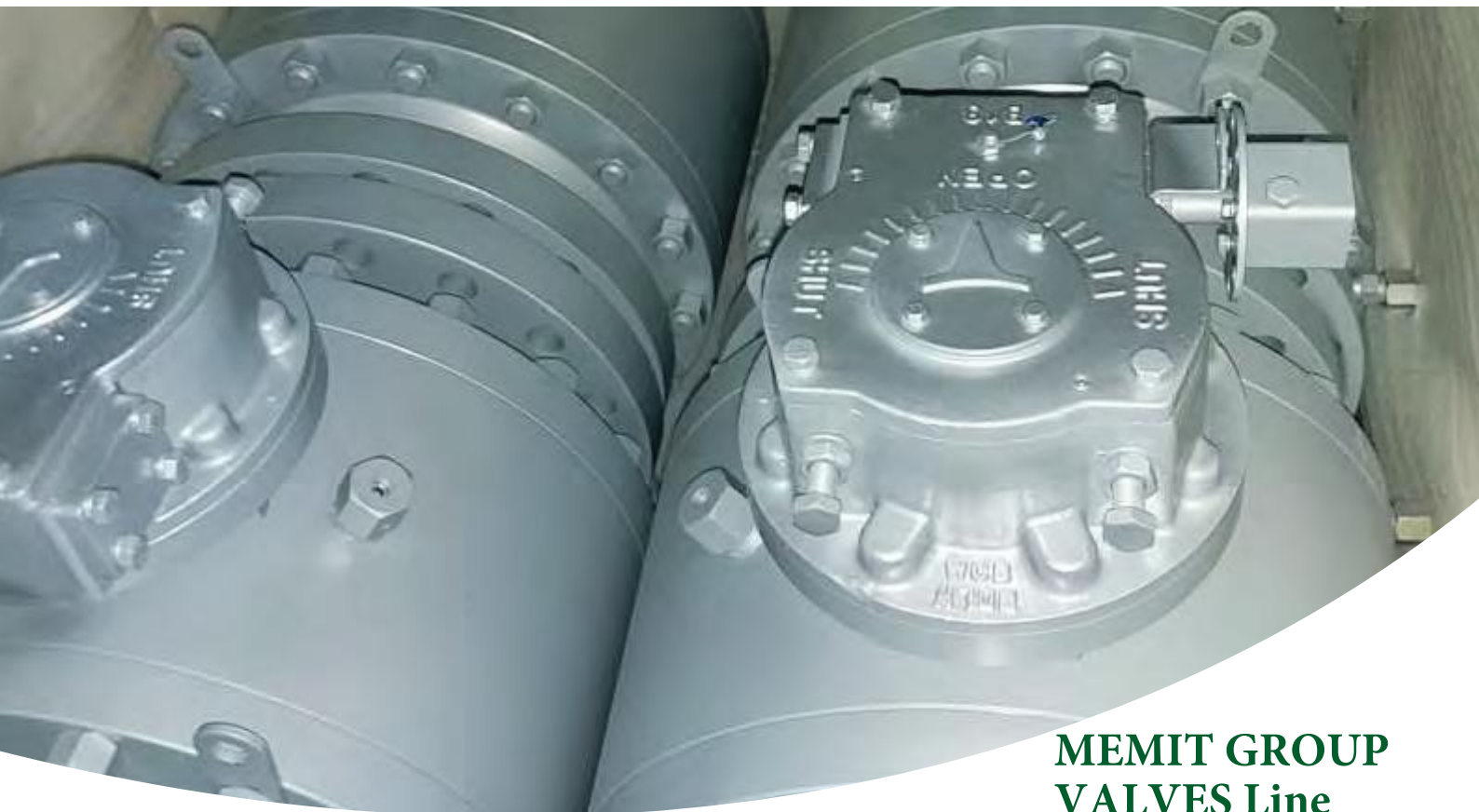


Memit group



MEMIT GROUP VALVES Line

Gate, Globe, Check, Ball, Butterfly and
Plug Valve



MEMIT GROUP

MEMIT GROUP can offer a comprehensive range of Gate, Globe, Check, Ball, Butterfly and Plug Valves in forged and cast steel according to the main International Standards. The material is sourced from Quality Approved suppliers around the world

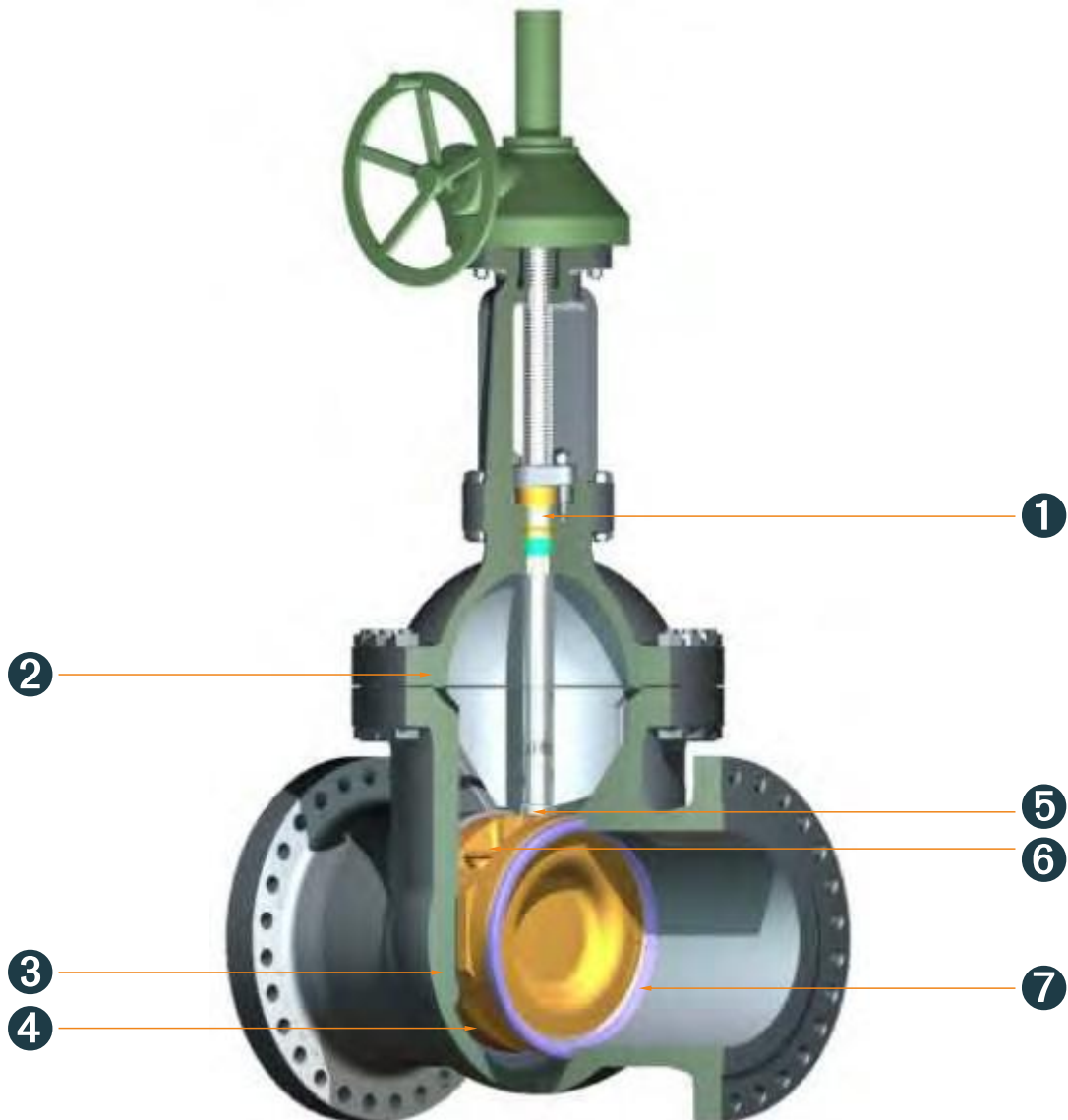
MEMIT GROUP commands strong buying power, giving it access to world's most renowned valve manufacturers at reasonable prices. We have developed reputation for being able to source material worldwide.

Our market consists of end-users, contractors, traders in:- oil, gas, petrochemical, power generation, marine and water industries.

The prime objective of the company is to maintain and improve market leadership in the supply of our products "off-the-rack" by maintaining large stock of valves at any point of time with a vast product choice.

Our office and warehouse facilities are strategically located in Italy, Asia, North Africa and Middel East in order to serve our customers with maximum efficiency.

Gate Valve



- ① Spacer ring and single packing set for class 300 and above while only single packing set for class 150. Double packings can be provided on customer's requirement.
- ② Corrugated steel gasket for 150lb valves, spiral wound gasket for 300lb & 600lb valves, and ring joint for 900lb & above valves or as a optional for the 600lb valves on customer request.
- ③ Integral guide rig inside body to assure self-centering of wedge during open or closing.
- ④ Flexible wedge to compensate for seat face distortion and body deformation due to pipe stress.
- ⑤ Anti blow-out stem design with collar.
- ⑥ Stem & wedge connection stronger than the thread area of stem.
- ⑦ Renewable seal welded seats with satellite 6 are standard design while screwed-in seats are optional.

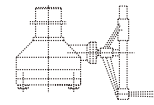
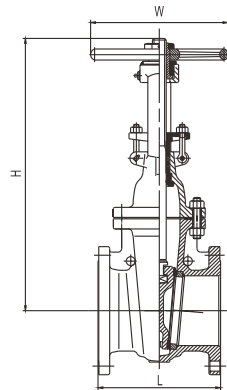


