

# Cast Carbon Steel Gate Valve

Bolted bonnet, Outside screw-and-yoke, Rising stem, Non-rising handwheel, Flexible wedge.

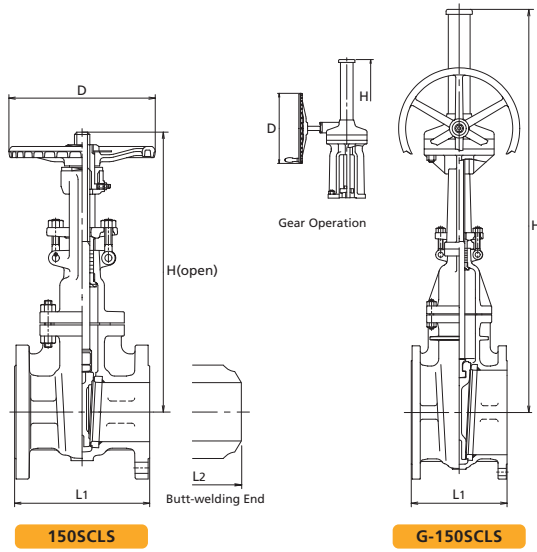


Fig	End Connections
(G-)150SCLS	RF-flanged ends.
(G-)W150SCLS	Butt-welding ends.

### Standard materials of parts

Parts	Materials
Body	ASTM A216 Gr.WCB
Bonnet	ASTM A216 Gr.WCB
Stem	403SS
Disc	A217 Gr.CA15 or A216 Gr.WCB+13Cr
Body seat ring	Carbon Steel+HF*
Gland	403SS
Gland packing	Flexible Graphite
Gland flange	Cast Steel
Handwheel	Ductile iron
Gasket	See Page 5
Bonnet bolt/nut	ASTM A193 Gr.B7/A194 Gr.2H
Gland bolt/nut	Carbon Steel
Bonnet bushing	403SS
Yoke sleeve	Ductile Ni-Resist
Grease nipple	Carbon steel

\*Hard facing with Co-Cr-W Alloy.  
 Note: Refer to Page 2&4 for standard seat material and construction.

### Dimensions

Nominal Size	1½		2		2½		3		4		5		6		8		10		12		14		16		18		20		22		24		26		28		30		32		34		36			
	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	in	mm	in	mm	in	mm				
L <sub>1</sub>	in	6.50	7.00	7.50	8.00	9.00	10.0	10.5	11.5	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	22.0	24.0	24.0	26.0	28.0	28.0	in	165	178	190	203	229	254	267	292	330	356	381	406	432	457	483	508	559	610	610	660	711	711
	mm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	mm	—	216	241	283	305	381	403	419	457	502	572	610	660	711	762	813	864	914	914	965	1016	1016
L <sub>2</sub>	in	—	8.50	9.50	11.1	12.0	15.0	15.9	16.5	18.0	19.8	22.5	24.0	26.0	28.0	30.0	32.0	34.0	36.0	36.0	38.0	40.0	40.0	in	15.2	15.2	17.0	20.0	23.3	25.9	29.8	37.8	45.8	53.6	61.9	66.6	74.3	83.6	91.6	98.4	111.6	119.0	124.2	128.6	138.1	149.0
	mm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	mm	385	385	432	509	592	658	758	959	1162	1362	1572	1692	1888	2123	2326	2498	2835	3022	3154	3267	3507	3785
H*	in	7.87	7.87	7.87	9.84	9.84	11.8	11.8	13.8	15.8	17.7	23.6	23.6	26.8	26.8	29.9	29.9	19.7	23.6	23.6	23.6	23.6	23.6	in	7.87	7.87	7.87	9.84	9.84	11.8	11.8	13.8	15.8	17.7	23.6	23.6	26.8	26.8	29.9	29.9	19.7	23.6	23.6	23.6	23.6	23.6
	mm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	mm	200	200	200	250	250	300	300	350	400	450	600	600	680	680	760	760	500	600	600	600	600	600

\*Size 26 and larger : Gear operation type.  
 Refer to "Standard Product Range" on page 01.

Bolted bonnet, Outside screw-and-yoke, Rising stem, Non-rising handwheel, Flexible wedge.

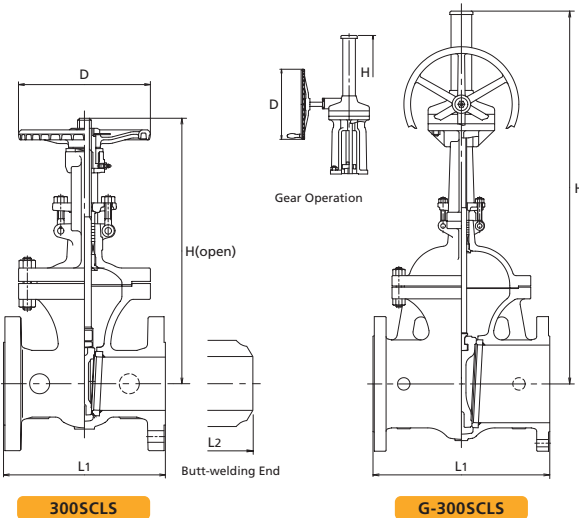


Fig	End Connections
(G-)300SCLS	RF-flanged ends.
(G-)W300SCLS	Butt-welding ends.

