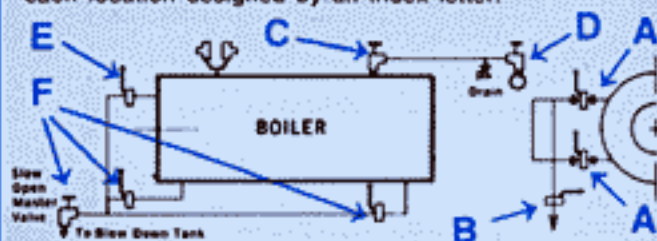


ASME/ANSI REQUIREMENTS
ASME BOILER & PRESSURE VESSEL CODE
Section 1 - Power Boilers (1999 Addenda) and
ANSI B31.1 - Power Piping Code
(1999 Addenda)
 (SEE NOTE 1)

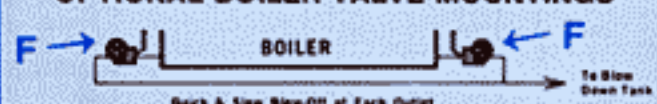
Index and Service	Reference	Comments
A Water Column Shut-Off Valves	BPV-1 PG 60.3.4 BPV-1 PG 60.3.7	Piping between water column and boiler to be 1 in. minimum size. Shut-off valves must be through-flow type. Must indicate whether the valve is open or closed. Must be locked or sealed open.
B Water Column Drain	BPV-1 PG 60.2.3	Minimum pipe size 3/4 in. Rising bends or pockets must have a separate drain.
C Stop Valves	ANSI B31.1 PARA. 122.1.7	Each boiler discharge outlet (except safety valve or reheater connections), must be fitted with a stop valve. Valves over 2 in. to be OS & Y rising stem type.
D Stop Valves at Common Header	ANSI B31.1 PARA. 122.1.7 "STOP - CHECK"	When boilers are connected to a common header, the connection from each boiler having a manhole opening shall be fitted with two stop valves consisting preferably of one valve (set next to the boiler) and a second valve of the OS & Y type, or two valves of the OS & Y type shall be used. A free-blow visible drain shall be fitted between the two stop valves.
E Surface Blow-Off	BPV-1 PG 59.3.2	Surface blow-off shall not exceed 2 1/2 in. pipe size.
F Blow-Off Valves	ANSI B31.1 PARA. 122.1.4 ANSI B31.1 PARA. 122.1.7	The minimum size of blow-off pipe and fittings shall be 1 in. The maximum size shall be 2 1/2 in. (See code for exceptions on miniature boilers and electric boilers) On boilers with 100 square feet or less of heating surface, 3/4 in. pipe and fittings may be used. Ordinary globe valves, and other valves with dams or pockets where sediment can collect, shall not be used on blow-off connections. Except for electric steam boilers having a normal water content of 100 Gal, traction-purpose, and portable boilers with allowable working pressure over 100PSIG, each bottom blow-off requires two slow-opening valves, or one quick opening valve at the boiler nozzle followed by a slow-opening valve. For maximum working pressures up to 250 PSIG, Class 250 iron valves may be used for blow-off service. (See maximum working pressure table for steel valve ratings). Boilers with multiple blow off pipes may have single master valve on common header with single blow off valve on each individual pipe. Either master or individual blow off valves shall be slow opening. Two independent slow opening valves, or a slow opening and a quick opening valve, may be combined in one body provided it is the equivalent of two separate valves and that the failure of one cannot affect the other.

BOILER VALVE MOUNTINGS

Refer to the following table for proper Valve to use at each location designed by an index letter.



OPTIONAL BOILER VALVE MOUNTINGS



BOILER VALVE selector guide

TO MEET ASME/ANSI REQUIREMENTS
 ISO 9001 CERTIFIED COMPANY



Everlasting®
 VALVE COMPANY, INC.