Material List

Part	Standard	Low Temperature Service	Stainless Steel	High Temperature Service	Sour Service
BODY	ASTM A216-WCB	ASTM A352-LCC	ASTM A351-CF8M	ASTM A217-WC9	ASTM A216-WCB
BONNET	ASTM A216-WCB	ASTM A352-LCC	ASTM A351-CF8M	ASTM A217-WC9	ASTM A216-WCB
WEDGE	ASTM A216-WCB/CR13 OVERLAY ASTM A217-CA15(10"&Smaller)	ASTM A352-LCC/316 OVERLAY	ASTM A351-CF8M	ASTM A217-WC9/STL. OVERLAY	ASTM A216-WCB/CR13 OVERLAY-NC ASTM A217-CA15(10"&Smaller)-NC
STEM NUT	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2
GLAND FLANGE	ASTM A216-WCB	ASTM A352-LCB	ASTM A351-CF8	ASTM A216-WCB	ASTM A216-WCB
HANDWHEEL	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
SEAT RING	ASTM A105/STL. OVERLAY	ASTM A182-F316/STL. OVERLAY	ASTM A182-F316/STL. OVERLAY	ASTM A182-F22/STL. OVERLAY	ASTM A105/STL. OVERLAY
STEM	ASTM A182-F6a	ASTM A182-F316	ASTM A182-F316	ASTM A182-F6a	ASTM A182-F6a-NC
BACK SEAT	ASTM A276-420	ASTM A276-316	ASTM A276-316	ASTM A276-420	ASTM A276-420-NC
GLAND	ASTM A276-420	STAINLESS STEEL	ASTM A276-316	ASTM A276-420	ASTM A276-420-NC
GASKET	SPIRAL WOUND GRAPHITE	SPIRAL WOUND GRAPHITE	SPIRAL WOUND GRAPHITE	SPIRAL WOUND GRAPHITE	SPIRAL WOUND GRAPHITE
MIDDLE PACKING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
TOP/BOTTOM PACKING	316+GRAPHITE	316+GRAPHITE	316+GRAPHITE	316+GRAPHITE	316+GRAPHITE
RETAINING NUT	CARBON STEEL	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL
HANDWHEEL NUT	CARBON STEEL	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL
BONNET STUD	ASTM A193-B7	ASTM A320-L7M	ASTM A193-B8	ASTM A193-B16	ASTM A193-B7M
BONNET NUT	ASTM A194-2H	ASTM A194-7M	ASTM A194-8	ASTM A194-4	ASTM A194-2HM
EYE BOLT	ASTM A193-B7	ASTM A320-L7M	ASTM A193-B8	ASTM A193-B16	ASTM A193-B7M
GLAND NUT	ASTM A194-2H	ASTM A194-7M	ASTM A194-8	ASTM A194-4	ASTM A194-2HM
GREASE FITTING	CARBON STEEL	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL
EYE BOLT PIN	CARBON STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	CARBON STEEL
RIVET	CARBON STEEL	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL
NAME PLATE	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL

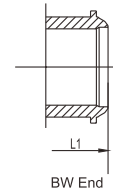
Dimension & Weight

API 600 Design,
Bolted Bonnet, OS&Y,
Screwed-in Back seat, Rising Stem,
Non-rising Handwheel,
Flexible Wedge



YOKE FOR 14\"/>

Gear Operation For	
Optional	Standard
8" to 24"	26" & Larger



BW End

Class 150

NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	36"	40"	42"	48"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200
L(RF)	mm	178	191	203	229	254	267	292	330	356	381	406	432	457	508	559	610	610	660	711	762	787	864
L1(BW)	mm	216	241	283	305	381	403	419	457	502	572	610	660	711	813	864	914	914	965	1016	1067	1092	1168
W	mm	200	200	250	300	300	300	350	400	450	500	550	600	680	760	610	610	610	610	610	610	610	610
H	mm	386.5	434.5	480.5	584.5	681	765	956	1149	1350.5	1508	1703	1892	2119	2500	2806	2960	3148	3281	3721	3980	4820	5920
WT(RF)	Kg	19	26	35	49	64	81	127	204	291	400	486	610	788	1144	1570	1900	2540	2958	3380	4815	5300	7110
WT(BW)	Kg	15	18	26	41	58	69	108	156	248	365	482	587	752	1178	1521	1838	2261	2490	3310	4840	5275	7050

Class 300

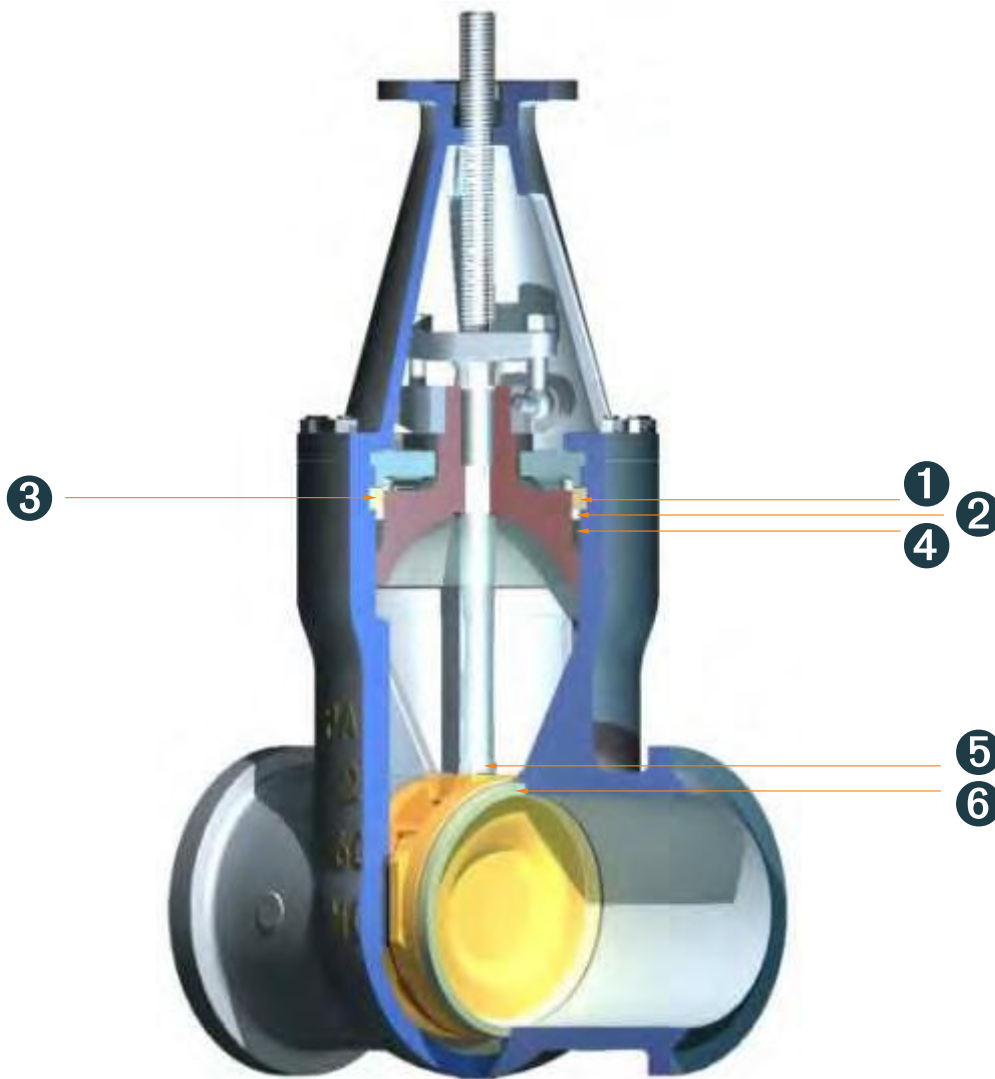
NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	36"	40"	42"	48"	
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200	
L-L1(RF-BW)	mm	216	241	283	305	381	403	419	457	502	762	838	914	991	1143	1245	1346	1397	1524	1727	1930	1981	2235	
W	mm	200	200	250	250	300	350	400	450	500	550	600	610	610	610	610	610	610	810	1000	1000	1000	1000	1000
H	mm	410	453	509	612	670	805	1000	1209	1416	1582	1725	1959	2194	2598	2986	3120	3205	3692	4104	4547	4739	5373	
WT(RF)	Kg	26	35	52	75	102	147	235	350	472	683	950	1145	1634	2660	3090	3312	3597	4850	6850	8460	9500	12400	
WT(BW)	Kg	17	26	52	74	102	113	164	344	485	565	805	1058	1412	2304	2540	2725	3057	4122	4990	6160	6800	9000	

Class 600

NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	36"	40"	42"	48"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200
L-L1(RF-BW)	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397	1448	1549	1651	1778	2082	2286	2438	2540
L2(RTJ)	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	1461	1562	1664	1794	2098	-	-	-
W	mm	200	250	250	300	400	450	500	600	680	610	610	610	610	610	810	1000	1000	1000	1000	1200	1200	1200
H	mm	418	476	518	646	770	839	1024	1229	1450	1574	1797	1931	2207	2582	3150	3362	3549	3811	4260	4670	4921	5876
WT(RF)	Kg	39	52	68	120	170	273	402	610	902	1245	1530	2030	2735	3620	5220	6050	6945	8312	10000	14300	16460	22900
WT(BW)	Kg	28	42	55	84	125	204	337	548	905	974	1345	1730	2415	3017	4295	4980	5710	6834	8220	11755	13530	18824

Class 900

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	36"
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900
L-L1(RF-BW)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1664	1778	1892	2004	2232
L2(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1333	1568	-	-	-	-	-
W	mm	250	250	300	350	500	600	610	610	610	610	810	1000	1000	1000	1000	1200	1200	1200
H	mm	498	547	573	678	900	1103	1345	1520	1902	2051	2212	2417	2750	2833	2916	3000	3083	3250
WT(RF)	Kg	74	92	101	172	335	640	1100	1360	2250	2850	3870	4860	6100	7300	7600	9800	11950	15000
WT(BW)	Kg	54	65	70	110	258	498	810	1228	2009	2563	3300	4050	6120	5500	6900	9000	11000	13500

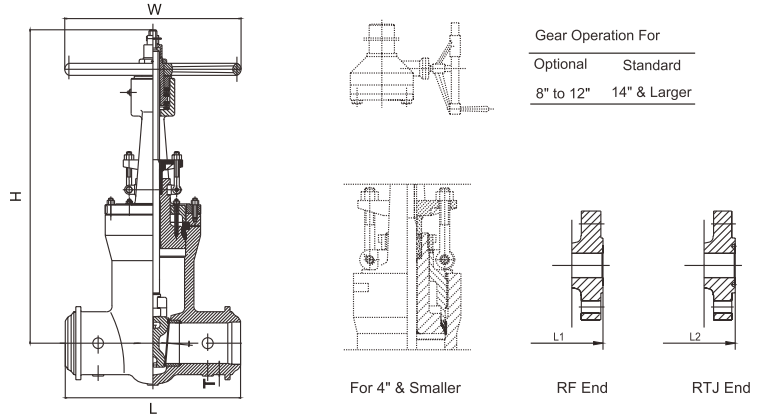


- ① Segmental thrust ring absorb all the thrust applied by the internal pressure
- ② Thrust ring to provide bearing surface and prevent deformation of the gaskets
- ③ Stainless steel inlay to ensure soundness and corrosion-resistance in the vital body sealing zone for carbon and alloy steel valves
- ④ Soft steel gasket seal to provide large contact area for perfect sealing
- ⑤ Anti blow-out stem design with collar
- ⑥ Flexible wedge to compensate for seat face distortion and body deformation due to pipe stress
- ⑦ Seat ring with satellite 6 overlay is standard design

