

Iron Globe and Angle Valves Illustrated Index

Iron Body Globe Valve
Outside Screw and Yoke
125 lb. SWP
200 lb. CWP



F-718-B Bronze Disc
F-718-N All Iron Trim
Sizes 2" thru 10" Flanged
Page 52, 53

Iron Body Globe Valve
Outside Screw and Yoke • Bronze Mounted
250 lb. SWP
500 lb. CWP



F-768-B
Bronze Disc
Sizes 2" thru 8" Flanged
Page 54

Iron Body Angle Valve
Outside Screw and Yoke • Bronze Mounted
125 lb. SWP
200 lb. CWP



F-818-B
Bronze Disc
Sizes 2" thru 8" Flanged
Page 55

Iron Body Stop Check Valve
Outside Screw and Yoke • Bronze Mounted
250 lb. SWP
500 lb. CWP



F-869-B
Bronze Disc
Sizes 2½" thru 8" Flanged
Page 56

Class 125 Iron Body Globe Valves

Bolted Bonnet • Renewable Seat and Disc* • Bronze Mounted

125 PSI/8.6 Bar Saturated Steam to 353° F/178° C
200 PSI/13.8 Bar Non-Shock Cold Working Pressure
to -20° F to 150° F/-29° C to 66° C♦

CONFORMS TO MSS SP-85

MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A 307
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A 126 Class B
4. Yoke Bushing	Cast Bronze ASTM B 584 Alloy C84400
5. Bonnet	Cast Iron ASTM A 126 Class B
6. Stem	Brass ASTM B 16 Alloy C36000
7. Gland Follower Nut	Brass ASTM F 467 Alloy C27000
8. Gland Follower	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
9. Packing Gland	Zinc Plated Powdered Iron ASTM B 783 or Brass ASTM B 16
10. Gland Follower Stud	Steel ASTM A 307
11. Packing	Synthetic Fibres with Graphite
12. ¹ Body Bolt	Steel ASTM A 307
13. Body Gasket	Synthetic Fibres
14. ¹ Body Nut	Steel ASTM A 307
15. Swivel Nut	Cast Bronze ASTM B 584 Alloy C84400
16. ² Disc Cage	Cast Iron ASTM A 126 Class B
17. ³ Disc	Cast Bronze ASTM B 584 Alloy C84400 (B)
**18. ⁴ Disc Plate	Cast Iron ASTM A 126 Class B
**19. Disc Nut	Bronze
20. Seat Ring	Cast Bronze ASTM B 584 Alloy C84400
21. Body	Cast Iron ASTM A 126 Class B

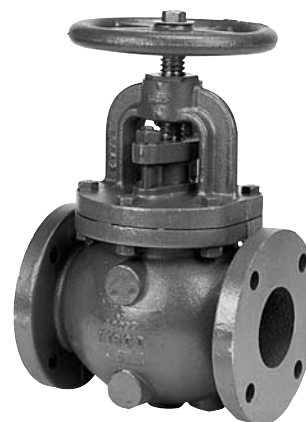
¹ 2" and 10" have hex head steel capscrew.

² 2" thru 5" are Cast Bronze ASTM B 584 Alloy C84400

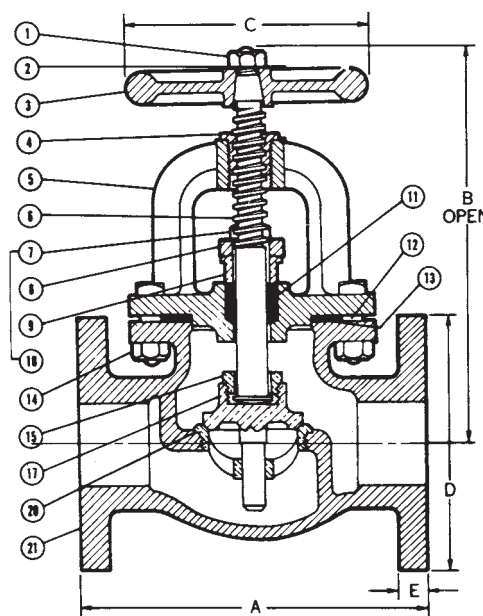
³ For (B) Disc, 2" thru 6" have Bronze ASTM B 584 Alloy C84400 Disc.
⁸" thru 10" have Iron Disc with Bronze Disc Face Rings and Brass Pilots.

⁴ 2" thru 4" are Cast Bronze ASTM B 584 Alloy C84400.