LATEST APPLICABLE CODES

- ASME SECT. 1 - 1998 POWER BOILERS
- ANSI B31.1 - 1998 POWER PIPING
- ANSI B16.1 - 1998 CAST IRON FLANGES & FITTINGS
- ANSI B16.5 - 1996 PIPE FLANGES & FLANGED FITTINGS
- ANSI B16.34 - 1996 VALVES - FLANGED, THREADED & W.E.

NOTE 1: These guide lines are based on ASME and ANSI codes at time of printing and are intended to assist you in valve selection. However, they are subject to changes in the codes as they may occur. The actual codes should always be consulted for full details and requirements.

PRESSURE RATING PSIG			Figure No.	End Type	Body Matl.	Available Sizes - Chart shows suggested Operating Pressure limits for easy operation with standard lever and geared lever. Longer levers are available for higher pressure upon request.					
Primary Service Rating	Max. Blow-Off Service †	Suitable for Use with Index Letter				¾"	1"	1¼"	1½"	2"	2½"
250	200	B,E,F	4000-A	SCR	Iron	250	250	250	200	200	100
			4001-A	FLG	Iron	—	250	250	200	200	100
			4010-A	SCR	Iron	—	—	—	250	215	150
			4011-A	FLG	Iron	—	—	—	250	215	150
300	485	B,E,F	4000-S (57)	SCR	Steel	300	400	300	200	200	100
			4001-S (57)	FLG	Steel	—	400	300	200	200	100
			4010-S (57)	SCR	Steel	—	—	—	300	215	150
			4011-S (57)	FLG	Steel	—	—	—	300	215	150
600	910	B,E,F	4000-S (58)	SCR	Steel	—	550	450	270	200	100
			4001-S (58)	FLG	Steel	—	550	450	270	200	100
			4010-S (58)	SCR	Steel	—	—	—	300	215	150
			4311-S (58)	FLG	Steel	—	—	—	300	215	150



Fig. 4000 Series Lever Operated



Fig. 4011, 4311 Series Lever & Gear Operated
4010 Series Not Illustrated

Fig. 4001 Series Lever Operated

- Features**
- Straight-through flow
 - Leak proof seal disc has self lapping action, actually improves with use.
 - Self wiping action of disc - cannot hang-up on boiler scale

How figure 4000 Series operates

Line pressure and heavy spring hold disc firmly against the body seat, sealing off the flow. When operated, the disc slides across the body seat pushing harmful boiler scale away, and wiping clean the precision lapped surfaces.

Hand adjustment of the post packing is eliminated. Post packing is **self-adjusted** by a spring and line pressure. This prevents destructive erosion and leakage of stuffing box.

MATERIAL DATA

Figure No.	Body	Post	Disc	Seat Bushing	Lever Arm	Post Packing	Springs	Body Gasket	Operating Wrench
4000-A 4001-A	Cast Iron	Forged Bronze	Cast Iron	— —	Ductile Iron	V-Ring Packing	17-7PH	Corrugated Stainless Steel	Forged Steel
4000-S (57) 4001-S (57)	Steel	Forged Bronze	Hard Stainless	Hard Stainless	Ductile Iron	V-Ring Packing	17-7PH	Corrugated Stainless Steel	Forged Steel
4010-A 4011-A	Cast Iron	Forged Bronze	Cast Iron	— —	Ductile Iron	V-Ring Packing	17-7PH	Corrugated Stainless Steel	Ductile Iron
4010-S (57) 4011-S (57)	Steel	Forged Bronze	Hard Stainless	Hard Stainless	Ductile Iron	Teflon "V"-Ring	17-7PH	Corrugated Stainless Steel	Ductile Iron
4000/4001-S (58) 4010/4311-S (58)	Steel	17-4 PH Stainless	Hard Stainless	Hard Stainless	Ductile Iron	Non-Asbestos	17-7PH	Corrugated Stainless Steel	Ductile Iron

