

Iron Globe and Angle Valves Illustrated Index



Class 125 Iron Body Globe Valves

Bolted Bonnet • Renewable Seat and Disc* • Bronze Mounted

200 PSI/13.8 bar non-shock cold working pressure to -20°F to 150°F/-29°C to 66°C* Maximum working temperature 450°F/232°C at 125 PSI/8.6 bar 125 PSI/8.6 bar saturated steam to 353°F/178°C

CONFORMS TO MSS SP-85

M	MATERIAL LIST											
PART	SPECIFICATION											
1. Handwheel Nut	Steel ASTM A307											
2. Identification Plate	Aluminum											
3. Handwheel	Cast Iron ASTM A126 Class B											
4. Yoke Bushing	Brass ASTM B584 Alloy C84400											
5. Bonnet	Cast Iron ASTM A126 Class B											
6. Stem	Brass ASTM B16 Alloy C36000											
7. Gland Follower Nut	Brass ASTM F467 Alloy C27000											
8 Gland Follower	Cast Iron ASTM A126 Class B											
	or Ductile Iron ASTM A536											
9 Packing Gland	Zinc Plated Powdered Iron ASTM B783											
	or Brass ASTM B16											
10. Gland Follower Stud	Steel ASTM A307											
11. Packing	Synthetic Fibers with Graphite											
12. ¹ Body Bolt	Steel ASTM A307/SAE J429											
13. Body Gasket	Synthetic Fibers											
14. ¹ Body Nut	Steel ASTM A563											
15. Swivel Nut	Brass ASTM B584 Alloy C84400											
16. ² Disc Cage	Cast Iron ASTM A126 Class B											
17. ³ Disc	Brass ASTM B584 Alloy C84400 (B)											
**18. ⁴ Disc Plate	Cast Iron ASTM A126 Class B											
**19. Disc Nut	Bronze											
20. Seat Ring	Brass ASTM B584 Alloy C84400											
21. Body	Cast Iron ASTM A126 Class B											

¹2" and 10" have hex head steel capscrew.

²2" thru 5" are Cast Bronze ASTM B584 Alloy C84400

³For (B) Disc, 2" thru 6" have Bronze ASTM B584 Alloy C84400 Disc.

8" thru 10" have Iron Disc with Bronze Disc Face Rings and Brass Pilots.

⁴2" thru 4" are Cast Bronze ASTM B584 Alloy C84400.

**For PTFE Seat Valves Only.

DIMENSIONS—WEIGHTS—QUANTITIES

Dimensions	
0	

Size		A	A		<u> </u>		<u> </u>		0		t		Weight	
In.	mm.	<u>In.</u>	<u>mm.</u>	<u>In.</u>	<u>mm.</u>	In.	mm.	<u>In.</u>	<u>mm</u> .	<u>In.</u>	<u>mm.</u>	Lbs.	Kq.	
2	50	8.00	203	10.19	259	7	178	6.00	152	.63	16	32	15	
21/2	65	8.50	216	11.81	300	8	203	7.00	178	.69	17	49	22	
3	80	9.50	241	12.50	318	8	203	7.50	191	.75	19	65	30	
4	100	11.50	292	15.81	402	10	254	9.00	229	.94	24	98	44	
5	125	13.00	330	16.50	419	10	254	10.00	254	.94	24	140	63	
6	150	14.00	356	18.88	479	12	305	11.00	279	1.00	25	182	83	
8	200	19.50	495	21.13	537	16	406	13.50	343	1.13	29	361	164	
10	250	24.50	622	25.19	640	18	457	16.00	406	1.19	30	586	266	

*With proper machining facilities.

FREEZING WEATHER PRECAUTION: Subsequent to testing a piping system, valves should be left in an open position to allow complete drainage. For detailed Operating Pressure, refer to Pressure Temperature Chart on page 114.

Visit www.nibco.com for current Chem-Guide and galvanic potential in piping systems information.



