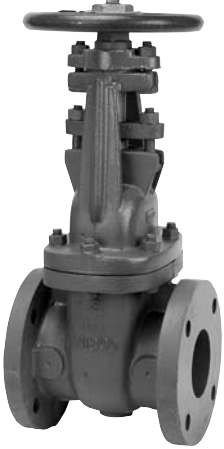



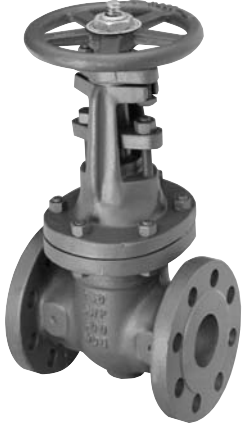



Iron Gate Valves Illustrated Index

<p>Iron Body Gate Valve Outside Screw and Yoke 125 lb. SWP 200 lb. CWP</p>  <p>F-617-O/F-617-ON T-617-O/T-617-ON Rising Stem • Solid Wedge Sizes 2" thru 24" Flanged Sizes 2" thru 4" only Threaded Page 39-42</p>	<p>Iron Body Gate Valve Inside Screw 125 lb. SWP 200 lb. CWP</p>  <p>F-619/F-619-N T-619/T-619-N Non-Rising Stem • Solid Wedge Sizes 2" thru 16" Flanged Sizes 2" thru 4" only Threaded Page 43, 44</p>	<p>Iron Body Gate Valve Outside Screw and Yoke Resilient Wedge 250 lb. CWP</p>  <p>F-607-RW Rising Stem • Resilient Wedge Sizes 2½" thru 12" Flanged Page 45</p>
<p>Iron Body Gate Valve Inside Screw 250 lb. CWP</p>  <p>F-619-RW/MJ-619-RW P-619-RW Rising Stem • Resilient Wedge Sizes 2" thru 12" Flanged Sizes 3" thru 12" Mechanical Joint Sizes 2" thru 12" IPS Push On Page 46-48</p>	<p>Iron Body Gate Valve Outside Screw and Yoke 250 lb. SWP 500 lb. CWP</p>  <p>F-667-O Rising Stem • Solid Wedge Sizes 2" thru 12" Flanged Page 49</p>	<p>Iron Body Gate Valve Inside Screw 250 lb. SWP 500 lb. CWP</p>  <p>F-669 Non-Rising Stem • Solid Wedge Sizes 2" thru 12" Flanged Page 50</p>

Class 125 Iron Body Gate Valves

Bolted Bonnet • Outside Screw and Yoke • Solid Wedge • 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-70

MATERIAL LIST

PART	SPECIFICATION
1. Stem	Brass ASTM B 16 Alloy C36000
2. Handwheel Nut	Cast Bronze ASTM B 584 Alloy C84400
3. Identification Plate	Aluminum
4. Yoke Bushing	Cast Bronze ASTM B 584 Alloy C84400
5. Handwheel	Cast Iron ASTM A 126 Class B
6. Bonnet Cap Nut	Steel ASTM A 307
7. Bonnet Cap	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
8. ¹ Bonnet	Cast Iron ASTM A 126 Class B
9. Bonnet Cap Bolt	Steel ASTM A 307
10. Gland Follower Nut	Brass ASTM B 16 Alloy C36000
11. Gland Follower	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
12. Packing Gland	Zinc Plated Powdered Iron ASTM B 783 or Brass ASTM B 16 Alloy C36000
13. Packing	Synthetic Fibres with Graphite
14. Gland Follower Bolt	Steel ASTM A 307
15. Backseat Bushing	Cast Bronze ASTM B 584 Alloy C84400
16. Body Nut	Steel ASTM A 307
17. Body Bolt	Steel ASTM A 307
18. Wedge Pin	Silicon Bronze ASTM B 371 Alloy C69400 (10" & 12") or B 140 Alloy C31600 (2"-8")
19. Body	Cast Iron ASTM A 126 Class B
20. Seat Ring	Cast Bronze ASTM B 584 Alloy C84400
21. Wedge Face Ring	Cast Bronze ASTM B 584 Alloy C84400
22. ² Wedge	Cast Iron ASTM A 126 Class B
23. Body Gasket	Synthetic Fibres
24. Stem Collar	Brass ASTM B 16 Alloy C36000

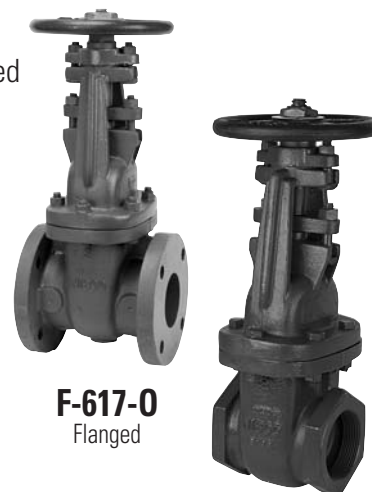
¹ Sizes thru 8" made with Yoke Integral with Bonnet. 10" and 12" sizes made with separate Yoke Bolted to Bonnet.

² Sizes 2" thru 6" are all Bronze Wedges. Sizes 8" thru 12" made with Cast Iron Wedge with Bronze Wedge Face Rings.

DIMENSIONS—WEIGHTS—QUANTITIES

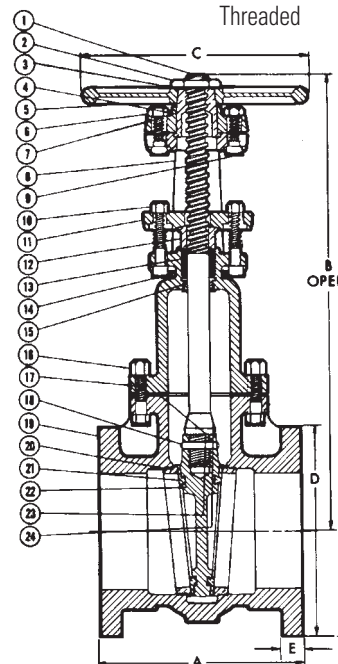
Dimensions																	
Size	F-617-0		T-617-0		B	C	D	E	F-617-0		T-617-0		Lbs.	Kg.			
	A	A	A	A					Lbs.	Kg.	Lbs.	Kg.					
2	50	7.00	178	5.63	143	16.31	414	8	203	6.00	152	.63	16	41	19	30	14
2½	65	7.50	191	5.88	149	17.19	437	8	203	7.00	178	.69	17	55	25	39	18
3	80	8.00	203	6.13	156	19.50	495	8	203	7.50	191	.75	19	67	30	47	21
4	100	9.00	229	6.50	165	24.00	610	10	254	9.00	229	.94	24	107	48	77	35
5	125	10.00	254	x	x	27.13	689	10	254	10.00	254	.94	24	145	66	x	x
6	150	10.50	267	x	x	31.06	789	12	305	11.00	279	1.00	25	178	81	x	x
8	200	11.50	292	x	x	40.19	1021	14	356	13.50	343	1.13	29	309	140	x	x
10	250	13.00	330	x	x	48.25	1226	16	406	16.00	406	1.19	30	481	218	x	x
12	300	14.00	356	x	x	56.88	1445	18	457	19.00	483	1.25	32	706	320	x	x

x Not available this size.