Material List

Part	Standard	Stainless Steel	High temperature Service		
BODY	ASTM A216-WCB	ASTM A351-CF8M	ASTM A217-WC6	ASTM A217-WC9	ASTM A217-C12A
BONNET	ASTM A105	ASTM A182-F316	ASTM A182-F11	ASTM A182-F22	ASTM A217-C12A
WEDGE	ASTM A216-WCB/ER410 & ASTM A217-CA15	ASTM A351-CF8M/STL.OVERLAY	ASTM A217-WC6/ER410 & ASTM A217-CA15	ASTM A217-WC9/ER410 & ASTM A217-CA15	ASTM A217-C12A/ER410
STEM NUT	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2
GLAND FLANGE	ASTM A216-WCB	ASTM A351-CF8	ASTM A216-WCB	ASTM A216-WCB	ASTM A216-WCB
HANDWHEEL	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
SEAT RING	ASTM A105/STL.OVERLAY	ASTM A182-F316/STL.OVERLAY	ASTM A182-F11/STL.OVERLAY	ASTM A182-F22/STL.OVERLAY	ASTM A182-F6a/STL.OVERLAY
STEM	ASTM A182-F6a	ASTM A182-F316	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F6a
BONNET SEAL RING	ASTM A182-F304(4"&Smaller GRAPHITE)	ASTM A182-F316L(4"&Smaller GRAPHITE)	ASTM A182-F304(4"&Smaller GRAPHITE)	ASTM A182-F304(4"&Smaller GRAPHITE)	ASTM A182-F304(4"&Smaller GRAPHITE)
GLAND	ASTM A276-420	ASTM A276-316	ASTM A276-420	ASTM A276-420	ASTM A276-420
RETAINING NUT FOR STEM NUT	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
YOKE	ASTM A216-WCB	ASTM A351-CF8	ASTM A216-WCB& ASTM A217-WC6	ASTM A216-WCB& ASTM A217-WC6	ASTM A216-WCB
PACKING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
BONNET SEPARATE RING	CARBON STEEL	ASTM A276-420	ANSI 4140	ANSI 4140	ANSI 4140
CLIPPING RING	ASTM A216-WCB	ASTM A351-CF8	ASTM A217-WC6	ASTM A217-WC6	ASTM A276-420
HANDWHEEL NUT	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
BONNET STUD	ASTM A193-B7	ASTM A193-B8	ASTM A193-B16	ASTM A193-B16	ASTM A193-B16
BONNET NUT	ASTM A194-2H	ASTM A194-8	ASTM A194-4	ASTM A194-4	ASTM A194-4
YOKE STUD	ASTM A193-B7	ASTM A193-B8	ASTM A193-B16	ASTM A193-B16	ASTM A193-B16
YOKE NUT	ASTM A194-2H	ASTM A194-8	ASTM A194-4	ASTM A194-4	ASTM A194-4
EYE BOLT	ASTM A193-B7	ASTM A193-B8	ASTM A193-B16	ASTM A193-B16	ASTM A193-B16
GLAND NUT	ASTM A194-2H	ASTM A194-8	ASTM A194-4	ASTM A194-4	ASTM A194-4
BONNET THRUST RING	CARBON STEEL	ASTM A276-420	AISI 4140	AISI 4140	ANSI 4140
SUPPORTING COVER	ASTM A105	ASTM A276-420	AISI 4140	AISI 4140	ANSI 4140
CLIPPING RING BOLT	CARBON STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL
RIVET	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL	STAINLESS STEEL
NAME PLATE	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL

ASME B16.34,
Pressure Seal, OS&Y, Rising Stem,
Non-rising Handwheel,
Flexible Wedge



Class 600

NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750
L-L1(RF-BW)	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397	1448	1549	1651
L2 (RTJ)	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	1460.5	1562	1664
W	mm	200	250	250	350	400	450	500	600	680	610	610	610	610	800	800	1000	1000
H	mm	590	629	667	914	1000	1080	1267	1511	1791	1857	2162	2251	2470	3000	3251	3502	3785
WT(RF)	kg	70	95	100	148	208	245	320	430	515	670	905	1150	1445	2080	2445	2835	3250
WT(BW)	kg	62	80	84	115	150	171	215	268	318	435	570	720	890	1285	1510	1750	2010

Class 900

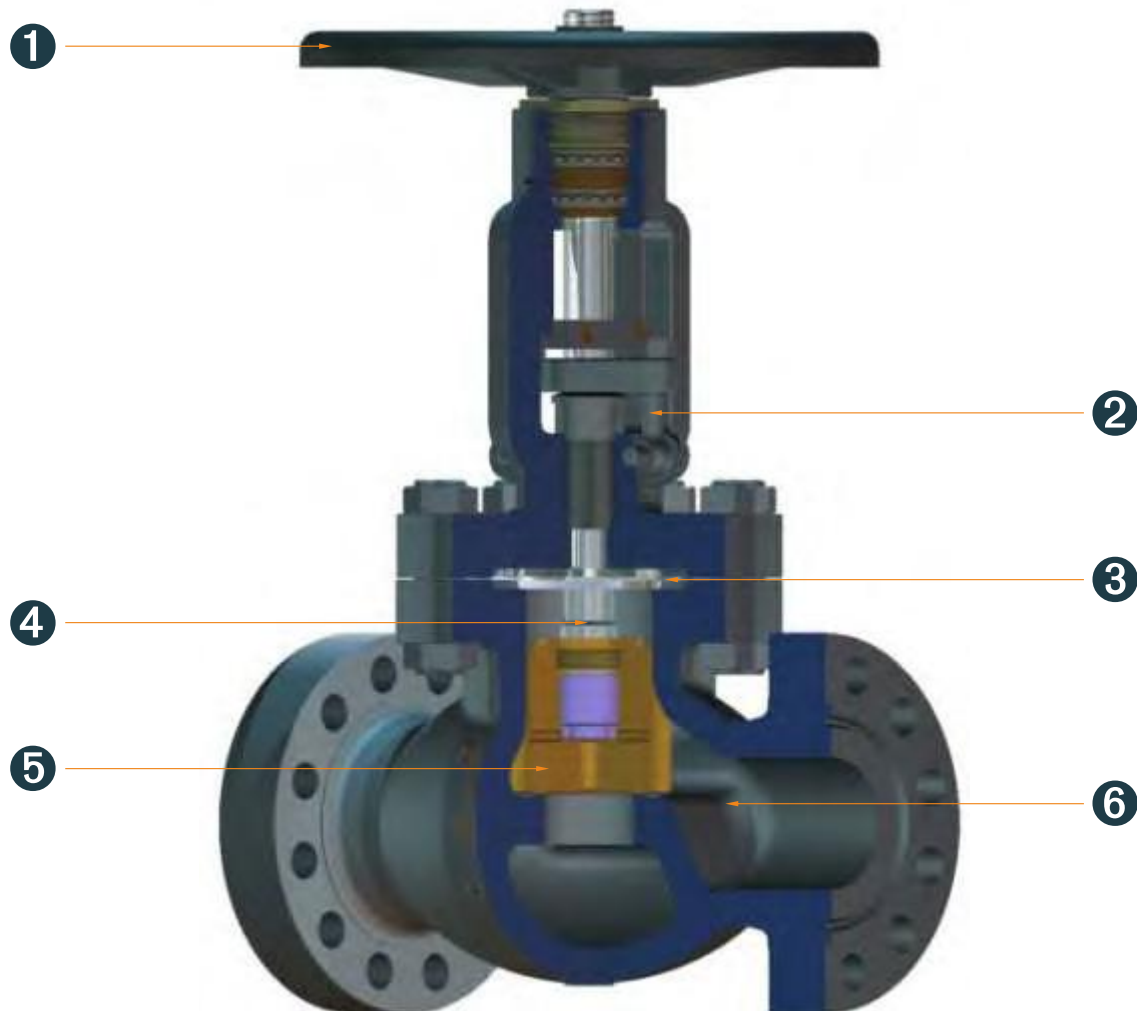
NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750
L (BW)	mm	216	254	305	356	508	660	787	914	991	1092	1219	1321	1549	1638	1727	1816
L1 (RF)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	-	-	-
L2 (RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1333	1568	-	-	-
W	mm	250	250	300	350	500	600	610	610	610	610	800	800	1000	1000	1000	1200
H	mm	594	753	756	864	1013	1276	1543	1781	2026	2261	2470	2750	3242	3512	3785	4051
WT(RF)	kg	63	99	107	158	294	693	1008	1418	1785	2520	3320	4400	6770	-	-	-
WT(BW)	kg	54	67	70	108	194	520	772	1103	1470	2048	2730	3685	5430	6370	7385	8480

Class 1500

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L (BW)	mm	216	254	305	406	559	711	864	991	1067	1194	1346	1473	1676
L1 (RF)	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L2 (RTJ)	mm	371	422	473	549	711	842	1000	1146	1276	1407	1559	1686	1972
W	mm	250	300	350	500	600	458	458	610	610	610	1000	1200	900
H	mm	594	753	756	864	994	1349	1480	1870	2216	2331	2823	3102	3766
WT(RF)	kg	63	99	126	218	504	956	1481	2184	2741	3780	5960	7370	10610
WT(BW)	kg	42	67	87	150	367	718	1071	1523	1890	2888	4630	5720	8240

Class 2500

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L (BW)	mm	279	330	368	457	610	762	914	1041	1118	1245	1397	1549	1727
L1 (RF)	mm	451	508	578	673	914	1022	1270	1422	-	-	-	-	-
L2 (RTJ)	mm	454	514	584	683	927	1038	1292	1445	-	-	-	-	-
W	mm	350	450	450	500	610	610	610	610	610	610	800	800	1000
H	mm	594	753	756	870	1129	1389	1748	1873	2291	2470	2950	3270	3902
WT(RF)	kg	89	142	173	346	851	1386	2493	3091	-	-	-	-	-
WT(BW)	kg	53	95	100	200	488	850	1680	2330	3400	4200	5000	6170	8880

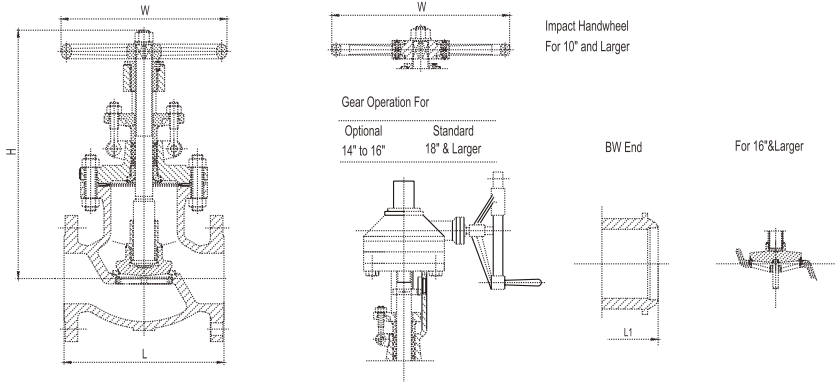


- ① Impact handwheel supplied by manufacturer's option or on customer request.
- ② Gland eyebolts are mounted to swing aside to facilitate packing maintenance.
- ③ Male and female bonnet joints for 150lb to 600lb valves, and ring joint for the 900lb & above valves or as an optional for 600lb valves on customer request.
- ④ Anti blow-out stem design with conical backseat surface to permit repacking of valve in the fully open position.
- ⑤ Plug seat surface is standard disc design as well as spherical and flat seating surface is optional on customer request.
- ⑥ Seat face with satellite 6 is standard design.