** For Teflon Seat Valves Only.



F-718-B
Flanged



F-718-B
Flg x Flg

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										F-718-B	
	A		B		C		D		E		Lbs.	Kg.
In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.			
2 50	8.00 203	10.19 259	7 178	6.00 152	.63 16	32	15					
2½ 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 in an open position to allow complete drainage.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 107.

Class 125 All Iron Trim Iron Body Globe Valves

Bolted Bonnet • Renewable Seat and Disc*

125 PSI/8.6 Bar Fluid Pressure to 353° F/178° C
200 PSI/13.8 Bar Non-Shock Cold Working Pressure
to -20° F to 150° F/-29° C to 66° C♦

CONFORMS TO MSS SP-85

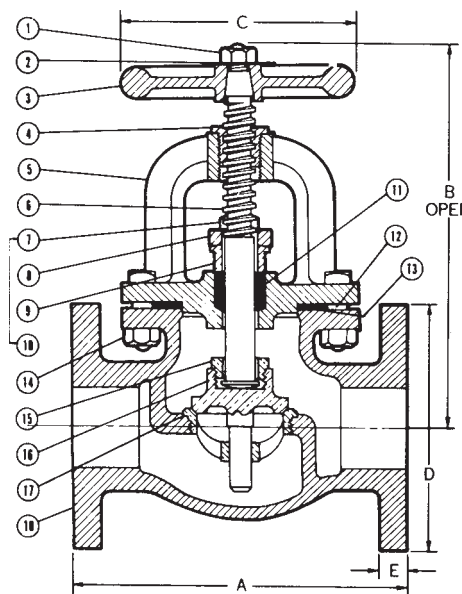
MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A 307
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A 126 Class B
4. Yoke Bushing	Ductile Iron ASTM A 536
5. Bonnet	Cast Iron ASTM A 126 Class B
6. Stem	Steel ASTM A 108 12L14 Electroless NI-PI
7. Gland Follower Nut	Steel ASTM A 307
8. Gland Follower	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
9. Packing Gland	Zinc Plated Powdered Iron ASTM B 783
10. Gland Follower Stud	Steel ASTM A 307
11. Packing	TFE Braided
12. 1 Body Bolt	Steel ASTM A 307
13. Body Gasket	Synthetic Fibres
14. 1 Body Nut	Steel ASTM A 307
15. Swivel Nut	Cast Iron ASTM A 126 Class B
16. Disc	Cast Iron ASTM A 126 Class B
17. Seat Ring	Cast Iron ASTM A 126 Class B
18. Body	Cast Iron ASTM A 126 Class B

* 2" and 10" have hex head steel capscrew.



F-718-N
Flanged



F-718-N
Flg x Flg

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										F-718-N Lbs. Kg.		
	A		B		C		D		E				
In. mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.			
2	50	8.00	203	10.19	259	7	178	6.00	152	.63	16	33	15
2½	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 in an open position to allow complete drainage.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 107.

Class 250 Iron Body Globe Valves

Bolted Bonnet • Renewable Seat and Disc* • Bronze Mounted

250 PSI/17.2 Bar Saturated Steam to 406° F/207° C
500 PSI/34.5 Bar Non-Shock Cold Working Pressure
to -20° F to 150° F/-29° C to 66° C♦

CONFORMS TO MSS SP-85

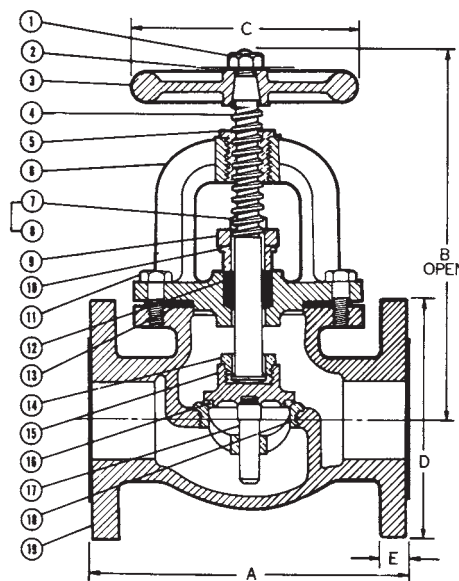
MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A 307
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A 126 Class B
4. Stem	Brass ASTM B 16 Alloy C36000
5. Yoke Bushing	Cast Bronze ASTM B 584 Alloy C84400
6. Bonnet	Cast Iron ASTM A 126 Class B
7. Gland Follower Nut	Brass ASTM F 467 Alloy C27000
8. Gland Follower Stud	Steel ASTM A 307
9. Gland Follower	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
10. Packing Gland	Zinc Plated Powdered Iron ASTM B 783 or Brass ASTM B 16
11. Hex Head Cap Screw	Steel ASTM A 307
12. Packing	TFE Braided
13. Body Gasket	Reinforced Graphite
14. Swivel Nut	Cast Bronze ASTM B 584 Alloy C84400 or ASTM B 16 Alloy C36000
15. Disc	Cast Iron ASTM A 126 Class B
16. Disc Ring	Cast Bronze ASTM B 584 Alloy C84400
17. Disc Pilot	Cast Bronze ASTM B 584 Alloy C84400
18. Seat Ring	Cast Bronze ASTM B 584 Alloy C84400
19. Body	Cast Iron ASTM A 126 Class B