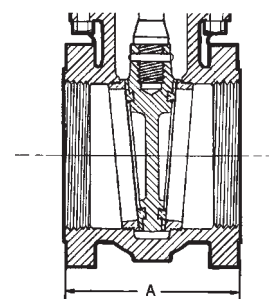


F-617-0
Flanged

T-617-0
Threaded



F-617-0
Flg x Flg



T-617-0
NPT x NPT

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 107.

Class 125 Iron Body Gate Valves

Bolted Bonnet • Outside Screw and Yoke • Solid Wedge • Bronze Mounted

***100 PSI/6.9 Bar Saturated Steam to 338° F/170° C**
150 PSI/10.3 Bar Non-Shock Cold Working Pressure
to -20° F to 150° F/-29° C to 66° C♦

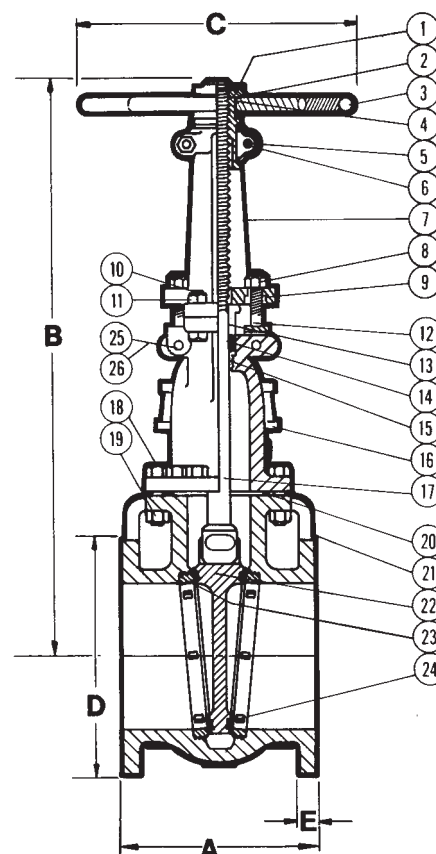
CONFORMS TO MSS SP-70

MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Cast Bronze ASTM B 584 Alloy C84400
2. I.D. Tag	Aluminum
3. Handwheel	Fabricated Steel
4. Yoke Bushing	Cast Bronze ASTM B 584 Alloy C84400
5. Split Yoke Bolt	Steel ASTM A 307
6. Split Yoke Bolt Nut	Steel ASTM A 307
7. Yoke	Cast Iron ASTM A 126 Class B
8. Gland Follower Nut	Brass ASTM B 16 Alloy C36000
9. Gland Follower	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
10. Yoke Bolt	Steel ASTM A 307
11. Yoke Bolt Nut	Steel ASTM A 307
12. Gland Follower Bolt	Steel ASTM A 307
13. Packing Gland	Cast Bronze ASTM B 584 Alloy C84400 or Brass ASTM B 16 C36000
14. Packing	Synthetic Fibres with Graphite
15. Backseat Bushing	Cast Bronze ASTM B 584 Alloy C84400
16. Bonnet	Cast Iron ASTM A 126 Class B
17. Stem	Brass ASTM B 16 Alloy C36000
18. Bonnet Bolt	Steel ASTM A 307
19. Bonnet Bolt Nut	Steel ASTM A 307
20. Bonnet Gasket	Synthetic Fibres
21. Body	Cast Iron ASTM A 126 Class B
22. Wedge	Cast Iron ASTM A 126 Class B
23. Seat Ring	Cast Bronze ASTM B 584 Alloy C84400
24. Wedge Ring	Cast Bronze ASTM B 584 Alloy C84400
25. Swing Nut	Steel ASTM A 307
26. Swing Bolt	Steel ASTM A 307
27. Grease Fitting	Alemite 1743B (not shown)
28. Stem Collar	Brass ASTM B 16 Alloy C36000 (not shown)
29. Wedge Pin	Brass ASTM B 371 C69400 (not shown)
30. Wedge Nut	Brass ASTM B 61 C92200 (not shown)



F-617-0
Flanged



F-617-0
Flg x Flg

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										Turns to Open	F-617-0		
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.		Lbs.	Kg.	
14	350	15	381	65.50	1660	24	610	21.00	533	1.38	35	29.38	892	405
16	400	16	407	74.50	1892	24	610	23.50	597	1.44	37	33.50	1253	568
18	450	17	432	82.50	2096	24	610	25.00	635	1.56	40	37.63	1598	725
20	500	18	457	91.00	2311	30	762	27.50	699	1.69	43	41.88	2000	907
24	600	20	508	107.50	2731	30	762	32.00	813	1.88	48	50.06	2909	1319

* 18", 20" and 24" sizes recommended for 50 PSI maximum steam service.

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 107.

Class 125 All Iron Trim Iron Body Gate Valves

Bolted Bonnet • Outside Screw and Yoke • Solid Wedge

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-70

MATERIAL LIST

PART	SPECIFICATION
1. Stem	Brass ASTM A 108 12L14 Electroless NI-PI
2. Handwheel Nut	Ductile Iron ASTM A 536
3. Identification Plate	Aluminum
4. Yoke Bushing	Ductile Iron ASTM A 395 or A 536
5. Handwheel	Cast Iron ASTM A 126 Class B
6. Bonnet Cap Nut	Steel ASTM A 307
7. Bonnet Cap	Ductile Iron ASTM A 536
8. Bonnet	Cast Iron ASTM A 126 Class B
9. Bonnet Cap Bolt	Steel ASTM A 307
10. Gland Follower Nut	Steel ASTM A 307
11. Gland Follower	Ductile Iron ASTM A 536
12. Packing Gland	Zinc Plated Powdered Iron ASTM B 783
13. Packing	TFE Braided
14. Gland Follower Bolt	Steel ASTM A 307
15. Backseat Bushing	Steel ASTM A 108 12L14
16. Body Nut	Steel ASTM A 307
17. Body Bolt	Steel ASTM A 307
18. Wedge Pin	Steel ASTM A 108 12L14
19. Body	Cast Iron ASTM A 126 Class B
20. Seat Ring	Cast Iron ASTM A 126 Class B
21. Wedge Face	Cast Iron ASTM A 126 Class B
22. Wedge	Cast Iron ASTM A 126 Class B
23. Body Gasket	Synthetic Fibres
24. Stem Collar	Brass ASTM A 108 12L14
25. Grease Fitting	Alemite 1743B (not shown)

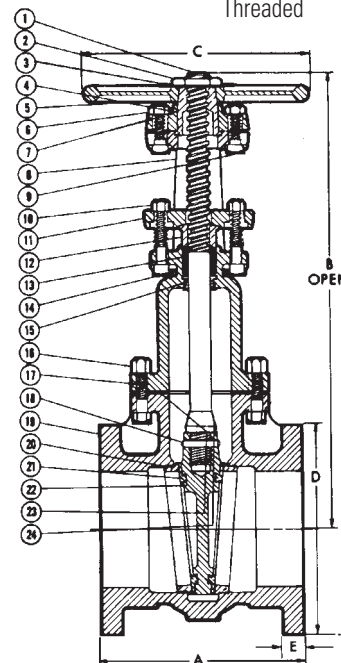
* Sizes thru 8" made with Yoke Integral with Bonnet. 10" and 12" sizes made with separate Yoke Bolted to Bonnet.