Part	Standard	Low Temperature Service	Stainless Steel	High Temperature Service	Sour Service
BODY	ASTM A216-WCB	ASTM A352-LCC	ASTM A351-CF8M	ASTM A217-WC9	ASTM A216-WCB
BONNET	ASTM A216-WCB	ASTM A352-LCC	ASTM A351-CF8M	ASTM A217-WC9	ASTM A216-WCB
DISC	ASTM A182-F6a ASTM A105/ER410 (FOR 4"&Larger)	ASTM A182-F316	ASTM A182-F316	ASTM A182-F22/STL.OVERLAY	ASTM A182-F6a-NC
STEM NUT	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2
GLAND FLANGE	ASTM A216-WCB	ASTM A352-LCB	ASTM A351-CF8	ASTM A216-WCB	ASTM A216-WCB
HANDWHEEL	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
IMPACT BLOCK	CARBON STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
RETAIN PLATE	CARBON STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
SEAT RING	ASTM A105/STL.OVERLAY	ASTM A182-F316/STL.OVERLAY	ASTM A182-F316/STL.OVERLAY	ASTM A182-F22/STL.OVERLAY	ASTM A105/STL.OVERLAY
STEM	ASTM A182-F6a	ASTM A182-F316	ASTM A182-F316	ASTM A182-F6a	ASTM A182-F6a-NC
BACK SEAT	ASTM A276-420	ASTM A276-316	ASTM A276-316	ASTM A276-420	ASTM A276-420-NC
GLAND	ASTM A276-420	STAINLESS STEEL	ASTM A276-316	ASTM A276-420	ASTM A276-420-NC
SPACE RING	ASTM A276-420	ASTM A276-316	ASTM A276-316	ASTM A276-420	ASTM A276-420-NC
DISC NUT	ASTM A276-420	ASTM A276-316	ASTM A276-316	ASTM A276-420	ASTM A276-420-NC
STEM WASHER	ASTM A276-430	NO	NO	ASTM A276-430	STAINLESS STEEL
HANDWHEEL WASHER	CARBON STEEL	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL
BONNET GASKET	SOFT STEEL	ASTM A276-316	ASTM A276-316	SOFT STEEL	SOFT STEEL
PACKING	316+GRAPHITE	316+GRAPHITE	316+GRAPHITE	316+GRAPHITE	316+GRAPHITE
PACKING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
BONNET STUD	ASTM A193-B7	ASTM A320-L7M	ASTM A193-B8	ASTM A193-B16	ASTM A193-B7M
BONNET NUT	ASTM A194-2H	ASTM A194-7M	ASTM A194-8	ASTM A194-4	ASTM A194-2HM
EYE BOLT	ASTM A193-B7	ASTM A320-L7M	ASTM A193-B8	ASTM A193-B16	ASTM A193-B7M
GLAND NUT	ASTM A194-2H	ASTM A194-7M	ASTM A194-8	ASTM A194-4	ASTM A194-2HM
HANDWHEEL NUT	CARBON STEEL	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL
EYE BOLT PIN	CARBON STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	CARBON STEEL
RIVET	CARBON STEEL	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL
NAME PLATE	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL

Dimension & Weight

BS 1873 Design,
Bolted Bonnet, OS&Y ,
Screwed-in Back Seat,
Rising Stem and Handwheel,
Swivel Disc



Class 150

NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L-L1 (RF-BW)	mm	203	216	241	292	356	406	495	622	699	787	914	978	978	1295
W	mm	200	250	250	300	350	350	400	500	500	560	650	610	610	810
H	mm	338	373	396	476	497	524	588	738	862	950	994	1140	1262	1524
WT(RF)	Kg	21	29	35	58	78	104	162	289	485	550	724	1400	2600	3700
WT(BW)	Kg	17	20	30	47	71	86	138	219	362	491	650	1250	2300	3250

Class 300

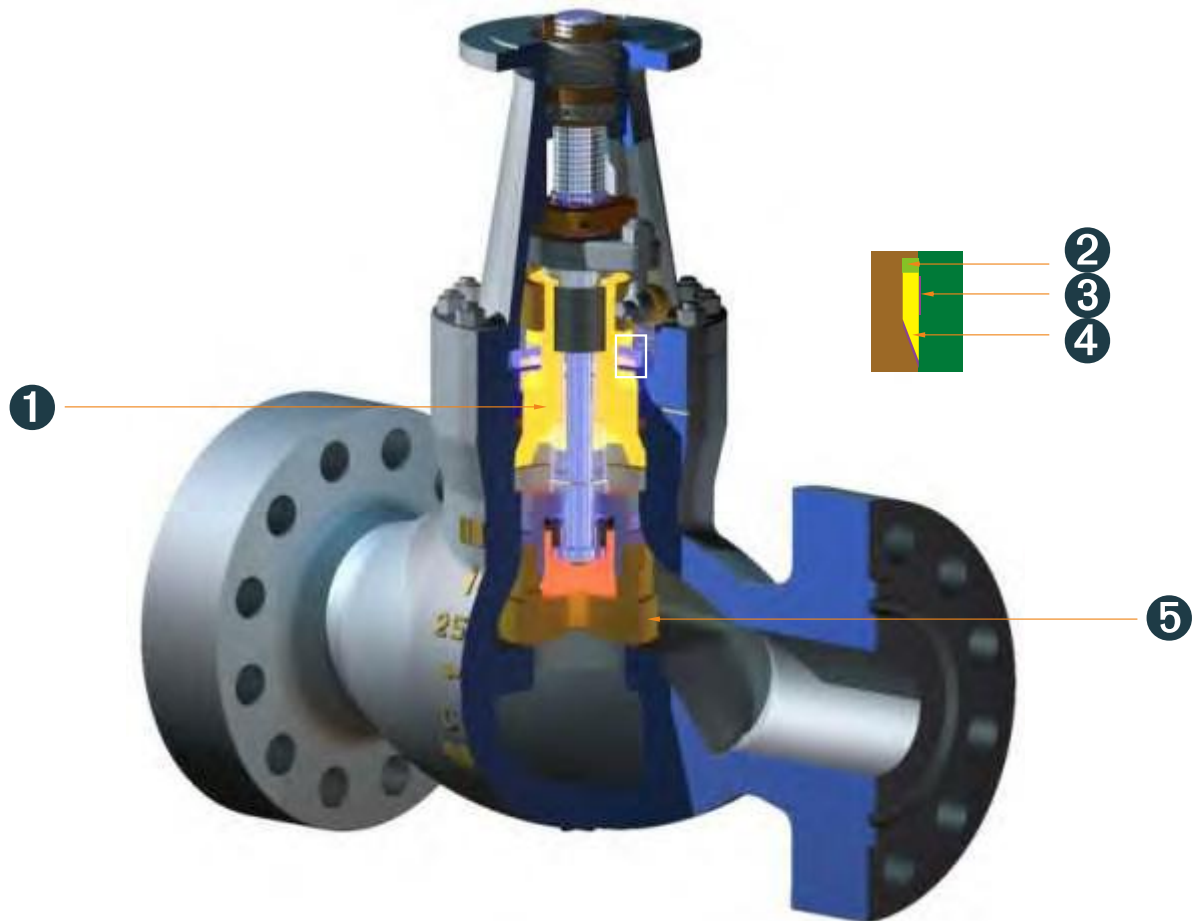
NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500
L-L1 (RF-BW)	mm	267	292	318	356	400	445	559	622	711	838	864	978	1016
W	mm	200	250	250	350	450	500	560	600	650	610	610	610	810
H	mm	353.5	388.5	420.5	495.5	576.5	674.5	911.5	949	1032	1130	1310	1460	1632
WT(RF)	Kg	26	38	51	76	125	173	297	500	724	1125	1650	2700	3650
WT(BW)	Kg	21	29	38	59	104	137	237	432	632	975	1450	2400	3200

Class 600

NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450
L-L1 (RF-BW)	mm	292	330	356	432	508	559	660	787	838	889	991	1092
L2 (RTJ)	mm	295	333	359	435	511	562	663	790	841	892	994	1095
W	mm	250	250	350	450	500	560	600	700	610	610	762	810
H	mm	396.5	446	495.5	599	700	791	1014	1180	1397	1450	1610	1801
WT(RF)	Kg	37	50	62	150	187	294	543	1006	1350	1620	2160	3300
WT(BW)	Kg	30	40	58	132	142	227	460	729	1060	1330	1750	2800

Class 900

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"
DN	mm	50	65	80	100	150	200	250	300	350	400
L-L1 (RF-BW)	mm	368	419	381	457	610	737	838	965	1029	1130
L2 (RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140
W	mm	350	350	450	500	610	610	610	810	810	810
H	mm	590	660	699	795	1108	1184	1479	1755	1934	2210
WT(RF)	Kg	95	138	110	197	435	720	1070	1920	2670	3520
WT(BW)	Kg	75	85	112	158	360	597	890	1690	2390	3170

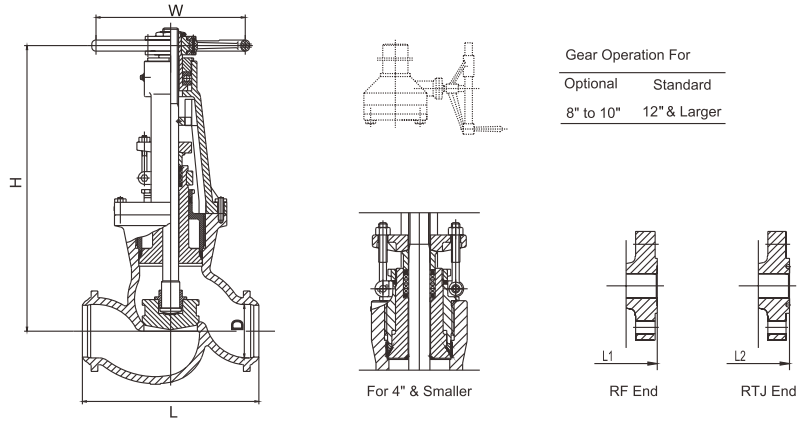


- ① Thrust ring nut absorb all the thrust applied by the internal pressure.
- ② Thrust ring to provide bearing surface and prevent deformation of the gaskets.
- ③ Stainless steel inlay to ensure soundness and corrosion-resistance in the vital body sealing zone for carbon and alloy steel valves.
- ④ Soft steel gasket seal to provide large contact area for perfect sealing.
- ⑤ Seat face with satellite 6 is standard design.