F-718-B Flanged



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Class 125 All Iron Trim Iron Body Globe Valves

Bolted Bonnet • Renewable Seat and Disc*

200 PSI/13.8 bar non-shock cold working pressure to -20°F to 150°F/-29°C to 66°C* Maximum working temperature 450°F/232°C at 125 PSI/8.6 bar 125 PSI/8.6 bar saturated steam to 353°F/178°C

CONFORMS TO MSS SP-85

MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A563
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A126 Class B
4. Yoke Bushing	Ductile Iron ASTM A536
5. Bonnet	Cast Iron ASTM A126 Class B
6. Stem	Steel ASTM A108 12L14 Electroless NI-PI
7. Gland Follower Nut	Steel ASTM A307/SAE J429
8 Gland Follower	Cast Iron ASTM A126 Class B
	or Ductile Iron ASTM A536
9. Packing Gland	Zinc Plated Powdered Iron ASTM B783
10. Gland Follower Stud	Steel ASTM A307/SAE J429
11. Packing	PTFE Braided
12. ¹ Body Bolt	Steel ASTM A307/SAE J429
13. Body Gasket	Synthetic Fibers
14. ¹ Body Nut	Steel ASTM A563
15. Swivel Nut	Cast Iron ASTM A126 Class B
16. Disc	Cast Iron ASTM A126 Class B
17. Seat Ring	Cast Iron ASTM A126 Class B
18. Body	Cast Iron ASTM A126 Class B

¹2" and 10" have hex head steel capscrew.

DIMENSIONS—WEIGHTS—QUANTITIES

			Diliciisions											
Size			<u> </u>		<u> </u>				<u>D</u>		E		ght	
<u>In.</u>	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	
2	50	8.00	203	10.19	259	7	178	6.00	152	.63	16	33	15	
21/2	65	8.50	216	11.81	300	8	203	7.00	178	.69	17	49	22	
3	80	9.50	241	12.50	318	8	203	7.50	191	.75	19	66	30	
4	100	11.50	292	15.81	402	10	254	9.00	229	.94	24	97	44	
5	125	13.00	330	16.50	419	10	254	10.00	254	.94	24	141	64	
6	150	14.00	356	18.88	479	12	305	11.00	279	1.00	25	183	83	
8	200	19.50	495	21.13	537	16	406	13.50	343	1.13	29	359	163	
10	250	24.50	622	25.19	640	18	457	16.00	406	1.19	30	611	277	

*With proper machining facilities available.

FREEZING WEATHER PRECAUTION: Subsequent to testing a piping system, valves should be left in an open position to allow complete drainage.

• For detailed Operating Pressure, refer to Pressure Temperature Chart on page 114.



F-718-N Flanged



Class 250 Iron Body Globe Valves

Bolted Bonnet • Renewable Seat and Disc* • Bronze Mounted

500 PSI/34.5 bar non-shock cold working pressure from -20°F to 150°F/-29°C to 66°C* Maximum working temperature 450°F/232°C at 250 PSI/17.2 bar 250 PSI/17.2 bar saturated steam to 406°F/208°C

CONFORMS TO MSS SP-85

	MA	TERIAL LIST
	PART	SPECIFICATION
1.	Handwheel Nut	Steel ASTM A563
2.	Identification Plate	Aluminum
3.	Handwheel	Cast Iron ASTM A126 Class B
4.	Stem	Brass ASTM B16 Alloy C36000
5.	Yoke Bushing	Brass ASTM B584 Alloy C84400
6.	Bonnet	Cast Iron ASTM A126 Class B
7.	Gland Follower Nut	Brass ASTM F467 Alloy C27000
8.	Gland Follower Stud	Steel ASTM A307/SAE J429
q	Gland Follower	Cast Iron ASTM A126 Class B
0.		or Ductile Iron ASTM A536
10.	Packing Gland	Zinc Plated Powdered Iron ASTM B783
		or Brass ASTM B16
11.	Hex Head Cap Screw	Steel ASTM A307/SAE J429
12.	Packing	PTFE Braided
13.	Body Gasket	Reinforced Graphite
14	Swivel Nut	Brass ASTM B584 Alloy C84400
14.	ownernat	or ASTM B16 Alloy C36000
15.	¹ Disc	Cast Iron ASTM A126 Class B
16.	Disc Ring	Brass ASTM B584 Alloy C84400
17.	Disc Pilot	Brass ASTM B584 Alloy C84400
18.	Seat Ring	Brass ASTM B584 Alloy C84400
19.	Body	Cast Iron ASTM A126 Class B

¹Sizes thru 4" have all Bronze Discs

Sizes 6" and 8" have Cast Iron Disc with Bronze Disc Face Rings and Brass Pilots.

