



SUBMITTAL DATA

Date: March 26, 2025
Project: UAMS -Center for Animal Models of Infection and Disease
Contractor: Comfort Systems, USA (Arkansas)
Engineer: Clark & Enersen

SPIRAX/SARCO STEAM SPECIALTIES

Qty of (1) 2-1/2" Model 25 PRV with pilot (Blue Spring) (Tagged: SPR-1)
Qty of (1) 2" Model 25 PRV with pilot (Yellow Spring) (Tagged: SPR-2)
Qty of (1) 2" FTB-20 Steam Trap (Tagged: T-1)
Qty of (1) 3/4" FT-15 Steam Trap (Tagged: T-2)
Qty of (1) 3/4" FT-15 Steam Trap (Tagged: T-3)
Qty of (1) 3/4" B1H-15 Steam Trap (Tagged: T-4)
Qty of (1) 3/4" B1H-15 Steam Trap (Tagged: T-5)
Qty of (1) 3/4" FT-75 Steam Trap (Tagged: T-6)
Qty of (1) 3/4" FT-75 Steam Trap (Tagged: T-7)

Drip leg traps shown on M5.04 Schematic

Qty of (1) 3/4" FT-125 Steam Trap (Hi Pressure Drip Before SPR-1)
Qty of (1) 3/4" FT-75 Steam Trap (Medium Pressure Drip Before SPR-2)
Qty of (1) 3/4" FT-15 Steam Trap (Medium Pressure Drip After SPR-2)
Qty of (1) 3/4" FT-15 Steam Trap (Tagged: E shown on sheet M5.04 end of main)

6815 Dewaffelbaker Dr., Maumelle, AR 72113

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Pilot Operated Pressure Regulator 1/2" to 4" 25P

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 main valve can close tight for ANSI/FCI 70-2 Class IV shut off when steam is not required.

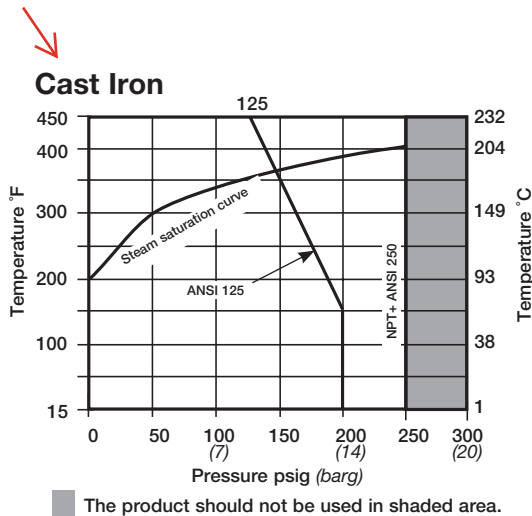
Model	25P			
Sizes	1/2" to 2"	2 1/2", 3", 4"	1/2" to 2"	2", 2 1/2", 3", 4"
Connections	NPT	ANSI 125 flgd.	NPT	ANSI 300 flgd.
Construction	Cast Iron		Cast Steel	
Options		ANSI 250 flgd.		ANSI 150 flgd. (excludes 2")

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.

Capacities

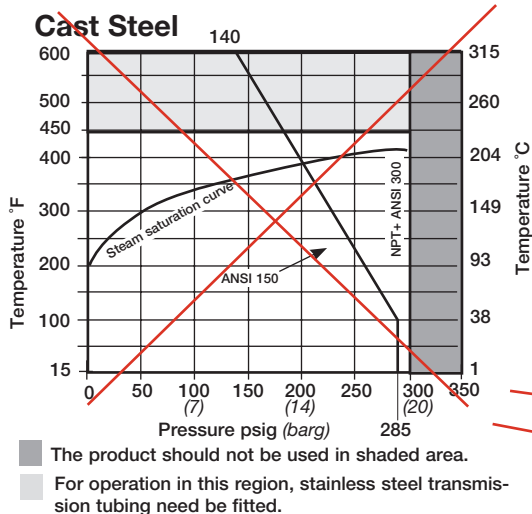
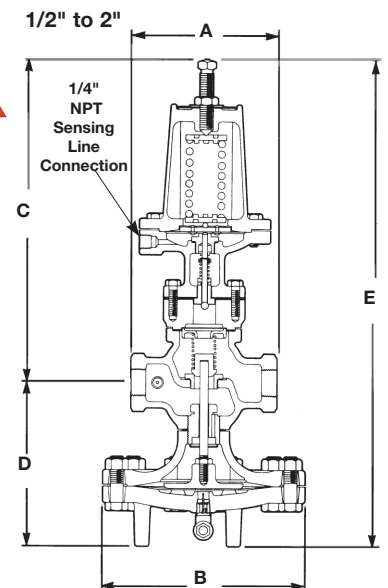
For selection and sizing data, see TIS 3.030.



