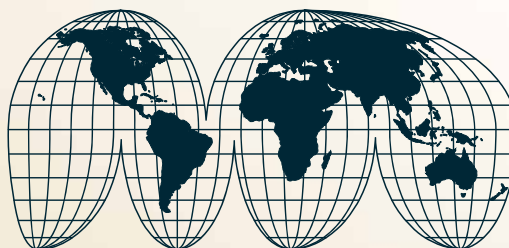


Smart Solutions. Powerful Products.



DSI® Pressure Seal Cast Gate, Globe and Check Valves

Flexible Wedge and Parallel Slide Gate Valves
Straight and Y-Pattern Globe Valves
Swing Type and Tilt Disc Check Valves



Manufacturer of Quality Valve Products Around the Globe

At Forum™ Energy Technologies we are committed to improving our clients' operational and financial performance by supplying the most comprehensive range of valve products in the industry through our family of trusted valve brands.

For years, DSI® Pressure Seal Valves have been satisfying the high pressure, high temperature needs of Steam Generation Stations, Industrial/Chemical Processing Plants, Thermal Power Generating Plants and other processing facilities throughout the world.

Our Pressure Seal Valves are designed, engineered and manufactured in strict conformance to API, ASTM, ASME, ANSI, MSS and other recognized standards. DSI® Pressure Seal Valves are not only characterized by outstanding performance, reliability and quality, they're also known for their standard features normally optional in other brands.

DSI®'s Pressure Seal Valve design utilizes a segmental thrust ring, absorbing all the thrust applied by internal pressure. A hardened stainless steel protective ring prevents deformation of the top surface of the soft steel, 304 Stainless Steel or 316 Stainless Steel with a high density graphite gasket. The gasket can be removed freely without damaging the sealing surface of the body. DSI® utilizes gasket materials, exacting assembly and testing procedures to ensure compliance with global standards.

Visit our website to learn more about Forum™ Energy Technologies and other DSI® quality products.



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DSI® Pressure Seal Gate, Globe and Check Valves

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Figure Numbers and Trim Materials

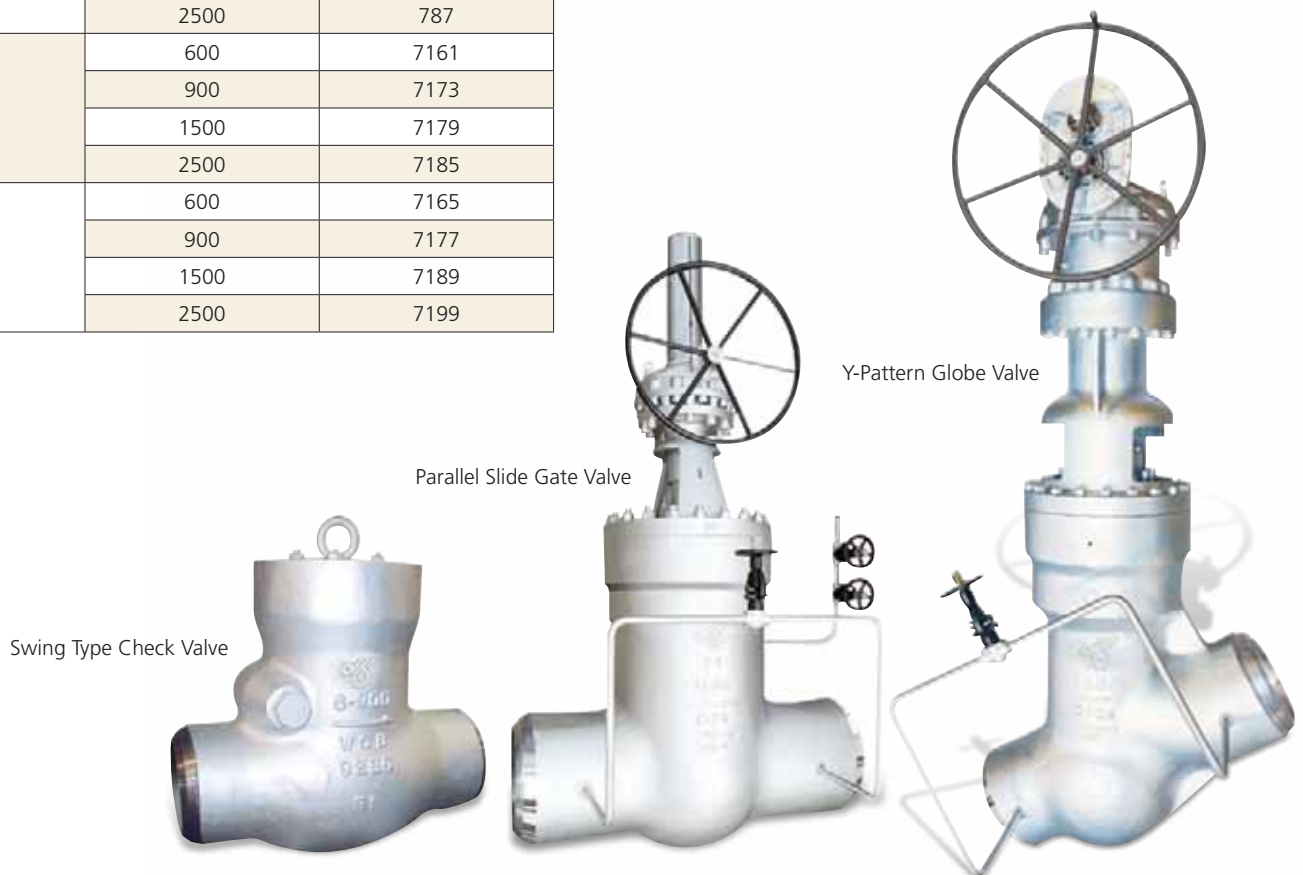
Specifying DSI® Pressure Seal Valve Figure Numbers

Example: 10" GRFS-777-U-C12 This number represents a 10" Gear Operated, RF Flanged, Class 1500 Parallel Slide Gate Valve with full Stellite® trim and C12 body.

G	RF	S	–	777	–	U	–	C12
Operation	End Connection	Pattern Design	Type & Pressure Class	Trim Material	Body Material			
No Denotation for Handwheel Operated G Gear Operated	No Denotation for Buttweld Ends RF RF Flanged Ends RTJ RTJ Flanged Ends	No Denotation for Straight Pattern Globes, Wedge Gates, Swing Checks Y Y-Pattern Globe S Parallel Slide Gate SC Stop Check T Tilt Disc Check YSC Y-Pattern Stop Check	See Chart Below	XU Half Stellite® U Full Stellite® LU 316SS + Half Stellite® LUU 316SS + Full Stellite®	Cast Steel			
					No Denotation for WCB LCC WC6 WC9 C5 C12 C12A CF8M CF3M CF8 CF3			

Pressure Classes

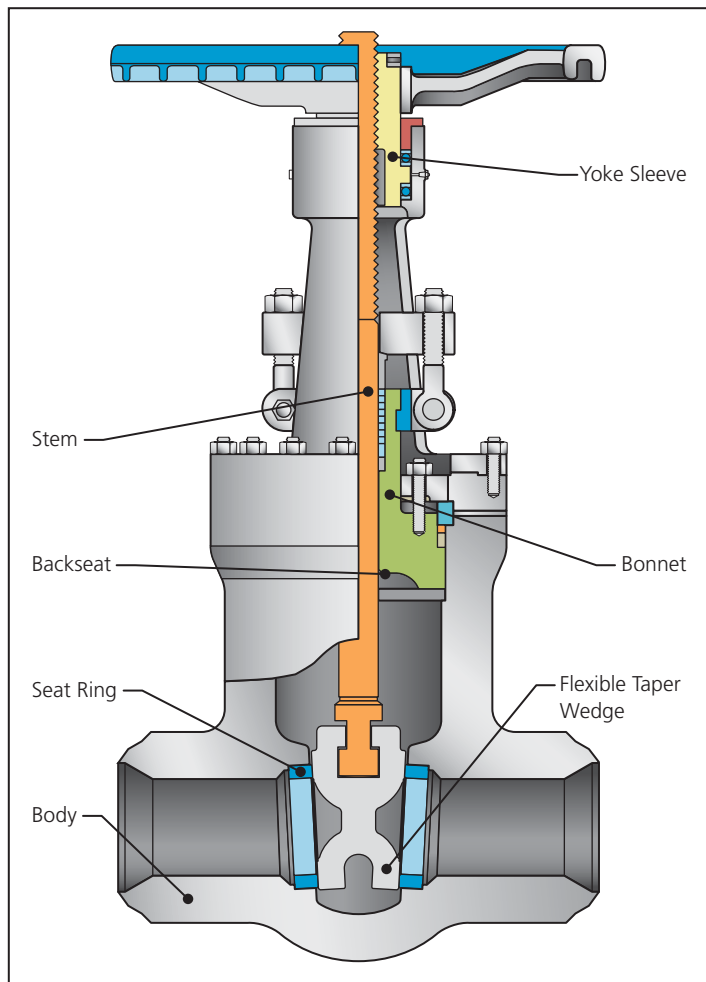
Valve Type	Class	Figure Number
Gates	600	776
	900	773
	1500	777
	2500	787
Globes	600	7161
	900	7173
	1500	7179
	2500	7185
Checks	600	7165
	900	7177
	1500	7189
	2500	7199



Note: All information is subject to change without notice.

DSI® Pressure Seal Flexible Wedge Gate Valve

Standard Features



Yoke Sleeve

The upper portion of the yoke sleeve is hexagonally tapered to fix the handwheel. The standard material of the yoke sleeve is austenitic ductile iron with over 950°C (1750°F) melting point in accordance with API standard specifications.

Bonnet

The valve has a precise body-bonnet seal to facilitate valve service. The bodies and bonnets of the valve are machined to achieve precise coaxiality and prevent any misalignment which may damage the stems.

Stem

The machined forged stem comes with a T-shape head, which connects with the slot of the wedge. The contacting surface of the head is spherically shaped, thereby giving it greater strength and durability. It is heat treated to ensure adequate mechanical properties and surface hardness. Accurate machining and lapping ensure minimized friction during operation.

Backseat

All of our valves are provided with a positive backseat to provide accurate guidance of the stem.

Seat Ring

The Stellite® surface of the seat ring is applied by means of welding in all valve sizes. Lapping of the seating surface ensures precise mating with the wedge surfaces.

Flexible Wedge

The flexible wedge is designed to absorb thermally-induced body distortion, thereby making it ideal for high temperature media. A Stellite® layer is applied to the seating surface, and is heat treated to secure required hardness and soundness. The lapped finish then ensures precise mating with the seats.

Body

The valve body is cylindrically shaped to prevent distortion or undue stress during extreme working conditions. The wall thickness meets or exceeds API, ANSI, ASME and MSS requirements. The body design allows ease of repairability and maintenance for extended use service.

Available Modifications

- Gear Operator Mounting
- Trim Changes
- Actuation
- Drilled & Tapped Body Connections
- By-Pass
- Pressure Equalizing
- Weld End Bore Changes
- Customer Specified Coatings

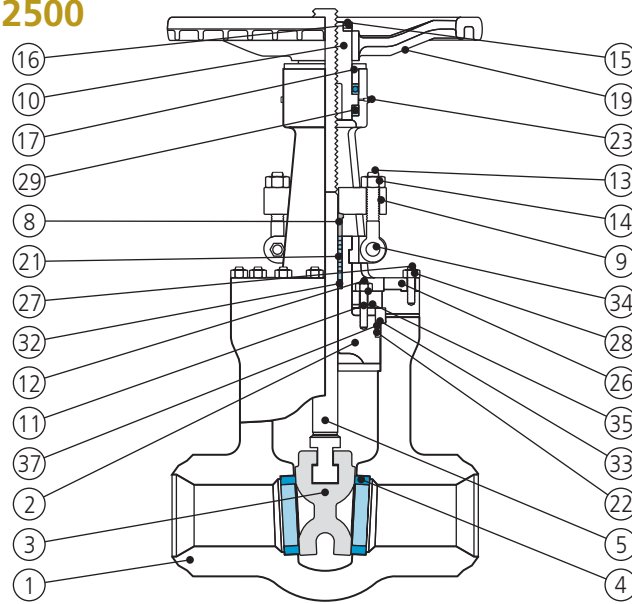


Class 900

Note: All information is subject to change without notice.