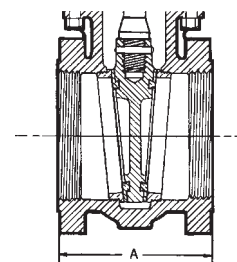
F-617-ON
Flanged



T-617-ON
Threaded



F-617-ON
Fig x Flg



T-617-ON
NPT x NPT

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions														F-617-ON		T-617-ON	
	A		A		B		C		D		E		Lbs.	Kg.	Lbs.	Kg.		
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.						
2	50	7.00	178	5.63	143	16.31	414	8	203	6.00	152	.63	16	41	18	30	14	
2½	65	7.50	191	5.88	149	17.19	437	8	203	7.00	178	.69	17	55	25	39	18	
3	80	8.00	203	6.13	156	19.50	495	8	203	7.50	191	.75	19	66	30	47	21	
4	100	9.00	229	6.50	165	24.00	610	10	254	9.00	229	.94	24	104	47	77	35	
5	125	10.00	254	x	x	27.13	689	10	254	10.00	254	.94	24	144	65	x	x	
6	150	10.50	267	x	x	31.06	789	12	305	11.00	279	1.00	25	178	81	x	x	
8	200	11.50	292	x	x	40.19	1021	14	356	13.50	343	1.13	29	309	140	x	x	
10	250	13.00	330	x	x	48.25	1226	16	406	16.00	406	1.19	30	481	218	x	x	
12	300	14.00	356	x	x	56.88	1445	18	457	19.00	483	1.25	32	702	318	x	x	

x Not available this size.

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 107.

Class 125 All Iron Trim Iron Body Gate Valves

Bolted Bonnet • Outside Screw and Yoke • Solid Wedge

100 PSI/6.9 Bar Fluid Pressure to 338° F/170° C
150 PSI/10.3 Bar Non-Shock Cold Working Pressure
to -20° F to 150° F/-29° C to 66° C♦

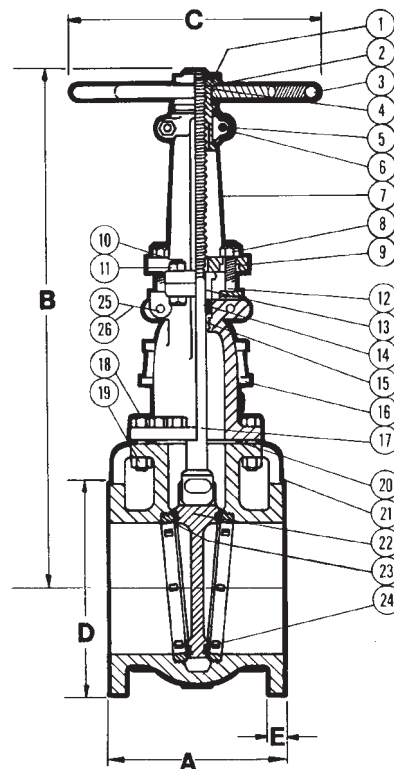
CONFORMS TO MSS SP-70

MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Ductile Iron ASTM A 536
2. Identification Tag	Aluminum
3. Handwheel	Fabricated Steel
4. Yoke Bushing	Ductile Iron ASTM A 536
5. Split Yoke Bolt	Steel ASTM A 307
6. Split Yoke Bolt Nut	Steel ASTM A 307
7. Yoke	Cast Iron ASTM A 126 Class B
8. Gland Follower Nut	Steel ASTM A 307
9. Gland Follower	Ductile Iron ASTM A 536
10. Yoke Bolt	Steel ASTM A 307
11. Yoke Bolt Nut	Steel ASTM A 307
12. Gland Follower Bolt	Steel ASTM A 307
13. Packing Gland	Steel ASTM A 108 12L14
14. Packing	TFE Braided
15. Backseat Bushing	Steel ASTM A 108 12L14
16. Bonnet	Cast Iron ASTM A 126 Class B
17. Stem	Steel ASTM A 108 12L14 Electroless NI-PI
18. Bonnet Bolt	Steel ASTM A 307
19. Bonnet Bolt Nut	Steel ASTM A 307
20. Bonnet Gasket	Synthetic Fibres
21. Body	Cast Iron ASTM A 126 Class B
22. Wedge	Cast Iron ASTM A 126 Class B
23. Seat Ring	Cast Iron ASTM A 126 Class B
24. Grease Fitting	Alemite 1743B (not shown)
25. Swing Nut	Steel ASTM A 307
26. Swing Bolt	Steel ASTM A 307
27. Stem Collar	Steel ASTM A 108 12L14 (not shown)
28. Wedge Pin	Steel ASTM A 108 12L14 (not shown)
29. Wedge Nut	Ductile Iron ASTM A 536 (not shown)



F-617-ON
Flanged



F-617-ON
Flg x Flg

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										Turns to Open	F-617-ON	
	A		B		C		D		E			Lbs.	Kg.
In. mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.			
14 350	15 381	65.50	1660	24 610	21.00	533	1.38	35	29.38	890	404		
16 400	16 407	74.50	1892	24 610	23.50	597	1.44	37	33.50	1252	568		
18* 450	17 432	82.50	2096	24 610	25.50	635	1.56	40	37.63	1595	724		
20* 500	18 457	91.00	2311	30 762	27.50	699	1.69	43	41.88	2001	907		
24* 600	20 508	107.50	2731	30 762	32.00	813	1.88	48	50.06	2879	1306		

* 18", 20" and 24" sizes recommended for 50 psi maximum steam service. For higher pressures see F-637-33.

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 107.