### Standard materials of parts

Parts	Materials
Body	ASTM A216 Gr.WCB
Bonnet	ASTM A216 Gr.WCB
Stem	403SS
Disc	403SS or A217 Gr.CA15 (Size 1-1/2-4) A216 Gr.WCB+13Cr (Size 5-24)
Body seat ring	Carbon Steel+HF*
Gland	403SS
Gland packing	Flexible Graphite
Gland flange	Carbon Steel/Cast Steel
Handwheel	Ductile iron
Gasket	See Page 5
Bonnet bolt/nut	ASTM A193 Gr.B7/A194 Gr.2H/Alloy Steel
Gland bolt/nut	Carbon Steel
Bonnet bushing	403SS
Yoke sleeve	Ductile Ni-Resist
Grease nipple	Carbon steel

\*Hard facing with Co-Cr-W Alloy.  
 Note: Refer to Page 2&4 for standard seat material and construction.

### Dimensions

Nominal Size	1½		2		2½		3		4		5		6		8		10		12		14		16		18		20		22		24		26		28		30		32		34		36			
	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	in	mm	in	mm	in	mm				
L <sub>1</sub>	in	7.48	8.50	9.49	11.1	12.0	15.0	15.9	16.5	18.0	19.8	30.0	33.0	36.0	39.0	43.0	45.0	49.0	53.0	55.0	60.0	64.0	68.0	in	7.48	8.50	9.49	11.1	12.0	15.0	15.9	16.5	18.0	19.8	30.0	33.0	36.0	39.0	43.0	45.0	49.0	53.0	55.0	60.0	64.0	68.0
	mm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	mm	190	216	241	283	305	381	403	419	457	502	762	838	914	991	1092	1143	1245	1346	1397	1524	1626	1727
L <sub>2</sub>	in	—	8.50	9.50	11.1	12.0	15.0	15.9	16.5	18.0	19.8	30.0	33.0	36.0	39.0	43.0	45.0	49.0	53.0	55.0	60.0	64.0	68.0	in	—	8.50	9.50	11.1	12.0	15.0	15.9	16.5	18.0	19.8	30.0	33.0	36.0	39.0	43.0	45.0	49.0	53.0	55.0	60.0	64.0	68.0
	mm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	mm	—	216	241	283	305	381	403	419	457	502	762	838	914	991	1092	1143	1245	1346	1397	1524	1626	1727
H*	in	16.3	16.3	18.0	20.9	24.3	27.3	31.2	39.9	47.9	57.4	61.5	69.5	76.1	84.1	93.1	100.1	112.0	123.8	131.3	143.7	150.0	153.5	in	16.3	16.3	18.0	20.9	24.3	27.3	31.2	39.9	47.9	57.4	61.5	69.5	76.1	84.1	93.1	100.1	112.0	123.8	131.3	143.7	150.0	153.5
	mm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	mm	413	413	456	530	618	694	793	1014	1216	1458	1563	1766	1932	2137	2364	2542	2845	3145	3335	3650	3810	3900
D	in	7.87	7.87	7.87	9.84	9.84	11.8	13.8	15.8	17.7	23.6	23.6	26.8	26.8	29.9	29.9	35.8	23.6	23.6	23.6	23.6	23.6	23.6	in	7.87	7.87	7.87	9.84	9.84	11.8	13.8	15.8	17.7	23.6	23.6	26.8	26.8	29.9	29.9	35.8	23.6	23.6	23.6	23.6	23.6	23.6
	mm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	mm	200	200	200	250	250	300	350	400	450	600	600	680	680	760	760	910	600	600	600	600	600	600

\*Size 26 and larger : Gear operation type.  
 Refer to "Standard Product Range" on page 01.

# Cast Carbon Steel Gate Valve

Bolted bonnet, Outside screw-and-yoke, Rising stem, Non-rising handwheel, Flexible wedge.