DSI® Pressure Seal Flexible Wedge Gate Valve

Class 600, 900, 1500 & 2500



Parts & Materials

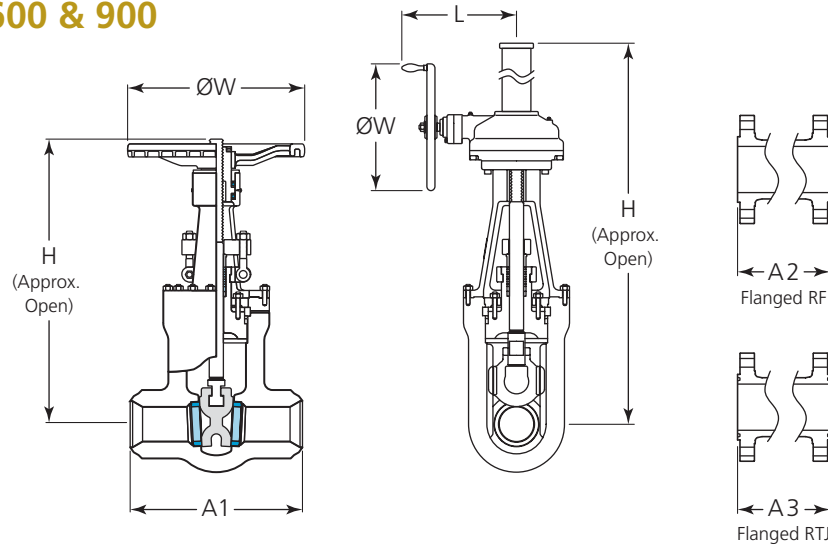
No.	Part Name	ASTM Specification									
		Std. • A216	High Temperature Service • A217					Stainless Steel • A351			
1	Body	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
2	Bonnet	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
3	Disc*	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
4	Body Seat Ring*	A105	A182 F11	A182 F22	A182 F5a	A182 F9	A182 F91	A182 F304	A182 F316	A182 F304L	A182 F316L
5	Stem	A479 410						A276 304	A276 316	A276 304L	A276 316L
8	Packing Gland	A479 410						A276 304			
9	Gland Flange	A105 or A283 D						AISI 304			
10	Yoke Sleeve	A439 D2						A439 D2			
11	Bonnet Stud	A193 B7	A193 B16					A193 B8			
12	Bonnet Nut	A194 2H	A194 4					A194 8			
13	Gland Bolt	A193 B7						A193 B8			
14	Gland Nut	A194 2H						A194 8			
15	Handle Nut	Steel						Steel			
16	Set Screw	Steel						Steel			
17	Sleeve Gland	Steel						Steel			
19	Handwheel	A395						A395			
21	Packing	Graphite						Graphite			
22	Seal Ring	Graphite/SS						Graphite/SS			
23	Grease Nipple	Steel						Steel			
26	Yoke	A216 WCB						A351 CF8			
27	Yoke Stud	A193 B7						A193 B8			
28	Yoke Nut	A194 2H						A194 8			
29	Bearing	Commercial						Commercial			
32	Packing Ring	A479 410						A276 304	A276 316	A276 304L	A276 316L
33	Retainer	A29 1045 + Chrome Plated	A240 304					A240 304L			
34	Hinge Clamp	A216 WCB						A351 CF8			
35	Bonnet Clamp	A29 1045						A240 304			
37	Gasket Spacer	A29 1045 + Chrome Plated	A240 304					A240 304			

*Full HF is standard design.

Note: All information is subject to change without notice.

DSI® Pressure Seal Flexible Wedge Gate Valve

2"- 24" Class 600 & 900



Dimensional Data & Weights • Class 600, 2"- 24"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	11.5	292	11.5	292	11.6	295	23.1	586	19.7	500	—	—	154.3	70	136.7	62
2½	65	8.5	216	13.0	330	13.1	333	21.1	535	11.8	300	—	—	209.4	95	176.4	80
3	80	10.0	254	14.0	356	14.1	359	19.9	505	9.8	250	—	—	220.5	100	185.2	84
4	100	12.0	305	17.0	432	17.1	435	23.4	594	11.8	300	—	—	326.3	148	253.5	115
6	150	18.0	457	22.0	559	22.1	562	37.0	941	17.3	440	—	—	555.6	252	416.7	189
8	200	23.0	584	26.0	660	26.1	663	43.3	1100	19.7	500	—	—	705.5	320	648.2	294
10	250	28.0	711	31.0	787	31.1	790	49.1	1248	24.8	630	—	—	1071.4	486	974.4	442
12	300	32.0	813	33.0	838	33.1	841	66.9	1700	24.8	630	15.3	389	1642.4	745	1492.5	677
14	350	35.0	889	35.0	889	35.1	892	71.6	1818	24.8	630	15.3	389	1962.1	890	1785.7	810
16	400	39.0	991	39.0	991	39.1	994	80.3	2040	28.0	710	16.0	406	3104.1	1408	2821.9	1280
18	450	43.0	1092	43.0	1092	43.1	1095	96.1	2442	31.5	800	18.1	461	4321.1	1960	3924.2	1780
20	500	47.0	1194	47.0	1194	47.2	1200	101.1	2567	31.5	800	18.1	461	5820.2	2640	4850.2	2200
24	600	55.0	1397	55.0	1397	55.4	1407	109.9	2792	35.4	900	19.1	486	7407.5	3360	6172.9	2800

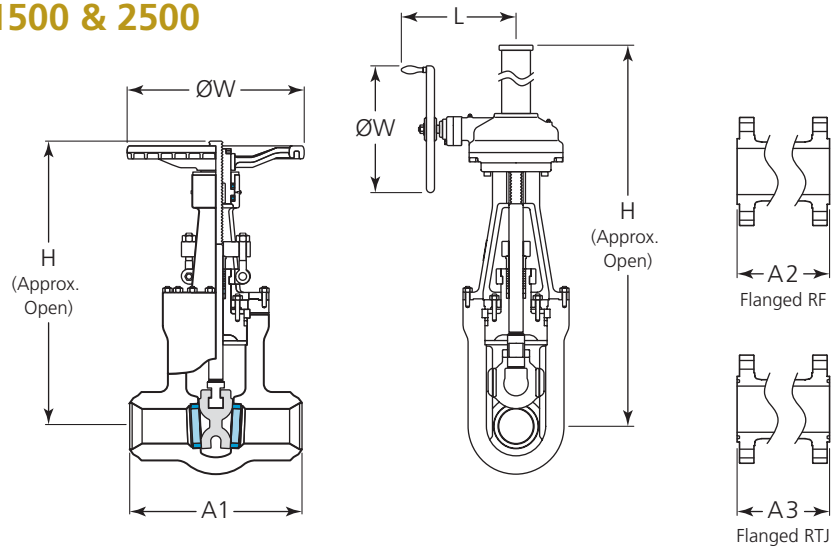
Dimensional Data & Weights • Class 900, 2"- 24"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	8.5	216	14.5	368	14.6	371	23.1	586	19.7	500	—	—	132.3	60	88.2	40
2½	65	10.0	254	16.5	419	16.6	422	21.1	535	11.8	300	—	—	207.2	94	141.1	64
3	80	12.0	305	15.0	381	15.1	384	26.2	666	19.7	500	—	—	224.9	102	176.4	80
4	100	14.0	356	18.0	457	18.1	460	31.4	798	19.7	500	—	—	330.7	150	220.5	100
6	150	20.0	508	24.0	610	24.1	613	40.8	1036	22.0	560	—	—	617.3	280	407.9	185
8	200	26.0	660	29.0	737	29.1	740	53.3	1353	19.7	500	13.5	342	1455.1	660	1091.3	495
10	250	31.0	787	33.0	838	33.1	841	62.2	1581	24.8	630	15.3	389	2116.4	960	1620.4	735
12	300	36.0	914	38.0	965	38.1	968	70.6	1792	28.0	710	16.0	406	2976.2	1350	2314.9	1050
14	350	39.0	991	40.5	1029	40.9	1039	73.2	1860	28.0	710	16.0	406	3747.9	1700	3086.5	1400
16	400	43.0	1092	44.5	1130	44.9	1140	85.9	2181	31.5	800	18.1	461	5291.1	2400	4299.0	1950
18	450	48.0	1219	48.0	1219	48.5	1232	97.2	2470	35.4	900	19.1	486	7319.3	3320	6018.6	2730
20	500	52.0	1321	52.0	1321	52.5	1334	100.2	2546	35.4	900	20.8	529	9700.3	4400	8124.0	3685
24	600	61.0	1549	61.0	1549	61.7	1568	119.5	3036	39.4	1000	23.2	590	14925.3	6770	11971.1	5430

Note: All information is subject to change without notice.

DSI® Pressure Seal Flexible Wedge Gate Valve

2"-24" Class 1500 & 2500



Dimensional Data & Weights • Class 1500, 2"-24"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	8.5	216	14.5	368	14.6	371	23.1	586	19.7	500	—	—	132.3	60	88.2	40
2 1/2	65	10.0	254	16.5	419	16.6	422	21.1	535	11.8	300	—	—	207.2	94	141.1	64
3	80	12.0	305	18.5	470	18.6	473	26.2	666	19.7	500	—	—	264.6	120	185.2	84
4	100	16.0	406	21.5	546	21.6	549	32.0	812	19.7	500	—	—	458.6	208	308.6	140
6	150	22.0	559	27.8	705	28.0	711	53.7	1363	19.7	500	13.5	342	1058.2	480	749.6	340
8	200	28.0	711	32.8	832	33.1	842	56.1	1426	24.8	630	15.3	389	2006.2	910	1499.1	680
10	250	34.0	864	39.0	991	39.4	1000	62.3	1583	28.0	710	16.0	406	3108.5	1410	1984.2	900
12	300	39.0	991	44.5	1130	45.1	1146	66.7	1694	28.0	710	16.0	406	4585.6	2080	3196.7	1450
14	350	42.0	1067	49.5	1257	50.2	1276	79.6	2023	35.4	900	20.8	529	5754.1	2610	3968.3	1800
16	400	47.0	1194	54.5	1384	55.4	1406	91.8	2331	35.4	900	20.8	529	7936.6	3600	6062.7	2750
18	450	53.0	1346	60.5	1537	61.4	1559	111.1	2823	39.4	1000	23.2	590	13139.5	5960	10207.4	4630
20	500	58.0	1473	65.5	1664	66.4	1686	101.5	2579	39.4	1000	23.2	590	16248.1	7370	12610.4	5720
24	600	64.0	1626	76.5	1943	77.6	1971	116.3	2955	39.4	1000	24.4	619	23391.0	10,610	18166.1	8240

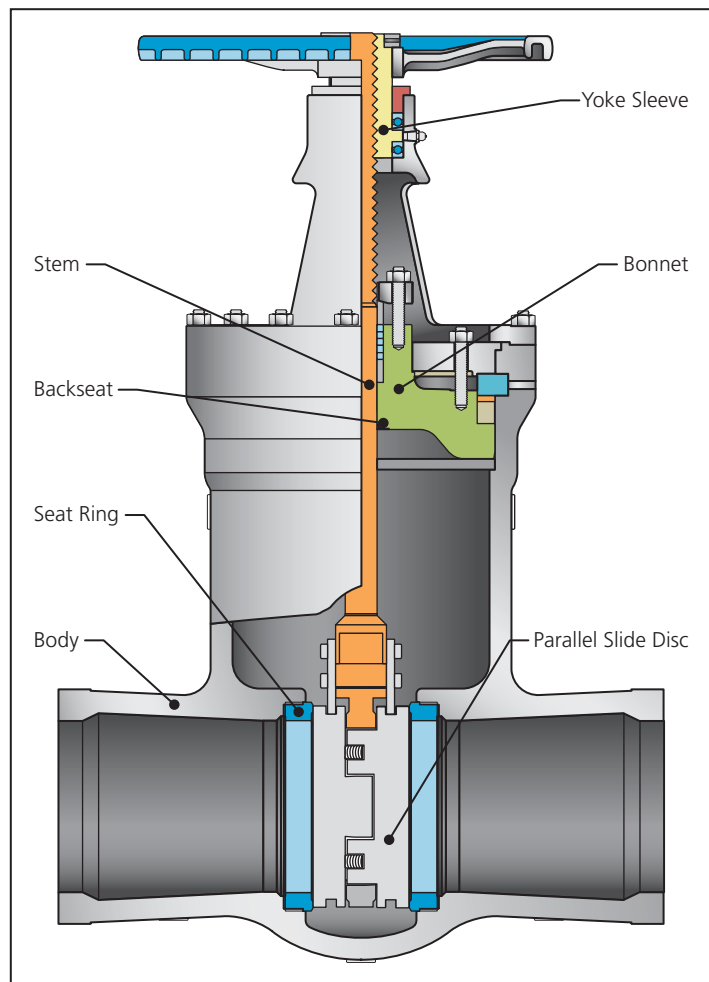
Dimensional Data & Weights • Class 2500, 2"-18"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	11.0	279	17.8	451	17.9	454	24.4	619	11.8	300	—	—	187.4	85	110.2	50
2 1/2	65	13.0	330	20.0	508	20.2	514	25.9	659	14.0	355	—	—	297.6	135	198.4	90
3	80	14.5	368	22.8	578	23.0	584	31.9	809	17.7	450	—	—	363.8	165	253.5	115
4	100	18.0	457	26.5	673	26.9	683	29.5	750	19.7	500	—	—	765.0	347	418.9	190
6	150	24.0	610	36.0	914	36.5	927	46.1	1170	19.7	500	13.5	342	1785.7	810	1146.4	520
8	200	30.0	762	40.2	1022	40.9	1038	55.0	1397	28.0	710	16.0	406	2910.1	1320	1631.4	740
10	250	36.0	914	50.0	1270	50.9	1292	60.9	1548	31.5	800	18.1	461	5233.8	2374	3527.4	1600
12	300	41.0	1041	56.0	1422	56.9	1444	76.5	1942	35.4	900	20.8	529	7539.8	3420	6613.9	3000
14	350	44.0	1118	—	—	—	—	72.7	1846	35.4	900	20.8	529	—	—	7495.7	3400
16	400	49.0	1245	—	—	—	—	97.2	2470	39.4	1000	24.4	619	—	—	9259.4	4200
18	450	55.0	1397	—	—	—	—	116.1	2950	39.4	1000	24.4	619	—	—	11023.1	5000

Note: All information is subject to change without notice.

DSI® Pressure Seal Parallel Slide Gate Valve

Standard Features



Yoke Sleeve

The upper portion of the yoke sleeve is hexagonally tapered to fix the handwheel. The standard material of the yoke sleeve is austenitic ductile iron with over 950°C (1750°F) melting point in accordance with API standard specifications.

Bonnet

The valve has a precise body-bonnet seal to facilitate valve service. The bodies and bonnets of the valve are machined to achieve precise coaxiality and prevent any misalignment which may damage the stems.

Stem

The machined forged stem comes with a T-shape head, which connects with the slot of the disc. The contacting surface of the head is spherically shaped, thereby giving it greater strength and durability. It is heat treated to ensure adequate mechanical properties and surface hardness. Accurate machining and lapping ensure minimized friction during operation.

Backseat

All of our valves are provided with a positive backseat to provide accurate guidance of the stem.

Seat Ring

The Stellite® surface of the seat ring is applied by means of welding in all valve sizes. Lapping of the seating surface ensures precise mating with the disc surfaces.