Downstream Pressure Ranges

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

- Yellow: 3 to 30 psi
- Blue: 20 to 100 psi
- Red: 80 to 250 psi



Note: Maximum temperature for Stainless Steel tubing is 600°F

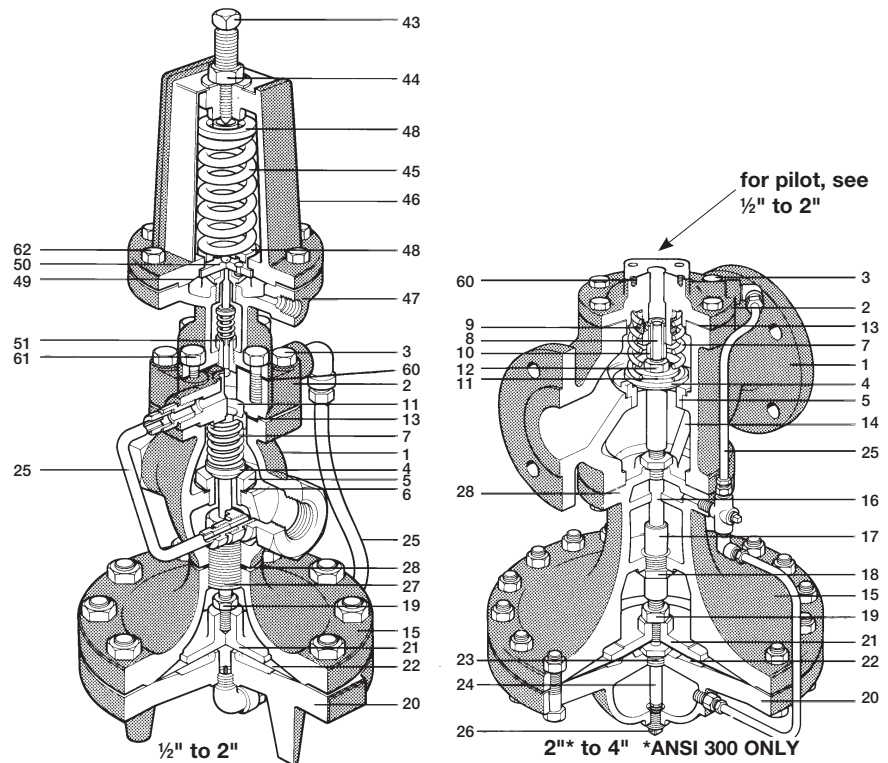
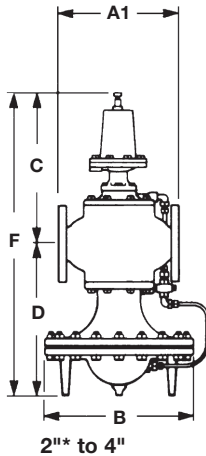
Dimensions (nominal) in inches and millimeters									
	ANSI 125 ANSI 150		ANSI 250 ANSI 300					Weight	
Size	A	A1	A1	B	C	D	E	Cast Iron	Cast Steel
½", ¾"	5.5 140	–	–	7.6 194	12.2 310	6.2 157	18.4 467	32 lb 14.5 kg	35 lb 15.9 kg
1"	6.0 152	–	–	8.6 219	12.1 308	6.75 171	18.9 479	39 lb 17.7 kg	43 lb 19.5 kg
1¼", 1½"	7.25 184	–	–	8.6 219	12.7 322	7.1 179	19.75 502	44 lb 20 kg	48 lb 21.8 kg
2"	8.5 216	–	9.0 228	10.6 270	13.3 338	8.2 208	21.5 546	69 lb 31.3 kg	75 lb 34 kg
2½"	– –	10.9 276	11.5 292	13.6 346	14.0 356	13.9 354	27.9 710	157 lb 71.2 kg	171 lb 77.6 kg
3"	– –	11.75 298	12.5 318	13.6 346	13.9 354	14.4 367	28.4 721	188 lb 85.3 kg	205 lb 93 kg
4"	– –	13.9 352	14.5 368	15.6 397	15.25 387	16.1 410	31.4 797	284 lb 129 kg	309 lb 140 kg

Pilot Operated Pressure Regulator

1/2" to 4" 25P

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 (cast steel). The pilot shall be bolted directly to the regulator body. The regulator shall be capable of dead-end shut-off.



Construction Materials

No.	Part	Material	
1	Valve Body	Cast Iron	ASTM A 126 CL B
		Cast Steel	ASTM A216 Gr WCB
2	Cover	Cast Iron	ASTM A 126 CL B
		Cast Steel	ASTM A216 Gr WCB
3	Cover Bolts	Steel	ASTM A449
4	Main Valve Head	Stainless Steel	
5	Main Valve Seat	Stainless Steel	
6	Main Valve Seat Gasket	Copper	
7	Valve Return Spring	Stainless Steel	
8	Valve Stem	Stainless Steel	
9	Strainer Screen	Stainless Steel	
10	Valve Stem Sleeve	Stainless Steel	
11	Spring Guide	Cast Iron 1/2"-2"	
		CRS 2" - 4"	
12	Nut	Steel	
13	Cover Gasket	Graphite	
14	Pressure Equalizer Pipe	Stainless Steel	
15	Upper Diaphragm Case	Cast Iron	ASTM A 126 CL B
		Cast Steel	ASTM A216 Gr WCB
16	Stem Bushing (2 1/2" - 4" Cast Steel only)	Stainless Steel	
17	Diaphragm Plate Stem	Stainless Steel	
18	Diaphragm Stem Guide	Stainless Steel	
19	Nut	Brass 1/2" - 2"	
		Steel 2" - 4"	
20	Lower Diaphragm Case	Cast Iron	ASTM A 126 CL B
		Cast Steel	ASTM A216 Gr WCB
21	Diaphragm Plate	Brass 1/2" - 2"	
		C.I. 2" - 4"	
22	Main Diaphragm (2 ply)	Stainless Steel	
23	Bushing	CRS	
24	Tube & Orifice	Stainless Steel	
25	Tubing Assembly	Copper	
		Brass	
	(optional for cast steel)	Stainless Steel	

No.	Part	Material	
26	Plug (Cast Iron)	Brass	
		(Cast Steel)	Steel
27	Connector Stud	Stainless Steel	
28	Body Gasket	1/2" - 2" Copper Clad	
		2" - 4" Graphite	
43	Adjustment Screw	Stainless Steel	
44	Jam Nut	Brass	
45	Pilot Valve Spring	Steel	
46	Upper Diaphragm Case	Cast Iron	ASTM A 126 CL B
		Cast Steel	ASTM A216 Gr WCB
47	Lower Diaphragm Case	Cast Iron	ASTM A 126 CL B
		Cast Steel	ASTM A216 Gr WCB
48	Spring Plate	Steel	
49	Diaphragm	Stainless Steel	
50	Diaphragm Plate	Brass	
51	Pilot Head Spring	Stainless Steel	
60	Pilot Gasket	Graphite	
61	Pilot Mounting Screws	Steel	
62	Diaphragm Case Screws	Steel	ASTM A449

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. 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 installation and maintenance instructions are given in IM-3-000-US, a copy of which is supplied with each regulator. Available spare parts are shown on TI-1-1120-US & TI-3-0271-US.

TI-3-015-US 4.12

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Sizing and Selection Chart 25P, 25PE, 25PA, and all Combinations