Class 600

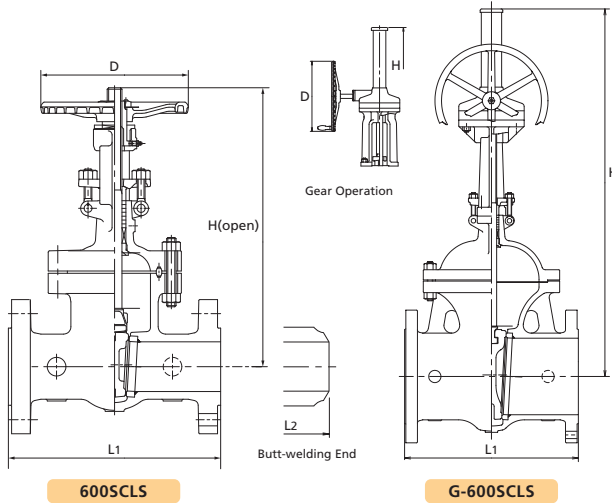


Fig	End Connections
(G-)600SCLS	RF-flanged ends.
(G-)W600SCLS	Butt-welding ends.

## Standard materials of parts

Parts	Materials
Body	ASTM A216 Gr.WCB
Bonnet	ASTM A216 Gr.WCB
Stem	403SS
Disc	403SS or A217 Gr.CA15 (Up to Size 4) A216 Gr.WCB+13Cr (Size 5 & over)
Body seat ring	Carbon Steel+HF*
Gland	403SS
Gland packing	Flexible Graphite
Gland flange	Carbon Steel/Cast Steel
Handwheel	Ductile iron
Gasket	See Page 5
Bonnet bolt/nut	ASTM A193 Gr.B7/A194 Gr.2H
Gland bolt/nut	Carbon Steel
Bonnet bushing	403SS
Yoke sleeve	Ductile Ni-Resist
Grease nipple	Carbon steel

\*Hard facing with Co-Cr-W Alloy.  
Note: Refer to Page 2&4 for standard seat material and construction.

## Dimensions

Nominal Size		2	2½	3	4	5	6	8	10	12	14	16	18	20	22	24
		50	65	80	100	125	150	200	250	300	350	400	450	500	550	600
L <sub>1</sub>	in	11.5	13.0	14.0	17.0	20.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	51.0	55.0
	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1295	1397
L <sub>2</sub>	in	11.5	13.0	14.0	17.0	20.0	22.0	26.0	31.0	33.0	35.0	39.0	43.0	47.0	51.0	55.0
	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1295	1397
H*	in	17.6	19.6	21.5	26.3	30.4	35.2	43.1	49.5	57.6	62.7	70.0	81.5	88.8	98.4	107.5
	mm	446	497	545	667	771	893	1094	1257	1464	1593	1779	2070	2256	2500	2730
D	in	7.90	9.80	9.80	11.8	15.7	17.7	23.6	23.6	26.8	29.9	29.9	35.8	23.6	23.6	24.0
	mm	200	250	250	300	400	450	600	600	680	760	760	910	600	600	610

\*Size 20 and larger : Gear operation type.  
Refer to "Standard Product Range" on page 01.

Bolted bonnet, Outside screw-and-yoke, Rising stem, Non-rising handwheel, Solid wedge (Nominal Size 2 to 4) or Flexible wedge (Nominal Size 6 & larger).

Class 900

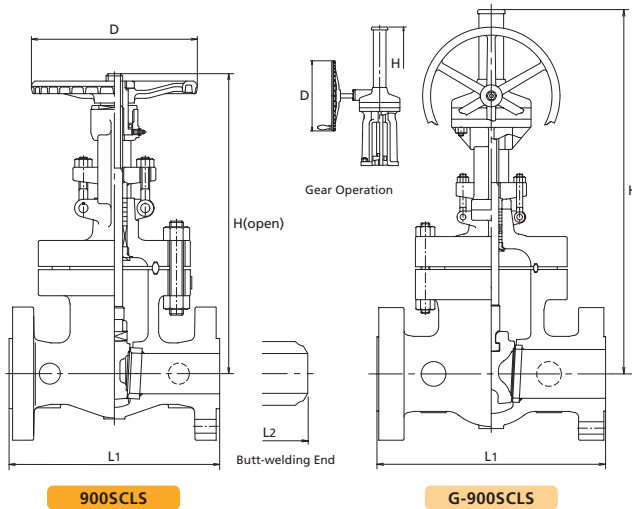


Fig	End Connections
(G-)900SCLS	RF-flanged ends.
(G-)W900SCLS	Butt-welding ends.

## Standard materials of parts

Parts	Materials
Body	ASTM A216 Gr.WCB
Bonnet	ASTM A216 Gr.WCB
Stem	403SS
Disc	403SS (Size 2-4) A216 Gr.WCB+13Cr (Size 6 & over)
Body seat ring	Carbon Steel+HF*
Gland	403SS
Gland packing	Flexible Graphite
Gland flange	Carbon Steel
Handwheel	Ductile iron
Gasket	See Page 5
Bonnet bolt/nut	ASTM A193 Gr.B7/A194 Gr.2H
Gland bolt/nut	Carbon Steel
Bonnet bushing	403SS
Yoke sleeve	Ductile Ni-Resist
Grease nipple	Carbon steel

\*Hard facing with Co-Cr-W Alloy.  
Note: Refer to Page 2&4 for standard seat material and construction.