Parallel Slide Disc

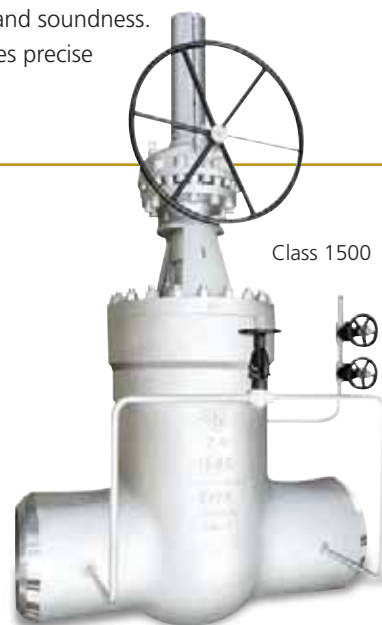
The parallel slide disc is designed to absorb thermally-induced body distortion, thereby making it ideal for high temperature media. A Stellite® layer is applied to the seating surface, and is heat treated to secure required hardness and soundness. The lapped finish then ensures precise mating with the seats.

Body

The valve body is cylindrically shaped to prevent distortion or undue stress during extreme working conditions. The wall thickness meets or exceeds API, ANSI, ASME and MSS requirements. The body design allows ease of repairability and maintenance for extended use service.

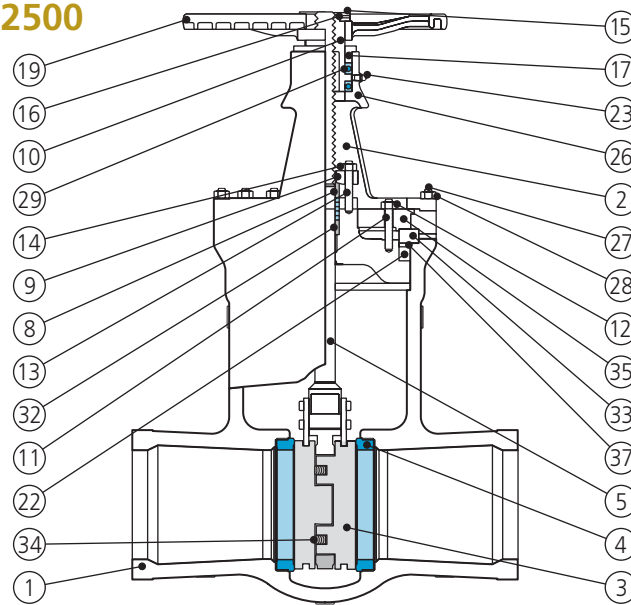
Available Modifications

- Gear Operator Mounting
- Trim Changes
- Actuation
- Drilled & Tapped Body Connections
- By-Pass
- Pressure Equalizing
- Weld End Bore Changes
- Customer Specified Coatings



DSI® Pressure Seal Parallel Slide Gate Valve

Class 600, 900, 1500 & 2500



Parts & Materials

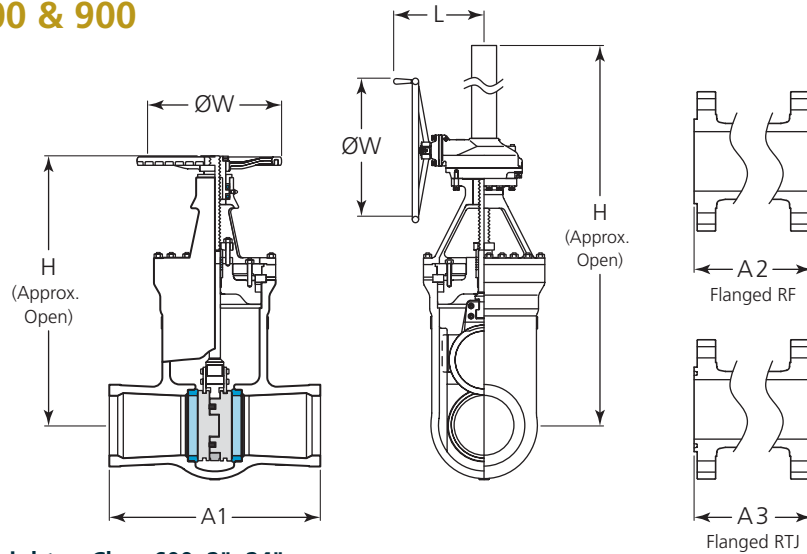
No.	Part Name	ASTM Specification									
		Std. • A216	High Temperature Service • A217					Stainless Steel • A351			
1	Body	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
2	Bonnet	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
3	Disc*	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
4	Body Seat Ring*	A105	A182 F11	A182 F22	A182 F5a	A182 F9	A182 F91	A240 304	A240 316	A240 304L	A240 316L
5	Stem	A479 410						A276 304	A276 316	A276 304L	A276 316L
8	Packing Gland	A479 410						A276 304			
9	Gland Flange	A105 or A283 D						AISI 304			
10	Yoke Sleeve	A439 D2						A439 D2			
11	Bonnet Stud	A193 B7	A193 B16					A193 B8			
12	Bonnet Nut	A194 2H	A194 4					A194 8			
13	Gland Bolt	A193 B7						A193 B8			
14	Gland Nut	A194 2H						A194 8			
15	Handle Nut	Steel						Steel			
16	Set Screw	Steel						Steel			
17	Sleeve Gland	Steel						Steel			
19	Handwheel	A395						A395			
21	Packing	Graphite						Graphite			
22	Seal Ring	Graphite/SS						Graphite/SS			
23	Grease Nipple	Steel						Steel			
26	Yoke	A216 WCB						A351 CF8			
27	Yoke Stud	A193 B7						A193 B8			
28	Yoke Nut	A194 2H						A194 8			
29	Bearing	Commercial						Commercial			
32	Packing Ring	A479 410						A276 304	A276 316	A276 304L	A276 316L
33	Retainer	A29 1045 + Chrome Plated	A240 304					A240 304L			
34	Spring	Inconel® X750						Inconel® X750			
35	Bonnet Clamp	A29 1045						A240 304			
37	Gasket Spacer	A29 1045 + Chrome Plated	A240 304					A240 304			

*Full HF is standard design.

Note: All information is subject to change without notice.

DSI® Pressure Seal Parallel Slide Gate Valve

2"- 24" Class 600 & 900



Dimensional Data & Weights • Class 600, 2" - 24"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	7.0	178	11.5	292	11.6	295	19.1	485	8.8	224	—	—	99.2	45	81.6	37
2 1/2	65	8.5	216	13.0	330	13.1	333	20.3	515	8.8	224	—	—	123.5	56	90.4	41
3	80	10.0	254	14.0	356	14.1	359	22.8	578	9.8	250	—	—	134.5	61	99.2	45
4	100	12.0	305	17.0	432	17.1	435	27.1	689	11.8	300	—	—	216.1	98	143.3	65
6	150	18.0	457	21.9	556	22.1	562	37.6	955	17.7	450	—	—	571.0	259	407.9	185
8	200	23.0	584	26.0	660	26.1	664	44.7	1135	19.7	500	—	—	881.8	400	650.4	295
10	250	28.0	711	31.0	787	31.1	791	50.2	1275	24.8	630	—	—	1338.2	607	981.1	445
12	300	32.0	813	33.0	838	33.1	841	57.3	1455	15.7	400	13.0	330	1944.5	882	1510.2	685
14	350	35.0	889	35.0	889	35.1	892	66.9	1698	19.7	500	13.5	342	2381.0	1080	1862.9	845
16	400	39.0	991	39.0	991	39.1	994	84.1	2135	24.8	630	15.3	389	3626.6	1645	2888.1	1310
18	450	43.0	1092	43.0	1092	43.1	1095	104.3	2650	28.0	710	16.0	406	5070.6	2300	4122.6	1870
20	500	47.0	1194	47.0	1194	47.2	1200	110.0	2795	28.0	710	16.0	406	6757.2	3065	5533.6	2510
24	600	55.0	1397	55.0	1397	55.4	1406	122.2	3105	31.5	800	18.1	461	8873.6	4025	7120.9	3230

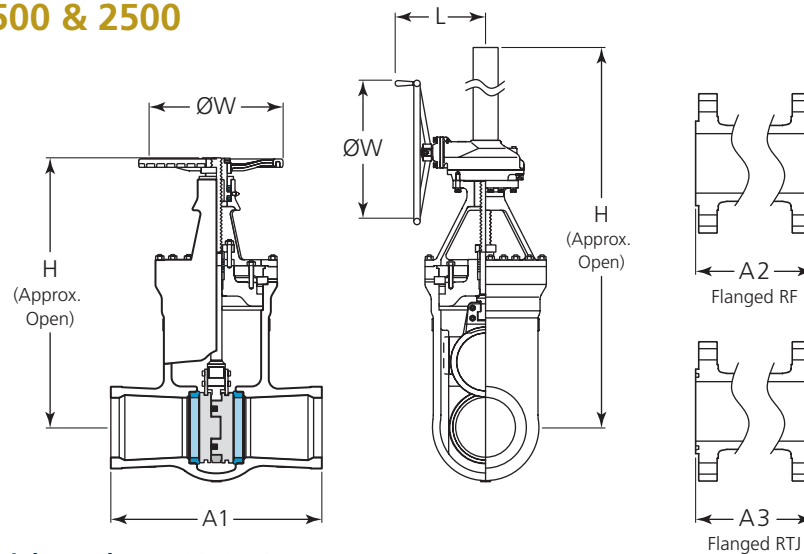
Dimensional Data & Weights • Class 900, 2" - 24"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	8.5	216	14.5	368	14.6	371	21.3	540	11.8	300	—	—	141.1	64	94.8	43
2 1/2	65	10.0	254	16.5	419	16.6	422	24.4	620	11.8	300	—	—	160.9	73	105.8	48
3	80	10.0	254	16.5	419	16.6	422	24.4	620	11.8	300	—	—	160.9	73	105.8	48
4	100	14.0	356	18.0	457	18.1	460	31.1	789	15.7	400	—	—	280.0	127	189.6	86
6	150	20.0	508	24.0	610	24.1	612	42.7	1085	22.0	560	—	—	937.0	425	749.6	340
8	200	26.0	660	29.0	737	29.1	740	49.2	1250	19.7	500	13.5	342	1221.4	554	903.9	410
10	250	31.0	787	33.0	838	33.1	841	55.9	1420	24.8	630	15.3	389	2030.5	921	1576.3	715
12	300	32.0	814	38.0	965	38.1	968	65.6	1666	28.0	710	16.0	406	2821.9	1280	2193.6	995
14	350	39.0	991	40.5	1029	40.9	1038	72.8	1850	28.0	710	16.0	406	3216.5	1459	2491.2	1130
16	400	43.0	1092	44.5	1130	44.9	1140	80.9	2056	31.5	800	18.1	461	5147.8	2335	4259.3	1932
18	450	46.5	1181	48.0	1219	48.5	1232	85.2	2165	31.5	800	18.1	461	6655.8	3019	5401.3	2450
20	500	50.5	1283	52.0	1321	52.5	1333	89.8	2280	35.4	900	19.1	486	9050	4105	7495.7	3400
24	600	59.5	1511	61.0	1549	61.7	1568	111.4	2830	35.4	900	19.1	486	12,930	5865	9920.8	4500

Note: All information is subject to change without notice.

DSI® Pressure Seal Parallel Slide Gate Valve

2"-24" Class 1500 & 2500



Dimensional Data & Weights • Class 1500, 2"-24"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	8.5	216	14.5	368	14.6	371	21.3	540	11.8	300	—	—	141.1	64	94.8	43
2 1/2	65	10.0	254	16.5	419	16.6	422	24.4	620	11.8	300	—	—	160.9	73	105.8	48
3	80	12.0	305	18.5	470	18.6	473	27.4	695	15.7	400	—	—	284.4	129	198.4	90
4	100	16.0	406	21.5	546	21.6	549	33.1	840	19.7	500	—	—	456.4	207	326.3	148
6	150	22.0	559	27.8	705	28.0	711	47.0	1195	19.7	500	13.5	342	983.3	446	674.6	306
8	200	28.0	711	32.8	832	33.1	841	52.8	1340	24.8	630	15.3	389	1671.1	758	1168.4	530
10	250	34.0	864	39.0	991	39.4	1000	57.1	1450	28.0	710	16.0	406	2885.9	1309	2028.3	920
12	300	39.0	991	44.5	1130	45.1	1146	61.8	1570	31.5	800	18.1	461	3926.4	1781	2634.5	1195
14	350	42.0	1067	49.5	1257	50.2	1276	66.3	1683	31.5	800	18.1	461	4872.2	2210	3130.6	1420
16	400	47.0	1194	54.5	1384	55.4	1406	74.4	1890	35.4	900	19.1	486	7198.1	3265	4925.1	2234
18	450	53.0	1346	60.5	1536	61.4	1559	82.3	2090	35.4	900	19.1	486	11,001	4990	7936.6	3600
20	500	58.0	1473	65.5	1664	66.4	1686	103.5	2630	39.4	1000	23.2	590	15,013	6810	11,188	5075
24	600	64.0	1626	76.5	1943	77.6	1972	117.3	2980	39.4	1000	24.4	619	22,575	10,240	16,424	7450

