

# CAST IRON GATE VALVES HANDWHEEL WITH OUTSIDE SCREW AND YOKE (OS&Y)

The Gate Valves are used when the need exists for a device that allows an interruption or cut off in the flow or fluid. Gate Valves are not to be used for flow modulations as the high velocity through a partially open valve may result in erosive damage to the wedge and seats. Under normal operating conditions, the valve should remain either fully open or fully closed. Installation of a Gate Valve does not depend on the flow direction:

#### **DESIGN FEATURES**

- Gate Valves design in accordance with MSS SP-70 type solid, wedge/Disc.
- Body and Bonnet Cast Iron in Accordance with ASTM A 126 Class B.
- · Face to Face dimensions as per ANSI B16.10
- · Flanged drilled as per ANSI B16.1

## STANDARD MANUFACTURING OF WEDGE

- Solid Wedge single piece design with long disc guides is a proven performer for all service conditions, particularly suitable for conditions of severe turbulence and stem vibration.
- Service Conditions WOG-Water, Oil, Air, Gas, Water, Steam and Pumping Systems.

## HANDWHEEL OPERATION

- Handwheels are furnished on all Gate & Globe Valves, manual gear, hydraulic or motored operators and chainwheels can be supplied when specified.
- By-Pass, Drains and Special connections are available upon request.
- Stem Nut replaceable in line to avoid shut down of pipe line process.
- Non Rising Stem with trapezoidal metric thread for quick operation.
- Surface finish suitable to seal properly to obtain low fugitive emissions.

## TRIM MATERIALS

- Cast Iron Valves are provided with Bronze Seat and Brass Stem.
- · Graphite is used for Gaskets and Packing
- · Glands may be threaded or bolted type
- Bronze trim valves are recommended for steam, water, air, and noncorrosive oil or gas.
- All Iron Valves are recommended for oil, gas, or fluids that corrode bronze, but not iron or steel.





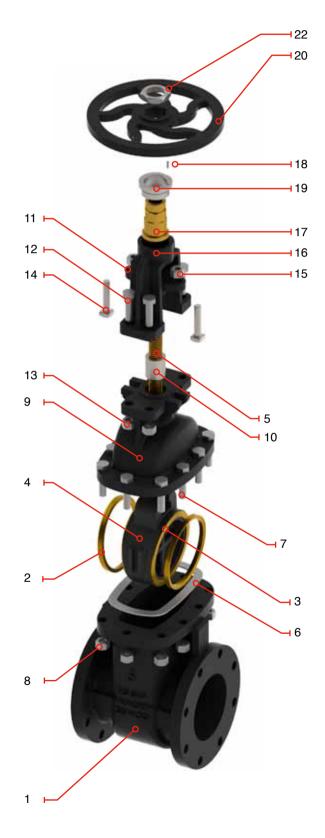
#### **DESIGN FEATURES**

- · Design in accordance with MSS SP-70
- CLASS 125
- Outside Screw & Yoke (OS&Y)
- · Cast Iron Construction
- · Bolted Body design
- · Handwheel Operated
- Face to Face dimensions as per ANSI B16.10
- Flanged drilled as per ANSI B16.1

125 psi (8.6 Bar) Saturated Stem @ 353°F (178°C) 200 psi (13.8 Bar) Cold water pressure @ -20°F(-29 °C) to 150 °F(66°C).

# **Regular Bill of Materials**

No.	Description	Brass
1	Body	ASTM A126 class B
2	Body Seat Ring	ASTM B62 Grade C83600
3	Wedge Seat Ring	ASTM B62 Grade C83600
4	Wedge	ASTM A126 class B
5	Stem	Brass ASTM B16
6	Bonnet Gasket	Graphite
7	Bonnet Bolt	ASTM A307 class B
8	Bonnet Nut	ASTM A563 class B
9	Bonnet	ASTM A126 class B
10	Packing	Graphite
11	Gland Follower	ASTM A536 65-45-12
12	Bolt	Steel
13	Nut	Steel
14	Gland Bolt	Steel
15	Gland Nut	Steel
16	Yoke	ASTM A126 class B
17	Stem Nut	Cast Brass (Mn-Brass)
18	Screw	Steel
19	Yoke Nut	ASTM A126 class B
20	Handwheel	ASTM A126 class B
21	Identification Plate*	Aluminum
22	Handwheel Nut	Steel