DIMENSIONS—WEIGHTS—QUANTITIES

	Dimensions												
Size		Α		В		C		D		E		Weight	
In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	Lbs.	Kg.
2	50	10.50	267	10.31	262	7	178	6.50	165	.88	22	42	19
21/2	65	11.50	292	13.56	344	8	203	7.50	191	1.00	25	78	35
3	80	12.50	318	14.00	356	10	254	8.25	210	1.13	29	96	44
4	100	14.00	356	16.50	419	11	279	10.00	254	1.25	32	154	70
6	150	17.50	445	23.50	597	14	356	12.50	318	1.44	37	360	163
8	200	21.00	533	26.50	673	16	406	15.00	381	1.63	41	546	248

*With proper machining facilities available.

FREEZING WEATHER PRECAUTION: Subsequent to testing a piping system, valves should be left in an open position to allow complete drainage.

• For detailed Operating Pressure, refer to Pressure Temperature Chart on page 114.



F-768-B Flanged



Flg x Flg

Class 125 Iron Body Angle Valves

Bolted Bonnet • Renewable Seat and Disc* • Bronze Mounted

200 PSI/13.8 bar non-shock cold working pressure to -20°F to 150°F/-29°C to 66°C* Maximum working temperature 450°F/232°C at 125 PSI/8.6 bar 125 PSI/8.6 bar saturated steam to 353°F/178°C

CONFORMS TO MSS SP-85

MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A563
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A126 Class B
4. Yoke Bushing	Brass ASTM B584 Alloy C84400
5. Bonnet	Cast Iron ASTM A126 Class B
6. Stem	Brass ASTM B16 Alloy C36000
7. Gland Follower Nut	Brass ASTM F467 Alloy C27000
8. Gland Follower Stud	Steel ASTM A307/SAE J429
0 Cland Fallower	Cast Iron ASTM A126 Class B
9. Gianu Fonower	or Ductile Iron ASTM A536
10 Poolving Cland	Zinc Plated Powdered Iron ASTM B783
	or ASTM B16
11. Packing	Synthetic Fibers with Graphite
12. ¹ Body Bolt	Steel ASTM A307/SAE J429
13. Body Gasket	Synthetic Fibers
14. ¹ Body Nut	Steel ASTM A563
15. Swivel Nut	Brass ASTM B584 Alloy C84400
16. ² Disc Cage	Cast Iron ASTM A126 Class B
17. ³ Disc	Bronze ASTM B584 Alloy C84400 (B)
18. ⁴ Disc Plate	Cast Iron ASTM A126 Class B
19. Disc Nut	Bronze
20. Seat Ring	Brass ASTM B584 Alloy C84400
21. Body	Cast Iron ASTM A126 Class B

¹2" have hex head steel capscrews.

² 2" thru 5" are Cast Bronze ASTM B584 Alloy C84400.

³ 8" have Cast Iron Disc with Bronze Disc Face Rings and Brass Pilots.

⁴ 2" thru 4" are Cast Bronze ASTM B584 Alloy C84400.

DIMENSIONS -	-WEIGHTS-	-QUANTITIES

	Dimensions													
Size		Α		В			C		D		E		Weight	
In.	mm.	ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.	
2	50	4.00	102	10.00	254	7	178	6.00	152	.63	16	30	14	
21/2	65	4.25	108	11.50	292	8	203	7.00	178	.69	17	50	23	
3	80	4.75	121	12.25	311	8	203	7.50	191	.75	19	60	27	
4	100	5.75	146	15.00	381	10	254	9.00	229	.94	24	99	45	
5	125	6.50	171	16.50	419	10	254	10.00	254	.94	24	133	60	
6	150	7.00	178	18.88	479	12	305	11.00	279	1.00	25	187	85	
8	200	9.75	248	20.75	527	16	406	13.50	343	1.13	29	349	158	

*With proper machining facilities available.

FREEZING WEATHER PRECAUTION: Subsequent to testing a piping system, valves should be left in an open position to allow complete drainage.

• For detailed Operating Pressure, refer to Pressure Temperature Chart on page 114.