DIMENSIONAL DATA

Rating	Figure No.	Dimension Letter	Size					2½"	
			1"	1¼"	1½"	2"	2½"	(57)	(58)
250	4000-A	F	3%	3%	4%	4%	5%		
300/600	4000-S (57)(58)	++F	5	5%	6	6%		13 3/8	13 3/8
300/600	4002-S (57)(58)	++F	6%	6%	6%	7%		14%	14%
250	4001-A	B	7%	7%	8%	9	10%		
300	4001-S (57)	B	7%	7%	8%	9	12		
600	4001-S (58)	B	8%	9	10%	11%	15		
250/300	600	J	4	4%	5%	5%	6%		
		L	9	9	15%	15%	23		
600		L	18%	18%	15%	15%	23		
		O	55°	55°	55°	60°	60°		
		S	1%	1%	2%	2%	2%		

Rating	Figure No.	Dimension Letter	Size			Rating	Figure No.	Dimension Letter	Size			2½"	
			1½"	2"	2½"				1½"	2"	2½"	(57)	(58)
250	4010-A	F	4½	4%	5%	300/600	4010-S (57)(58)	++F	6	6%		13 3/8	13 3/8
250	4011-A	B	8%	9	10%	300/600	4012-S (57)(58)	++F	6%	7%		14%	14%
		J	5%	6%	7%	300	4011-S (57)	B	8%	9	12		
		L	18%	18%	23	600	4311-S (58)	B	10½	11%	15"		
		Ls	12½	12½	15½			J	5%	5%	6%		
		O	130°	130°	120°			L	18%	18%	23		
		S	5	5%	6%			Ls	12½	12½	15½		
								O	130°	130°	120°		
								S	4½	4%	6%		

TO SPECIFY — Everlasting Quick Opening Blow-Off Valve(s) figure number(s) _____, size _____, lever operated, sliding disc packless seating, bolted split body, for _____ lbs. meeting ASME/ANSI code.

TO ORDER — Use figure number(s), state size, body material, type connection, for _____ lbs.

†Pressures shown are maximum allowed by ASME Code.
++ New F to F For 2½" valves

PRESSURE RATING PSIG			Figure No.	End Type	Body Matl.	Available Sizes - Chart shows suggested Operating Pressure limits for easy operation with standard lever and geared lever. Longer levers are available for higher pressure upon request.				
Primary Service Rating	Max. Blow-Off Service *	Suitable for Use with Index Letter				1"	1 1/4"	1 1/2"	2"	2 1/2"
250	200	B,C,D,E,F	4060-A 4061-A B-6561 B-6571	SCR FLG FLG FLG	Iron Iron Iron Iron	250 — — —	250 — — —	250 250 250 250	250 250 250 250	250 250 250 250
300	485	B,C,D,E,F	4060-S (57) 4061-S (57) B-6661 B-6671	SCR FLG FLG FLG	Steel Steel Steel Steel	605 605 — —	605 605 — —	605 605 605 605	605 605 605 605	605 605 605 605
600	910	B,C,D,E,F	4060-S (58) 4061-S (58) B-6761 B-6771	SCR FLG FLG FLG	Steel Steel Steel Steel	935 935 — —	935 935 — —	935 935 935 935	935 935 935 935	935 935 935 935

Features

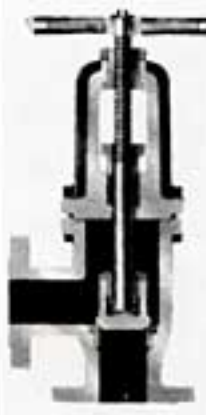
- Valve can be installed with hand wheel in any position.
- Straight-through-flow.
- Leak proof seal-disc has self lapping action, actually improves with use.
- Seal-disc has self wiping action; cannot hang-up on boiler scale.
- No retightening after cool down; seal not affected by temperature change.
- Real slow opening.
- Hard seat resists erosion.



How figure 4060 and 4061 series operate

Line pressure and heavy spring hold disc firmly against the body seat, sealing off the flow. When operated, the disc slides across the body seat pushing harmful boiler scale away, and wiping clean the precision lapped surfaces.