Capacities		NOMINAL VALVE SIZE									
Inlet Steam Pressure psig	Outlet Steam Pressure psig										
		1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"
C.V. Factors I		3.48	6.5	10.5	14	20	35	56	74	115	280
15	10	95	175	285	380	540	950	1,500	2,000	3,100	7,140
	5	135	250	405	545	780	1,365	2,185	2,890	4,480	10,373
	3	155	285	465	620	880	1,550	2,470	3,260	5,080	11,669
20	12	120	230	365	490	700	1,225	1,960	2,590	4,025	9,282
	8	155	290	470	630	900	1,575	2,520	3,330	5,175	11,934
	0-5	180	335	540	720	1,025	1,795	2,870	3,790	5,895	13,592
25	15	145	270	435	580	830	1,450	2,325	3,070	4,770	11,006
	10	195	360	580	775	1,110	1,950	3,110	4,110	6,385	14,719
	0-7	205	385	620	825	1,180	2,065	3,305	4,360	6,785	15,647
30	20	155	290	470	630	900	1,575	2,520	3,330	5,175	11,934
	15	220	410	665	890	1,270	2,220	3,555	4,700	7,300	16,840
	0-12	230	430	695	925	1,320	2,310	3,695	4,885	7,590	17,503
40	30	155	290	470	630	900	1,575	2,520	3,330	5,175	11,934
	25	250	470	755	1,010	1,440	2,520	4,030	5,330	8,280	19,094
	0-18	280	525	850	1,135	1,620	2,835	4,535	5,995	9,315	21,481
50	40	190	355	575	770	1,100	1,925	3,080	4,070	6,325	14,586
	30	315	585	955	1,275	1,820	3,185	5,095	6,735	10,465	24,133
	0-21	350	650	1,050	1,400	2,000	3,500	5,600	7,400	11,500	26,520
60	45	280	520	840	1,120	1,600	2,800	4,480	5,920	9,200	21,216
	35	360	670	1,080	1,440	2,060	3,605	5,770	7,620	11,845	27,316
	0-27	385	720	1,165	1,555	2,220	3,885	6,215	8,215	12,765	29,437
75	60	280	525	850	1,135	1,620	2,835	4,535	5,995	9,315	21,481
	50	415	775	1,250	1,665	2,380	4,165	6,665	8,800	13,685	31,559
	0-35	470	875	1,415	1,890	2,700	4,725	7,560	9,990	15,525	35,802
85	70	290	540	870	1,160	1,660	2,905	4,650	6,140	9,545	22,012
	50	490	915	1,480	1,965	2,820	4,935	7,895	10,435	16,215	37,393
	0-43	515	960	1,555	2,070	2,960	5,180	8,290	10,950	17,020	39,250
100	80	370	690	1,115	1,485	2,120	3,710	5,935	7,845	12,190	28,111
	60	580	1,080	1,740	2,325	3,320	5,810	9,295	12,285	19,090	44,023
	0-48	600	1,120	1,815	2,420	3,460	6,055	9,690	12,800	19,895	45,900
125	100	440	825	1,335	1,780	2,540	4,445	7,110	9,400	14,600	33,660
	80	680	1,275	2,060	2,745	3,920	6,860	10,975	14,500	22,540	51,979
	0-62	730	1,365	2,200	2,940	4,200	7,350	11,760	15,540	24,150	55,692
150	125	490	910	1,470	1,960	2,800	4,900	7,840	10,360	16,100	37,128
	100	800	1,490	2,400	3,205	4,580	8,015	12,825	16,945	26,335	60,731
	0-76	860	1,600	2,590	3,460	4,940	8,645	13,830	18,280	28,400	65,504
175	150	490	915	1,480	1,975	2,820	4,935	7,895	10,435	16,125	37,393
	125	870	1,630	2,635	3,515	5,020	8,785	14,055	18,570	28,865	66,565
	0-87	985	1,840	2,970	3,960	5,660	9,900	15,850	20,950	32,545	75,052
200	150	840	1,600	2,540	3,390	4,840	8,470	13,550	17,900	27,830	67,238
	125	1,075	2,000	3,240	4,330	6,180	10,815	17,300	22,870	35,530	81,947
	0-103	1,125	2,100	3,390	4,520	6,460	11,300	18,000	23,900	37,145	85,660
225	175	840	1,650	2,670	3,560	5,080	8,890	14,225	18,800	29,210	67,320
	150	1,160	2,180	3,500	4,660	6,660	11,655	18,650	24,640	38,300	88,332
	0-117	1,250	2,340	3,780	5,000	7,200	12,600	20,160	26,640	41,400	95,472
250	200	925	1,730	2,790	3,720	5,320	9,300	14,900	19,680	30,600	70,584
	150	1,340	2,500	4,050	5,400	7,720	13,500	21,600	28,600	44,400	102,367
	0-131	1,385	2,590	4,180	5,570	7,960	13,930	22,300	29,450	45,800	105,570
*273	225	880	1,640	2,650	3,530	5,050	8,830	14,130	18,670	29,000	
	200	1,240	2,320	3,750	4,990	7,130	12,480	19,960	26,400	41,000	
	0-145	1,510	2,830	4,570	6,090	8,700	15,230	24,360	32,200	50,000	
*300	250	920	1,720	2,780	3,700	5,290	9,250	14,800	19,600	30,400	
	225	1,250	2,330	3,770	5,020	7,170	12,550	20,100	26,500	41,300	
	0-160	1,640	3,070	4,960	6,600	9,440	16,520	26,400	34,900	54,300	

Capacities are based on an accuracy regulation of 1 PSI and with pipe sizes to insure reasonable velocities. Refer to pipe sizing chart. * Cast steel construction required for service above 250 psig

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.

TI-3-030-US 07.18

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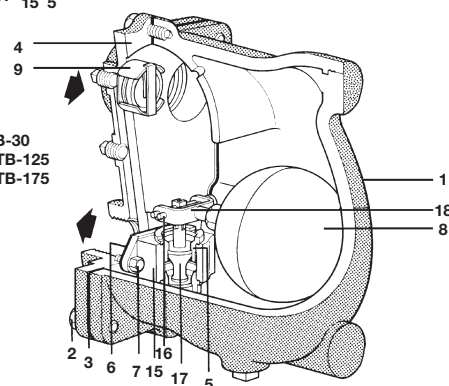
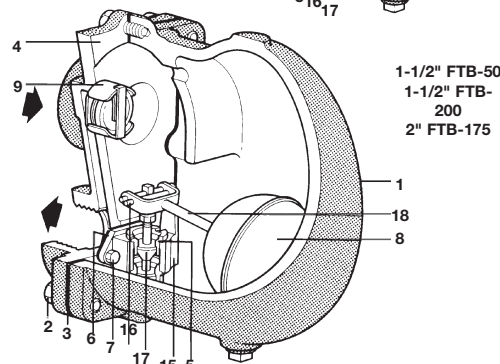
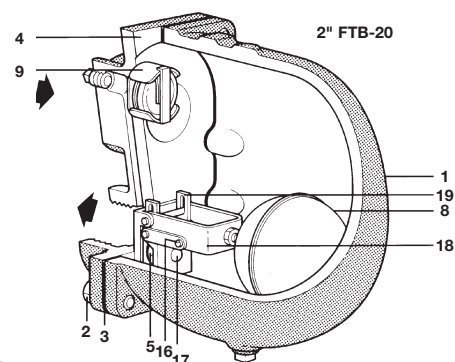
Cast Iron Float & Thermostatic Steam Traps FTB Super Capacity Series

The trap contains a float valve mechanism which modulates to discharge condensate continuously at steam temperature. Non-condensable gases are released by a separate internal balanced pressure thermostatic air vent.