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F-818-B Flanged



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Class 250 Iron Body Automatic Stop Check Valves

Bolted Bonnet • Angle Pattern • Renewable Seat and Disc* • Bronze Mounted

500 PSI/34.5 bar non-shock cold working pressure from -20°F to 150°F/-29°C to 66°C* Maximum working temperature 450°F/232°C at 250 PSI/17.2 bar 250 PSI/17.2 bar saturated steam to 406°F/208°C

CONFORMS TO MSS SP-85

MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A307
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A126 Class B
4. Stem	Brass ASTM B 16 Alloy C36000
5. Yoke Bushing	Brass ASTM B584 Alloy C84400
6. Bonnet	Cast Iron ASTM A126 Class B
7. Gland Follower Stud	Steel ASTM A307 (not shown)
8. Gland Follower Nut	Brass ASTM F467 Alloy C27000 (not shown)
9. Gland Follower	Ductile Iron ASTM A536
10 Packing Gland	Zinc Plated Powdered Iron ASTM B783
	or Brass ASTM B16
11. Packing	PTFE Braided
12. ¹ Butterfly Handle Nut	Steel ASTM A307/SAE J429
13. ¹ Butterfly Handle	Brass ASTM B584 Alloy C84400
14. ¹ Control Valve Stem	Bronze ASTM B371 Alloy C69400
15. ¹ Control Valve Pack Nut	Brass ASTM B584 Alloy C84400
16. ¹ Control Valve Pack Gland	Brass ASTM B16 Alloy C36000
17. ¹ Control Valve Packing	Synthetic Fibers with Graphite
18. ¹ Control Valve Body	Brass ASTM B584 Alloy C84400
19. Hex Head Cap Screw	Steel ASTM A307/SAE J429
20. Body Gasket	Reinforced Graphite
21. ¹ Dashpot Gasket	Reinforced Graphite
22. ¹ Dashpot	Brass ASTM B584 Alloy C84400
23. ¹ Piston-Disc	Cast Iron ASTM A126 Class B
24. ¹ Piston Ring (2)	PTFE Composite Material
25. ¹ Disc Face Ring	Brass ASTM B584 Alloy C84400
26. ¹ Seat Ring	Brass ASTM B584 Alloy C84400
27. Body	Cast Iron ASTM A126 Class B
28. ² Piston Ring Collar	Brass ASTM B16 Alloy C36000
29. ² Disc Cage	Brass ASTM B584 Alloy C84400
30. ² PTFE Disc	PTFE
31. ² Disc Plate and Nut	Brass ASTM B584 C84400
32. ² Piston Rod Plug	Brass ASTM B16 Alloy C36000
33. ² Piston Rod Plug Pin	Bronze ASTM B 140 Alloy C31400

F-869-B Flanged Series D





FREEZING WEATHER PRECAUTION: Subsequent to testing a piping system, valves should be left in an open position to allow complete drainage.

 For detailed Operating Pressure, refer to Pressure Temperature Chart on page 114.

 $^{1}4"$ thru 8" size only. (4" thru 8" have Cast Iron Disc with Bronze Disc Face Ring) 2 TFE Seat Disc in $2^{1}\!\!/_{2}"$ and 3" only. Maximum 150 psi saturated steam working pressure

DIMENSIONS—WEIGHTS—QUANTITIES

Size		A	Α		В		C)	E		Weight		
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg
	21⁄2	65	5.75	146	12.63	321	8	203	7.50	191	1.00	25	80	36
	3	80	6.25	159	14.00	356	10	254	8.25	210	1.13	29	102	46
	4	100	7.00	178	16.50	419	10	254	10.00	254	1.25	32	168	76
	6	150	8.75	222	20.75	527	14	356	12.50	318	1.44	37	311	141
	8	200	10.50	267	23.81	605	16	406	15.00	381	1.63	41	520	236

*With proper machining facilities available. Valve must be installed vertically.