† Sizes thru 4" have all Bronze Discs
Sizes 6" and 8" have Cast Iron Disc with Bronze Disc Face Rings and Brass Pilots.



F-768-B
Flanged



F-768-B
Flg x Flg

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										F-768-B	
	A		B		C		D		E		Lbs.	Kg.
In. mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.		
2 50	10.50	267	10.31	262	7 178	6.50	165	.88	22	42	19	
2½ 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 in an open position to allow complete drainage.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 107.

Class 125 Iron Body Angle Valves

Bolted Bonnet • Renewable Seat and Disc* • Bronze Mounted

125 PSI/8.6 Bar Saturated Steam to 353° F/178° C
200 PSI/13.8 Bar Non-Shock Cold Working Pressure
to -20° F to 150° F/-29° C to 66° C♦

CONFORMS TO MSS SP-85

MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A 307
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A 126 Class B
4. Yoke Bushing	Cast Bronze ASTM B 584 Alloy C84400
5. Bonnet	Cast Iron ASTM A 126 Class B
6. Stem	Brass ASTM B 16 Alloy C36000
7. Gland Follower Nut	Brass ASTM F 467 Alloy C27000
8. Gland Follower Stud	Steel ASTM A 307
9. Gland Follower	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
10. Packing Gland	Zinc Plated Powdered Iron ASTM B 783 or ASTM B 16
11. Packing	Synthetic Fibres with Graphite
12. ¹ Body Bolt	Steel ASTM A 307
13. Body Gasket	Synthetic Fibres
14. ¹ Body Nut	Steel ASTM A 307
15. Swivel Nut	Cast Bronze ASTM B 584 Alloy C84400
16. ² Disc Cage	Cast Iron ASTM A 126 Class B
17. ³ Disc	Bronze ASTM B 584 Alloy C84400 (B)
18. ⁴ Disc Plate	Cast Iron ASTM A 126 Class B
19. Disc Nut	Bronze
20. Seat Ring	Cast Bronze ASTM B 584 Alloy C84400
21. Body	Cast Iron ASTM A 126 Class B

¹ 2" have hex head steel cap screws.

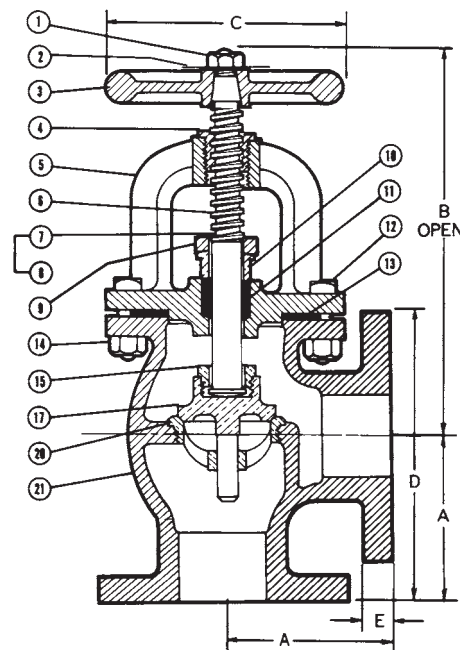
² 2" thru 5" are Cast Bronze ASTM B 584 Alloy C84400.

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

⁴ 2" thru 4" are Cast Bronze ASTM B 584 Alloy C84400.



F-818-B
Flanged



F-818-B
Fig x Flg

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										F-818-B	
	A		B		C		D		E		Lbs.	Kg.
In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.			
2 50	4.00 102	10.00 254	7 178	6.00 152	.63 16					30	14	
2½ 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 in an open position to allow complete drainage.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 107.

