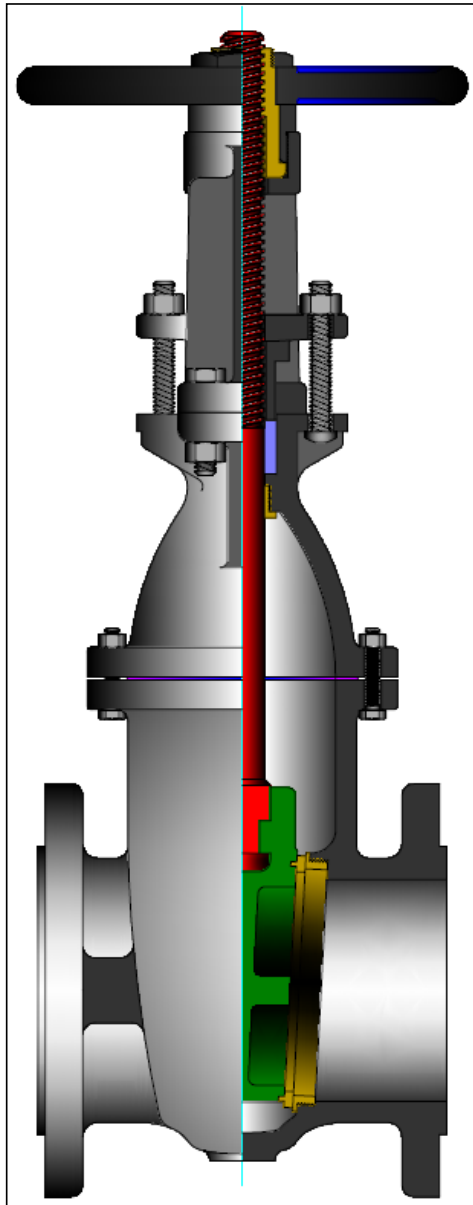


# MSS SP-70 GATE VALVE

BOLTED BONNET, FLANGED ENDS

2 - 24" (50 - 600 mm) CLASSES 125 - 250

CAST IRON OR 3% NICKEL IRON RISING STEM



## STANDARD MATERIALS

FIGURE NUMBER	1793	1797	1816	1893
CLASS	125	250	125	125
PART	MATERIALS			
Body	A126-B		3% Nickel	
Bonnet	A126-B		3% Nickel	
Yoke	A126-B		A126-B	
Wedge	A126-B		3% Nickel	
Wedge Seat Ring	B62	-	A351-CF8M	
Body Seat Ring	B62	-	A351-CF8M	
Stem	B16	A276-410	A276-316	
Stem Bushing	B62			
Stem Bushing Lock Nut	A536			
Gland Flange	A536			
Gland Flange Bolt	A307-A			
Gland Flange Nut	A563-A			
Gland	B62	A126-B		
Packing	Non-Asbestos			
Gasket	Non-Asbestos			
Backseat Ring	2 - 12"	B62	A276-410	316 SST
	14 - 24"	B16		
Hand Wheel	A126-B or A536			
Hand Wheel Nut	A536			
Body / Bonnet Stud	A307-A			
Body / Bonnet Nut	A563-A			
Bonnet / Yoke Bolt	A307-A			
Bonnet / Yoke Nut	A563-A			

## Design Specifications

Item	Applicable Specification
Wall thickness	ASME B16.1
Pressure - temperature ratings	MSS SP-70
General valve design	MSS SP-70 Type I
End to End dimensions	ASME B16.10
Flange design	ASME B16.1
Materials	ASTM

Class	Trim	Fig. No.
125	Bronze	1793
	Iron	1816
	T316 SS	1893
250	Bronze	1797

## DESIGN FEATURES:

- Seat faces lapped for smooth finish and superior sealing.
- Stems are non-rotating with surface finish to optimize packing seal.
- Each valve is shell and seat pressure tested per industry standard MSS SP-70.
- Gland is two piece gland / gland flange design for optimal alignment and uniform packing compression.
- Renewable seat rings.
- Body has 5 tapping bosses.
- Solid wedge design.
- Class 125 have flat faced end flanges, class 250 has raised face end flanges.

## GATE VALVE DIMENSIONS (CLASSES 125 & 250)

SIZE in mm	FIG 1793, 1816, & 1893				FIG 1797			
	A	C	D	E	A	C	D	E
2	7.00	14.7	2.00	7.0	8.50	15.0	2.00	7.0
50	178	374	51	178	216	382	51	178
2½	7.50	16.7	2.50	7.0	9.50	17.1	2.50	8.0
65	191	423	64	178	241	434	64	203
3	8.00	18.9	3.00	8.0	11.13	19.4	3.00	10.0
80	203	479	76	203	283	492	76	254
4	9.00	23.4	4.00	10.0	12.00	23.6	4.00	12.0
100	229	595	102	254	305	600	102	305
5	10.00	27.7	5.00	12.0	15.00	27.9	5.00	12.0
125	254	704	127	305	381	709	127	305
6	10.50	32.2	6.00	12.0	15.88	32.4	6.00	14.0
150	267	819	152	305	403	824	152	356
8	11.50	39.5	8.00	14.0	16.50	40.6	8.00	16.0
200	292	1002	203	356	419	1030	203	406
10	13.00	48.2	10.00	16.0	18.00	49.0	10.00	18.0
250	330	1223	254	406	457	1246	254	457
12	14.00	56.1	12.00	18.0	19.75	56.8	12.00	20.0
300	356	1424	305	457	502	1442	305	508
14	15.00	62.5	14.00	20.0				
350	381	1586	356	508				
16	16.00	71.1	16.00	22.0				
400	406	1805	406	559				
18	17.00	79	18.00	24.0				
450	432	2007	457	610				
20	18.00	87.1	20.00	24.0				
500	457	2213	508	610				
24	20.00	100.5	24.00	30.0				
600	508	2553	610	762				

SIZE in mm	FIG 1793, 1816, & 1893		FIG 1797	
	WT	lb kg	WT	lb kg
2	36	240	53	240
50	16		24	
2½	48	390	70	390
65	22		32	
3	60	560	102	560
80	27		46	
4	103	1000	157	1000
100	47		71	
5	143	1600	198	1600
125	65		90	
6	186	2400	259	2400
150	84		117	
8	298	4500	451	4500
200	135		205	
10	441	7000	649	7000
250	200		294	
12	628	10500	913	10500
300	285		414	
14	880	14300		
350	399			
16	1166	18600		
400	529			
18	1467	24500		
450	665			
20	1824	30300		
500	827			
24	2618	43600		
600	1188			

**C** = Center to top open  
**WT** = Weight  
**C<sub>v</sub>** = Flow Coefficient