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www.nibco.com

Sizing NIBCO Automatic Stop Check Valves F-869-B

CALCULATED STEAM VOLUME SYSTEM REQUIREMENTS

12 AM	17,000	29,000
1	13,000	24,000
2	15,000	26,000
3	13,000	25,000
4	10,000	22,000
5	14,000	25,000
6	15,000	26,000
7	20,000	31,000
8	23,000	34,000
9	39,000	50,000
10	44,000	55,000
11	45,000	63,000
12 PM	40,000	51,000
1	22,000	32,000
2	35,000	46,000
3	37,000	49,000
4	34,000	45,000
5	35,000	45,000
6	33,000	44,000
7	33,000	44,000
8	34,000	46,000
9	29,000	43,000
10	27,000	40,000
11	20,000	33,000

STEP 1

- A. Calculate and chart the expected steam volume requirements for each hour of boiler operation. See example chart on left.
- B. Total the volume and divide by the number of hours the boiler is in operation to get steam Hourly Average volume in Ibs/hour.

STEP 2

Example 1 - This is a typical boiler system where the steam volume is consistent throughout the year. Use the Sizing Chart below, left section with 2 psi pressure drop.

- 1. Identify system steam working gauge pressure. For our example we will use 125 psi.
- 2. Use *Hourly Average* steam demand calculated in Step 1 above. For our example use 26,958 from chart on left, center column.
- 3. Find the *Gauge Pressure* column in Sizing Chart below closest to the system pressure of our example, 125 psi, for each size valve (*120 psi* is closest).
- Find the *lbs/hr* in Sizing Chart below closest to calculated Hourly Average of our example, 26,958 lbs/hr (23,100 is closest).
- 5. Read across to choose a 6" size valve.

Example 2 - This is a typical boiler system where the steam volume is higher in the winter than in summer. Use the Sizing Chart below, right section with 5 psi pressure drop.

- 1. Identify system steam working gauge pressure. For our example we will use 125 psi.
- 2. Use *Hourly Average* steam demand calculated in Step 1 above. For our example use 38,667 from chart on left, right column.
- 3. Find the *Gauge Pressure* column in Sizing Chart below closest to the system pressure of our example, 125 psi, for each size valve (*120 psi* is closest).
- Find the *lbs/hr* in Sizing Chart below closest to calculated Hourly Average of our example, 38,667 lbs/hr (37,400 is closest).
- 5. Read across to choose a 6" size valve.

NOTE: It is better for control consistency to size the automatic stop check valve on the smaller side than on the larger side.

MO	SATURAT	ED STEAM	GAUGE PF	RESSURE	VALVE SIZE 2½"	MO	SATURAT	VALVE			
E	10 psi	50 psi	120 psi	250 psi		H	10 psi	50 psi	120 psi	250 psi	SIZE
EAM VOLUME Ibs/hr	1,540	2,420	3,520			— 2½"		2,640	3,630	5,720	—
	2,200	3,520	4,840		3"	ps/	3,850	6,380	9,350	—	3"
	3,740	5,940	8,250	11,550	4"	> - > -	7,150	11,000	16,500	23,100	4"
	9,900	15,400	23,100	33,000	6"	EAL	16,500	25,300	37,400	51,700	6"
ST	16,500	27,500	38,500	55,000	8"	ST	29,700	46,200	66,000	93,500	8"

SIZING CHART

F-869 Automatic Stop Check Valve Sizing Guide

100	3450	4"	3"	3"	21/2"	21/2"	21/2"	n/a	n/a		
125	4313	4"	3"	3"	3"	3"	21⁄2"	n/a	n/a	n/a	n/a
150	5175	4"	4"	4"	3"	3"	3"	n/a	n/a	n/a	n/a
200	6900	6"	4"	4"	4"	4"	3"	n/a	n/a	n/a	n/a
250	8625	6"	4"	4"	4"	4"	4"	4"	n/a	n/a	n/a
300	10350	6"	4"	4"	4"	4"	4"	4"	4"	4"	4"
350	12075	6"	6"	4"	4"	4"	4"	4"	4"	4"	4"
400	13800	8"	6"	6"	4"	4"	4"	4"	4"	4"	4"
500	17250	8"	6"	6"	6"	6"	4"	4"	4"	4"	4"
600	20700		8"	6"	6"	6"	6"	6"	4"	4"	4"
700	24150		8"	6"	6"	6"	6"	6"	6"	6"	6"
750	25875		8"	8"	6"	6"	6"	6"	6"	6"	6"
800	27600		8"	8"	8"	6"	6"	6"	6"	6"	6"
900	31050		8"	8"	8"	8"	6"	6"	6"	6"	6"
1000	34500		8"	8"	8"	8"	8"	6"	6"	6"	6"
1100	37950			8"	8"	8"	8"	8"	6"	6"	6"
1200	41400			8"	8"	8"	8"	8"	8"	6"	6"
1300	44850				8"	8"	8"	8"	8"	8"	8"
1400	48300				8"	8"	8"	8"	8"	8"	8"
1500	51750					8"	8"	8"	8"	8"	8"
1600	55200						8"	8"	8"	8"	8"
1800	62100							8"	8"	8"	8"
2000	69000									8"	8"