Model	FTB-20	FTB-30	FTB-50	FTB-125	FTB-175	FTB-200
PMO	20 psig	30 psig	50 psig	125 psig	175 psig	200 psig
Sizes	2"	2"	1-1/2"	2-1/2"	2", 2-1/2"	1-1/2"
Connections	NPT					
Construction	Cast Iron Body Stainless Steel Internals					
Options	Gauge glass, Vacuum Breaker					

Typical Applications

All process heat exchange equipment, particularly when controlled by modulating temperature control valves; unit heaters and air heating coils.



Construction Materials

No.	Part	Material
1	Body	Cast Iron ASTM A126 CL B
2	Cover Screws	Carbon Steel ASTM A449 Type 1
3	Cover Gasket	Graphite
4	Cover	Cast Iron ASTM A126 CL B
5	Valve Seat	Stainless Steel
6	Valve Seat Gasket	Stainless Steel (FTB-20)
7	Valve Assembly Gasket	Graphite
8	Main Valve	Stainless Steel
9	Assembly Screws	ASTM A193 Grade B8
10	Ball Float	Stainless Steel
11	Air Vent Assembly	Stainless Steel
12	Air Vent Head	Stainless Steel
13	Air Vent Seat	Stainless Steel
14	Main Valve Assy Housing	Stainless Steel
15	Pivot Pin	Stainless Steel
16	Valve Head	Stainless Steel (FTB-20, 175, 200)
17		Cast Stainless Steel (FTB-30, 125, 200)
18	Float Arm	Stainless Steel
19	Seat Bracket	Stainless Steel (FTB-20)
20	Head Bracket, Stop, Link	Stainless Steel (FTB-20)

For Capacities, see TI-2-317-US

Limiting Operating Conditions

Max. Operating Pressure (PMO)	FTB-20: 20 psig (1.4 barg)	FTB-30: 30 psig (2.1 barg)	FTB-50: 50 psig (3.4 barg)	FTB-125: 125 psig (8.6 barg)	FTB-175: 175 psig (12.1 barg)	FTB-200: 200 psig (14.0 barg)
Max. Operating Temperature	450°F @ 200 psig					

Pressure Shell Design Conditions

PMA	FTB-125	175 psig/up to 450°F	12.1 barg/up to 232°C
Max. allowable temp.	FTB-175	200 psig/up to 450°F	14 barg/up to 232°C
	FTB-200	125 psig/up to 450°F	8.6 barg/up to 232°C
TMA	FTB-20	450° F/0-175 psig	232°C/0-12.1 barg
Max. allowable temp.	FTB-175	450° F/0-125 psig	232°C/0-8.6 barg
	FTB-30	450° F/0-200 psig	
	FTB-50		
	FTB-200		

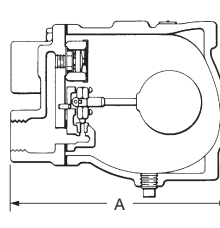
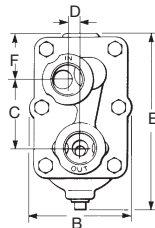
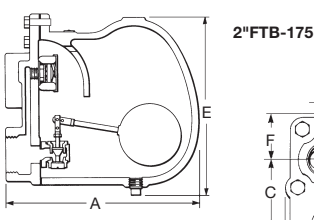
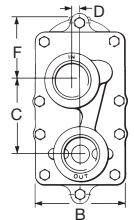
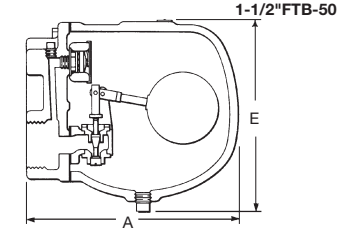
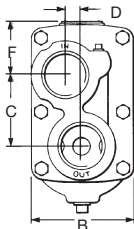
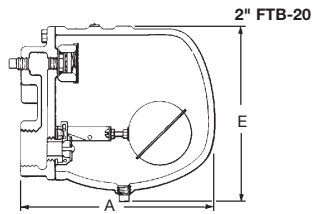
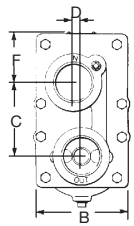
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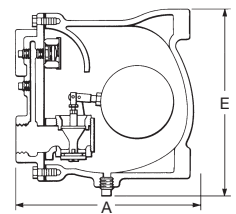
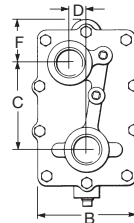
TI-2-315-US 4.12

Cast Iron Float & Thermostatic Steam Traps

FTB Super Capacity Series



1-1/2" FTB-200



2" FTB-30, 2-1/2" FTB-125 & 175

Dimensions (nominal) in inches and millimeters

Type & Size	A	B	C	D	E	F	Weight
FTB-20 2"	12.2 309	5.9 149	4.5 114	0.5 13	10.7 271	3 76	43 lb 19.5 kg
FTB-30 2"	15.25 387	9.25 235	7.25 184	1.4 35	15.6 397	3.75 95	89 lb 40.4 kg
FTB-50 1-1/2"	8.8 224	4.25 108	3 76	0.68 17	8.3 211	2.5 64	22 lb 10.0 kg
FTB-125 2-1/2"	15.6 390	9.25 235	7.25 184	1.4 35	15.6 397	3.75 95	90 lb 40.8 kg
FTB-175 2"	12.1 306	5.9 149	4.5 114	0.5 13	11.8 300	4 102	48 lb 21.8 kg
FTB-175 2-1/2"	15.4 390	9.25 235	7.25 184	1.4 35	15.6 397	3.75 95	90 lb 40.8 kg
FTB-200 1-1/2"	10.8 273	5.8 146	3 76	0.6 14	9.1 232	2.3 64	31 lb

Installation

A pipeline strainer should be installed ahead of any steam trap. Full-port isolating valves should be placed to permit servicing. The trap should be installed below the drainage point of the equipment with a collecting leg before the trap, in a position with the float arm in a horizontal plane so that the float rises and falls vertically, and with the direction of flow as indicated on the cover. Refer to IM-2-300-US for complete instructions.