## Dimensions

Nominal Size		2	3	4	6	8	10	12	14	16	18	20	24
		50	80	100	150	200	250	300	350	400	450	500	600
L <sub>1</sub>	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5	48.0	52.0	61.0
	mm	368	381	457	610	737	838	965	1029	1130	1219	1321	1549
L <sub>2</sub>	in	14.5	15.0	18.0	24.0	29.0	33.0	38.0	40.5	44.5	48.0	52.0	61.0
	mm	368	381	457	610	737	838	965	1029	1130	1219	1321	1549
H*	in	20.5	24.5	27.8	35.4	42.8	50.6	59.0	67.5	72.0	85.8	95.9	105.5
	mm	520	621	706	900	1087	1285	1498	1714	1830	2180	2435	2680
D	in	9.80	11.8	13.8	19.7	23.6	26.8	29.9	23.6	23.6	23.6	24.0	24.0
	mm	250	300	350	500	600	680	760	600	600	600	610	610

\*Size 14 and larger : Gear operation type.  
Refer to "Standard Product Range" on page 01.

# Cast Carbon Steel Gate Valve

Bolted bonnet, Outside screw-and-yoke, Rising stem, Non-rising handwheel, Solid wedge (Nominal Size 2 to 4) or Flexible wedge (Nominal Size 6 & larger).

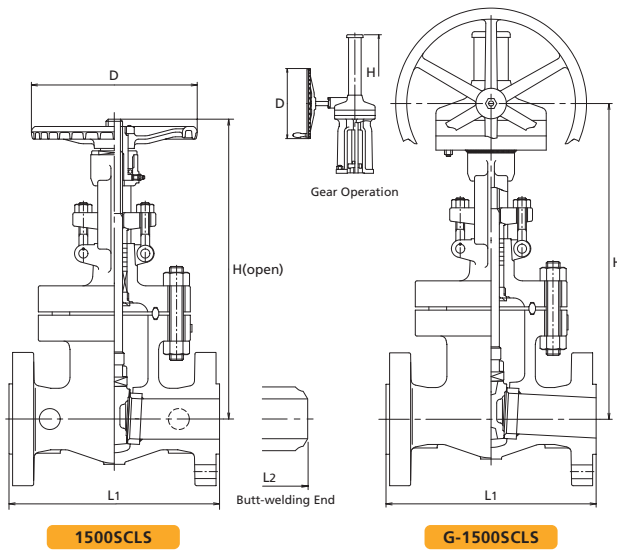


Fig	End Connections
(G-)1500SCLS	RF-flanged ends.
(G-)W1500SCLS	Butt-welding ends.

## Standard materials of parts

Parts	Materials
Body	ASTM A216 Gr.WCB
Bonnet	ASTM A216 Gr.WCB
Stem	403SS
Disc	403SS (Up to Size 4) A216 Gr.WCB+13Cr (Size 6 & over)
Body seat ring	Carbon Steel+HF*
Gland	403SS
Gland packing	Flexible Graphite
Gland flange	Carbon Steel
Handwheel	Ductile iron
Gasket	See Page 5
Bonnet bolt/nut	ASTM A193 Gr.B7/A194 Gr.2H
Gland bolt/nut	Carbon Steel
Bonnet bushing	403SS
Yoke sleeve	Ductile Ni-Resist
Grease nipple	Carbon steel

\*Hard facing with Co-Cr-W Alloy.  
Note: Refer to Page 2&4 for standard seat material and construction.

## Dimensions

Nominal Size		2	2½	3	4	6	8	10	12	14	16
		50	65	80	100	150	200	250	300	350	400
L <sub>1</sub>	in	14.5	16.5	18.5	21.5	27.8	32.8	39.0	44.5	49.5	54.5
	mm	368	419	470	546	705	832	991	1130	1257	1384
L <sub>2</sub>	in	14.5	16.5	18.5	21.5	27.8	32.8	39.0	44.5	49.5	54.5
	mm	368	419	470	546	705	832	991	1130	1257	1384
H*	in	22.0	25.0	27.0	30.4	40.6	49.1	58.1	65.2	68.9	81.1
	mm	559	635	685	772	1031	1248	1475	1656	1750	2060
D	in	9.80	11.8	13.8	15.7	23.6	26.8	35.8	35.8	23.6	24.0
	mm	250	300	350	400	600	680	910	910	600	610

\*Size 14 and larger : Gear operation type.  
Refer to "Standard Product Range" on page 01.