Hand adjustment of the post packing is eliminated. Post packing is **self-adjusted** by a spring and line pressure. This prevents destructive erosion or leakage of stuffing box.



Sectional View of Angle and "Y" Valve How figure 6000 series operates

These valves are of the outside Screw and Yoke type. The seat and disc are capable of withstanding the severe erosive flow of blow-down service. While quick opening Valve holds boiler water, the seat and disc can be easily removed for repair without removing the Valve from line.

MATERIAL DATA

Figure No.	Body	Post	Disc	Seat Bushing	Lever Arm	Post Packing	Springs	Body Gasket	Clevis Nut	Handwheel	Lever	Screw Shaft
4060-A 4061-A	Cast Iron	Forged Bronze	Cast Iron	Hard Stainless	Ductile Iron	V-Ring Packing	17-7PH	Corrugated Stainless Steel	Iron	Iron	Ductile Iron	Steel
4060-4061S (57) 4060-4061S (58)	Carbon Steel	Forged Bronze 17-4PH	Hard Stainless	Hard Stainless	Ductile Iron	Teflon V-Rings Non-Asb.	17-7PH	Corrugated Stainless Steel	Iron	Iron	Ductile Iron	Steel

Figure No.	Body	Yoke	Disc	Seat	Stem	Yoke Nut	Yoke Lock Nut	Yoke Bushing	Gland	Packing	Seat Gaskets	Body Gasket
B6561 B6571	Cast Iron	Cast Iron	Hard Stainless	Stainless	Stainless Steel	Bronze	Bronze	Bronze	Ductile Iron	Comp. Fiber	Grafoil	Grafoil
B6661 B6671	Cast Steel	Cast Steel	Hard Stainless	Stainless	Stainless Steel	Bronze	Bronze	Bronze	Ductile Iron	Comp. Fiber	Grafoil	Grafoil
B6761 B6771	Cast Steel	Cast Steel	Hard Stainless	Stainless	Stainless Steel	Bronze	Bronze	Bronze	Ductile Iron	Comp. Fiber	Grafoil	Grafoil

DIMENSIONAL DATA

Rating	Figure No.	Dimension Letter	Size				
			1"	1 1/4"	1 1/2"	2"	2 1/2"
250	4060-A	F	3 3/4	3 3/4	4 1/2	4 3/4	5 1/4
250	4061-A	B	—	—	8 3/4	9	10 3/4
		H	8	8	10	10 1/2	10 1/2
		J	13	13	14	14	15 1/2
		N	9	9 1/2	12	12 1/2	13 1/2
		S	5	5	5 1/2	5 1/2	5 1/2
		W	9	9	9	9	12

Rating	Figure No.	Dimension Letter	Size		
			1 1/2"	2"	2 1/2"
250/300	B6561/B6661	E	4 1/4	5	6
		G	5	5 1/2	5 3/4
		H-Shut	14 1/2	15 3/4	16 3/4
		H-Open	16 1/2	17 1/4	19 1/4
600	B6761	E	4 3/4	5 1/4	6 1/4
		G	5 3/4	6	6 1/4
		H-Shut	14 1/2	15 3/4	15 3/4
		H-Open	16 1/2	17 1/4	18 1/4

Rating	Figure No.	Diman Letter	Size				
			1"	1 1/4"	1 1/2"	2"	2 1/2"
300/600	4060-S (57/58)	— F	5	5 1/4	6	6 1/4	13 3/8 13 3/8
300/600	4062-S (57/58)	— F	6 1/4	6 3/4	6 3/4	7 1/4	14 1/4 14 1/4
300	4061-S (57)	B	7 3/4	7 3/4	8 3/4	9	12
600	4061-S (58)	B	8 1/2	9	10 1/2	11 1/4	15"
		H	7 1/4	7 1/4	7 1/4	7 1/4	9 1/2
		J	11 1/2	12	12	12 1/2	16
		N	11	10	10 1/2	13	13
		S	4 3/4	4 3/4	5 1/4	5 1/4	6 1/2
		W	9	9	9	9	12