<sup>\*</sup> Not Shown

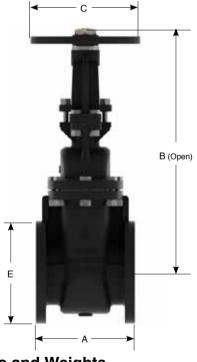


# **CLASS 125**

## **DESIGN FEATURES**

- · Design in accordance with MSS SP-70
- CLASS 125
- Outside Screw & Yoke (OS&Y)
- · Cast Iron Construction
- · Bolted Body design
- · Handwheel Operated
- Face to Face dimensions as per ANSI B16.10
- Flanged drilled as per to ANSI B16.1

Catalog Figure No.	Type of Ends
W726F	Flat Face ends







# **Dimensions and Weights**

D	mm	51	64	76	102	127	152	203	254	305	356	406	457	508	610	762	914
Nominal Diameter	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	30	36
	mm	177.8	190.0	203.2	228.6	254.0	266.7	292.1	330.2	355.6	381.0	406.4	432.0	457.0	508.0	PCR	PCR
Α	in	7.00	7.48	8.00	9.00	10.00	10.50	11.50	13.00	14.00	15.00	16.00	17.01	17.99	20.00	PCR	PCR
D (Onen)	mm	311	347	384	490	541	656	778	933	1102	1259	1395	1560	1708	1990	PCR	PCR
B (Open)	in	12.24	13.66	15.12	19.29	21.30	25.83	30.63	36.73	43.39	49.57	54.92	61.42	67.24	78.35	PCR	PCR
0	mm	178	178	200	254	300	300	348	400	457	560	560	610	610	765	PCR	PCR
С	in	7.01	7.01	7.87	10.00	11.81	11.81	13.70	15.75	17.99	22.05	22.05	24.02	24.02	30.12	PCR	PCR
_	mm	152.0	178.0	190.0	228.6	254.0	279.4	343.0	406.0	483.0	533.4	597.0	635.0	699.0	813.0	PCR	PCR
E	in	5.98	7.01	7.48	9.00	10.00	11.00	13.50	15.98	19.02	21.00	23.50	25.00	27.52	32.01	PCR	PCR
Weight	kg	17	23	28	50	70	92	129	208	289	380	460	673	859	1225	2492	3682
W726F	lb	37.49	50.72	61.74	110.25	154.36	202.87	284.45	458.65	637.27	837.93	1014.33	1484.01	1894.16	2701.21	5495.04	8119.07
Cv	Flow	241.0	386.0	556.0	1018.0	1639.0	2438.0	4486.0	7009.0	10473.0	14256.0	18619.0	24528.0	30281.0	43605.0	83444	120160
	Coefficient																

PCR= per customer request



# CAST IRON GATE VALVES HANDWHEEL WITH OUTSIDE SCREW AND YOKE (OS&Y)

WALWORTH design for class 250 is based in uniform wall thickness distributed to offer the maximum mechanichal properties. Flange dimensions and drilling comply with ASME B16.1. Face to face dimensions are in accordance with ASME B16.10.

## **DESIGN FEATURES**

- · Gate valves design in accordance with MSS SP-70 type 1 solid, wedge/Disc.
- · Body and Bonnet Cast iron in accordance with ASTM A 126 Class B.
- Face to Face dimensions as per ANSI B16.10
- Flanged drilled as per ANSI B16.1

## STANDARD MANUFACTURING OF WEDGE

- · Solid Wedge single piece design with long disc guides is a proven performer for all service conditions, particularly suitable for conditions of severe turbulence and stem vibration.
- · Service Conditions WOG-Water, Oil, Air, Gas, Water, Steam and Pumping Systems.