Class 125 Iron Body Gate Valves

Bolted Bonnet • Non-Rising Stem • Solid Wedge • 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-70

MATERIAL LIST

PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A 307
2. Identification Plate	Aluminum
3. Handwheel or Square Operating Nut	Cast Iron ASTM A 126 Class B
4. Stem	Brass ASTM B 16 Alloy C36000
5. Gland Follower Nut	Bronze ASTM F 467 Alloy C27000
6. Gland Follower	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
7. Gland Follower Bolt	Steel ASTM A 307
8. Packing Gland	Zinc Plated Powdered Iron ASTM B 783 or Brass ASTM B 16
9. Stuffing Box	Cast Iron ASTM A 126 Class B
10. Packing	Synthetic Fibres with Graphite
11. Stuffing Box Gasket	Synthetic Fibres
12. Bonnet	Cast Iron ASTM A 126 Class B
13. Body Bolt	ASTM A 307
14. Body Gasket	Synthetic Fibres
15. Body Nut	Steel ASTM A 307
16. † Wedge Bushing	Cast Bronze ASTM B 584 Alloy C84400
17. Seat Ring	Cast Bronze ASTM B 584 Alloy C84400
18. Wedge Face Ring	Cast Bronze ASTM B 584 Alloy C84400
19. † Wedge	Cast Iron ASTM A 126 Class B
20. Body	Cast Iron ASTM A 126 Class B
21. Stuffing Box Nut	Steel ASTM A 307 (not shown)

† Sizes thru 6" have Bronze Wedges. Sizes 8" thru 12" made with Cast Iron Wedge with Bronze Bushing and Wedge Face Rings.

DIMENSIONS—WEIGHTS—QUANTITIES

		Dimensions															
		F-619		T-619		B		C		D		E		F-619		T-619	
Size		A	A	B	C	D	E	F-619	T-619	Lbs.	Kg.	Lbs.	Kg.				
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.				
2	50	7.00	178	5.63	143	11.00	279	7	178	6.00	152	.63	16	35	16	25	11
2½	65	7.50	191	5.88	149	12.50	318	7	178	7.00	178	.69	17	49	22	33	15
3	80	8.00	203	6.13	156	13.50	343	8	203	7.50	191	.75	19	60	27	42	19
4	100	9.00	229	6.50	165	15.75	400	10	254	9.00	229	.94	24	90	41	61	28
5	125	10.00	254	x	x	17.00	432	10	254	10.00	254	.94	24	129	59	x	x
6	150	10.50	267	x	x	21.00	533	12	305	11.00	279	1.00	25	161	73	x	x
8	200	11.50	292	x	x	25.00	635	14	356	13.50	343	1.13	29	277	126	x	x
10	250	13.00	330	x	x	29.00	737	16	406	16.00	406	1.19	30	415	188	x	x
12	300	14.00	356	x	x	34.50	876	18	457	19.00	483	1.25	32	631	287	x	x
14	350	15.00	381	x	x	40.38	1026	20	508	21.00	533	1.38	35	869	394	x	x
16	400	16.00	407	x	x	45.75	1162	22	559	23.50	597	1.44	37	1224	555	x	x

x Not available this size.



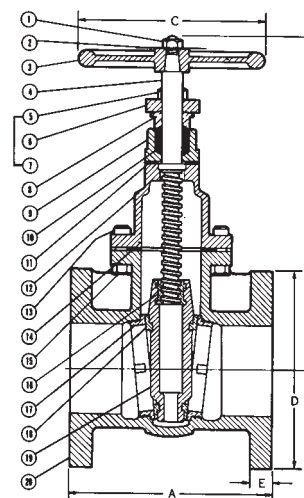
F-619
Flanged



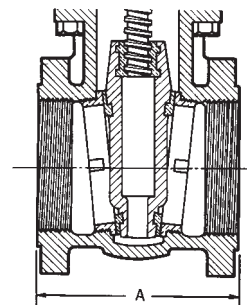
T-619
Threaded



F-619-SO
Flanged
With Square Op. Nut



F-619
Flg x Flg



T-619
NPT x NPT

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

Position indicators available, see page 90.

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

Class 125 All Iron Trim Iron Body Gate Valves

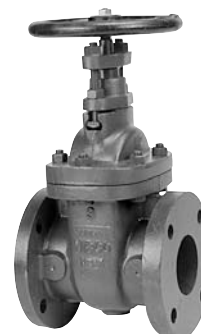
Bolted Bonnet • Non-Rising Stem • Solid Wedge

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♦

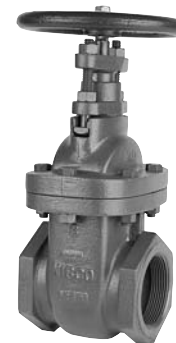
CONFORMS TO MSS SP-70

MATERIAL LIST

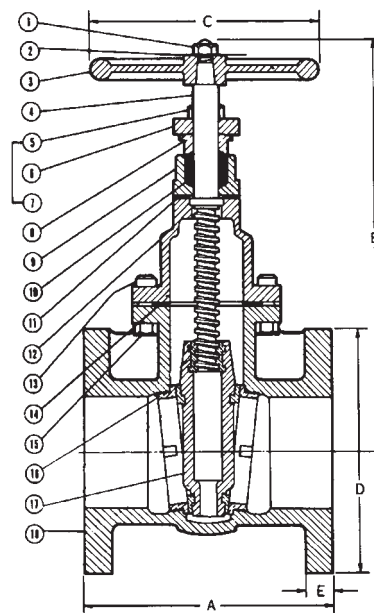
PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A 307
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A 126 Class B
4. Stem	Steel ASTM A 108 12L14 Electroless NI-PI
5. Gland Follower Nut	Steel ASTM A 307
6. Gland Follower	Ductile Iron ASTM A 536
7. Gland Follower Bolt	Steel ASTM A 307
8. Packing Gland	Zinc Plated Powdered Iron ASTM B 783
9. Stuffing Box	Cast Iron ASTM A 126 Class B
10. Packing	TFE Braided
11. Stuffing Box Gasket	Synthetic Fibres
12. Bonnet	Cast Iron ASTM A 126 Class B
13. Body Bolt	Steel ASTM A 307
14. Body Gasket	Synthetic Fibres
15. Body Nut	Steel ASTM A 307
16. Seat Ring	Cast Iron ASTM A 126 Class B
17. Wedge	Cast Iron ASTM A 126 Class B
18. Body	Cast Iron ASTM A 126 Class B
19. Stuffing Box Nut	Steel ASTM A 307 (not shown)



F-619-N
Flanged



T-619-N
Threaded



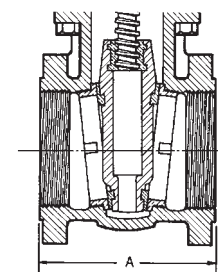
F-619-N
Flg x Flg

DIMENSIONS—WEIGHTS—QUANTITIES

		Dimensions																	
		F-619-N		T-619-N		A		B		C		D		E		F-619-N		T-619-N	
Size		A	A	A	A	B	B	C	C	D	D	E	E	Lbs.	Kg.	Lbs.	Kg.		
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.		
2	50	7.00	178	5.63	143	11.00	279	7	178	6.00	152	.63	16	35	16	25	11		
2½	65	7.50	191	5.88	149	12.50	318	7	178	7.00	178	.94	17	49	22	33	15		
3	80	8.00	203	6.13	156	13.50	343	8	203	7.50	191	.75	19	60	27	42	19		
4	100	9.00	229	6.50	165	15.75	400	10	254	9.00	229	.94	24	90	41	61	28		
5	125	10.00	254	x	x	17.00	432	10	254	10.00	254	.94	24	129	59	x	x		
6	150	10.50	267	x	x	21.00	533	12	305	11.00	279	1.00	25	161	73	x	x		
8	200	11.50	292	x	x	25.00	635	14	356	13.50	343	1.13	29	277	126	x	x		
10	250	13.00	330	x	x	29.00	737	16	406	16.00	406	1.19	30	415	188	x	x		
12	300	14.00	356	x	x	34.50	876	18	457	19.00	483	1.25	32	631	287	x	x		
14*	350	15.00	381	x	x	40.38	1026	20	508	21.00	533	1.38	35	869	394	x	x		
16*	400	16.00	407	x	x	45.75	1162	22	559	23.50	597	1.44	37	1224	555	x	x		