Material List

Part	Standard	Stainless Steel	High temperature Service		
BODY	ASTM A216-WCB/STL.OVERLAY	ASTM A351-CF8M/STL.OVERLAY	ASTM A217-WC6/STL.OVERLAY	ASTM A217-WC9/STL.OVERLAY	ASTM A217-C12A/STL.OVERLAY
BONNET	ASTM A105	ASTM A182-F316	ASTM A182-F11	ASTM A182-F22	ASTM A217-C12A
DISC	ASTM A182-F6a & ASTM A105/ER410	ASTM A182-F316	ASTM A182-F6a & ASTM A182-F11/ER410	ASTM A182-F6a & ASTM A182-F22/ER410	ASTM A182-F6a
STEM NUT	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2	ASTM A439 D-2
GLAND FLANGE	ASTM A216-WCB	ASTM A351-CF8	ASTM A216-WCB	ASTM A216-WCB	ASTM A216-WCB
HANDWHEEL	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
BONNET SEAL RING	ASTM A182-F304(4"&Smaller GRAPHITE)	ASTM A182-F316L(4"&Smaller GRAPHITE)	ASTM A182-F304(4"&Smaller GRAPHITE)	ASTM A182-F304(4"&Smaller GRAPHITE)	ASTM A182-F304(4"&Smaller GRAPHITE)
STEM	ASTM A182-F6a	ASTM A182-F316	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F6a
RETAINING NUT FOR STEM NUT	CARBON STEEL	STAINESS STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
GLAND	ASTM A276-420	ASTM A182-F316	ASTM A276-420	ASTM A276-420	ASTM A276-420
HANDWHEEL NUT	CARBON STEEL	STAINESS STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
DISC NUT	ASTM A276-420	ASTM A182-F316	ASTM A276-420	ASTM A276-420	ASTM A276-420
STEM WASHER	ASTM A276-430	NO	ASTM A276-430	ASTM A276-430	ASTM A276-430
THRUST RING	CARBON STEEL	AITM A276-420	AISI 4140	AISI 4140	AISI 4140
PACKING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
CLIPPING RING	ASTM A216-WCB	ASTM A351-CF8	ASTM A217-WC6	ASTM A217-WC6	ASTM A276-420
YOKE STUD	ASTM A193-B7	ASTM A193-B8	ASTM A193-B16	ASTM A193-B16	ASTM A193-B16
YOKE NUT	ASTM A194-2H	ASTM A194-8	ASTM A194-4	ASTM A194-4	ASTM A194-4
EYE BOLT	ASTM A193-B7	ASTM A193-B8	ASTM A193-B16	ASTM A193-B16	ASTM A193-B16
GLAND NUT	ASTM A194-2H	ASTM A194-8	ASTM A194-4	ASTM A194-4	ASTM A194-4
BONNET NUT 1	CARBON STEEL	ASTM A276-420	AISI 4140	AISI 4140	AISI 4140
CLIPPING RINGBOLT	CARBON STEEL	STAINESS STEEL	STAINESS STEEL	STAINESS STEEL	STAINESS STEEL
BONNET NUT 2	CARBON STEEL	ASTM A276-420	AISI 4140	AISI 4140	AISI 4140
ORIENTED BLOCK	CARBON STEEL	ASTM A276-420	CARBON STEEL	CARBON STEEL	CARBON STEEL
YOKE	ASTM A216-WCB	ASTM A351-CF8	ASTM A216-WCB& ASTM A217-WC6	ASTM A216-WCB& ASTM A217-WC6	ASTM A217-C12A
RIVET	CARBON STEEL	STAINESS STEEL	CARBON STEEL	CARBON STEEL	STAINESS STEEL
NAME PLATE	STAINESS STEEL	STAINESS STEEL	STAINESS STEEL	STAINESS STEEL	STAINESS STEEL

ASME B16.34,
Pressure Seal, OS&Y,
Rising Stem and Handwheel,
Swivel Disc



Class 600

NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"
DN	mm	50	65	80	100	125	150	200	250	300	350	400
L-L1(RF-BW)	mm	292	330	356	432	508	559	660	787	838	889	991
L2 (RTJ)	mm	295	333	359	435	511	562	663	790	841	892	994
W	mm	250	300	350	450	500	560	600	700	610	610	760
H	mm	550	630	680	750	1000	1150	1250	1400	1550	1800	2160
WT(RF)	kg	45	55	85	135	190	305	620	1310	1900	2720	3150
WT(BW)	kg	35	45	60	95	150	230	540	1150	1720	2530	2900

Class 900

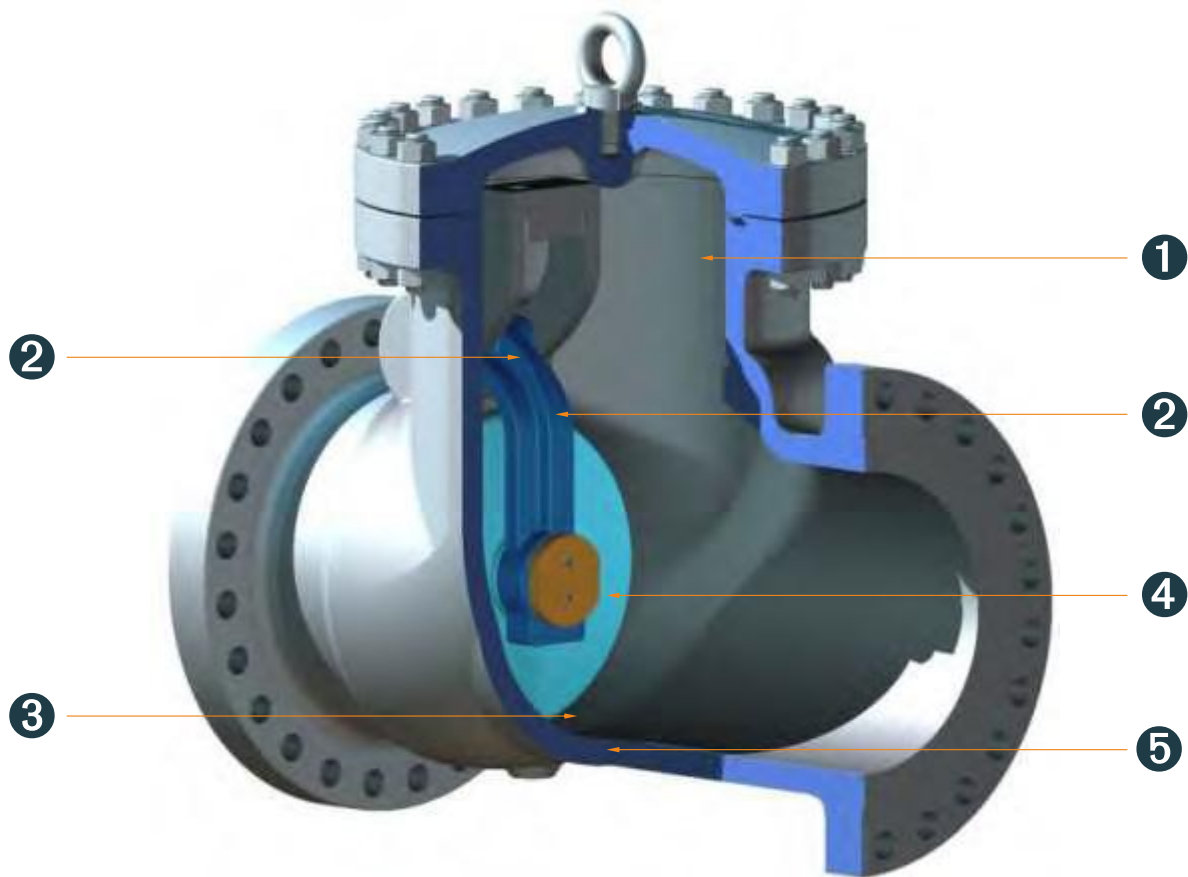
NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"
DN	mm	50	65	80	100	150	200	250	300	350	400
L-L1(RF-BW)	mm	368	419	381	457	610	737	838	965	1029	1130
L2 (RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140
W	mm	350	350	450	500	610	610	610	1000	1000	1200
H	mm	619	641	721	850	1225	1350	1550	1750	2000	2310
WT(RF)	kg	84	110	116	179	441	1050	1720	2300	3350	4000
WT(BW)	kg	58	74	84	137	378	945	1520	2050	3050	3600

Class 1500

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"
DN	mm	50	65	80	100	150	200	250	300	350
L-L1(RF-BW)	mm	368	419	470	546	705	832	991	1130	1257
L2 (RTJ)	mm	371	422	473	549	711	842	1000	1146	1276
W	mm	350	350	500	560	610	610	1000	1000	1200
H	mm	619	641	835	857	1230	1800	2000	2311	2692
WT(RF)	kg	84	116	143	236	918	1764	2680	3400	4300
WT(BW)	kg	58	62	128	168	781	1502	2280	2830	3600

Class 2500

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"
DN	mm	50	65	80	100	150	200	250	300
L-L1(RF-BW)	mm	451	508	578	673	914	1022	1270	1422
L2 (RTJ)	mm	454	541	584	683	927	1038	1292	1445
W	mm	400	500	560	610	610	610	1000	1000
H	mm	616	781	800	1300	1370	2160	2540	2692
WT(RF)	kg	105	163	221	525	1313	2520	3300	4200
WT(BW)	kg	74	116	147	368	973	2100	2500	3300

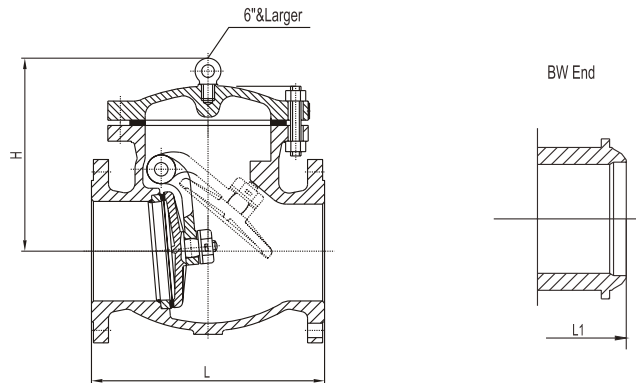


- ① Corrugated steel gasket for 150lb valves, spiral wound gasket for 300lb & 600lb valves, and ring joint for 900lb & above valves or as a optional for the 600lb valves on customer request.
- ② A hinge and hinge pin provided and mounted so as to permit full movement of the disc.
- ③ Standard renewable seal welded seat with satellite 6 while optional screwed-in seat.
- ④ Standard swing type disc only in horizontal pipe lines handling liquids.
- ⑤ Normal provision for a drain tapping at location G while additional bosses on customer request.