## HANDWHEEL OPERATION

- · Handwheels are furnished on all Gate & Globe Valves, manual gear, hydraulic or motor operators and chainwheels can be supplied when specified.
- By-Pass, Drains and Special connections, available upon request.
- · Stem Nut, replaceable in line to avoid shut down of pipe line process.
- · Rising stem with trapezoidal metric thread for quick operation.
- · Surface finish suitable to seal properly to obtain low fugitive emissions.

## TRIM MATERIALS

- · Cast Iron Valves are provided with Bronze Seat and Brass Stem
- · Graphite is used for Gaskets and Packing
- · Glands may be threaded or bolted type
- · Bronze trim valves are recommended for steam, water, sea water, air, and noncorrosive oil or gas.
- All iron valves are recommended for oil, gas, or fluids that corrode bronze, but not iron or steel.





#### **DESIGN FEATURES**

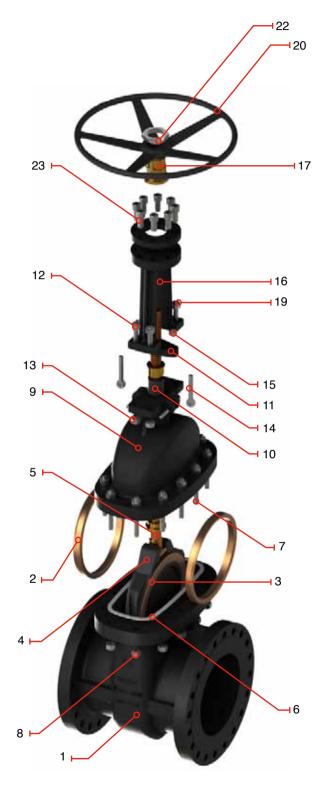
- · Design in accordance with MSS SP-70
- CLASS 250
- · Outside Screw & Yoke (OS&Y)
- · Cast Iron Construction
- · Bolted Body design
- · Handwheel Operated
- Face to Face dimensions as per ANSI B16.10
- · Flanged drilled conforms to ANSI B16.1

250 psi (17.2 Bar) Saturated Stem @ 406°F (207°C)

500 psi (34.5 Bar) Cold water pressure @ -20°F(-29 °C) to 150 °F(66°C).

# **Regular Bill of Materials**

No.	Description	Brass
1	Body	ASTM A126 class B
2	Body Seat Ring	ASTM B62
3	Wedge Seat Ring	ASTM B62
4	Wedge	ASTM A126 class B
5	Stem	Brass ASTM B16
6	Bonnet Gasket	Graphite
7	Bonnet Bolt	ASTM A307 class B
8	Bonnet Nut	ASTM A563 class B
9	Bonnet	ASTM A126 class B
10	Packing	Graphite
11	Gland Follower	ASTM A536 65-45-12
12	Yoke Bolt	Steel
13	Nut	Steel
14	Gland Bolt	Steel
15	Gland Nut	Steel
16	Yoke	ASTM A126 class B
17	Stem Nut	Cast Brass (Mn-Brass)
18	Screw*	Steel
19	Nut	ASTM A126 class B
20	Handwheel	ASTM A126 class B
21	Identification Plate*	Aluminum
22	Handwheel Nut	Steel
23	Bolt	Steel



<sup>\*</sup> Not Shown

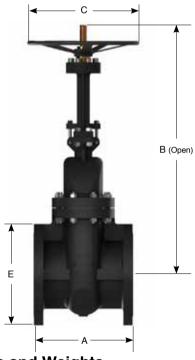


# **CLASS 250**

## **DESIGN FEATURES**

- · Design in accordance with MSS SP-70
- CLASS 250
- Outside Screw & Yoke (OS&Y)
- · Cast Iron Construction
- · Bolted Body design
- · Handwheel Operated
- Face to Face dimensions as per ANSI B16.10
- Flanged drilled as per ANSI B16.1