* 14"-16" sizes rated to 100 PSI maximum steam service, 150 PSI Non-Shock Cold Working Pressure. For higher pressures, see F-639.

x Not available this size.



T-619-N
NPT x NPT

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 107.

250 lb. WWP Iron Body Gate Valves

Fire Protection Valve • Outside Screw and Yoke • **Resilient Wedge** • Epoxy Coated Interior/Exterior • Pre-Grooved Stem for Supervisory Switch • Drilled, Tapped and Plugged at Boss Location A**

250 PSI/17.2 Bar Non-Shock Cold Working Pressure
(160° F/71° C max. operating temperature)

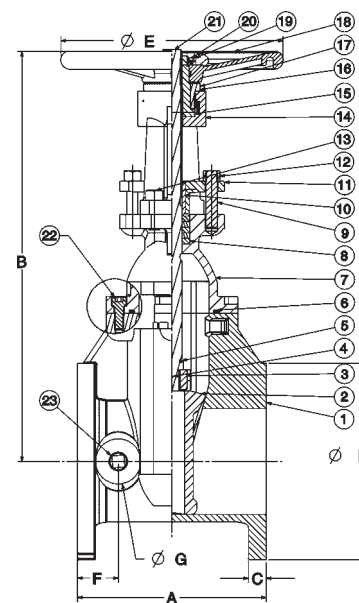
UL/ULC LISTED • FMRC APPROVED •
AWWA C509 & 515 • M.E.A. APPROVED



F-607-RW
Flanged

MATERIAL LIST

PART	SPECIFICATION
1. Valve Body	Ductile Iron ASTM A 536
2. Resilient Wedge	Ductile Iron ASTM A 536/EPDM ASTM D 2000
3. Wedge Nut	Bronze ASTM B 584 UNS C83600
4. Dowel Pin	Stainless Steel ASTM A 276 UNS S42000
5. Stem Back Seat O-Ring	EPDM ASTM D 2000
6. Bonnet Gasket	EPDM ASTM D 2000
7. Bonnet	Ductile Iron ASTM A 536
8. Stem Packing	EPDM ASTM D 2000
9. Threaded Rod	Carbon Steel Zinc Plated
10. Gland Bushing	Bronze ASTM B 584
11. Gland	Cast Iron ASTM A 126-B
12. Gland Nut	Stainless Steel 18-8
13. Yoke Screw	Alloy Steel ASTM A 574M Zinc Plated
14. Yoke	Cast Iron ASTM A 126-B
15. Yoke Bushing	Bronze ASTM B 584
16. Flat Point Set Screw	Alloy Steel ASTM F 912M Black Oxide
17. Yoke Bushing Retainer	Cast Iron ASTM A 126-B
18. Handwheel	Ductile Iron ASTM A 536
19. Handwheel Nut	Carbon Steel Zinc Plated
20. Flat Head Screw	Carbon Steel Zinc Plated
21. Stem	Bronze ASTM B 150 UNS C61400
22. Bonnet Screw	Alloy Steel ASTM A 574M Zinc Plated
23. NPT Pipe Plug	Malleable Iron ANSI B16.3 (Epoxy Coated)
24. UL/FM Label (not shown)	Aluminum



F-607-RW
Flg x Flg

* Electrostatically applied fusion-bonded epoxy coated inside and outside per AWWA C-550.

**Drilled, tapped and plugged at Position A with 1/2" valve sizes 2 1/2"-4", 3/4" on 6"-8", 1" on 10"-12".

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions															Bolt							
	A		B Open		B Closed		C		D		E		F		G		Circle	Flange Holes	Turns To Open	Weight			
In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.		Lbs.	Kg.			
2 1/2	65	7.5	190	17.8	453	14.9	378	0.69	17.5	7.0	178	7.9	200	1.50	38	1.6	40	5.50	140	4	8.8	45	20
3	80	8.0	203	19.7	500	15.9	405	0.75	19.0	7.5	191	7.9	200	1.73	44	2.1	54	6.00	152	4	10.5	53	24
4	100	9.0	229	21.0	534	16.6	422	0.94	24.0	9.0	229	10.2	260	2.13	54	2.1	54	7.50	191	8	10.4	94	43
6	150	10.5	267	29.3	744	22.9	581	1.00	25.4	11.0	279	12.4	315	2.24	57	2.5	64	9.50	241	8	15.7	154	70
8	200	11.5	292	37.0	939	28.5	724	1.13	28.6	13.5	343	14.8	375	2.48	63	2.8	70	11.75	298	8	17.2	247	112
10	250	13.0	330	44.8	1139	34.5	877	1.19	30.2	16.0	406	16.4	416	2.56	65	2.8	70	14.25	362	12	21.4	349	159
12	300	14.0	356	52.2	1326	39.9	1014	1.25	31.8	19.0	483	17.5	445	2.91	74	3.4	86	17.00	432	12	25.5	484	220



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

250 PSI CWP Iron Body Gate Valves

Bolted Bonnet • Non-Rising Stem • Resilient Wedge • Flanged Ends

250 PSI/17.2 Bar Non-Shock Cold Working Pressure

CONFORMS TO AWWA C509

MATERIAL LIST

PART	SPECIFICATION
1. Valve Body	Ductile Iron ASTM A 536
2. Resilient Wedge	Ductile Iron ASTM A 536/EPDM ASTM D 2000
3. Wedge Nut	Bronze ASTM B 584 UNS C83600
4. Stem	Bronze ASTM B 150 UNS C61400
5. Bonnet Gasket	EPDM ASTM D 2000
6. Bonnet Screw	Alloy Steel ASTM A 574M Zinc Plated
7. Bonnet	Ductile Iron ASTM A 536
8. Stem Primary O-Ring	EPDM ASTM D 2000
9. Stem Thrust Washer (lower)	Bronze ASTM B 584 UNS C83600
10. Stem Thrust Washer (upper)	Stainless Steel ASTM A 276 UNS S41000
11. Gland Seal O-Ring	EPDM ASTM D 2000
12. Stem Seal Bushing	Bronze ASTM B 584 UNS C83600
13. Stem Secondary O-Ring (2)	EPDM ASTM D 2000
14. Gland Flange	Ductile Iron ASTM A 536
15. Gland Flange Screw	Alloy Steel ASTM A 574M Zinc Plated
16. Stem Ring Wiper	EPDM ASTM D 2000
17. Square Operating Nut	Cast Iron ASTM A 126-B
17A. Handwheel (Optional)	Ductile Iron ASTM A 536
18. Flat Washer	Carbon Steel Zinc Plated
19. Screw	Alloy Steel ASTM A 574M Zinc Plated

Coating – Electrostatically applied fusion-bonded epoxy 10-14 mil. inside and outside. Meets or exceeds AWWA C550.