Class 250 Iron Body Automatic Stop Check Valves

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

250 PSI/17.2 Bar Saturated Steam to 406° F/207° C
500 PSI/34.5 Bar Non-Shock Cold Working Pressure
to -20° F to 150° F/-29° C to 66° C♦

CONFORMS TO MSS SP-85

MATERIAL LIST

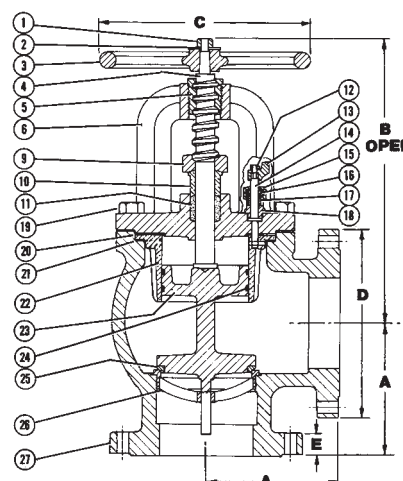
PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A 307
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A 126 Class B
4. Stem	Brass ASTM B 16 Alloy C36000
5. Yoke Bushing	Cast Bronze ASTM B 584 Alloy C84400
6. Bonnet	Cast Iron ASTM A 126 Class B
7. Gland Follower Stud	Steel ASTM A 307 (not shown)
8. Gland Follower Nut	Brass ASTM F 467 Alloy C27000 (not shown)
9. Gland Follower	Ductile Iron ASTM A 536
10. Packing Gland	Zinc Plated Powdered Iron ASTM B 783 or Brass ASTM B 16
11. Packing	TFE Braided
12. ¹ Butterfly Handle Nut	Steel ASTM A 307
13. ¹ Butterfly Handle	Cast bronze ASTM B 584 Alloy C84400
14. ¹ Control Valve Stem	Bronze ASTM B 371 Alloy C69400
15. ¹ Control Valve Pack Nut	Cast Bronze ASTM B 584 Alloy C84400
16. ¹ Control Valve Pack Gland	Brass ASTM B 16 Alloy C36000
17. ¹ Control Valve Packing	Synthetic Fibres with Graphite
18. ¹ Control Valve Body	Cast Bronze ASTM B 584 Alloy C84400
19. Hex Head Cap Screw	Steel ASTM A 307
20. Body Gasket	Reinforced Graphite
21. ¹ Dashpot Gasket	Reinforced Graphite
22. ¹ Dashpot	Cast Bronze ASTM B 584 Alloy C84400
23. ¹ Piston-Disc	Cast Iron ASTM A 126 Class B
24. ¹ Piston Ring (2)	TFE Composite Material
25. ¹ Disc Face Ring	Cast Bronze ASTM B 584 Alloy C84400
26. ¹ Seat Ring	Cast Bronze ASTM B 584 Alloy C84400
27. Body	Cast Iron ASTM A 126 Class B
28. ² Piston Ring Collar	Brass ASTM B 16 Alloy C36000
29. ² Disc Cage	Bronze ASTM B 62 Alloy C83600
30. ² Teflon Disc	TFE
31. ² Disc Plate and Nut	Bronze ASTM B 62 Alloy C83600
32. ² Piston Rod Plug	Brass ASTM B 16 Alloy C36000
33. ² Piston Rod Plug Pin	Red Bronze ASTM B 140 Alloy C31400

¹ 4" thru 8" size only. (4" thru 8" have Cast Iron Disc with Bronze Disc Face Ring.)

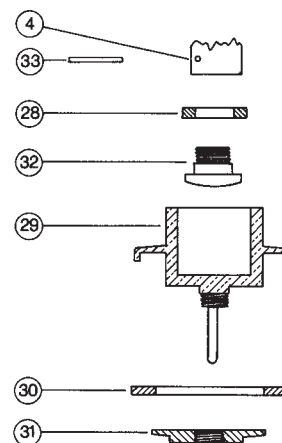
² 2½" and 3" size only. (2½" and 3" have Teflon Disc Ring (-Y series).)



F-869-B
Flanged
Series D



F-869-B
Flg x Flg



DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										F-869-B		
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	
2½	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.

Freezing Weather Precaution – Subsequent to testing a piping system, valves should be in an open position to allow complete drainage.

♦ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 107.