Maintenance

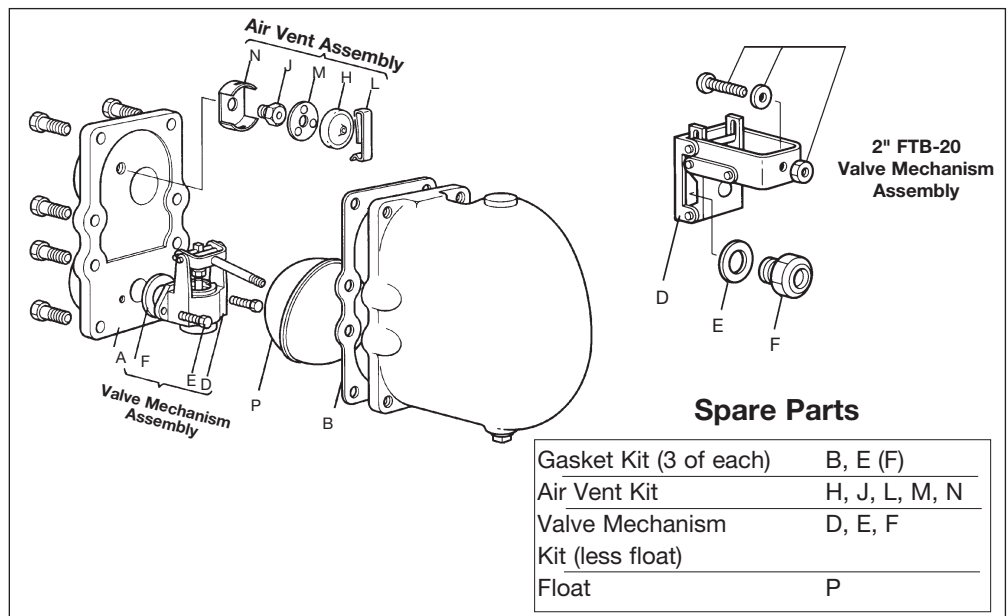
This product can be maintained without disturbing the piping connections. Complete isolation from both supply and return line is required before any servicing is performed.

The trap should be disassembled periodically for inspection and cleaning of the valve head and seat, and operating mechanism. Worn or damaged parts should be replaced using a complete valve mechanism assembly and/or air vent assembly.

Complete installation and maintenance instructions are given in IM-2-300-US, which accompanies the product.

Sample Specification

Steam traps shall be of the mechanical float type having cast iron bodies, NPT connections, and stainless steel valve heads and seats. Incorporated into the trap body shall be a stainless steel balanced pressure thermostatic air vent capable of withstanding 450°F and resisting waterhammer without sustaining damage. Internals of the trap shall be completely servicable without disturbing the piping.



Spare Parts

Gasket Kit (3 of each)	B, E (F)
Air Vent Kit	H, J, L, M, N
Valve Mechanism Kit (less float)	D, E, F
Float	P

TI-2-315-US 4.12

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Cast Iron Float & Thermostatic Steam Traps

→ FT-15, FT-30, FT-75, FT-125 ←

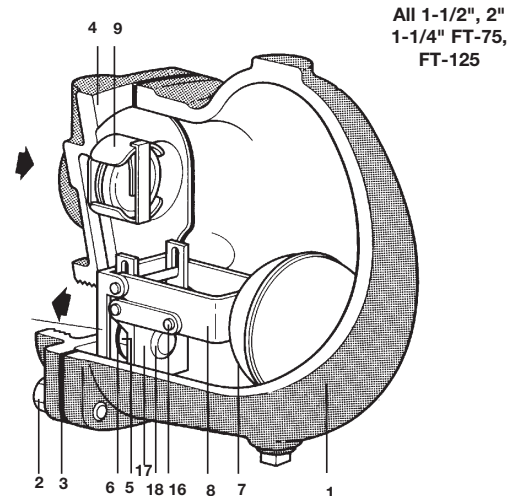
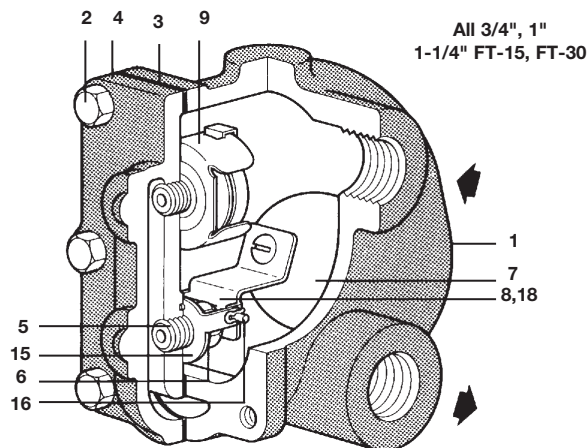
The trap contains a float valve mechanism which modulates to discharge condensate continuously at steam temperature, while non-condensable gases are released by a separate internal balanced pressure thermostatic air vent.

Model →	FT-15	FT-30	FT-75	FT-125
PMO	15 psig	30 psig	75 psig	125 psig
Sizes	3/4", 1", 1-1/4", 1-1/2", 2"			
Connections	NPT			
Construction	Cast Iron Body & Cover Stainless Steel Internals			
Options	Gauge Glass, Vacuum Breaker			

Typical Applications

All process equipment, particularly when controlled by modulating temperature control valves; unit heaters, air heating coils, heat exchangers and steam main drip stations.

For Capacities,
See TIS 2.317



Limiting Operating Conditions

Max. Operating Pressure (PMO)	FT-15:	15 psig	(1.0 barg)
	FT-30:	30 psig	(2.1 barg)
	FT-75:	75 psig	(5.2 barg)
	FT-125:	125 psig	(8.6 barg)