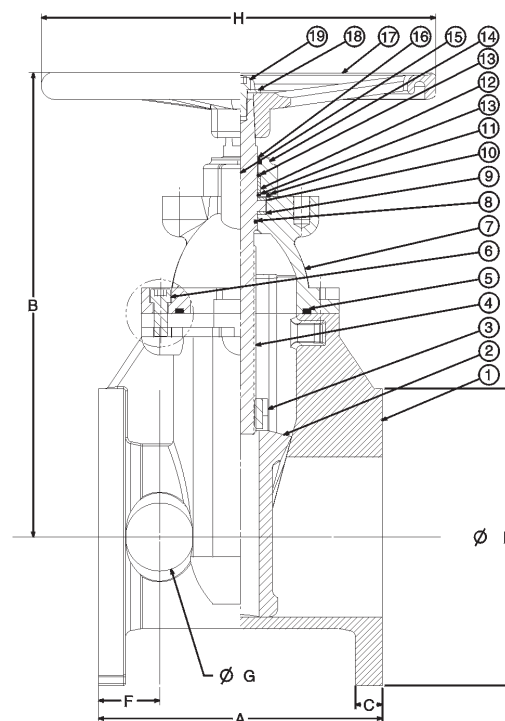
Maximum operating temperature 160° F/71° C.



F-619-RW
Flanged



F-619-RW-SON
Flanged



F-619-RW
Flg x Flg

Shown with optional handwheel

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions												Bolt Circle	Flange Holes	Turns to Open	Weight					
	A	B	C		D		F	G	H	In.	Mm.	Lbs.				Kg.					
In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.				
2	50	7.0	178	10.0	255	0.63	16.0	6.0	152	1.42	36	1.6	40	7.9	200	4.75	121	4	6.5	30	14
2½	65	7.5	190	11.3	287	0.69	17.5	7.0	178	1.50	38	1.6	40	7.9	200	5.50	140	4	8.8	35	16
3	80	8.0	203	12.6	321	0.75	19.0	7.5	191	1.73	44	2.1	54	10.2	260	6.00	152	4	10.6	45	20
4	100	9.0	229	13.5	344	0.94	24.0	9.0	229	2.13	54	2.1	54	10.2	260	7.50	191	8	13.0	71	32
6	150	10.5	267	17.4	441	1.00	25.4	11.0	279	2.24	57	2.5	64	14.8	375	9.50	241	8	15.6	122	55
8	200	11.5	292	20.8	529	1.13	28.6	13.5	343	2.48	63	2.8	70	14.8	375	11.75	298	8	17.3	196	89
10	250	13.0	330	24.2	614	1.19	30.2	16.0	406	2.56	65	2.8	70	15.7	400	14.25	362	12	21.4	294	134
12	300	14.0	356	27.6	700	1.25	31.8	19.0	483	2.91	74	3.4	86	19.7	500	17.00	432	12	25.3	426	194

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

250 PSI CWP Iron Body Gate Valves

Bolted Bonnet • Non-rising Stem • Resilient Wedge • MJ Ends

250 PSI/17.2 Bar Non-Shock Cold Working Pressure

CONFORMS TO AWWA C509

MATERIAL LIST

PART	SPECIFICATION
1. Valve Body	Ductile Iron ASTM A 536
2. Resilient Wedge	Ductile Iron ASTM A 536/EPDM ASTM D 2000
3. Wedge Nut	Bronze ASTM B 584 UNS C83600
4. Stem	Bronze ASTM B 150 UNS C61400
5. Bonnet Gasket	EPDM ASTM D 2000
6. Bonnet Screw	Alloy Steel ASTM A 574M Zinc Plated
7. Bonnet	Ductile Iron ASTM A 536
8. Stem Primary O-Ring	EPDM ASTM D 2000
9. Stem Thrust Washer (lower)	Bronze ASTM B 584 UNS C83600
10. Stem Thrust Washer (upper)	Stainless Steel ASTM A 276 UNS S41000
11. Gland Seal O-Ring	EPDM ASTM D 2000
12. Stem Seal Bushing	Bronze ASTM B 584 UNS C83600
13. Stem Secondary O-Ring (2)	EPDM ASTM D 2000
14. Gland Flange	Ductile Iron ASTM A 536
15. Gland Flange Screw	Alloy Steel ASTM A 574M Zinc Plated
16. Stem Ring Wiper	EPDM ASTM D 2000
17. Square Operating Nut	Cast Iron ASTM A 126-B
17A. Handwheel (Optional)	Ductile Iron ASTM A 536
18. Flat Washer	Carbon Steel Zinc Plated
19. Screw	Alloy Steel ASTM A 574M Zinc Plated

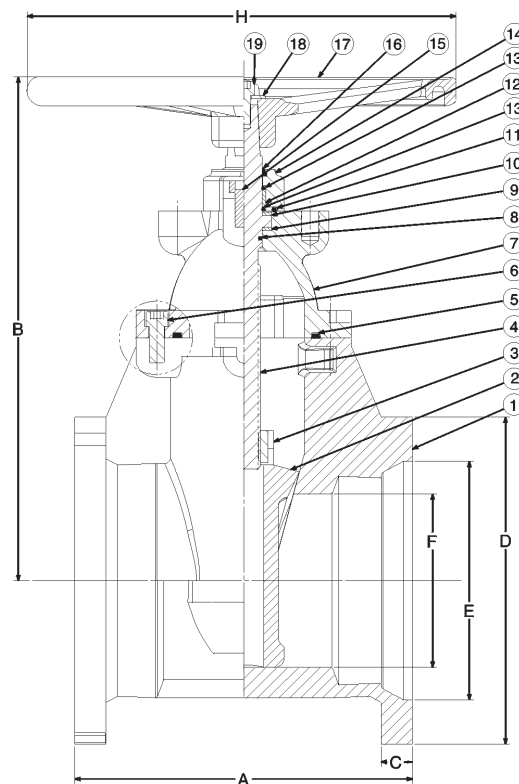
Coating – Electrostatically applied fusion-bonded epoxy 10-14 mil. inside and outside. Meets or exceeds AWWA C550.

Maximum operating temperature 160 ° F/71° C.