Catalog Figure No.	Type of Ends
W786F	Flat Face ends







# **Dimensions and Weights**

, D	mm	51	64	76	102	127	152	203	254	305
Nominal Diameter	in	2	2 1/2	3	4	5	6	8	10	12
۸	mm	215.9	241.3	282.5	304.8	381.0	403.2	419.1	457.0	502.0
Α	in	8.50	9.50	11.12	12.00	15.00	15.87	16.50	17.99	19.76
D (O===)	mm	325	362	406	493	579	644	795	935	1059
B (Open)	in	12.80	14.25	15.98	19.41	22.80	25.35	31.30	36.81	41.69
0	mm	175	200	254	300	300	348	400	457	457
С	in	6.89	7.87	10.00	11.81	11.81	13.70	15.75	17.99	17.99
_	mm	165.0	191.0	210.0	254.0	279.0	318.0	381.0	445.0	521.0
E	in	6.50	7.52	8.27	10.00	10.98	12.52	15.00	17.52	20.51
Weight	kg	28	34	46	76	101	132	201	317	433
W786F	lb	61.74	74.97	101.43	167.59	222.71	291.07	443.22	699.01	954.80
Cv	Flow Coefficient	241.0	386.0	556.0	1018.0	1639.0	2438.0	4486.0	7009.0	10473.0



## CAST IRON GATE VALVES HANDWHEEL WITH NON RISING STEM

Non Rising Stem Cast Iron valves are used when there is not enough, space above the valve to permit that stem goes up. In this configuration, the stem is coupled by threads inside the wedge, which permit to the stem movement with freedom.

## **DESIGN FEATURES**

- Gate valves design in accordance with MSS SP-70 type 1 solid, wedge/Disc.
- Body and Bonnet Cast iron in Accordance with ASTM A 126 Class B.
- · Face to Face dimensions as per ANSI B16.10
- · Flanged drilled as per ANSI B16.1

## STANDARD MANUFACTURING OF WEDGE

- Solid Wedge single piece design with long disc guides is a proven performer for all service conditions, particularly suitable for conditions of severe turbulence and stem vibration.
- Service Conditions WOG-Water, Oil, Air, Gas, Water, Steam, Pumping Systems.

## HANDWHEEL OPERATION

- Handwheels are furnished on all Gate & Globe Valves, manual gear, hydraulic or motor operators and chainwheels can be supplied when specified.
- · By-Pass, Drains and Special connections, available upon request.
- Stem Nut, replaceable in line to avoid shut down of pipe line process.
- · Non Rising stem with trapezoidal metric thread for quick operation.
- Surface finish suitable to seal properly to obtain low fugitive emissions.

#### TRIM MATERIALS

- Cast Iron Valves are provided with Bronze Seat and Brass Stem.
- · Graphite is used for Gaskets and Packing.
- · Glands may be threaded or bolted type.
- Bronze trim valves are recommended for steam, water, sea water, air, and noncorrosive oil or gas.
- All iron valves are recommended for oil, gas, or fluids that corrode bronze, but not iron or steel.





## **DESIGN FEATURES**

- · Design in accordance with MSS SP-70
- CLASS 125
- Non Rising Stem (NRS)
- · Cast Iron Construction
- · Bolted Body design
- · Handwheel Operated
- Face to Face dimensions as per ANSI B16.10
- Flanged drilled conforms to ANSI B16.1

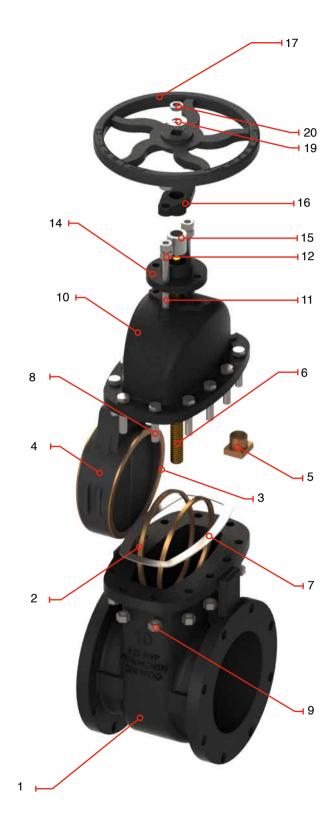
125 psi (8.6 Bar) Saturated Stem @ 353°F (178°C)

200 psi (13.8 Bar) Cold water pressure @ -20°F(-29 °C) to 150 °F(66°C).