Rating	Figure No.	Dimension Letter	Size		
			1 1/2"	2"	2 1/2"
250/300	B6571/B6671	B	12 1/4	12 1/4	14 1/4
		H-Open	15 1/4	17 1/4	18 1/2
		X-Open	6 3/4	7 3/4	7 3/4
600	B6771	B	12 1/4	13 1/2	15
		H-Open	16 1/4	17 1/4	19 1/4
		X-Open	6 1/2	7 3/4	7 3/4

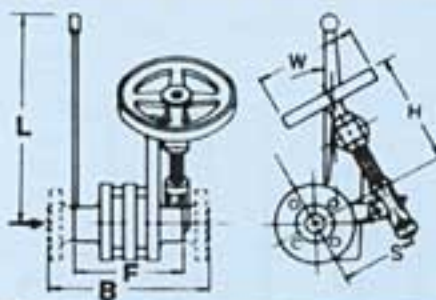
FIG. 4060 & 4061
 TO SPECIFY — Everlasting Slow Opening Blow-Off Valve(s):
 figure number(s) _____ size _____ wheel operated,
 sliding disc packless seating, for _____ lbs. meeting
 ASME/ANSI code.

FIG. B6561 to B6771
 TO SPECIFY — Everlasting Slow Opening Blow-Off Valve(s):
 figure number(s) _____ size _____ wheel operated,
 rising stem, packless seating disc type, for _____ lbs.
 meeting ASME/ANSI code.

* Pressures shown are maximum allowed by ASME Code.
 + - New F to F For 2 1/2" valves

TO ORDER — Use figure number(s), state size, body material, type connection, for _____ lbs.

ONE QUICK & ONE SLOW OPENING VALVE IN ONE BODY.



RIGHT HAND

Fig. A5061-R Flanged 300 lb.
Fig. A5161-R Flanged 600 lb.
Fig. A5160-R Screw End 600 lb.
Fig. A5162-R Socket Weld 600 lb.
*For Left Hand Valves
Specify "L" after Fig. No.

TWO SLOW OPENING VALVES IN ONE BODY.

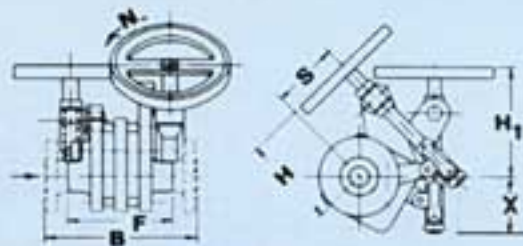


Fig. A5261 Flanged 300 lb.
Fig. A5361 Flanged 600 lb.
Fig. A5360 Screw End 600 lb.
Fig. A5362 Socket Weld 600 lb.

DIMENSIONAL DATA

Rating	Figure No.	Dimension Letter	Size			
			1"	1 1/4"	1 1/2"	2"
300 600	A5060-R & L A5160-R & L	F	6 1/4	7	7 1/4	8 1/4
300 600	A5062-R & L A5162-R & L	F	7 1/4	8 1/2	8 3/4	9 1/4
300 600	A5260 Two Slow A5360 Two Slow	F	6 1/4	7	7 1/4	8 1/4
300 600	A5262 Two Slow A5362 Two Slow	F	7 1/4	8 1/2	8 3/4	9 1/4
300	A5061-R	B	10	10 1/4	11 1/2	12
300	A5061-L	B	11	11 1/4	12 1/2	12
600	A5161-R	B	11 1/4	11 3/4	12 1/2	15 1/2
600	A5161-L	B	12 1/4	12 1/2	13	15 1/2
300	A5261 Two Slow	B	10	10 1/4	11 1/2	12
600	A5361 Two Slow	B	11 1/4	11 3/4	12 1/2	17 1/2
	Right Hand	H	7 1/4	7 1/4	6 1/2	7
	Left Hand	H ₁	8 1/4	8	8 1/2	8 1/2
300		L	9	9	15 1/4	15 1/4
600		L	18 1/4	18 1/4	15 1/4	15 1/4
		N	11	10	10 1/2	13
	ALL Figure Numbers	S	4 1/4	5	5	5
		W	9	9	9	9
		X	4 1/4	4 1/4	4 1/4	4 1/4