MJ-619-RW
Mechanical Joint

MJ-619-RW-SON
Mechanical Joint



MJ-619-RW
MJ x MJ

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions																Bolt Circle	Flange Holes	Turns to Open	Weight	
	A		B		C		D		E		F		H		Lbs.	Kg.					
In. mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.					
3	80	8.0	203	12.7	322	0.94	24	7.7	196	4.9	126	3.1	80	10.2	260	6.19	157	4	10.8	43	20
4	100	10.0	254	13.5	344	1.00	26	9.1	232	6.0	153	3.9	100	10.2	260	7.50	191	4	13.0	70	36
6	150	11.5	292	17.4	441	1.06	27	11.1	283	8.1	206	5.9	150	14.8	375	9.50	241	6	15.7	112	51
8	200	11.5	292	20.8	529	1.12	28	13.4	340	10.3	261	7.9	200	14.8	375	11.75	298	6	17.3	170	77
10	250	13.0	330	24.2	614	1.18	30	15.7	400	12.3	313	9.8	250	15.7	400	14.00	356	8	21.4	267	121
12	300	14.0	356	27.6	700	1.25	32	18.0	456	14.4	367	11.8	300	19.7	500	16.25	413	8	25.3	388	176

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

250 PSI CWP Iron Body Gate Valves

Bolted Bonnet • Non-Rising Stem • Resilient Wedge • IPS PVC Push-on

250 PSI/17.2 Bar Non-Shock Cold Working Pressure

CONFORMS TO AWWA C509

MATERIAL LIST

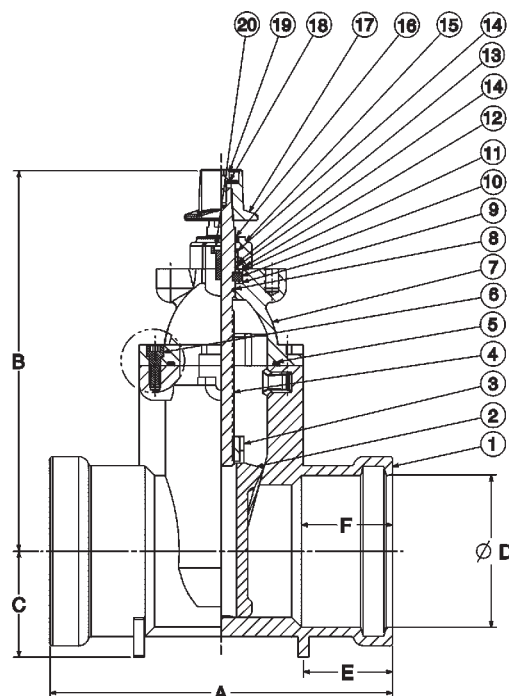
PART	SPECIFICATION
1. Valve Body	Cast Iron ASTM A 126-B
2. Resilient Wedge	Ductile Iron ASTM A 536/EPDM ASTM D 2000
3. Wedge Nut	Bronze ASTM B 584 UNS C83600
4. Stem	Stainless Steel ASTM A 276 UNS S41000
5. Bonnet Gasket	EPDM ASTM D 2000
6. Bonnet Screw	Alloy Steel ASTM A 574M Zinc Plated
7. Bonnet	Cast Iron ASTM A 126-B
8. Stem Primary O-Ring	EPDM ASTM D 2000
9. Stem Thrust Washer (lower)	Nylon 1010
10. Stem Collar	Brass ASTM B 16 UNS C36000
11. Stem Thrust Washer (upper)	Stainless Steel ASTM A 276 UNS S41000
12. Gland Seal O-Ring	EPDM ASTM D 2000
13. Stem Seal Bushing	Nylon 1010
14. Stem Secondary O-Ring (2)	EPDM ASTM D 2000
15. Gland Flange	Ductile Iron ASTM A 536
16. Stem Ring Wiper	EPDM ASTM D 2000
17. Square Operating Nut	Cast Iron ASTM A 126-B
17A. Handwheel (Optional)	Ductile Iron ASTM A 536
18. Operating Nut Washer	Carbon Steel Zinc Plated
19. Operating Nut Screw	Alloy Steel ASTM A 574M Zinc Plated
20. Gland Flange Screw	Alloy Steel ASTM A 574M Zinc Plated

Coating – Electrostatically applied fusion-bonded epoxy 10-14 mil. inside and outside. Meets or exceeds AWWA C550.

Maximum operating temperature 160° F/71° C.



P-619-RW
IPS Push-On



P-619-RW
IPS Push-On

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions												Handwheel (Opt.)	Turns to Open	Weight			
	A		B		C		D		E		F				Lbs.	Kg.		
In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.	In. mm.						
2	50	114	289	10.2	259	2.4	60	2.48	63	2.3	58	2.7	69	7.9	200	6.5	24	11
2½	65	114	289	11.3	288	2.6	67	2.99	76	2.3	58	2.7	69	7.9	200	8.8	32	15
3	80	113	287	12.7	322	3.1	80	3.62	92	2.2	56	3.0	75	10.2	250	10.6	40	18
4	100	117	298	13.4	341	3.5	90	4.65	118	2.5	63	3.5	89	10.2	260	12.8	56	25
6	150	153	388	17.0	431	4.7	120	6.77	172	4.0	101	4.1	103	14.8	375	15.6	106	48
8	200	165	418	20.4	518	5.9	150	8.74	222	3.0	77	4.5	115	14.8	375	17.3	172	78
10	250	212	539	23.8	604	7.1	180	10.94	278	3.7	93	5.2	132	15.7	400	21.3	307	140
12	300	265	672	27.0	685	8.1	206	12.89	327.5	4.1	103	5.5	139	19.7	500	25.3	447	203

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

Class 250 Iron Body Gate Valves

Bolted Bonnet • Outside Screw and Yoke • Solid Wedge •
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-70

MATERIAL LIST

PART	SPECIFICATION
1. Stem	Brass ASTM B 16 Alloy C36000
2. Handwheel Nut	Cast Bronze ASTM B 584 Alloy C84400
3. Identification Plate	Aluminum
4. Yoke Bushing	Cast Bronze ASTM B 584 Alloy C84400
5. Handwheel	Cast Iron ASTM A 126 Class B
6. Bonnet Cap Nut	Steel ASTM A 307
7. Bonnet Cap	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
8. ¹ Bonnet	Cast Iron ASTM A 126 Class B
9. Bonnet Cap Bolt	Steel ASTM A 307
10. Gland Follower Nut	Brass ASTM F 467 Alloy C27000
11. Gland Follower	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
12. Packing Gland	Zinc Plated Powdered Iron ASTM B 783 or Brass ASTM B 16
13. Packing	TFE Braided
14. Gland Follower Bolt	Steel ASTM A 307
15. Backseat Bushing	Cast Bronze ASTM B 584 Alloy C84400
16. Body Nut	Steel ASTM A 307
17. Body Gasket	Reinforced Graphite
18. Body Bolt	Steel ASTM A 307
19. Body	Cast Iron ASTM A 126 Class B
20. Stem Collar	Brass ASTM B 16 Alloy C36000
21. ² Wedge	Cast Iron ASTM A 126 Class B
22. ³ Wedge Nut	Cast Bronze ASTM B 584 Alloy C84400
23. Wedge Pin	Silicon Bronze ASTM B 371 Alloy C69400 or ASTM B 140 Alloy C31400
24. Seat Ring	Cast Bronze ASTM B 584 Alloy C84400
25. ³ Wedge Face Ring	Cast Bronze ASTM B 584 Alloy C84400

¹ Sizes 2" thru 8" made with Yoke Integral with Bonnet. Sizes 8" thru 12" made with separate Yoke Bolted to Bonnet.