This chart assumes that the boiler will always run at maximum capacity (lbs/hr)

100	3105	4"	3"	21/2"	21/2"	21/2"	21/2"	n/a	n/a		
125	3881	4"	3"	3"	3"	21⁄2"	21/2"	n/a	n/a	n/a	n/a
150	4658	4"	3"	3"	3"	3"	3"	n/a	n/a	n/a	n/a
200	6210	4"	4"	4"	3"	3"	3"	n/a	n/a	n/a	n/a
250	7763	6"	4"	4"	4"	4"	3"	n/a	n/a	n/a	n/a
300	9315	6"	4"	4"	4"	4"	4"	4"	n/a	n/a	n/a
350	10868	6"	6"	4"	4"	4"	4"	4"	4"	4"	4"
400	12420	6"	6"	4"	4"	4"	4"	4"	4"	4"	4"
500	15525	8"	6"	6"	4"	4"	4"	4"	4"	4"	4"
600	18630	8"	6"	6"	6"	6"	4"	4"	4"	4"	4"
700	21735		8"	6"	6"	6"	6"	6"	6"	4"	4"
750	23288		8"	6"	6"	6"	6"	6"	6"	6"	6"
800	24840		8"	8"	6"	6"	6"	6"	6"	6"	6"
900	27945		8"	8"	6"	6"	6"	6"	6"	6"	6"
1000	31050		8"	8"	8"	6"	6"	6"	6"	6"	6"
1100	34155		8"	8"	8"	8"	6"	6"	6"	6"	6"
1200	37260			8"	8"	8"	8"	6"	6"	6"	6"
1300	40365			8"	8"	8"	8"	8"	6"	6"	6"
1400	43470			8"	8"	8"	8"	8"	8"	6"	6"
1500	46575				8"	8"	8"	8"	8"	8"	8"
1600	49680				8"	8"	8"	8"	8"	8"	8"
1800	55890						8"	8"	8"	8"	8"
2000	62100							8"	8"	8"	8"

This chart assumes that the boiler will always run between 75% and 100% of maximum capacity (lbs/hr) and average an output of 90% of boiler capacity.

- 1. Automatic Stop Check Valve sizing must be sized only to the boiler steam demand, not the boiler nozzle outlet piping size.
- 2. Specific operating conditions may require slightly different Automatic Stop Check Valve sizing requirements for any given boiler system.
- 3. Automatic Stop Check Valve sizing is based on a target of 2 PSI pressure drop across the valve for optimum flow.
- 4. Please contact NIBCO Technical Services for guidance if operating conditions differ from conditions stated in #2 above.
- 5. This chart is to be used to assist in sizing Automatic Stop Check Valves, NIBCO assumes no liability for incorrect sizing.

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NOTES:

F-869 Automatic Stop Check Valve Sizing Guide

100	2588	3"	21⁄2"	21/2"	21⁄2"	21/2"	21/2"	n/a			
125	3234	4"	3"	21⁄2"	21⁄2"	21⁄2"	21⁄2"	n/a	n/a		
150	3881	4"	3"	3"	21⁄2"	21⁄2"	21⁄2"	n/a	n/a	n/a	n/a
200	5175	4"	4"	3"	3"	3"	3"	n/a	n/a	n/a	n/a
250	6469	4"	4"	4"	3"	3"	3"	n/a	n/a	n/a	n/a
300	7763	6"	4"	4"	4"	4"	3"	n/a	n/a	n/a	n/a
350	9056	6"	4"	4"	4"	4"	4"	4"	n/a	n/a	n/a
400	10350	6"	4"	4"	4"	4"	4"	4"	4"	4"	4"
500	12938	6"	6"	4"	4"	4"	4"	4"	4"	4"	4"
600	15525	8"	6"	6"	4"	4"	4"	4"	4"	4"	4"
700	18113	8"	6"	6"	6"	6"	4"	4"	4"	4"	4"
750	19406	8"	6"	6"	6"	6"	6"	4"	4"	4"	4"
800	20700		6"	6"	6"	6"	6"	6"	6"	4"	4"
900	23288		8"	6"	6"	6"	6"	6"	6"	6"	6"
1000	25875		8"	8"	6"	6"	6"	6"	6"	6"	6"
1100	28463		8"	8"	8"	6"	6"	6"	6"	6"	6"
1200	31050		8"	8"	8"	8"	6"	6"	6"	6"	6"
1300	33638		8"	8"	8"	8"	6"	6"	6"	6"	6"
1400	36225		8"	8"	8"	8"	8"	6"	6"	6"	6"
1500	38813			8"	8"	8"	8"	8"	6"	6"	6"
1600	41400			8"	8"	8"	8"	8"	8"	6"	6"
1800	46575				8"	8"	8"	8"	8"	8"	8"
2000	51750					8"	8"	8"	8"	8"	8"

This chart assumes that the boiler will always run between 50% and 100% of maximum capacity (lbs/hr) and average an output of 75% of boiler capacity.

100	1725	21/2"									
125	2156	3"	21⁄2"	21⁄2"							
150	2588	3"	21⁄2"	21/2"	21⁄2"	21⁄2"					
200	3450	4"	3"	3"	21⁄2"	21⁄2"	21⁄2"	n/a			
250	4313	4"	3"	3"	3"	3"	21⁄2"	n/a	n/a	n/a	n/a
300	5175	4"	4"	4"	3"	3"	3"	n/a	n/a	n/a	n/a
350	6038	4"	4"	4"	4"	3"	3"	n/a	n/a	n/a	n/a
400	6900	6"	4"	4"	4"	4"	3"	n/a	n/a	n/a	n/a
500	8625	6"	4"	4"	4"	4"	4"	4"	n/a	n/a	n/a
600	10350	6"	4"	4"	4"	4"	4"	4"	4"	4"	4"
700	12075	6"	6"	4"	4"	4"	4"	4"	4"	4"	4"
750	12938	6"	6"	6"	4"	4"	4"	4"	4"	4"	4"
800	13800	8"	6"	6"	4"	4"	4"	4"	4"	4"	4"
900	15525	8"	6"	6"	6"	4"	4"	4"	4"	4"	4"
1000	17250	8"	6"	6"	6"	6"	4"	4"	4"	4"	4"
1100	18975		6"	6"	6"	6"	6"	4"	4"	4"	4"
1200	20700		6"	6"	6"	6"	6"	6"	6"	4"	4"
1300	22425		8"	6"	6"	6"	6"	6"	6"	6"	6"
1400	24150		8"	8"	6"	6"	6"	6"	6"	6"	6"
1500	25875		8"	8"	6"	6"	6"	6"	6"	6"	6"
1600	27600		8"	8"	8"	6"	6"	6"	6"	6"	6"
1800	31050		8"	8"	8"	8"	6"	6"	6"	6"	6"
2000	34500		8"	8"	8"	8"	8"	8"	6"	6"	6"

This chart assumes that the boiler will always run between 25% & 100% of maximum capacity (lbs/hr) and average an output of 50% of boiler capacity.

NOTES: 1. Automatic Stop Check Valve sizing must be sized only to the boiler steam demand, not the boiler nozzle outlet piping size.

2. Specific operating conditions may require slightly different Automatic Stop Check Valve sizing requirements for any given boiler system.

3. Automatic Stop Check Valve sizing is based on a target of 2 PSI pressure drop across the valve for optimum flow.

Automatic stop check valve sizing is based on a target of 2 rsh pressure drop across the valve for optimum now.
 Please contact NIBCO Technical Services for guidance if operating conditions differ from conditions stated in #2 above.

- Prease contact NIBCO rechnical services for guidance in operating conditions unter from conditions stated in #2 above
 This chart is to be used to assist in sizing Automatic Stop Check Valves, NIBCO assumes no liability for incorrect sizing.
 - NIBCO INC. WORLD HEADQUARTERS 1516 MIDDLEBURY ST. ELKHART, IN 46516-4740 USA PH: 1.800.234.0227 TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455 www.nibco.com