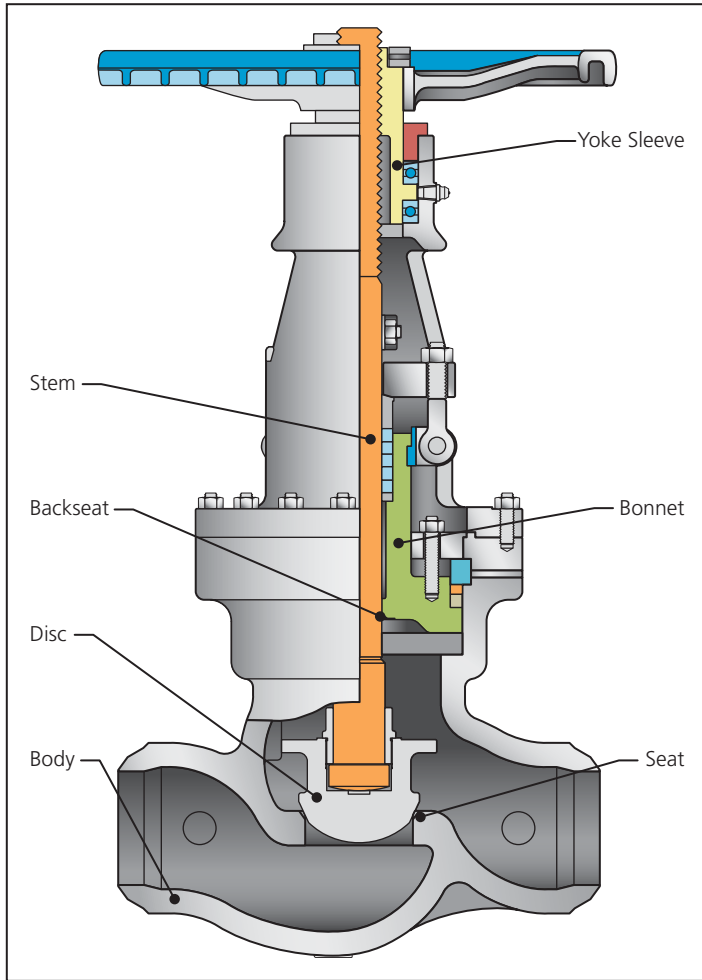
Dimensional Data & Weights • Class 2500, 2"-24"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	11.0	279	17.8	451	17.9	454	22.6	575	11.8	300	—	—	227.1	103	154.3	70
2 1/2	65	13.0	330	20.0	508	20.2	514	28.1	715	15.7	400	—	—	295.4	134	187.4	85
3	80	14.5	368	22.8	578	23.0	584	29.3	745	19.7	500	—	—	405.7	184	242.5	110
4	100	18.0	457	26.5	673	26.9	683	32.1	815	19.7	500	13.5	342	615.1	279	363.8	165
6	150	24.0	610	36.0	914	36.5	927	45.3	1150	24.8	630	15.3	389	1580.7	717	937.0	425
8	200	30.0	762	40.2	1022	40.9	1038	53.0	1345	28.0	710	16.0	406	2275.2	1032	1311.8	595
10	250	36.0	914	50.0	1270	50.9	1292	58.1	1475	31.5	800	18.1	461	4144.7	1880	2259.7	1025
12	300	41.0	1041	56.0	1422	56.9	1445	63.8	1620	31.5	800	18.1	461	6128.8	2780	3494.3	1585
14	350	44.0	1118	—	—	—	—	67.7	1720	35.4	900	19.1	486	—	—	4166.7	1890
16	400	49.0	1245	—	—	—	—	76.2	1935	35.4	900	19.1	486	—	—	6338.3	2875
18	450	55.0	1397	—	—	—	—	84.4	2145	39.4	1000	23.2	590	—	—	8587.0	3895
20	500	60.0	1524	—	—	—	—	104.1	2645	39.4	1000	24.4	619	—	—	12,754	5785
24	600	65.0	1650	—	—	—	—	109.6	2785	39.4	1000	24.4	619	—	—	17,538	7955

Note: All information is subject to change without notice.

DSI® Pressure Seal Straight Pattern Globe Valve

Standard Features



Yoke Sleeve

The standard material of the yoke sleeve is austenitic ductile iron with over 950°C (1750°F) melting point in conformity with API standard specifications.

Bonnet

The valve has a precise body-bonnet seal to facilitate valve service. The bodies and bonnets of the valves are machined to achieve precise coaxiality and prevent any misalignment.

Stem

The stem is of one-piece construction and is heat treated to ensure adequate mechanical properties and surface hardness. Accurate machining and grinding ensure that there is minimized friction during valve operation. The round head of the stem gives a point contact with the inside of the disc housing and thus prevents galling.

Backseat

All of our valves are equipped with a backseat to provide accurate guidance of the stem. The conical shape contact seat in the bonnet assembly is integrally Stellite® faced.

Disc

The globe valve disc is guided throughout the full range of travel, and revolves freely around the stem, thereby reducing friction and galling with the seating surface. The outside diameter of the disc is accurately finished and cylindrical in shape to travel along the body guides. A Stellite® layer is applied to the conical seating surface of the disc. In addition, the lapped finish ensures a precise mating with the seat.

Seat

The Stellite® seating surface is applied by means of welding in all valve sizes. Lapping of the seating surface ensures precise mating with the disc surfaces.

Body

The valve body is cylindrically shaped to prevent distortion or undue stress during extreme working conditions. The wall thickness meets or exceeds API, ANSI, ASME and MSS requirements. The body design allows ease of repairability and maintenance for extended use service.

Available Modifications

- Gear Operator Mounting
- Trim Changes
- Actuation
- Drilled & Tapped Body Connections
- By-Pass
- Weld End Bore Changes
- Customer Specified Coatings

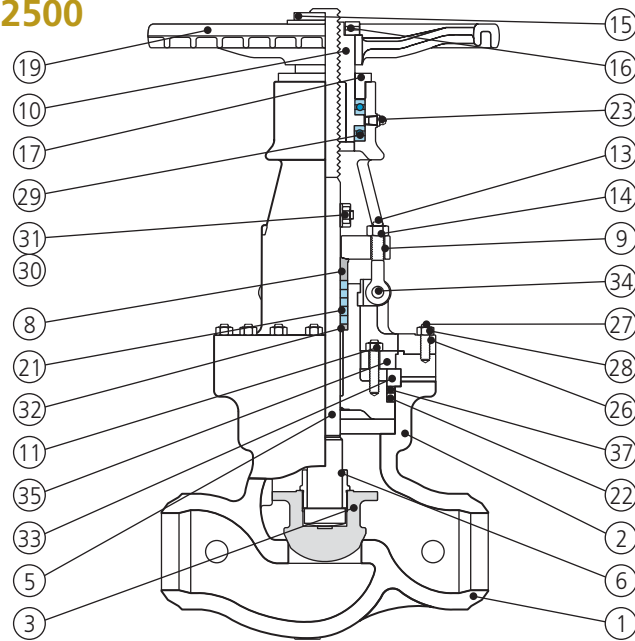


Note: All information is subject to change without notice.

Class 900

DSI® Pressure Seal Straight Pattern Globe Valve

Class 600, 900, 1500 & 2500



Parts & Materials

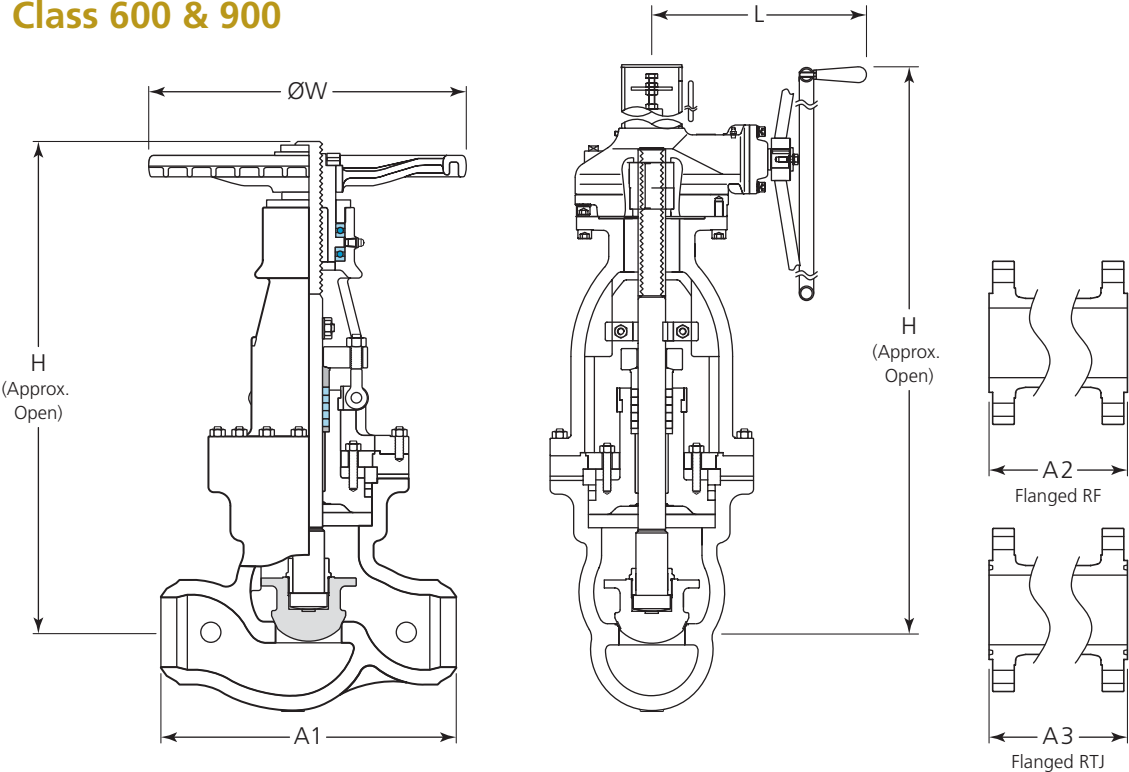
No.	Part Name	ASTM Specification									
		Std. • A216	High Temperature Service • A217					Stainless Steel • A351			
1	Body	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
2	Bonnet	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
3	Disc*	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
5	Stem	A479 410						A276 304	A276 316	A276 304L	A276 316L
6	Disc Gland	A217 CA15						A276 304	A276 316	A276 304L	A276 316L
8	Packing Gland	A479 410						A276 304			
9	Gland Flange	A105 or A283 D						A351 CF8			
10	Yoke Sleeve	A439 D2						A439 D2			
11	Bonnet Stud/Nut	A193 B7/ A194 2H	A193 B16/A194 4					A193 B8/A194 8			
13	Gland Bolt	A193 B7						A193 B8			
14	Gland Nut	A194 2H						A194 8			
15	Handle Nut	Steel						Steel			
16	Set Screw	Steel						Steel			
17	Sleeve Gland	Steel						Steel			
19	Handwheel	A395						A395			
21	Packing	Graphite						Graphite			
22	Seal Ring	Graphite/SS						Graphite/SS			
26	Yoke	A216 WCB						A351 CF8			
27	Yoke Stud	A193 B7						A193 B8			
28	Yoke Nut	A194 2H						A194 8			
30	Stopper	A283 D						A283 D			
31	Stopper Pin	A193 B7						A29 1045			
32	Packing Ring	A479 410						A276 304	A276 316	A276 304L	A276 316L
33	Retainer	A29 1045 + Chrome Plated	A240 304					A240 304L			
34	Hinge Clamp	A216 WCB						A351 CF8			
35	Bonnet Clamp	A29 1045						A240 304			
37	Gasket Spacer	A29 1045 + Chrome Plated	A240 304					A240 304			

*Full HF is standard design.

Note: All information is subject to change without notice.

DSI® Pressure Seal Straight Pattern Globe Valve

2"- 16" Class 600 & 900



Dimensional Data & Weights • Class 600, 2"- 16"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	11.5	292	11.5	292	11.6	295	19.7	500	19.7	500	—	—	99.2	45	77.2	35
2 1/2	65	13.0	330	13.0	330	13.1	333	20.8	529	19.7	500	—	—	121.2	55	99.2	45
3	80	14.0	356	14.0	356	14.1	359	24.8	630	15.7	400	—	—	187.4	85	132.3	60
4	100	17.0	432	17.0	432	17.1	435	25.6	650	17.7	450	—	—	297.7	135	209.5	95
6	150	22.0	559	22.0	559	22.1	562	37.6	955	24.8	630	15.3	389	672.5	305	507.2	230
8	200	23.0	584	26.0	660	26.1	664	42.4	1076	24.8	630	15.3	389	1367.1	620	1190.7	540
10	250	28.0	711	31.0	787	31.1	791	55.1	1400	24.0	610	17.0	432	2888.6	1310	2535.8	1150
12	300	32.0	813	32.2	818	33.1	841	61.0	1550	24.0	610	20.2	512	4189.5	1900	3792.6	1720
14	350	35.0	889	35.0	889	35.1	892	70.9	1800	24.0	610	20.2	512	5997.6	2720	5578.7	2530
16	400	39.0	991	39.0	991	39.1	994	85.0	2160	29.9	760	22.3	567	6945.8	3150	6394.5	2900