² Wedge construction – 2" thru 3" all bronze.
– 4" thru 12" Cast Iron with Bronze Wedge Face Rings.

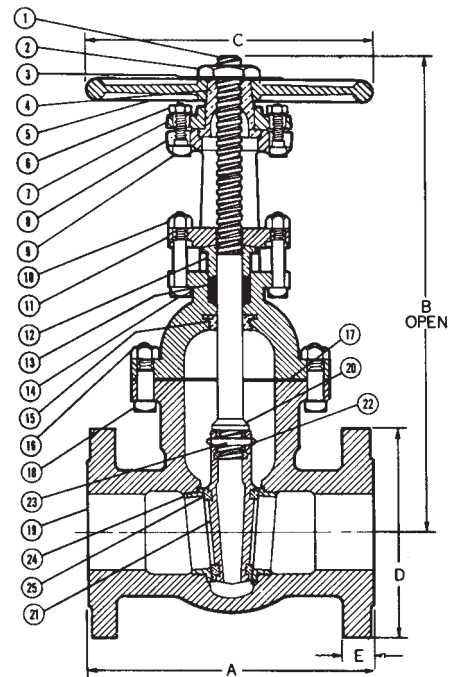
³ Bronze Wedge Nuts used on sizes 5" thru 12".

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										F-667-O	
	A		B		C		D		E		Lbs.	Kg.
In. mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.		
2 50	8.50	216	16.00	406	8 203	6.50	165	.88	22	56	25	
2½ 65	9.50	241	18.44	468	8 203	7.50	191	1.00	25	74	34	
3 80	11.13	283	20.50	521	10 254	8.25	210	1.13	29	122	55	
4 100	12.00	305	27.00	686	12 305	10.00	254	1.25	32	193	87	
5 125	15.00	381	31.50	800	12 305	11.00	279	1.38	35	297	135	
6 150	15.88	403	33.00	838	16 406	12.50	318	1.44	37	411	187	
8 200	16.50	419	45.50	1156	16 406	15.00	381	1.63	41	637	289	
10 250	18.00	457	56.00	1422	20 508	17.50	445	1.88	48	897	407	
12 300	19.75	502	60.00	1524	20 508	20.50	521	2.00	51	1172	532	



F-667-O
Flanged



F-667-O
Flg x Flg

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 107.

Class 250 Iron Body Gate Valves

Bolted Bonnet • Non-Rising Stem • Solid Wedge • 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-70

MATERIAL LIST

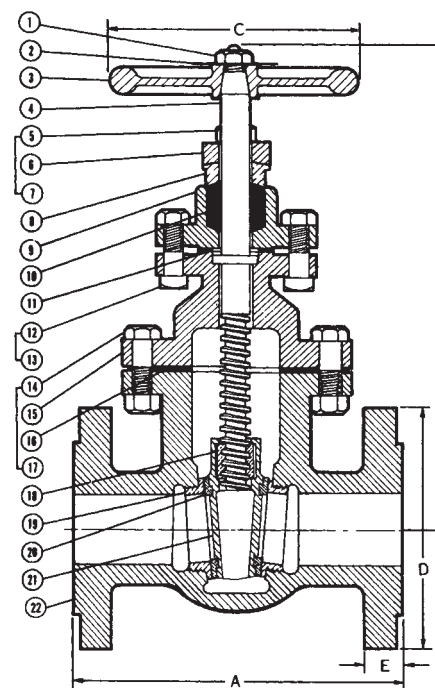
PART	SPECIFICATION
1. Handwheel Nut	Steel ASTM A 307
2. Identification Plate	Aluminum
3. Handwheel	Cast Iron ASTM A 126 Class B
4. Stem	Brass ASTM B 16 Alloy C36000
5. Gland Follower Nut	Brass ASTM F 467 Alloy C27000
6. Gland Follower	Cast Iron ASTM A 126 Class B or Ductile Iron ASTM A 536
7. Gland Follower Bolt	Steel ASTM A 307
8. Packing Gland	Zinc Plated Powdered Iron ASTM B 783 or Brass ASTM B 16
9. Stuffing Box	Cast Iron ASTM A 126 Class B
10. Packing	TFE Braided
11. Stuffing Box Gasket	Reinforced Graphite
12. Stuffing Box Bolt	Steel ASTM A 307
13. Stuffing Box Nut	Steel ASTM A 307
14. Body Bolt	Steel ASTM A 307
15. Bonnet	Cast Iron ASTM A 126 Class B
16. Body Gasket	Reinforced Graphite
17. Body Nut	Steel ASTM A 307
18. ² Wedge Nut	Cast Bronze ASTM B 584 Alloy C84400
19. Seat Ring	Cast Bronze ASTM B 584 Alloy C84400
20. ¹ Wedge Face Ring	Cast Bronze ASTM B 584 Alloy C84400
21. ¹ Wedge	Cast Iron ASTM A 126 Class B
22. Body	Cast Iron ASTM A 126 Class B

¹ Sizes thru 3" have Bronze Wedges. 4" thru 12" have Cast Iron Wedges with Bronze Wedge Face Rings.

² Bronze Wedge Bushing cast in place on 4" Wedge. Bronze Wedge Nut used in sizes 5" thru 12".



F-669
Flanged



F-669
Flg x Flg

DIMENSIONS—WEIGHTS—QUANTITIES

Size	Dimensions										F-669		
	A		B		C		D		E				
In. mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	
2	50	8.50	216	13.50	343	7	178	6.50	165	.88	22	53	24
2½	65	9.50	241	15.00	381	8	203	7.50	191	1.00	25	72	33
3	80	11.13	283	16.50	419	10	254	8.25	210	1.13	29	115	52
4	100	12.00	305	18.50	470	12	305	10.00	254	1.25	32	186	85
5	125	15.00	381	20.75	527	12	305	11.00	279	1.38	35	269	122
6	150	15.88	403	24.00	610	16	406	12.50	318	1.44	37	374	170
8	200	16.50	419	28.50	724	16	406	15.00	381	1.63	41	581	264
10	250	18.00	457	34.00	864	18	457	17.50	445	1.88	48	786	357
12	300	19.75	502	36.00	914	20	508	20.50	521	2.00	51	1098	498

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 107.