# **Regular Bill of Materials**

No.	Description	Brass
1	Body	ASTM A126 class B
2	Seat Ring	ASTM B62 GradeC 83600
3	Wedge Seat Ring	ASTM B62 GradeC 83600
4	Wedge	ASTM A126 class B
5	Wedge Nut	Cast Brass (Mn-Brass)
6	Stem	Brass ASTM B16
7	Bonnet Gasket	Graphite
8	Bonnet Bolt	ASTM A307 class B
9	Bonnet Nut	ASTM A563 class B
10	Bonnet	ASTM A126 class B
11	Yoke Bolt	ASTM A307 class B
12	Nut	ASTM A563 class B
13	Gasket*	Graphite
14	Stuffing Box	ASTM A126 class B
15	Packing	Graphite
16	Gland Follower	ASTM A536 65-45-12
17	Handwheel	ASTM A126 class B
18	Identification Plate*	Aluminum
19	Washer	Steel
20	Handwheel Nut	ASTM A563-B







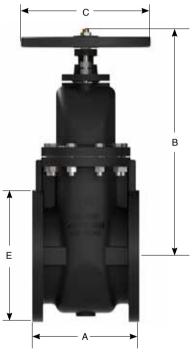
# **WALWORTH CAST IRON NRS GATE VALVES**

# **CLASS 125**

## **DESIGN FEATURES**

- · Design in accordance with MSS SP-70
- CLASS 125
- Non Rising Stem (NRS)
- · Cast Iron Construction
- · Bolted Body design
- · Handwheel Operated
- Face to Face dimensions as per ANSI B16.10
- Flanged drilled as per ANSI B16.1

Catalog Figure No.	Type of Ends
W719F	Flat Face ends







# **Dimensions and Weights**

D	mm	51	64	76	102	127	152	203	254	305	356	406	457	508	610	762	914
Nominal Diameter	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	30	36
	mm	177.8	190.0	203.2	228.6	254.0	266.7	292.1	330.2	355.6	381.0	406.4	432.0	457.0	508.0	PCR	PCR
Α	in	7.00	7.48	8.00	9.00	10.00	10.50	11.50	13.00	14.00	15.00	16.00	17.01	17.99	20.00	PCR	PCR
В	mm	302	332	335	423	485	545	644	769	860	987	1044	1148	1257	1418	PCR	PCR
В	in	11.89	13.07	13.19	16.65	19.09	21.46	25.35	30.28	33.86	38.86	41.10	45.20	49.49	55.83	PCR	PCR
С	mm	178	178	200	254	300	300	348	400	457	560	560	610	610	765	PCR	PCR
C	in	7.01	7.01	7.87	10.00	11.81	11.81	13.70	15.75	17.99	22.05	22.05	24.02	24.02	30.12	PCR	PCR
Е	mm	152.0	178.0	190.0	228.6	254.0	279.4	343.0	406.0	483.0	533.4	597.0	635.0	699.0	813.0	PCR	PCR
E.	in	5.98	7.01	7.48	9.00	10.00	11.00	13.50	15.98	19.02	21.00	23.50	25.00	27.52	32.01	PCR	PCR
Weight	kg	17	22	27	47	68	87	118	197	275	370	463	589	762	1113	2086	3083
W719F	lb	37.49	48.51	59.54	103.64	149.94	191.84	260.20	434.40	606.39	815.88	1020.95	1298.79	1680.26	2454.24	4599.78	6798.24
C.	Flow	241.0	386.0	556.0	1018.0	1639.0	2438.0	4486.0	7009.0	10473.0	14256.0	18619.0	24528.0	30281.0	43605.0	83444	120160
Cv	Coefficient																

PCR= per customer request