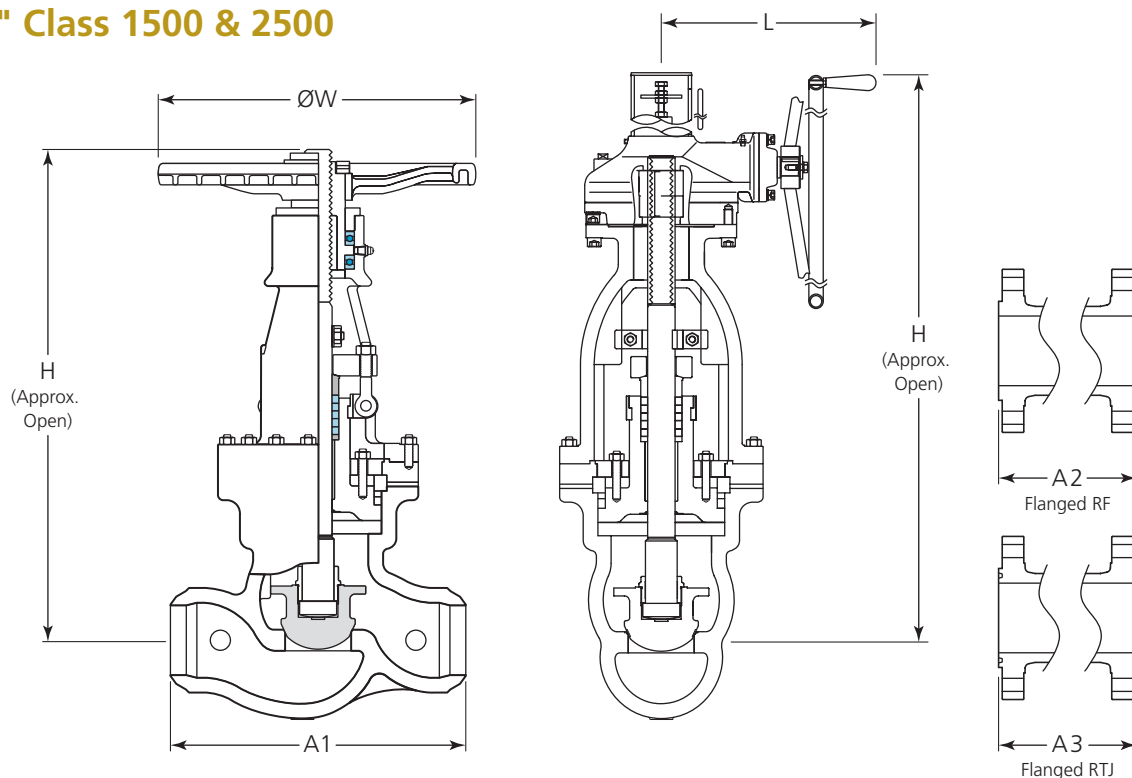
Dimensional Data & Weights • Class 900, 2"- 16"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	14.5	368	14.5	368	14.6	371	20.7	525	19.7	500	—	—	176.4	80	121.3	55
2 1/2	65	16.5	419	16.5	419	16.6	422	26.1	663	19.7	500	—	—	242.6	110	176.4	80
3	80	15.0	381	15.0	381	15.1	384	24.9	633	19.7	500	—	—	231.5	105	176.4	80
4	100	18.0	457	18.0	457	18.1	460	27.0	687	19.7	500	—	—	374.9	170	286.7	130
6	150	20.0	508	24.0	610	24.1	613	53.3	1355	28.0	710	16.0	406	926.1	420	793.8	360
8	200	26.0	660	29.0	737	29.1	740	53.1	1350	24.0	610	17.0	432	2205	1000	1984.5	900
10	250	31.0	787	33.0	838	33.1	841	61.0	1550	24.0	610	20.2	512	3792.6	1720	3351.6	1520
12	300	36.0	914	38.0	965	38.1	968	68.9	1750	24.0	610	20.2	512	5071.5	2300	4520.3	2050
14	350	39.0	991	40.5	1029	40.9	1038	78.7	2000	29.9	760	22.3	567	7386.8	3350	6725.3	3050
16	400	43.0	1092	44.5	1130	44.9	1140	90.9	2310	29.9	760	22.3	567	8820	4000	7938	3600

Note: All information is subject to change without notice.

DSI® Pressure Seal Straight Pattern Globe Valve

2"- 14" Class 1500 & 2500



Dimensional Data & Weights • Class 1500, 2"- 14"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	8.5	368	14.5	368	14.6	371	20.7	525	19.7	500	—	—	176.4	80	121.3	55
2 1/2	65	10.0	419	16.5	419	16.6	422	26.1	663	19.7	500	—	—	242.6	110	176.4	80
3	80	12.0	305	18.5	470	18.6	473	26.4	671	19.7	500	—	—	299.9	136	209.5	95
4	100	16.0	406	21.5	546	21.6	549	34.5	876	19.7	500	—	—	496.1	225	352.8	160
6	150	22.0	559	27.8	705	28.0	711	45.9	1167	31.5	800	18.1	461	1433.3	650	1146.6	520
8	200	28.0	711	32.8	832	33.1	841	70.9	1800	24.0	610	20.2	512	3704.4	1680	3153.2	1430
10	250	34.0	864	39.0	991	39.4	1000	78.7	2000	29.9	760	20.2	512	5909.4	2680	5027.4	2280
12	300	39.0	991	44.5	1130	45.1	1146	91.0	2311	29.9	760	20.2	512	7497	3400	6240.2	2830
14	350	42.0	1067	49.5	1257	50.2	1276	105.9	2691	29.9	760	22.3	567	9481.5	4300	7938	3600

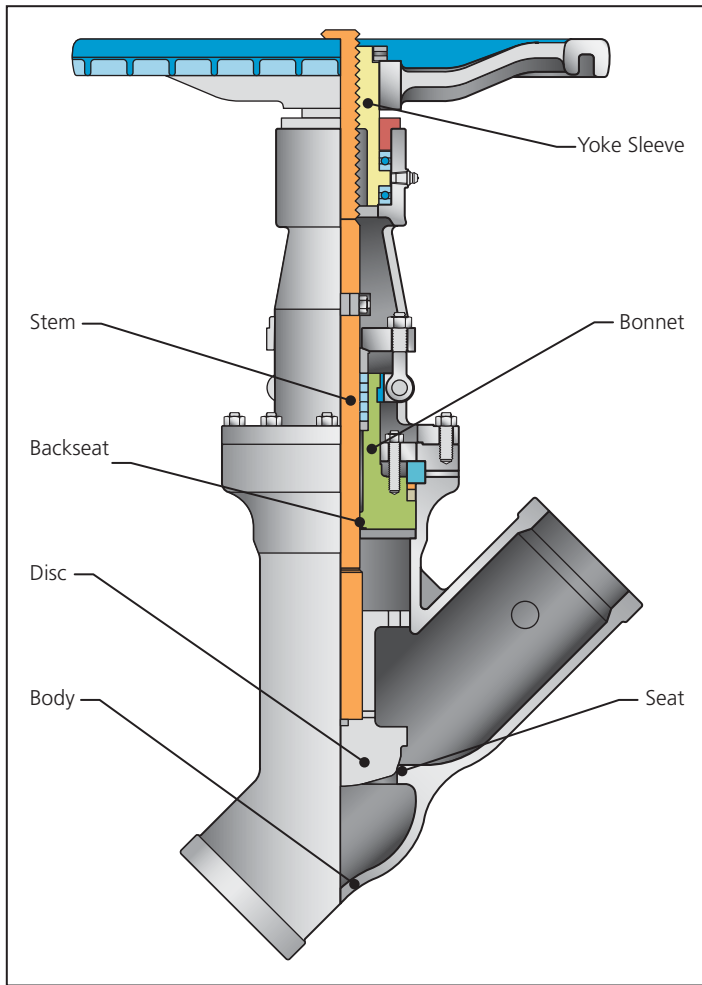
Dimensional Data & Weights • Class 2500, 2"- 12"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	11.0	279	17.8	451	17.9	454	25.1	637	19.7	500	—	—	220.5	100	154.4	70
2 1/2	65	13.0	508	20.0	508	20.2	514	28.3	719	19.7	500	—	—	341.8	155	242.6	110
3	80	14.5	578	22.8	578	23.0	584	29.3	743	22.8	580	—	—	463.1	210	308.7	140
4	100	18.0	457	26.5	673	26.9	682	47.4	1205	28.0	710	16.0	406	1102.5	500	771.8	350
6	150	24.0	610	36.0	914	36.5	927	53.0	1345	35.4	900	19.1	486	2756.3	1250	2094.8	950
8	200	30.0	762	40.3	1022	40.9	1038	85.0	2160	29.9	760	22.3	567	5292	2400	4410	2000
10	250	36.0	914	50.0	1270	50.9	1292	100.0	2540	29.9	760	22.3	567	7276.5	3300	5512.5	2500
12	300	41.0	1041	56.0	1422	56.9	1444	106.0	2692	29.9	760	22.3	567	9261	4200	7276.5	3300

Note: All information is subject to change without notice.

DSI® Pressure Seal Y-Pattern Globe and Stop Check Valve

Standard Features



Yoke Sleeve

The standard material of the yoke sleeve is austenitic ductile iron with over 950°C (1750°F) melting point in conformity with API standard specifications.

Bonnet

The valve has a precise body-bonnet seal to facilitate valve service. The bodies and bonnets of the valves are machined to achieve precise coaxiality and prevent any misalignment.

Stem

The stem is of one-piece construction and is heat treated to ensure adequate mechanical properties and surface hardness. Accurate machining and grinding ensure that there is minimized friction during valve operation. The round head of the stem gives a point contact with the inside of the disc housing and thus prevents galling.

Backseat

All of our valves are equipped with a backseat to provide accurate guidance of the stem. The conical shape contact seat in the bonnet assembly is integrally Stellite® faced.

Disc

The globe valve disc is guided throughout the full range of travel, and revolves freely around the stem, thereby reducing friction and galling with the seating surface. The outside diameter of the disc is accurately finished and cylindrical in shape to travel along the body guides. A Stellite® layer is applied to the conical seating surface of the disc. In addition, the lapped finish ensures a precise mating with the seat.

Seat

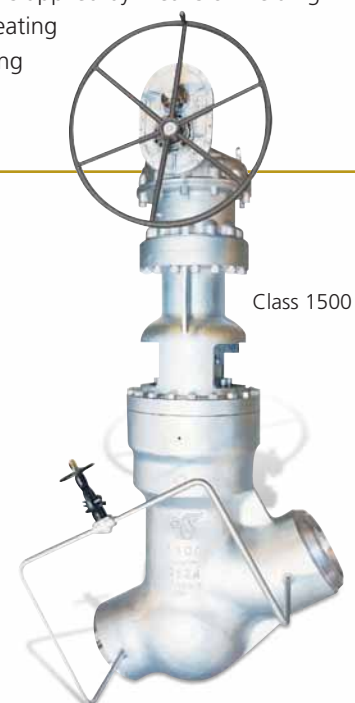
The Stellite® seating surface is applied by means of welding in all valve sizes. Lapping of the seating surface ensures precise mating with the disc surfaces.

Body

The valve body is cylindrically shaped to prevent distortion or undue stress during extreme working conditions. The wall thickness meets or exceeds API, ANSI, ASME and MSS requirements. The body design allows ease of repairability and maintenance for extended use service.

Available Modifications

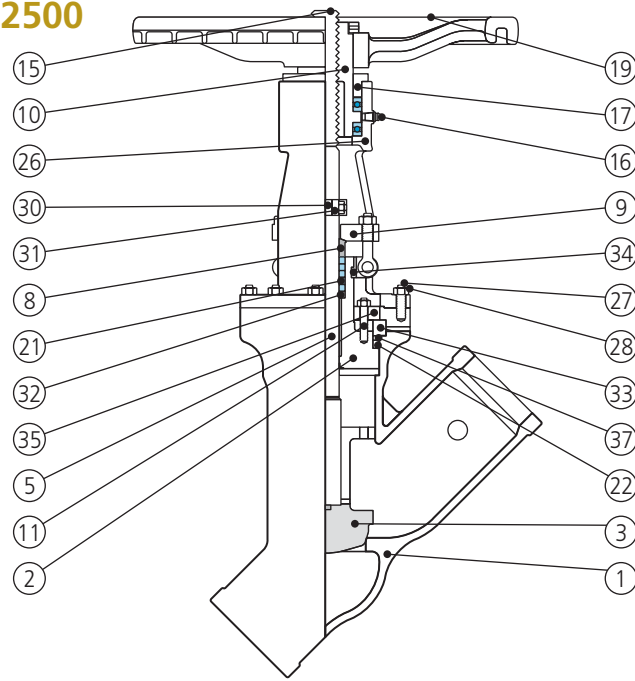
- Gear Operator Mounting
- Trim Changes
- Actuation
- Drilled & Tapped Body Connections
- By-Pass
- Weld End Bore Changes
- Customer Specified Coatings



Note: All information is subject to change without notice.

DSI® Pressure Seal Y-Pattern Globe and Stop Check Valve

Class 600, 900, 1500 & 2500



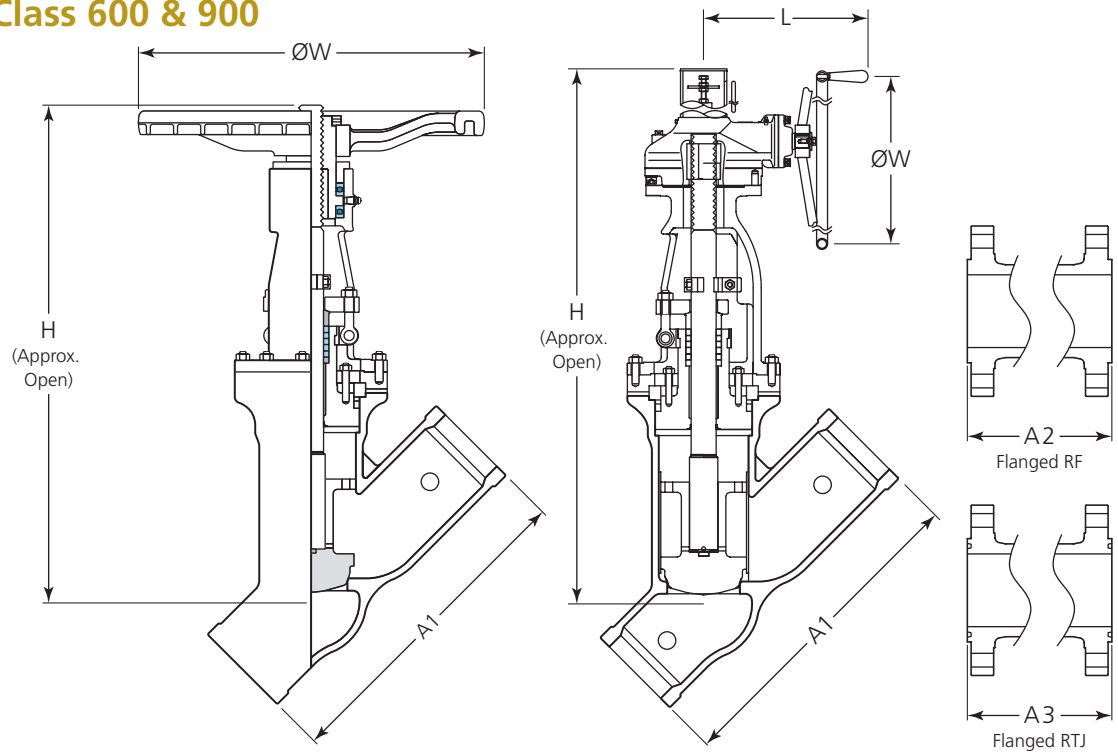
Parts & Materials

No.	Part Name	ASTM Specification									
		Std. • A216	High Temperature Service • A217					Stainless Steel • A351			
1	Body	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
2	Bonnet	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
3	Disc*	A217 CA15	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
5	Stem	A479 410						A276 304	A276 316	A276 304L	A276 316L
8	Packing Gland	A479 410						A276 304			
9	Gland Flange	A105 or A283 D						AISI 304			
10	Yoke Sleeve	A439 D2						A439 D2			
11	Bonnet Stud /Nut	A193 B7/ A194 2H	A193 B16/A194 4					A193 B8/A194 8			
13	Gland Bolt	A193 B7						A193 B8			
14	Gland Nut	A194 2H						A194 8			
15	Handle Nut	Steel						Steel			
16	Set Screw	Steel						Steel			
17	Sleeve Gland	Steel						Steel			
19	Handwheel	A395						A395			
21	Packing	Graphite						Graphite			
22	Seal Ring	Graphite/SS						Graphite/SS			
26	Yoke	A216 WCB						A351 CF8			
27	Yoke Stud	A193 B7						A193 B8			
28	Yoke Nut	A194 2H						A194 8			
30	Stopper	A283 D/AISI 304						A283 D/AISI 304			
31	Stopper Pin	A194 2H						A194 8			
32	Packing Ring	A479 410						A276 304	A276 316	A276 304L	A276 316L
33	Retainer	A29 1045 + Chrome Plated	A240 304					A240 304L			
34	Hinge Clamp	A216 WCB						A351 CF8			
35	Bonnet Clamp	A29 1045						A240 304			
37	Gasket Spacer	A29 1045 + Chrome Plated	A240 304					A240 304			

*Full HF is standard design.