Max. Operating Temperature 450°F (25°C) at all operating pressures

Pressure Shell Design Conditions

PMA 125 psig/up to 450°F 9 barg/up to 232°C
Max. allowable pressure

TMA 450°F/0-125 psig 232°C/0-9 barg
Max. allowable temperature

Construction Materials

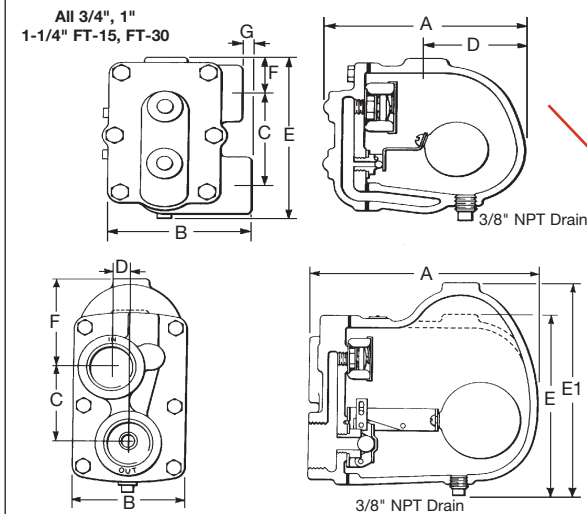
No.	Part	Material
1	Body	Cast Iron ASTM A126 CL B
2	Cover Screws	Carbon Steel ASTM A449
3	Cover Gasket	Graphite
4	Cover	Cast Iron ASTM A126 CL B
5	Valve Seat	Stainless Steel
6	Valve Seat Gasket	Stainless Steel
7	Ball Float	Stainless Steel
8	Float Arm	Stainless Steel
9	Air Vent Assembly	Stainless Steel
	Air Vent Head	Stainless Steel
	Air Vent Seat	Stainless Steel
15	Seat Bracket	Stainless Steel
16	Pivot Pins	Stainless Steel
17	Head Bracket, Stop, Link	Stainless Steel
18	Valve Head	Stainless Steel

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.

TI-2-313-US 4.12

Cast Iron Float & Thermostatic Steam Traps

→ **FT-15, FT-30, FT-75, FT-125**



Dimensions (nominal) in inches and millimeters									
Size	A	B	C	D	E	E1	F	G	Weight
3/4", 1"	6.2 157	4.6 117	3.3 84	3 77	5.75 146	—	1.3 33	0.3 7.9	9 lb 4.1 kg
1 1/4" * 1 1/2"	8.5 216	4.25 108	3 76	0.7 17	—	8.4 213	3.5 89	—	18 lb 8.2 kg
2"	9.8 249	4.9 124	4.9 124	0.12 3	9.1 230	—	1.9 49	—	26 lb 11.8 kg
*1-1/4"	6.2	4.7	3	2.8	5.75	—	1.5	0.3	9.3 lb
FT-15, FT-30	157	119	76	72	146	—	38	7.9	4.2 kg

All 1-1/2", 2"
1-1/4" FT-75, FT-125

Sample Specification

Steam traps shall be of the mechanical ball float type having cast iron bodies, NPT connections, and all stainless steel internals. Incorporated into the trap body shall be a stainless steel balanced pressure thermostatic air vent capable of withstanding up to 450°F(25°C) and resisting waterhammer without sustaining damage. Internals of the trap shall be completely servicable without disturbing the piping.

Installation

A pipeline strainer should be installed ahead of any steam trap. Full port isolating valves should be placed to permit servicing. The trap should be installed below the drainage point of the equipment with a collecting leg before the trap, in a position so that the float arm is in a horizontal plane so that the float rises and falls vertically, and with the direction of flow as indicated on the body. Refer to IM-2-300 for complete instructions.

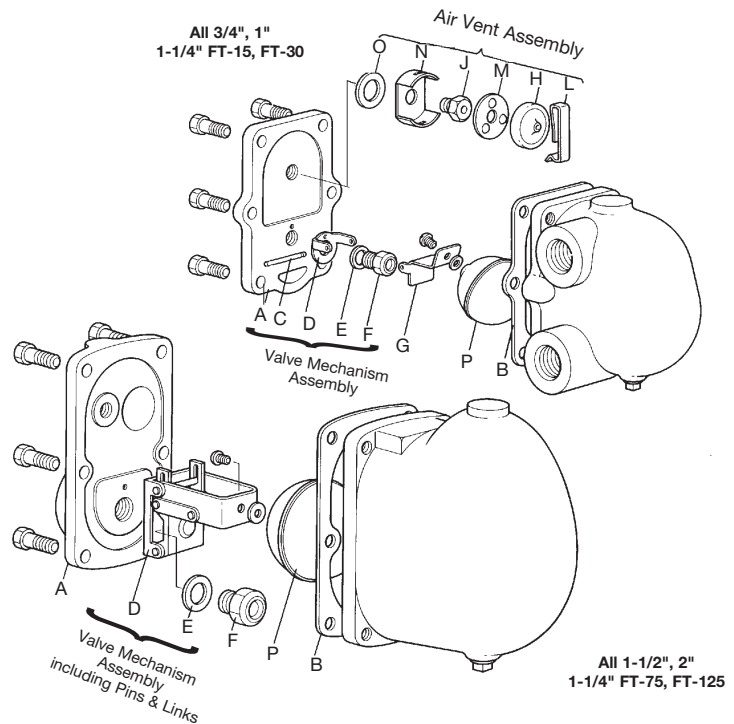
Maintenance

This product can be maintained without disturbing the piping connections. Complete isolation from both supply and return line is required before any servicing is performed. The trap should be disassembled periodically for inspection and cleaning of the valve head and seat, operating mechanism and air vent.

Worn or damaged parts should be replaced using a complete valve mechanism assembly and/or air vent assembly.

Complete installation and maintenance instructions are given in IM-2-300, which accompanies the product.

Spare Parts



Gasket Kit (3 of each)	B, E
Air Vent Kit	H, J, L, M, N, O
Valve Mechanism Kit (less float)	C, D, E, F, (G)
Float Kit	P
Replacement Module	A, C, B, D, E, F, G, H, J, L, M, N, P
3/4", 1", 1-1/4" FT-15	(Assembled)
3/4", 1", 1-1/4" FT-30	
3/4", 1", FT-15, FT-125	

TI-2-313-US 4.12

spirax/sarco®

Cast Iron Float & Thermostatic Steam Traps FT, FTI and FTB Capacities

Capacities in lb/h hot condensate

Differential Pressure		FT-15				FT-30				FT-75			FT-125		
PSI	BAR	3/4" 1"	1-1/4"	1-1/2"	2"	3/4" 1"	1-1/4"	1-1/2"	2"	3/4" 1"	1-1/4" & 1-1/2"	2"	3/4" 1"	1-1/4" & 1-1/2"	2"
1/4	.017	279	600	1100	2300	279	375	1000	1300	160	550	850	100	400	550
1/2	.035	369	770	1700	2800	369	500	1300	1800	213	725	1100	135	520	675
1	.07	489	980	2400	3600	489	690	1700	2500	280	960	1500	175	680	880
2	.14	650	1240	3300	4650	650	910	2300	3400	365	1300	2000	230	890	1225
5	.35	785	1640	5000	6900	785	1200	3400	5200	520	1900	3100	330	1300	1950
10	.69	1000	2000	6600	9000	1000	1500	4600	6800	700	2650	4150	415	1700	2600
15	1.0	1075	2340	7600	10900	1075	1680	5500	7800	795	3050	4750	500	2050	3000
20	1.4					1210	1800	6000	8600	875	3400	5200	565	2300	3250
30	2.1					1370	2000	7000	10000	970	4000	5800	665	2700	3800
40	2.8									1120	4400	6400	750	3000	4200
50	3.5									1230	4750	6800	830	3200	4600
75	5.2									1450	5400	7700	970	3800	5500
100	6.9												1110	4200	6100
125	8.6												1190	4500	6600