How figure 5000 series operate

A new combination of quick and slow opening or two slow opening Valves in one body operates the same as figure 4000 series described on pages 2 and 3. The lever operated section is used as the sealing Valve and the handwheel operated section is the blowing Valve. The blowing Valve can be removed for repair while the sealing Valve remains in service (Fire Banked).

All Valve bodies are made of carbon steel and are easy to operate at maximum blow-off pressure.

TO SPECIFY: Enter figure number(s) _____, size _____, and _____ lbs.

TO ORDER—Use figure number(s), state size, body material, type connection, for _____ lbs.



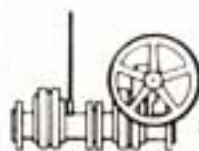
MATERIAL DATA

Figures	Body	Post	Disc	Seat Bushing	Lever Arm	Post Packing
A5060-R or L A5062-R or L A5160-R or L A5162-R or L	Carbon Steel	Forged Bronze or 17-4 PH	Hard Stainless	Hard Stainless	Ductile Iron	300 Carbon Teflon 600 2BT
Springs	Body Gasket	Operating Wrench	Clevis Nut	Handwheel	Lever	Screw Shaft
17-7PH	Corrugated Stainless Steel	Steel	Iron	Iron	Ductile Iron	Steel

DUPLEX VALVES



Two Slow Opening
250 LB. B6571/B6561
300 LB. B6671/B6661
600 LB. B6771/B6761



One Quick — One Slow Opening
250 LB. 4000A/4060A
4001A/4061A
4010A/4060A
4011A/4061A
300/600 LB. 4000S (57)/(58)/4060S (57)/(58)
4001S (57)/(58)/4061S (57)/(58)
4010S (57)/(58)/4060S (57)/(58)
300 LB. 4011S (57)/4061S (57)
600 LB. 4311S (58)/4061S (58)



One Quick — One Slow Opening
250 LB. 4001A/B6571
4011A/B6571
300 LB. 4001S (57)/B6671
4011S (57)/B6671
600 LB. 4001S (58)/B6771
4311S (58)/B6771



Two Slow Opening
250 LB. 4060A/4060A
4061A/4061A
300 LB. 4060S (57)/4060S (57)
4061S (57)/4061S (57)
600 LB. 4060S (58)/4060S (58)
4061S (58)/4061S (58)



One Quick — One Slow Opening
250 LB. 4001A/B6561
4011A/B6561
300 LB. 4001S (57)/B6661
4011S (57)/B6661
600 LB. 4311S (58)/B6761
4001S (58)/B6761

For detailed ratings and operating pressures see figure number of Valve on pages 2 and 3. TO SPECIFY—See data on pages 2 and 3. TO ORDER—Use figure number combination shown above, state size, body material, type connection, for _____ lbs.

WATER COLUMN SHUT-OFF VALVE ("A")



Protect your Boiler and prevent Boiler shut down due to water gauge or gauge Valve failure.

AVAILABLE: Class 250 iron
300 or 600 lb.
steel body.

SIZES: 1/2, 3/4, 1, 1 1/4, 1 1/2, 2.

TO SPECIFY — Everlastings Water Column Shut-Off Valve(s): figure number(s) _____, size _____, _____ and body material.

Figure number
4401* Flanged
4400* Screw end

*After Fig. No. insert "A" for iron, "S(57)" for 300 lb. steel, or "S(58)" for 600 lb. steel.