Note: All information is subject to change without notice.

DSI® Pressure Seal Y-Pattern Globe and Stop Check Valve
2"- 16" Class 600 & 900



Dimensional Data & Weights • Class 600, 2"- 16"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	11.5	292	13.78	350	13.90	353	18.70	475	9.84	250	—	—	152.1	69	130.1	59
2½	65	13.0	331	15.75	400	15.87	403	21.06	535	11.81	300	—	—	187.4	85	165.3	75
3	80	14.0	356	18.90	480	19.02	483	23.23	590	11.81	300	—	—	295.4	134	240.3	109
4	100	17.0	432	21.65	550	21.77	553	26.57	675	17.72	450	—	—	628.3	285	540.1	245
6	150	22.0	559	25.59	650	25.71	653	34.84	885	23.62	600	—	—	1212.5	550	1047.2	475
8	200	26.0	660	31.50	800	31.61	803	53.15	1350	27.95	710	15.98	406	1510.2	685	1333.8	605
10	250	31.0	787	39.37	1000	39.82	10,003	60.24	1530	31.50	800	18.15	461	1845.3	837	1505.8	683
12	300	32.2	818	45.28	1150	45.39	1153	63.39	1610	35.43	900	19.13	486	2634.5	1195	2228.9	1011
14	350	35.0	889	48.43	1230	48.54	1233	74.41	1890	35.43	900	20.83	529	3196.7	1450	2707.3	1228
16	400	39.0	991	51.57	1310	51.69	1313	88.58	2250	39.37	1000	23.23	590	4299.0	1950	3622.2	1643

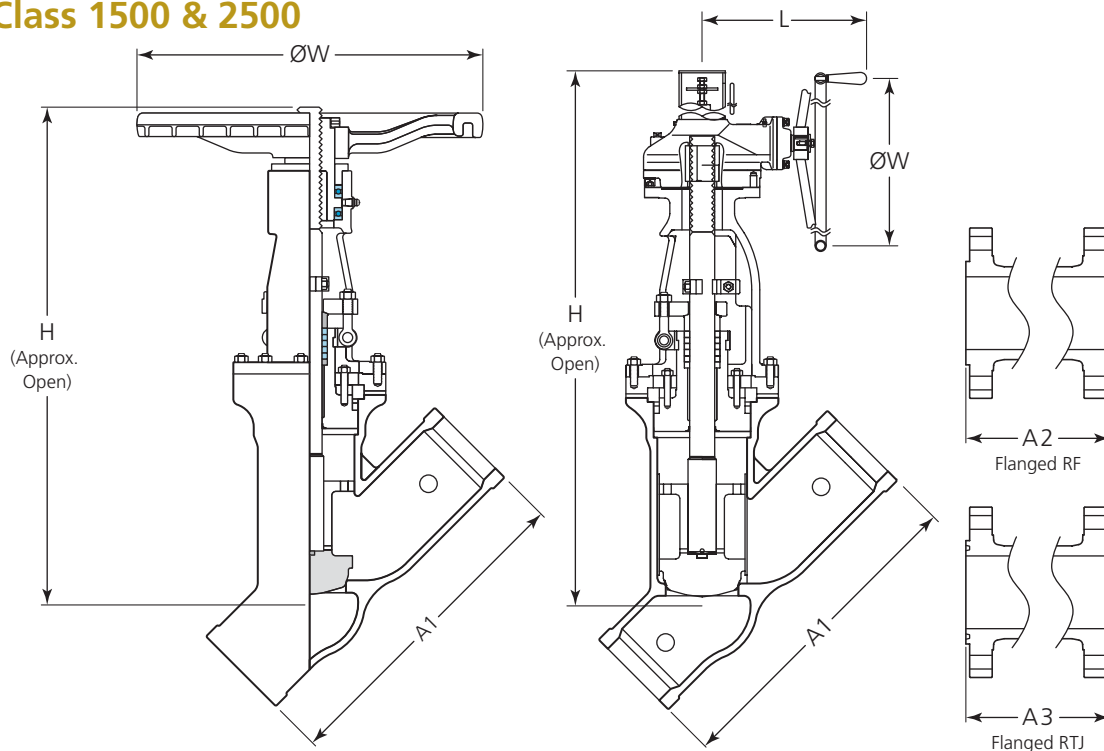
Dimensional Data & Weights • Class 900, 2"- 16"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	14.5	368	20.39	518	20.51	521	23.23	590	15.75	400	—	—	196.2	89	141.1	64
2½	65	16.5	419	22.40	569	22.52	572	24.80	630	15.75	400	—	—	275.6	125	209.4	95
3	80	15.0	381	20.91	531	21.02	534	27.36	695	15.75	400	—	—	313.1	142	253.5	115
4	100	18.0	457	23.90	607	24.02	610	28.54	725	19.69	500	—	—	705.5	320	617.3	280
6	150	24.0	610	29.92	760	30.04	763	47.05	1195	27.95	710	15.98	406	1276.5	579	1124.4	510
8	200	29.0	737	34.92	887	35.04	890	54.53	1385	27.95	710	15.98	406	1752.7	795	1510.2	685
10	250	33.0	838	38.90	988	39.02	991	62.20	1580	31.50	800	18.15	461	2976.2	1350	2535.3	1150
12	300	38.0	965	43.90	1115	44.02	1118	66.54	1690	35.43	900	20.83	529	3858.1	1750	3306.9	1500
14	350	40.5	1029	46.42	1179	46.77	1188	75.98	1930	35.43	900	20.83	529	5842.2	2650	5236.0	2375
16	400	44.5	1130	50.39	1280	50.79	1290	108.27	2750	39.37	1000	23.23	590	7605.9	3450	6624.9	3005

Note: All information is subject to change without notice.

DSI® Pressure Seal Y-Pattern Globe and Stop Check Valve

2"- 14" Class 1500 & 2500



Dimensional Data & Weights • Class 1500, 2" - 14"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	14.5	368	20.39	518	20.51	521	23.23	590	15.75	400	—	—	196.2	89	141.1	64
2 1/2	65	16.5	419	22.40	569	22.52	572	24.80	630	15.75	400	—	—	56.7	125	209.4	95
3	80	18.5	470	24.41	620	24.53	623	27.95	710	19.69	500	—	—	341.7	155	251.3	114
4	100	21.5	546	27.40	696	27.52	699	30.12	765	19.69	500	—	—	771.6	350	628.3	285
6	150	27.8	705	33.66	855	33.90	861	48.62	1235	27.95	710	15.98	406	1494.7	678	1208.1	548
8	200	32.8	832	38.66	982	39.02	991	54.72	1390	31.50	800	18.15	461	2083.4	945	1752.7	795
10	250	39.0	991	44.92	1141	45.28	1150	66.14	1680	35.43	900	20.83	529	3483.3	1580	2932.1	1330
12	300	44.5	1130	50.39	1280	51.02	1296	75.98	1930	35.43	900	20.83	529	4960.4	2250	4078.6	1850
14	350	49.5	1257	55.39	1407	56.14	1426	87.80	2230	39.37	1000	23.23	590	9149.2	4150	7605.9	3450

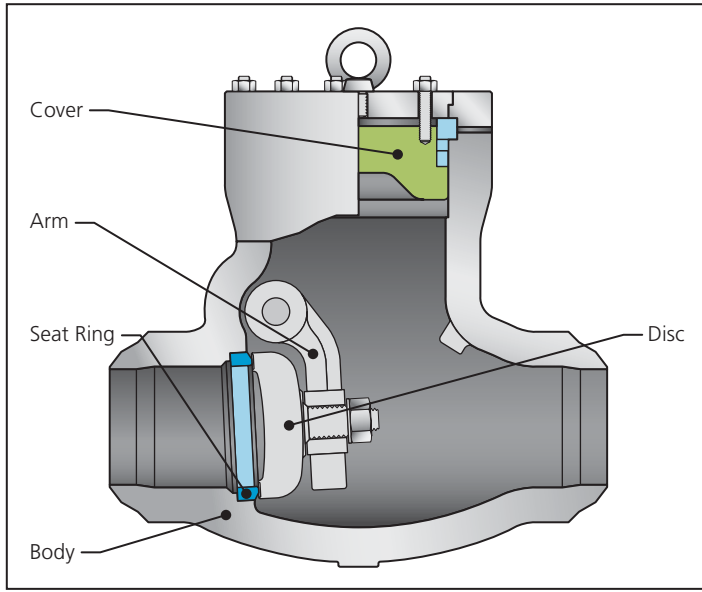
Dimensional Data & Weights • Class 2500, 2" - 12"

Valve Size		Dimensions												Weights			
		A1		A2		A3		H		W		L		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	17.8	451	25.63	651	25.75	654	23.23	590	15.75	400	—	—	231.5	105	165.3	75
2 1/2	65	20.0	508	27.87	708	28.11	714	30.12	765	19.69	500	—	—	71.7	158	49.9	110
3	80	22.8	578	30.63	778	30.87	784	31.10	790	19.69	500	—	—	474.0	215	319.7	145
4	100	26.5	673	34.37	873	34.76	883	46.85	1190	24.80	630	15.31	389	1058.2	480	727.5	330
6	150	36.0	914	43.86	1114	44.37	1127	51.57	1310	27.95	710	15.98	406	2072.3	940	1411.0	640
8	200	40.2	1022	48.11	1222	48.74	1238	76.77	1950	31.50	800	18.15	461	3626.6	1645	2744.8	1245
10	250	50.0	1270	57.87	1470	58.74	1492	83.86	2130	35.43	900	20.83	529	5643.8	2560	3769.9	1710
12	300	56.0	1422	63.86	1622	64.76	1645	96.46	2450	39.37	1000	23.23	590	7165.0	3250	4530.5	2055

Note: All information is subject to change without notice.

DSI® Pressure Seal Swing Type Check Valve

Standard Features



Cover

The cover material is a steel identical to the body to ensure high dependability. The cover construction has a precise body-cover tightness and ease of dismantling and reassembly are ensured.

Arm

The arm is of a steel material identical to the body. Larger sized valves are provided with a hinge bushing to reduce friction and to prevent galling.

Disc

The disc seating surface area is ground and lapped. It is of one-piece construction and is heat treated to deliver the required mechanical properties and hardness.

Seat Ring

The Stellite® surface of the seat ring is applied by means of welding in all valve sizes. Lapping of the seating surface ensures precise mating with the disc surfaces.

Body

The valve body is cylindrically shaped to prevent distortion or undue stress during extreme working conditions. The wall thickness meets or exceeds API, ANSI, ASME and MSS requirements. The body design allows ease of reparability and maintenance for extended use service.

Available Modifications

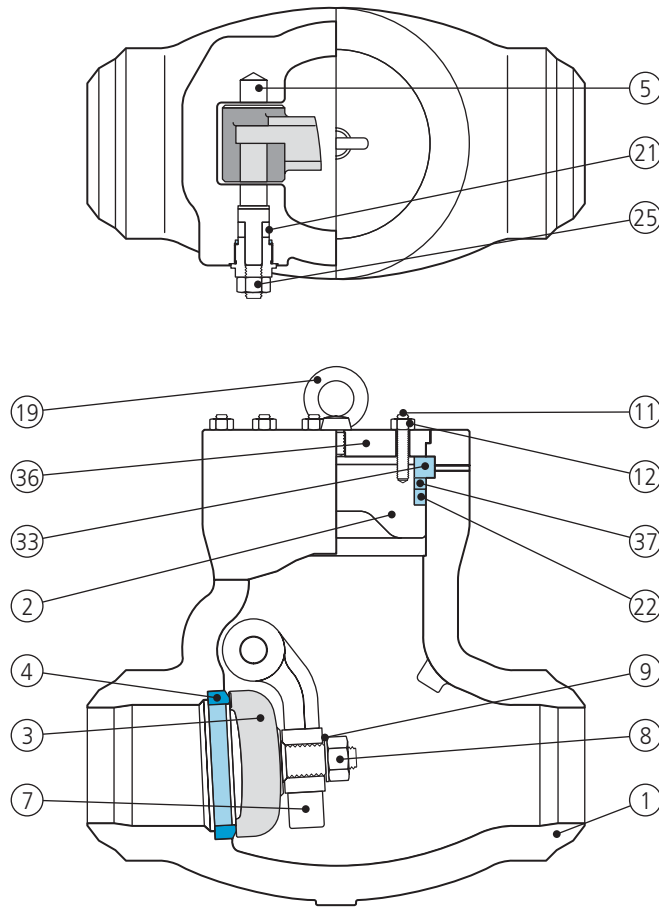
- Outside Lever and Weight
- Slam Retarders
- Assisting Springs
- Position Switches/Indicators
- Pneumatic Safety Control
- Trim Changes
- Customer Specified Coatings
- Weld End Bore Changes
- Drilled & Tapped Body Connections



Note: All information is subject to change without notice.