orifice dia.	.218"	.312"	.500"	.625"	.218"	.228"	.390"	.500"	.166"	.312"	.421"	.125"	0.246"	.332"
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Differential Pressure		FTI-15		FTI-30		FTI-75		FTI-125		FTI-200	
PSI	BAR	1/2", 3/4" 1"	1-1/2"	1/2", 3/4" 1"	1-1/2"	1/2", 3/4" 1"	1-1/2"	1/2", 3/4" 1"	1-1/2"	1/2", 3/4" 1"	1-1/2"
1/4	.017	279	1020	279	960	160	850	100	520	50	520
1/2	.035	369	1784	369	1598	213	1450	135	1020	75	1020
1	.07	489	3455	489	2976	280	1880	175	1600	115	1600
2	.14	650	5331	650	4290	365	2683	230	1970	180	1970
5	.35	785	6430	785	5326	520	3335	330	2945	230	2945
10	.69	1000	8163	1000	6413	700	4414	415	3141	305	3141
15	1.0	1075	9673	1075	7850	795	5024	500	3958	365	3958
20	1.4			1210	8242	875	5690	565	4304	415	4304
30	2.1			1370	10200	970	6600	665	5094	495	5094
40	2.8					1120	7111	750	5503	530	5503
50	3.5					1230	7625	830	5655	575	5655
75	5.2					1450	9615	970	6505	680	6505
100	6.9							1110	7666	750	7666
125	8.6							1190	8554	820	8554
150	10.3									895	10026
175	12.0									930	10500
200	13.8									985	11059

orifice dia.	.218"	.625"	.218"	.500"	.166"	.421"	.125"	0.332"	.100"	0.332"
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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.

TI-2-317-US 05.08

Cast Iron Float & Thermostatic Steam Traps

FT, FTI and FTB Capacities

Capacities in lb/h hot condensate



Differential Pressure		FT-150				FT-200				FTB-20	FTB-30	FTB-50	FTB-125	FTB-175	FTB-200	FTB-175 FTB-200
psi	bar	3/4"	1"	1-1/4"	1-1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2"	1-1/2"	2-1/2"	2"	1-1/2"	2-1/2"
1/4	.017	170	170	275	275	120	120	250	250	6000	12000	875	19000	2600	920	7000
1/2	.035	235	235	360	360	160	160	335	335	7500	15800	1240	24000	4000	1300	12000
1	.07	315	315	470	470	210	210	450	450	9000	19000	1758	29200	5550	1850	17000
2	.14	425	425	610	610	280	280	600	600	11500	24000	1995	35000	7100	2100	21000
5	.34	650	650	920	920	400	400	870	870	15500	31500	2470	44000	9500	2600	27000
10	.69	810	810	1120	1120	520	520	1100	1100	19000	38000	3040	52000	11500	3200	32000
15	1.0	940	940	1300	1300	600	600	1280	1280	22000	41500	3563	57500	13000	3750	35500
20	1.4	1020	1020	1415	1415	660	660	1410	1410	25000	43500	3990	61500	14000	4200	38500
30	2.1	1175	1175	1600	1600	770	770	1640	1640	—	45500	4750	68500	16000	5000	42500
40	2.8	1310	1310	1770	1770	850	850	1800	1800	—	—	5368	73500	17500	5650	46000
50	3.5	1410	1410	1935	1935	910	910	1910	1910	—	—	5910	78000	18500	6220	48500
75	5.2	1625	1625	2210	2210	1050	1050	2200	2200	—	—	—	86000	21000	7400	54000
100	6.9	1755	1755	2360	2360	1175	1175	2410	2410	—	—	—	93000	22500	8310	58000
125	8.6	1900	1900	2600	2600	1260	1260	2610	2610	—	—	—	100000	24000	9220	61000
150	10.3	2025	2025	2750	2750	1370	1370	2825	2825	—	—	—	—	25500	10150	64000
175	12.1	—	—	—	—	1440	1440	2975	2975	—	—	—	—	27000	10950	68000
200	13.8	—	—	—	—	1512	1512	3130	3130	—	—	—	—	—	11498	69400*

*2-1/2 FTB-200 ONLY

For kg/h, multiply by .454

Orifice Diameter

in	.152	.152	.250	.250	.128	.128	.203	.203	.937	2.125*	.375*	2.125*	.750*	.375*	1.500*
mm	3.86	3.86	6.35	6.35	3.25	3.25	5.16	5.16	23.8	54.2*	9.53*	54.0*	19.05*	9.53*	38.1*

*each orifice of a double seated trap.

TI-2-317-US 05.08

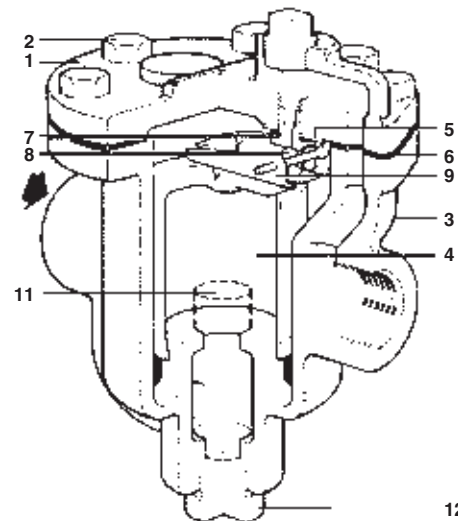


Cast Iron Inverted Bucket Steam Traps B Series

The trap contains an inverted bucket mechanism which responds to the difference in density between steam and condensate. The discharge action is cyclic. Condensate is discharged close to steam temperature.

