instructions are given in IM-3-023-US.

Maintenance

Complete installation and maintenance instructions are given in IM-3-023-US and ADVP 3029, a copy of which is supplied with each regulator. Available spare parts are shown on TI-P335-11-US and TI-P717-08-US.