DSI® Pressure Seal Swing Type Check Valve

Class 600, 900, 1500 & 2500



Parts & Materials

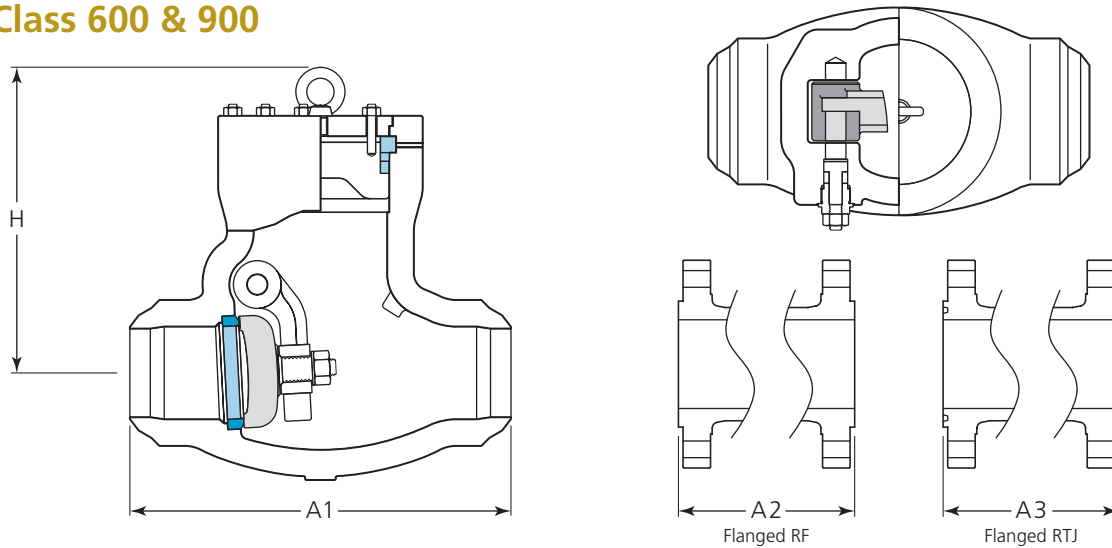
No.	Part Name	ASTM Specification									
		Std. • A216	High Temperature Service • A217					Stainless Steel • A351			
1	Body	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
2	Cover	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
3	Disc*	A217 CA15	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M
4	Body Seat Ring*	A105	A182 F11	A182 F22	A182 F5a	A182 F9	A182 F91	A240 304	A240 316	A240 304L	A240 316L
5	Hinge Pin	A479 410						A276 304	A276 316	A276 304L	A276 316L
7	Arm	A216 WCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A217 C12A	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
8	Disc Nut	A194 8						A194 8			
9	Washer	A240 304						A240 304			
11	Bonnet Stud	A193 B7	A193 B16					A193 B8			
12	Bonnet Nut	A194 2H	A194 4					A194 8			
19	Eye Bolt	A105						A105			
21	Plug Gasket	Graphite/SS						Graphite/SS			
22	Gasket	Graphite/SS						Graphite/SS			
25	Plug	A105	A479 410					A276 304	A276 316	A276 304L	A276 316L
33	Retainer	A29 1045 + Chrome Plated	A240 304					A240 304			
36	Bonnet Clamp	A29 1045						A240 304			
37	Gasket Spacer	A29 1045 + Chrome Plated	A240 304					A240 304			

*Full HF is standard design.

Note: All information is subject to change without notice.

DSI® Pressure Seal Swing Type Check Valve

2"- 24" Class 600 & 900



Dimensional Data & Weights • Class 600, 2" - 24"

Valve Size		Dimensions								Weights			
		A1		A2		A3		H		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	11.5	292	11.5	292	11.6	295	11.4	289	59.5	27	39.7	18
2 1/2	65	13.0	330	13.0	330	13.1	333	13.5	343	77.2	35	55.1	25
3	80	10.0	254	14.0	356	14.1	359	8.1	205	99.2	45	70.5	32
4	100	12.0	305	17.0	432	17.1	435	10.2	260	187.4	85	75.0	34
6	150	18.0	457	22.0	559	22.1	562	12.8	325	418.9	190	271.2	123
8	200	23.0	584	26.0	660	26.1	663	17.1	434	771.6	350	573.2	260
10	250	28.0	711	31.0	787	31.1	790	23.9	606	1102.3	500	815.7	370
12	300	32.0	813	33.0	838	33.1	841	27.4	695	1477.1	670	1080.2	490
14	350	35.0	889	35.0	889	35.1	892	29.5	749	1940.0	880	1455.0	660
16	400	39.0	991	39.0	991	39.1	994	28.7	730	2535.3	1150	1873.9	850
18	450	43.0	1092	43.0	1092	43.1	1095	28.7	730	3262.8	1480	2425.0	1100
20	500	47.0	1194	47.0	1194	47.2	1200	32.2	819	4144.6	1880	3284.8	1490
24	600	55.0	1397	55.0	1397	55.4	1407	37.4	949	5731.9	2600	4497.4	2040

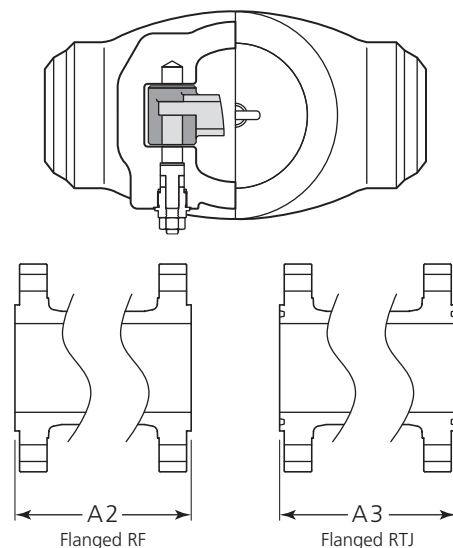
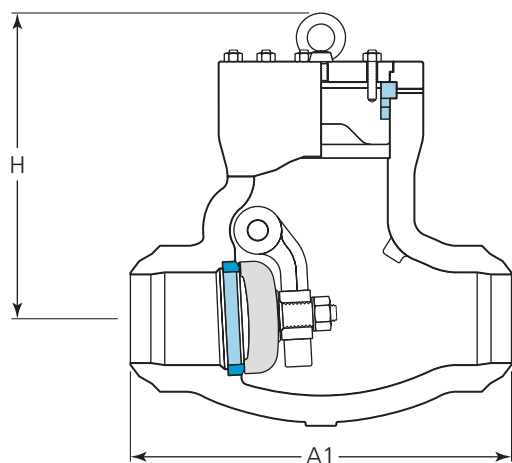
Dimensional Data & Weights • Class 900, 2" - 24"

Valve Size		Dimensions								Weights			
		A1		A2		A3		H		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	14.5	368	14.5	368	14.6	371	11.4	289	88.2	40	44.1	20
2 1/2	65	16.5	419	16.5	419	16.6	422	13.5	343	121.3	55	70.5	32
3	80	12.0	305	15.0	381	15.1	384	8.1	205	114.6	52	66.1	30
4	100	14.0	356	18.0	457	18.1	460	15.0	381	231.5	105	143.3	65
6	150	20.0	508	24.0	610	24.1	613	15.9	403	507.1	230	352.7	160
8	200	26.0	660	29.0	737	29.1	740	23.1	587	1256.6	570	970.0	440
10	250	31.0	787	33.0	838	33.1	841	23.9	606	1873.9	850	1521.2	690
12	300	36.0	914	38.0	965	38.1	968	27.4	695	2866.0	1300	2248.7	1020
14	350	39.0	991	40.5	1029	40.9	1039	29.5	749	3417.1	1550	2645.5	1200
16	400	43.0	1092	44.5	1130	44.9	1140	28.7	730	3637.6	1650	2976.2	1350
18	450	46.5	1181	48.0	1219	48.5	1232	33.5	851	5070.6	2300	4078.5	1850
20	500	50.5	1283	52.0	1321	52.5	1334	34.0	864	6613.8	3000	5291.0	2400
24	600	59.5	1511	61.0	1549	61.7	1568	37.8	959	9038.8	4100	6393.3	2900

Note: All information is subject to change without notice.

DSI® Pressure Seal Swing Type Check Valve

2"-24" Class 1500 & 2500



Dimensional Data & Weights • Class 1500, 2"-24"

Valve Size		Dimensions								Weights			
		A1		A2		A3		H		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	14.5	368	14.5	368	14.6	371	11.4	289	88.2	40	44.1	20
2 1/2	65	16.5	419	16.5	419	16.6	422	13.5	343	121.3	55	70.5	32
3	80	18.5	470	18.5	470	18.6	473	15.1	383	220.5	100	88.2	40
4	100	16.0	406	21.5	546	21.6	549	14.8	376	308.6	140	154.3	70
6	150	22.0	559	27.8	705	28.0	711	17.6	448	881.8	400	617.3	280
8	200	28.0	711	32.8	832	33.1	842	19.7	500	1344.8	610	1058.2	480
10	250	34.0	864	39.0	991	39.4	1001	23.5	598	2314.8	1050	1631.4	740
12	300	39.0	991	44.5	1130	45.1	1146	25.4	645	3417.1	1550	2425.0	1100
14	350	42.0	1067	49.5	1257	50.2	1276	28.0	711	4629.6	2100	3108.5	1410
16	400	47.0	1194	54.4	1383	55.3	1405	29.5	749	5731.9	2600	3527.3	1600
18	450	53.0	1346	60.5	1537	61.4	1559	34.6	880	7275.1	3300	4629.6	2100
20	500	58.0	1473	65.5	1664	66.4	1686	37.4	949	9259.3	4200	5731.9	2600
24	600	64.0	1626	76.5	1943	77.6	1972	43.3	1099	13227.5	6000	7716.1	3500

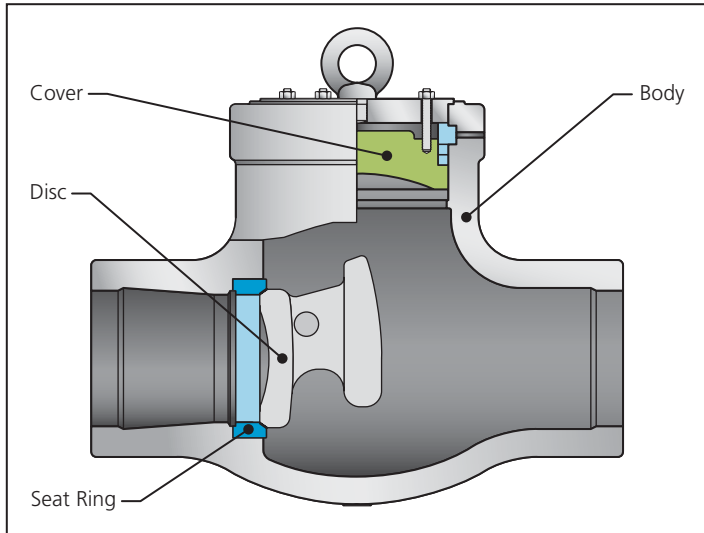
Dimensional Data & Weights • Class 2500, 2"-20"

Valve Size		Dimensions								Weights			
		A1		A2		A3		H		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	17.8	451	17.8	451	17.9	454	11.4	289	187.4	85	110.2	50
2 1/2	65	20.0	508	20.0	508	20.2	514	11.4	289	260.1	118	154.3	70
3	80	22.8	578	22.8	578	23.0	584	15.1	383	341.7	155	187.4	85
4	100	18.0	457	26.5	673	26.9	683	15.5	393	628.3	285	363.8	165
6	150	24.0	610	36.0	914	36.5	927	22.4	570	1653.4	750	1014.1	460
8	200	30.0	762	40.2	1022	40.9	1038	24.4	619	2976.2	1350	1984.1	900
10	250	36.0	914	50.0	1270	50.9	1292	29.7	754	4739.9	2150	2866.0	1300
12	300	41.0	1041	56.0	1422	56.9	1444	27.5	699	6613.8	3000	3968.3	1800
14	350	44.0	1118	62.0	1575	—	—	33.9	860	9215.2	4180	5401.2	2450
16	400	49.0	1245	68.0	1727	—	—	42.4	1076	11155.2	5060	7054.7	3200
18	450	55.0	1397	—	—	—	—	39.4	1000	16490.3	7480	8928.6	4050
20	500	55.0	1397	—	—	—	—	54.3	1378	17636.7	8000	11023.0	5000

Note: All information is subject to change without notice.

DSI® Pressure Seal Tilt Disc Check Valve

Standard Features



Cover

The cover material is a steel identical to the body to ensure high dependability. The cover construction has a precise body-cover tightness and ease of dismantling and reassembly are ensured.

Disc

The disc seating surface area is ground and lapped. It is of one-piece construction and is heat treated to deliver the required mechanical properties and hardness.

Seat Ring

The Stellite® surface of the seat ring is applied by means of welding in all valve sizes. Lapping of the seating surface ensures precise mating with the disc surfaces.

Body

The valve body is cylindrically shaped to prevent distortion or undue stress during extreme working conditions. The wall thickness meets or exceeds API, ANSI, ASME and MSS requirements. The body design allows ease of reparability and maintenance for extended use service.