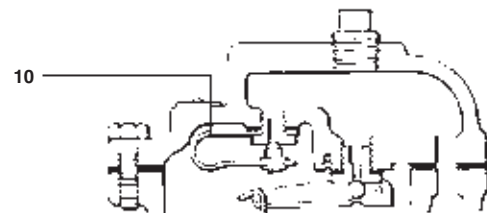
Model	B1H	B2	B3	B4	B5
PMO	250 psig (see below)				
Sizes	1/2", 3/4"	3/4"	1"	1-1/4"	2"
Connections	NPT				
Construction	Cast Iron Body, Stainless Steel Mechanism				
Options	Stainless Steel Bucket Bimetal air vent (add '2' to model No. eg. B12HS, B22S, etc.) Integral strainer (add 'S' to model No. eg. B1HS, B2S, etc.) (when bimetal is required, strainer becomes standard)				

Note: Top plug not provided on
B1H-15, 30, 75, 125
B1H, B2, B5



12A
12B

FOR CAPACITIES — SEE TIS 2.408



Construction Materials

No.	Part	Material
1	Cover	Cast Iron
2	Cover Screws	Steel
3	Body	Cast Iron
4	Bucket	Stainless Steel
5	Valve Guide Plate (Seat Bracket)	
6	Cover Gasket	Graphite
7	Valve Seat	Stainless Steel (hardened)
8	Valve Head (Ball)	Stainless Steel (hardened)
9	Valve Lever (Bucket Arm)	Stainless Steel
10	Air Vent (optional)	Stainless Steel
11	Strainer Screen (optional)	
	B1HS	Stainless Steel, 20 mesh
	B2S to B5S	Stainless Steel, 1/16" perf.
12 A	Cap on strainer	Brass
	models B1HS etc.	Steel
12 B	Plug in standard	
	model BIH, B2, B3, B4, B5	

Typical Applications

Steam main drip stations, laundry equipment, industrial dryers and storage tanks.

Optional Bimetal Air Vent

The optional bimetal air vent allows rapid air removal on cold start-up. The vent closes at approximately 200°F, and will remain closed during normal operation of the trap.

Limiting Operating Conditions

Max. Operating Pressure (PMO)	15 psig (1 barg)	125 psig (9 barg)
	30 psig (2 barg)	180 psig (12 barg)
	75 psig (5 barg)	250 psig (17 barg)
(Determined by Orifice selected. See Capacity and Selection Data on TIS 2.408)		

Max. Operating Temperature 450°F (232°C) at all operating pressures

Pressure Shell Design Conditions

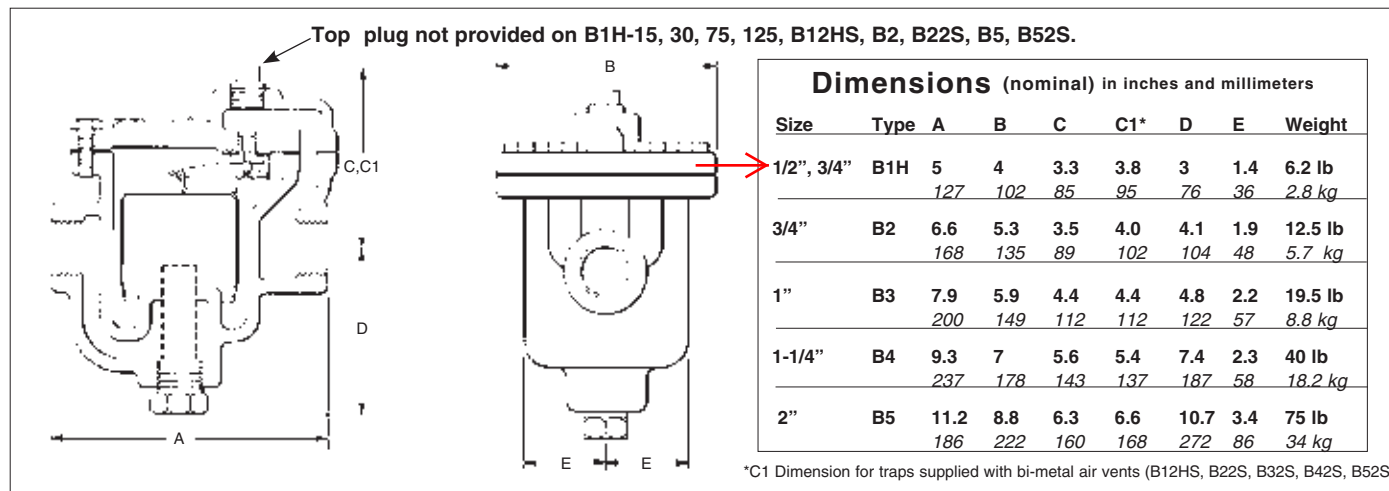
PMA	250 psig/up to 450°F	17 barg/up to 232°C
Max. allowable pressure		
TMA	450°F/0-250 psig	232°C/0-17 barg
Max. allowable temperature		

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.

TI-2-407-US 10.10

Cast Iron Inverted Bucket Steam Traps B Series



Sample Specification

Steam traps shall be of the mechanical inverted bucket type with cast iron bodies, screwed NPT horizontal connections and stainless steel valve head, seat and bucket. An internal bi-metal air vent and/or strainer screen shall be available as options.

Installation

A pipeline strainer should be installed ahead of any trap to protect the head and seat from dirt and scale. Suitable full-port isolation valves should be placed around trap to permit servicing. The trap should be installed below the equipment drainage connection in a horizontal position so that the bucket will rise and fall vertically. For superheated steam applications, a check valve should be installed at the trap inlet.

Maintenance

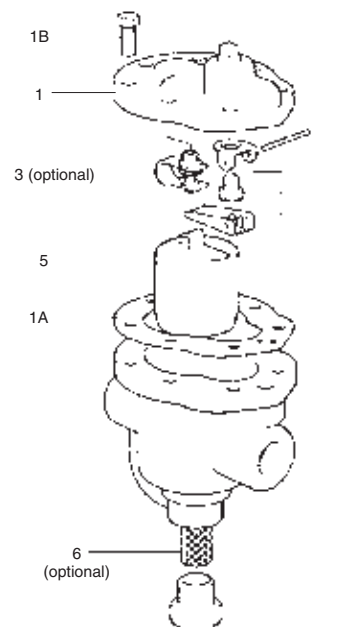
This product can be maintained without disturbing the piping connections. Complete isolation of the trap from both supply and return line is required before any servicing is performed.

The trap should be disassembled periodically for inspection and cleaning of the valve head and seat, and operating mechanism. The bucket vent hole must be clear. The optional strainer screen should be removed and cleaned.

Worn or damaged parts should be replaced using a complete mechanism assembly kit.

Complete installation and maintenance instructions are given in IMI 2.400, which accompanies the product.

Spare Parts



Cover w/ Gasket Specify if standard or w/ bi-metal air vent	1, 1A
Cover Gasket	1A
Cover Cap Screws, Set	1B
Air Vent Assembly	3
Complete Mechanism (specify pressure range)	4
Bucket (Stainless Steel)	5
Strainer (Stainless Steel)	6