Available Modifications

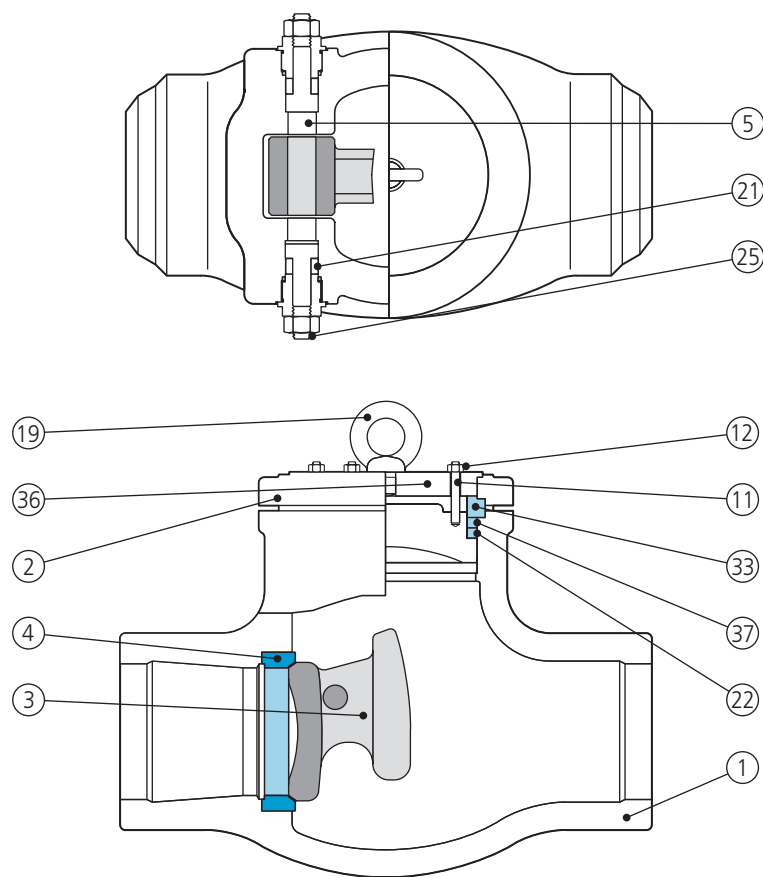
- Trim Changes
- Drilled & Tapped Body Connections
- Weld End Bore Changes
- Customer Specified Coatings



Note: All information is subject to change without notice.

DSI® Pressure Seal Tilt Disc Check Valve

Class 600, 900, 1500 & 2500



Parts & Materials

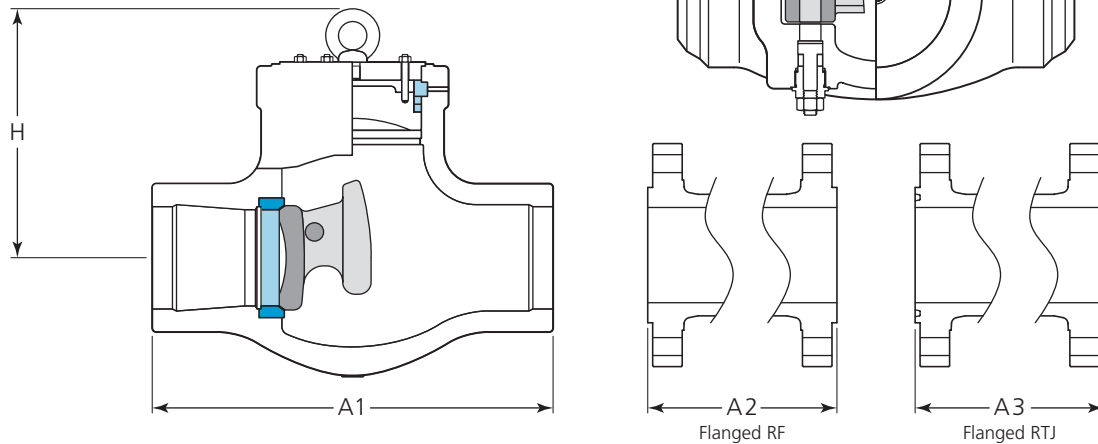
No.	Part Name	ASTM Specification										
		Std. • A216	High Temperature Service • A217					Stainless Steel • A351				
1	Body	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M	
2	Cover	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M	
3	Disc*	WCB	WC6	WC9	C5	C12	C12A	CF8	CF8M	CF3	CF3M	
4	Body Seat Ring*	A105	A182 F11	A182 F22	A182 F5a	A182 F9	A182 F91	A240 304	A240 316	A240 304L	A240 316L	
5	Hinge Pin	A479 410					A479 410		A276 304	A276 316	A276 304L	A276 316L
11	Bonnet Stud	A193 B7	A193 B16	A193 B16	A193 B16	A193 B16		A193 B8				
12	Bonnet Nut	A194 2H	A194 4	A194 4	A194 4	A194 4		A194 8				
19	Eye Bolt	A105					A105		A105			
21	Plug Gasket	Graphite/SS					Graphite/SS		Graphite/SS			
22	Gasket	Graphite/SS					Graphite/SS		Graphite/SS			
25	Plug	A105	A479 410			A479 410		A276 304	A276 316	A276 304L	A276 316L	
33	Retainer	A29 1045 + Chrome Plated	A240 304			A240 304		A240 304				
36	Bonnet Clamp	A29 1045					A29 1045		A240 304			
37	Gasket Spacer	A29 1045 + Chrome Plated	A240 304			A240 304		A240 304				

*Full HF is standard design.

Note: All information is subject to change without notice.

DSI® Pressure Seal Tilt Disc Check Valve

2"-24" Class 600 & 900



Dimensional Data & Weights • Class 600, 2"-24"

Valve Size		Dimensions								Weights			
		A1		A2		A3		H		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	7.0	178	11.5	292	11.6	295	7.7	195	55.1	25	37.5	17
2 1/2	65	8.5	216	13.0	330	13.1	333	7.9	200	79.4	36	46.3	21
3	80	10.0	254	14.0	356	14.1	359	8.2	208	90.4	41	55.1	25
4	100	12.0	305	17.0	432	17.1	435	9.8	248	147.7	67	75.0	34
6	150	18.0	457	22.0	559	22.1	562	12.2	310	438.7	199	275.6	125
8	200	23.0	584	26.0	660	26.1	664	15.0	380	815.7	370	584.2	265
10	250	28.0	711	31.0	787	31.1	791	17.7	450	1106.7	502	749.6	340
12	300	32.0	813	33.0	838	33.1	841	22.8	580	1492.5	677	1058.2	480
14	350	35.0	889	35.0	889	35.1	892	26.0	660	1929.0	875	1411.0	640
16	400	39.0	991	39.0	991	39.1	994	30.7	780	2579.4	1170	1840.9	835
18	450	43.0	1092	43.0	1092	43.1	1095	33.0	838	3384.1	1535	2436.1	1105
20	500	47.0	1194	47.0	1194	47.2	1200	34.6	880	4376.2	1985	3152.6	1430
24	600	55.0	1397	55.0	1397	55.4	1407	36.4	925	6272.1	2845	4519.5	2050

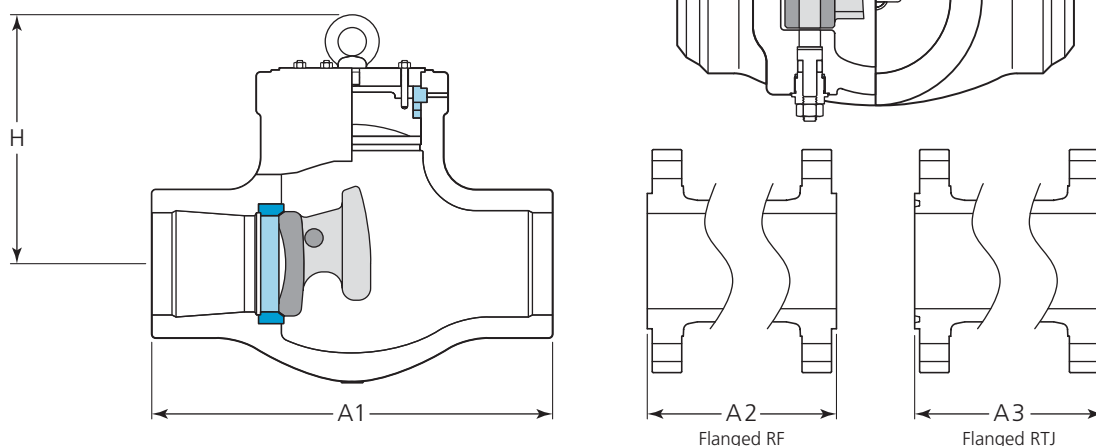
Dimensional Data & Weights • Class 900, 2"-24"

Valve Size		Dimensions								Weights			
		A1		A2		A3		H		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	8.5	216	14.5	368	14.6	371	8.1	205	90.4	41	44.1	20
2 1/2	65	10.0	254	16.5	419	16.6	422	8.7	220	123.5	56	68.3	31
3	80	12.0	305	15.0	381	15.1	384	9.1	230	123.5	56	66.1	30
4	100	14.0	356	18.0	457	18.1	460	10.2	258	233.7	106	143.3	65
6	150	20.0	508	24.0	610	24.1	612	12.8	325	540.1	245	352.7	160
8	200	26.0	660	29.0	737	29.1	740	15.2	385	1034.0	469	716.5	325
10	250	31.0	787	33.0	838	33.1	841	17.9	455	1280.9	581	826.7	375
12	300	32.0	814	38.0	965	38.1	968	21.5	545	2160.5	980	1532.2	695
14	350	39.0	991	40.5	1029	40.9	1038	25.4	645	2896.9	1314	2171.6	985
16	400	43.0	1092	44.5	1130	44.9	1140	28.7	730	3586.9	1627	2698.5	1224
18	450	46.5	1181	48.0	1219	48.5	1232	31.3	795	4407.0	1999	3152.6	1430
20	500	50.5	1283	52.0	1321	52.5	1333	33.1	842	5191.9	2355	3637.6	1650
24	600	59.5	1511	61.0	1549	61.7	1568	35.2	895	7290.7	3307	4281.4	1942

Note: All information is subject to change without notice.

DSI® Pressure Seal Tilt Disc Check Valve

2"-24" 1500 & 2500



Dimensional Data & Weights • Class 1500, 2"-24"

Valve Size		Dimensions								Weights			
		A1		A2		A3		H		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	8.5	216	14.5	368	14.6	371	8.1	205	90.4	41	44.1	20
2 1/2	65	10.0	254	16.5	419	16.6	422	8.7	220	123.5	56	81.6	37
3	80	12.0	305	18.5	470	18.6	473	10.9	278	191.8	87	105.8	48
4	100	16.0	406	21.5	546	21.6	549	12.6	320	266.8	121	180.8	82
6	150	22.0	559	27.8	705	28.0	711	13.6	345	509.3	231	423.3	192
8	200	28.0	711	32.8	832	33.1	841	15.5	394	718.7	326	632.7	287
10	250	34.0	864	39.0	991	39.4	1000	20.1	510	1060.4	481	974.4	442
12	300	39.0	991	44.5	1130	45.1	1146	24.3	616	1514.6	687	1428.6	648
14	350	42.0	1067	49.5	1257	50.2	1276	31.9	810	2120.8	962	2034.9	923
16	400	47.0	1194	54.5	1384	55.4	1406	36.4	925	2610.3	1184	2524.3	1145
18	450	53.0	1346	60.5	1536	61.4	1559	38.8	985	3007.1	1364	2921.1	1325
20	500	58.0	1473	65.5	1664	66.4	1686	42.4	1078	3897.8	1768	3811.8	1729
24	600	64.0	1626	76.5	1943	77.6	1972	46.7	1185	4887.6	2217	4801.7	2178

Dimensional Data & Weights • Class 2500, 2"-24"

Valve Size		Dimensions								Weights			
		A1		A2		A3		H		RF/RTJ		BW	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg
2	50	11.0	279	17.8	451	17.9	454	10.6	268	178.6	81	105.8	48
2 1/2	65	13.0	330	20.0	508	20.2	514	11.5	292	264.6	120	156.5	71
3	80	14.5	368	22.8	578	23.0	584	16.2	412	401.2	182	238.1	108
4	100	18.0	457	26.5	673	26.9	683	17.0	431	557.8	253	306.4	139
6	150	24.0	610	36.0	914	36.5	927	18.7	475	1071.4	486	427.7	194
8	200	30.0	762	40.2	1022	40.9	1038	22.5	572	1827.6	829	864.2	392
10	250	36.0	914	50.0	1270	50.9	1292	24.4	621	3483.3	1580	1598.4	725
12	300	41.0	1041	56.0	1422	56.9	1445	27.4	695	5110.3	2318	2475.8	1123
14	350	44.0	1118	—	—	—	—	32.8	832	—	—	3381.9	1534
16	400	49.0	1245	—	—	—	—	36.7	933	—	—	3979.3	1805
18	450	55.0	1397	—	—	—	—	39.1	992	—	—	4281.4	1942
20	500	60.0	1524	—	—	—	—	42.6	1083	—	—	4722.3	2142
24	600	65.0	1650	—	—	—	—	50.6	1285	—	—	5474.1	2483

Note: All information is subject to change without notice.

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OUR CORE VALUES

Integrity: In everything we do, in every interaction, both internally and externally, we strive to operate with the upmost integrity and mutual respect.

Long-term view: We are building our company for the long-term, a company that we can be proud of.

Open communication: We believe partnerships with our customers and co-workers must be based on trust, professionalism and transparency.

Customer focused: Our products enhance our customer's performance and we listen to their needs and work with them to solve their challenges.

Good place to work: We are committed to creating a workplace that fosters innovation, teamwork and pride. Every team member is integral to our success and is treated equally and fairly.

No one gets hurt: The safety of our employees and customers is our first priority coupled with a healthy respect for the environment.

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