Part	Standard	Low Temperature Service	Stainless Steel	High Temperature Service	Sour Service
BODY	ASTM A216-WCB	ASTM A352-LCC	ASTM A351-CF8M	ASTM A217-WC9	ASTM A216-WCB
COVER	ASTM A216-WCB	ASTM A352-LCC	ASTM A351-CF8M	ASTM A217-WC9	ASTM A216-WCB
DISC	ASTM A217-CA15(4"&Smaller) &ASTM A216-WCB/ER410	ASTM A352-LCC/316 OVERLAY	ASTM A351-CF8M	ASTM A217-WC9/STL. OVERLAY	ASTM A217-CA15-NC(4"&Smaller) &ASTM A216-WCB/ER410-NC
HINGE	ASTM A216-WCB	ASTM A352-LCC	ASTM A351-CF8M	ASTM A217-WC9	ASTM A216-WCB
SEAT RING	ASTM A105/STL. OVERLAY	ASTM A182-F316/STL. OVERLAY	ASTM A182-F316/STL. OVERLAY	ASTM A182-F22/STL. OVERLAY	ASTM A105/STL. OVERLAY
HINGE PIN	ASTM A276-410	ASTM A276-316	ASTM A276-316	ASTM A276-410	ASTM A276-410-NC
PLUG FOR HINGE PIN	CARBON STEEL	ASTM A276-316	ASTM A276-316	STAINLESS STEEL	CARBON STEEL
WASHER	STAINLESS STEEL	ASTM A276-316	ASTM A276-316	STAINLESS STEEL	STAINLESS STEEL
DISC NUT	ASTM A276-420	ASTM A276-316	ASTM A276-316	ASTM A276-420	STAINLESS STEEL
DISC WASHER	ASTM A276-420	ASTM A276-316	ASTM A276-316	ASTM A276-420	STAINLESS STEEL
DISC SPLIT PIN	ASTM A276-420	ASTM A276-316	ASTM A276-316	ASTM A276-420	STAINLESS STEEL
BONNET RING JOINT	SOFT STEEL	ASTM A276-316	ASTM A276-316	ASTM A276-304	SOFT STEEL
BONNET STUD	ASTM A193-B7	ASTM A320-L7M	ASTM A193 B8	ASTM A193-B16	ASTM A193-B7M
BONNET NUT	ASTM A194-2H	ASTM A194-7M	ASTM A194 8	ASTM A194-4	ASTM A194-2HM
RIVET	CARBON STEEL	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL
NAME PLATE	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL
HOOK SCREW	CARBON STEEL	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL

Dimension & Weight

BS 1868 Design, Bolted Cover,
Swing Type Disc



Class 150

NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	36"	40"	42"	48"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200
L-L1(RF-BW)	mm	203	216	241	292	330	356	495	622	699	787	864	978	978	1295	1295	1448	1524	1727	1956	2159	2261	2566
H	mm	150.5	168	171	204	230	296.5	351.5	389.5	437.5	476.5	525	582	627	880	910	935	970	1250	1377	1410	1468	1642
WT(RF)	Kg	15	22	28	42	57	79	131	177	282	380	542	632	855	970	1276	1600	2020	2430	3130	4230	5030	6680
WT(BW)	Kg	10	12	17	29	45	57	96	143	227	294	468	552	755	831	1120	1420	1760	2130	2930	3730	4430	5680

Class 300

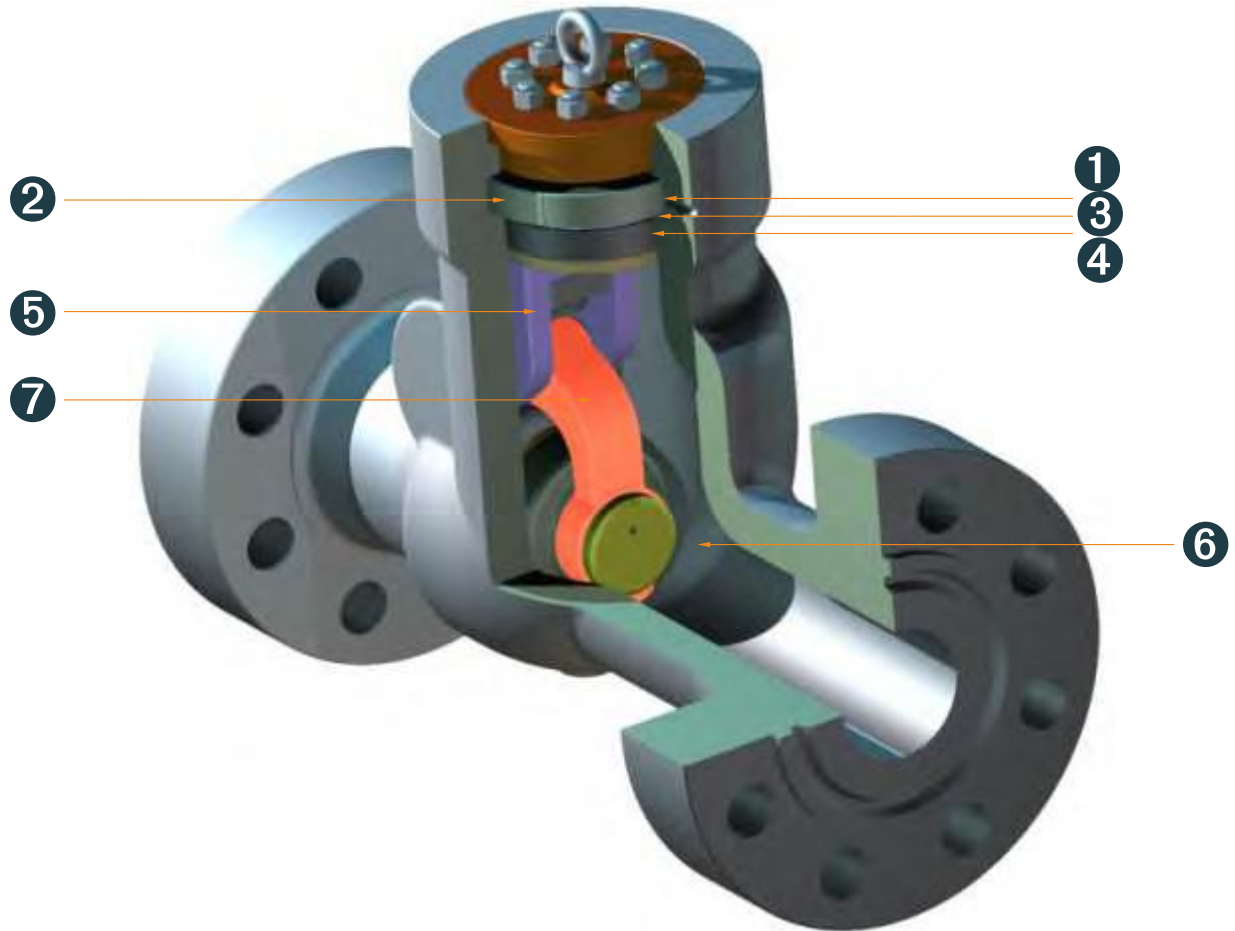
NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	36"	40"	42"	48"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200
L-L1(RF-BW)	mm	267	292	318	356	400	445	533	622	711	838	864	978	1016	1346	1346	1499	1594	1727	2083	2438	2617	3151
H	mm	176	185	216	259	304	317	380	434	511	561	596	675	730	860	930	1163	1270	1270	1510	1750	1870	2230
WT(RF)	Kg	20	30	40	65	84	118	193	310	450	595	840	933	1320	1848	2375	2660	3680	3880	5030	6290	7050	9310
WT(BW)	Kg	16	22	30	53	73	101	157	232	414	455	766	774	960	1792	1995	2260	2780	3380	4430	5640	6150	8310

Class 600

NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	36"	40"	42"	48"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200
L-L1(RF-BW)	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397	1448	1600	1651	1778	2083	2286	2438	2540
L2 (RTJ)	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	1461	1613	1664	1794	2099	-	-	-
H	mm	184	210	232	263	295	374	426	517	569	622	680	752	975	1111	1110	1192	1324	1367	1542	1702	1800	2171
WT(RF)	kg	30	43	55	93	160	208	339	547	715	885	1310	1620	2120	3100	3800	4600	5500	6800	8100	8900	9800	11100
WT(BW)	kg	21	35	43	64	115	145	256	375	589	694	932	1279	1702	2497	3100	3900	4700	6000	7200	8100	9900	10200

Class 900

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"	32"	36"
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900
L-L1(RF-BW)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1651	1753	1854	1956	2156
L2 (RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1333	1568	1673	1775	1876	-	-
H	mm	296	300	300	327	441	502	664	775	782	838	839	932	924	1121	1372	1521	1671	1821
WT(RF)	kg	70	100	110	150	305	510	810	1120	1380	1900	3000	4000	5200	6600	7550	8850	10150	12750
WT(BW)	kg	50	68	77	113	230	387	632	901	1139	1613	2650	3550	4650	5630	6420	7510	8600	10780

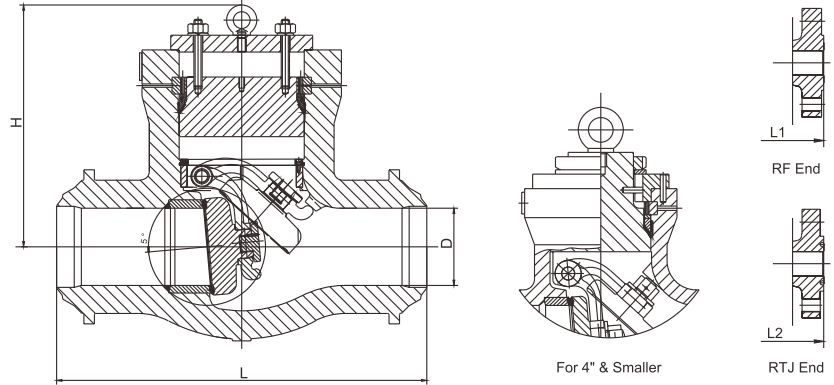


- ① Segmental thrust ring absorb all the thrust applied by the internal pressure.
- ② Thrust ring to provide bearing surface and prevent deformation of the gaskets.
- ③ Soft steel gasket seal to provide large contact area for perfect sealing.
- ④ Stainless steel inlay to ensure soundness and corrosion-resistance in the vital body sealing zone for carbon and alloy steel valves.
- ⑤ No external leakage hinge pin design.
- ⑥ Standard swing type disc only used in horizontal pipe lines handling liquids.
- ⑦ A hinge and hinge pin provided and mounted so as to permit full movement of the disc.

Material List

Part	Standard	Stainless Steel	High temperature Service		
BODY	ASTM A216-WCB	ASTM A351-CF8M	ASTM A217-WC6	ASTM A217-WC9	ASTM A217-C12A
COVER	ASTM A216-WCB(4"&Smaller ASTM A105)	ASTM A351-CF8M(4"&Smaller ASTM A182-F316)	ASTM A217-WC6(4"&Smaller ASTM A182-F11)	ASTM A217-WC9(4"&Smaller ASTM A182-F22)	ASTM A217-C12A(4"&Smaller ASTM A182-F91)
DISC	ASTM A217-CA15 &ASTM A216-WCB/ER410	ASTM A351-CF8M/STL.OVERLAY	ASTM A217-CA15 &ASTM A217-WC6/ER410	ASTM A217-CA15 &ASTM A217-WC9/ER410	ASTM A217-CA15
HINGE	ASTM A105	ASTM A351-CF8M	ASTM A217-WC6	ASTM A217-WC9	ASTM A217-C12A
HINGE PIN	ASTM A182-F6a	ASTM A276-316	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F6a
DISC NUT	ASTM A276-420	ASTM A276-316	ASTM A276-420	ASTM A276-420	ASTM A276-420
BONNET SEAL RING	ASTM A182-F304(4"&Smaller GRAPHITE)	ASTM A182-F316L(4"&Smaller GRAPHITE)	ASTM A182-F304(4"&Smaller GRAPHITE)	ASTM A182-F304(4"&Smaller GRAPHITE)	ASTM A182-F304(4"&Smaller GRAPHITE)
HOOK SCREW	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
COVER STUD	ASTM A193-B7	ASTM A193-B8	ASTM A193-B16	ASTM A193-B16	ASTM A193-B16
COVER NUT	ASTM A194-2H	ASTM A194-8	ASTM A194-4	ASTM A194-4	ASTM A194-4
SEAT RING	ASTM A105/STL.OVERLAY	ASTM A182-F316/STL.OVERLAY	ASTM A182-F11/STL.OVERLAY	ASTM A182-F22/STL.OVERLAY	ASTM A182-F6a/STL.OVERLAY
SEPARATE RING COVER	CARBON STEEL	ASTM A276-420	AISI 4140	AISI 4140	AISI 4140
THRUST RING COVER	CARBON STEEL	ASTM A276-420	AISI 4140	AISI 4140	AISI 4140
SUPPORTING COVER	ASTM A105	ASTM A276-420	AISI 4140	AISI 4140	AISI 4140
STOP RING	ASTM A276-420	ASTM A276-316	ASTM A276-420	ASTM A276-420	ASTM A276-420
YOKE	ASTM A216-WCB	ASTM A276-316	ASTM A216-WCB& ASTM A217-WC6	ASTM A216-WCB& ASTM A217-WC6	ASTM A217-C12A
SEPARATE RING FOR STOP RING	ASTM A276-420	ASTM A276-316	ASTM A276-420	ASTM A276-420	ASTM A276-420
SPLIT PIN	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL
STOP RING SCREW	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL
RIVET	CARBON STEEL	STAINLESS STEEL	CARBON STEEL	CARBON STEEL	STAINLESS STEEL
NAME PLATE	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL

ASME B16.34,
Pressure Seal, Swing Type Disc



Class 600

NPS	in	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
DN	mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	650	700	750
L (RF-BW)	mm	292	330	356	432	508	559	660	787	838	889	991	1092	1194	1397	1448	1600	1651
L2 (RTJ)	mm	295	333	359	435	511	562	663	790	841	892	994	1095	1200	1407	1461	1613	1664
H	mm	241	264	270	318	400	400	587	606	695	749	730	730	819	949	1000	1099	1200
WT(RF)	kg	27	35	45	85	135	190	350	500	670	880	1150	1480	1880	2600	3100	3500	4000
WT(BW)	kg	18	25	32	55	85	130	260	370	490	660	850	1100	1490	2040	2500	2800	3150

Class 900

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750
(BW)	mm	216	254	305	356	508	660	787	914	991	1092	1219	1321	1549	1600	1702	1803
L1 (RF)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1651	1753	1854
L2 (RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1333	1568	1673	1775	1876
H	mm	241	264	270	318	400	587	606	695	749	730	851	864	959	1000	1149	1400
WT(RF)	kg	42	55	58	110	242	599	893	1365	1628	1733	2300	3000	4100	4600	5200	6000
WT(BW)	kg	21	32	34	68	168	462	725	1071	1281	1418	1850	2400	2900	3600	4000	4600

Class 1500

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L (BW)	mm	216	254	305	406	559	711	864	991	1067	1194	1537	1664	1943
L1 (RF)	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L2 (RTJ)	mm	371	422	473	549	711	842	1000	1146	1276	1407	1559	1686	1972
H	mm	241	264	274	318	422	479	591	645	711	749	880	949	1099
WT(RF)	kg	42	58	105	147	360	641	1103	1628	2205	2730	3300	4200	6000
WT(BW)	kg	21	34	42	74	233	504	777	1155	1481	1680	2100	2600	3500

Class 2500

NPS	in	2"	2-1/2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L (BW)	mm	279	330	368	457	610	762	914	1041	1118	1245	1397	1549	1727
L1 (RF)	mm	451	508	578	673	914	1022	1270	1422	-	-	-	-	-
L2 (RTJ)	mm	454	514	584	683	927	1038	1292	1445	1546	-	-	-	-
H	mm	245	264	270	318	451	559	576	656	860	899	1000	1149	1400
WT(RF)	kg	89	124	163	299	588	1071	1676	2772	3350	-	-	-	-
WT(BW)	kg	53	74	89	142	285	598	783	1512	2450	3200	4050	5000	7200

Floating Forged Steel Ball Valve

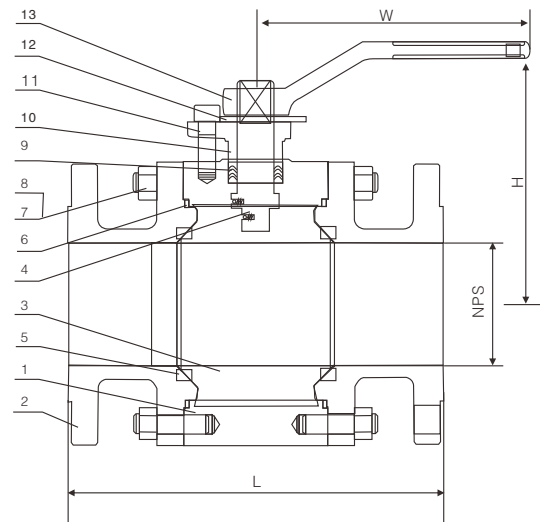
Applicable standards:

- STEEL BALL VALVES API 608/API 6D
- STEEL BALL VALVES ISO 14313
- FIRE SAFE, API 607
- ANTI STATICS, API 608
- STEEL VALVES, ASME B16.34
- FACE TO FACE ASME B16.10
- END FLANGES, ASME B16.5
- BUTTWELDING ENDS ASME B16.25
- INSPECTION AND TEST, API 598/ API 6D



Design descriptions:

- FULL PORT DESIGN
- BB. BOLTED BONNET. SPLIT BODY
- FLOATING BALL TYPE
- BLOW-OUT PROOF STEM
- FIRE SAFE CONSTRUCTION
- ANTI STATICS DEVICE
- STOPPER DEVICE
- ISO 5211 MOUNTING PAD
- FLANGED OR BUTTWELDING ENDS
- AVAILABLE WITH WG OPERATOR



Materials of parts

No	Part Name	ASTM Materials		
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304 ¹⁾	A182-F316	A182-F304 ¹⁾
4	Stem	A276-304	A276-316	A276-304
5	Seat Ring		R.PTFE	
6	Bonnet Gasket	Graphite+304 ²⁾	PTFE	Graphite+304 ²⁾
7	Bonnet Stud	A193-B7	A193-B8	A320-L7
8	Bonnet Stud Nut	A194-2H	A194-8	A194-4
9	Packing		PTFE	
10	Gland Flange	A105	A182-F316	A350-LF2
11	Gland Bolt	A193-B7	A193-B8	A193-B7
12	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
13	Handle		Carbon Steel	

Note: 1) A105+ENP optional
2) Spiral wound construction.

Dimensional datas of ANSI Class 150#

NPS DN	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in
	15	20	25	40	50	65	80	100	150	200	250	300	mm
L (RF)	4.25	4.62	5.00	6.50	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	in
	108	117	127	165	178	190	203	229	394	457	533	610	mm
L1 (BW)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	in
	140	152	165	190	216	241	283	305	457	521	559	635	mm
H	2.12	2.12	2.50	3.38	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	in
	55	55	65	85	100	150	180	235	250	280	320	390	mm
W	8	8	12	12	166	16	24	24	24	24	32	32	in
	200	200	300	300	400	400	600	600	600	600	800	800	mm
wt(kg)	3.1	4.1	6	9.5	12.8	20	26	45	126	216	270	378	RF
	2.6	3.9	5.2	8.7	11.8	19	28	47	131	226	295	393	BW

Dimensional datas of ANSI Class 300#

NPS DN	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in
	15	20	25	40	50	65	80	100	150	200	250	300	mm
L (RF)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	in
	140	152	165	190	216	241	283	305	403	502	568	648	mm
L1 (BW)	5.50	6.00	6.50	7.50	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	in
	140	152	165	190	216	241	283	305	457	521	559	635	mm
H	2.12	2.12	2.50	3.38	16.00	16.00	24.00	24.00	9.88	11.00	12.62	15.38	in
	55	55	65	85	400	400	600	600	250	280	320	390	mm
W	8	8	12	12	10	12	14	19	24	24	32	32	in
	200	200	300	300	250	300	350	480	600	600	800	800	mm
wt(kg)	3.5	4.6	6.7	10.5	14.5	22	29	50	141	242	302	423	RF
	2.8	3.1	4.4	5.5	8.7	13.5	17	31	108	194	234	325	BW

Dimensional datas of ANSI Class 600#

NPS DN	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8	10	12	in
	15	20	25	40	50	65	80	100	150	200	250	300	mm
L/L1 (RF/BW)	6.50	7.50	8.50	9.50	11.50	13.00	14.00	17.00	22.00	–	–	–	in
	165	190	216	241	292	330	356	432	559	–	–	–	mm
L2 (RTJ)	–	–	–	–	11.62	13.12	14.12	17.12	22.12	–	–	–	in
	–	–	–	–	295	333	359	435	562	–	–	–	mm
H	2.25	2.25	2.62	3.50	4.12	6.25	7.50	9.75	10.38	–	–	–	in
	58	58	68	89	105	158	190	247	262	–	–	–	mm
W	8	12	12	16	16	24	24	24	32	–	–	–	in
	200	300	300	400	400	600	600	600	800	–	–	–	mm
wt(kg)	4.5	5.5	8	12.5	18	27	35	61	172	–	–	–	RF
	3.8	4.1	5.6	7	12	18	23	43	139	–	–	–	BW

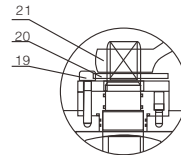
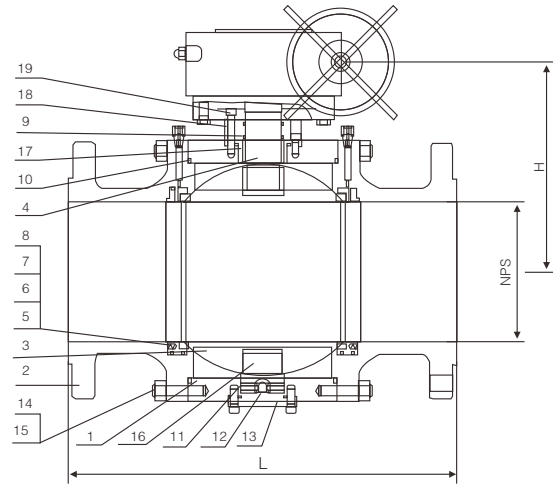
Trunnion Mounted Forged Steel Ball Valve

Applicable standards:

- STEEL BALL VALVES API 608/API 6D
- STEEL BALL VALVES ISO 14313
- FIRE SAFE, API 607
- ANTI STATICS, API 608
- STEEL VALVES, ASME B16.34
- FACE TO FACE ASME B16.10
- END FLANGES, ASME B16.5
- BUTTWELDING ENDS ASME B16.25
- INSPECTION AND TEST, API 598/ API 6D

Design descriptions:

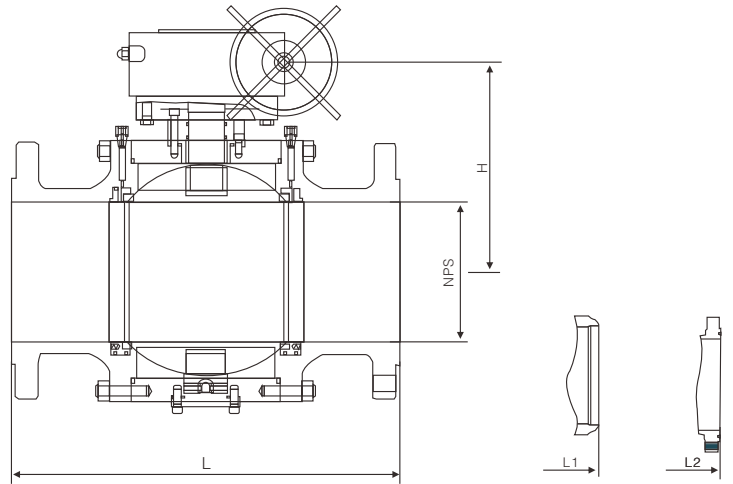
- FULL PORT DESIGN
- BB. BOLTED BONNET. SPLIT BODY
- THREE PIECES BODY FOR 12" & ABOVE
- TRUNNION MOUNTED BALL TYPE
- BLOW-OUT PROOF STEM
- FIRE SAFE CONSTRUCTION
- ANTI STATICS DEVICE
- STOPPER DEVICE
- ISO 5211 MOUNTING PAD
- FLANGED OR BUTTWELDING ENDS
- AVAILABLE WITH WG OPERATOR



Materials of parts

No	Part Name	ASTM Materials		
1	Body	A105	A182-F316	A350-LF2
2	Bonnet	A105	A182-F316	A350-LF2
3	Ball	A182-F304	A182-F316	A182-F304
4	Stem	A276-304	A276-316	A276-304
5	Seat	A105+ENP	A182-F316	A350-LF2+ENP
6	Seat Insert	Glass Filled PTFE		
7	Seat Spring	A313-304	Inconel X-750	A313-304
8	Seat O-Ring	NBR	Viton	Viton
9	Stem O-Ring	NBR	Viton	Viton
10	Bonnet Gasket	Graphite+304	Graphite+316 ²⁾	Graphite+304
11	Bonnet O-ring	NBR	Viton	Viton
12	Antistatic Spring	A313-304	A313-316	A313-304
13	Lower Cover	A182-F304	A182-F316	A182-F304
14	Bonnet Stud	A193-B7	A193-B8	A320-L7
15	Bonnet Stud Nut	A194-2H	A194-8	A194-4
16	Trunnion	A276-304	A276-316	A276-304
17	Trunnion Bearing	304+PTFE	316+PTFE	304+PTFE
18	Gland	A105	A182-F316	A350-LF2
19	Gland Bolt	A193-B7	A193-B8	A193-B7
20	Stop Plate	Carbon Steel	Carbon Steel+Zn	Carbon Steel
21	Handle		Carbon Steel	

Note: 1) A105+ENP optional
2) Spiral wound construction.



Dimensional datas of ANSI Class 150#

NPS DN	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	in
	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	mm
L (RF)	7.00	7.50	8.00	9.00	15.50	18.00	21.00	24.00	27.00	30.00	34.00	36.00	42.00	45.00	49.00	51.00	54.00	60.00	in
	178	190	203	229	394	457	533	610	686	762	864	914	1067	1143	1245	1295	1372	1524	mm
L1 (BW)	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	68.00	in
	216	241	283	305	457	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	1727	mm
H	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	16.50	21.88	23.62	25.00	28.00	29.50	31.50	34.00	36.00	38.50	in
	120	150	180	235	250	280	320	390	420	555	600	635	710	750	800	865	915	980	mm
W	16	16	24	24	24	24	32	32	32	32	32	32	32	40	40	40	40	40	in
	400	400	600	600	600	600	800	800	800	800	800	800	800	1000	1000	1000	1000	1000	mm
wt(kg)	28	35	55	80	190	290	445	570	780	1520	2300	2500	3950	4890	6300	7100	8950	13500	RF
	25	28	49	71	182	277	553	553	747	1481	2266	2460	3904	4939	6362	8149	9000	13570	BW

Dimensional datas of ANSI Class 300#

NPS DN	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	in
	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	mm
L (RF)	8.50	9.50	11.12	12.00	15.88	19.75	22.38	25.50	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	-	in
	216	241	283	305	403	502	568	648	762	838	914	991	1143	1245	1346	1397	1524	-	mm
L1 (BW)	8.50	9.50	11.12	12.00	18.00	20.50	22.00	25.00	30.00	33.00	36.00	39.00	45.00	49.00	53.00	55.00	60.00	-	in
	216	241	283	305	403	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	-	mm
H	4.00	6.00	7.00	9.25	9.88	11.00	12.62	15.38	16.50	21.88	23.62	25.00	28.00	29.50	31.50	34.00	36.00	-	in
	120	150	180	235	250	280	320	390	420	555	600	635	710	750	800	865	915	-	mm
W	16	16	24	24	24	24	32	32	32	32	32	32	32	40	40	40	40	-	in
	400	400	600	600	600	600	800	800	800	800	800	800	800	1000	1000	1000	1000	-	mm
wt(kg)	30	40	60	90	200	325	490	690	900	1810	2620	2860	4430	5430	6810	7655	9590	-	RF
	24	31	49	72	169	280	424	598	872	1665	2440	2635	4075	4880	6225	7115	9230	-	BW

Trunnion Mounted Forged Steel Ball Valve

Dimensional datas of ANSI Class 600#

NPS DN	2	2½	3	4	6	8	10	12	14	16	18	20	24	26	28	in
	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	mm
L/L1 (RF/BW)	11.50	13.00	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00	57.00	61.00	in
	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549	mm
L2 (RTJ)	11.62	13.12	14.12	17.12	22.12	26.12	31.12	33.12	35.12	39.12	43.12	47.25	55.38	57.50	61.50	in
	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1562	mm
H	6.50	7.00	7.88	11.00	12.25	14.00	16.12	18.00	19.25	21.00	24.88	25.62	30.12	31.88	34.62	in
	165	180	200	280	310	355	410	455	490	535	630	650	765	810	880	mm
W	16	24	24	24	32	32	32	32	32	32	40	40	40	40	40	in
	400	600	600	600	800	800	800	800	800	800	1000	1000	1000	1000	1000	mm
wt(kg)	34	53	65	125	245	505	640	910	1380	2250	3400	3850	4900	6700	8300	RF
	27	43	49	95	188	418	495	740	1185	1960	3050	3406	4275	6025	7590	BW

Dimensional datas of ANSI Class 900#

NPS DN	2	2½	3	4	6	8	10	12	14	16	18	20	24	in
	50	65	80	100	150	200	250	300	350	400	450	500	600	mm
L/L1 (RF/BW)	14.50	16.50	15.00	18.00	24.00	29.00	33.00	38.00	40.50	44.50	48.00	52.00	61.00	in
	368	419	381	457	610	737	965	965	1029	1130	1219	1321	1549	mm
L2 (RTJ)	14.62	16.62	15.12	18.12	24.12	29.12	38.12	38.12	40.88	44.88	48.50	52.50	61.75	in
	371	422	384	460	613	740	968	968	1038	1140	1232	1334	1568	mm
H	6.72	7.50	8.25	11.38	12.62	15.38	18.50	18.50	20.88	24.00	26.00	27.50	30.75	in
	170	190	210	290	320	390	470	470	530	610	660	700	780	mm
W	24	24	24	32	32	32	32	32	32	40	40	40	40	in
	600	600	600	800	800	800	800	500	800	1000	1000	1000	1000	mm
wt(kg)	45	65	73	135	360	650	1350	1350	1890	3100	4300	4950	7100	RF/RTJ
	37	53	56	98	291	545	1145	1145	1650	2750	3875	4410	6485	BW

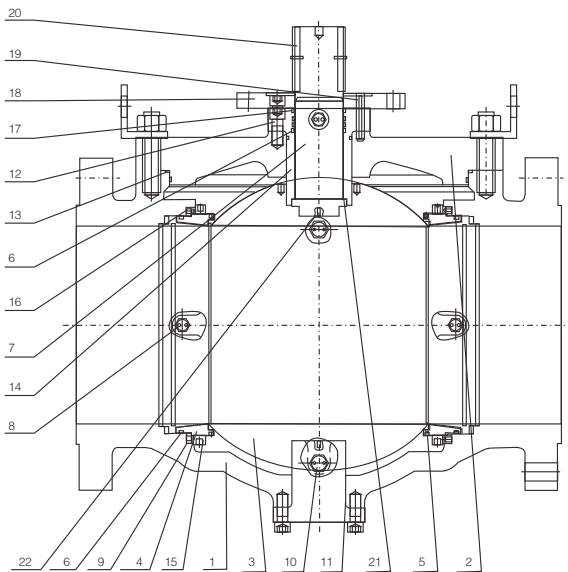
Dimensional datas

NPS	DN	L/L1 (RF/BW)		L2 (RTJ)		H		W		WT(kg)		L/L1 (RF/BW)		L2 (RTJ)		H		W		WT(kg)			
ANSI Class1500#											ANSI Class2500#												
2	50	14.50	368	14.62	371	6.75	170	24	600	55	40	17.75	451	17.88	454	7.50	190	24	600	68	57		
2½	65	16.50	419	16.62	422	7.50	190	24	600	75	55	20.00	508	21.25	540	9.00	230	32	800	95	74		
3	80	18.50	470	18.62	473	8.25	210	32	800	95	65	22.75	578	23.00	584	11.00	280	32	800	120	91		
4	100	21.50	546	21.62	549	11.38	290	32	800	150	115	26.50	673	26.88	683	14.12	360	32	800	185	122		
6	150	27.75	705	28.00	711	13.00	330	32	800	540	420	36.00	914	36.50	927	15.75	400	32	800	675	555		
8	200	32.75	832	33.12	841	15.75	400	32	800	880	685	40.25	1022	40.88	1038	18.88	480	40	1000	1100	918		
10	250	39.00	991	39.38	1000	17.38	440	32	800	1360	1025	50.00	1270	50.88	1292	20.50	520	40	1000	1650	1355		
12	300	44.50	1130	45.12	1146	22.00	560	40	1000	1980	1555	56.00	1422	56.88	1445	26.38	670	40	1000	2300	1950		
14	350	49.50	1257	50.25	1276	25.25	640	40	1000	3100	2600	-	-	-	-	-	-	-	-	-	-		
16	400	54.50	1384	55.38	1407	27.12	690	40	1000	4650	3930	-	-	-	-	-	-	-	-	-	-		
in	mm	in	mm	in	mm	in	mm	in	mm	RF/RTJ	bw	in	mm	in	mm	in	mm	in	mm	in	mm	RF/RTJ	BW



Materials of parts

Body	WCB/LCB/CF8M/CF8/CF3M/CF3/WC6/WC9/CD3MN
Lid	WCB/LCB/CF8M/CF8/CF3M/CF3/WC6/WC9/CD3MN
Ball	A105+ENP/LF2+ENP/F304/F316/F304L/F316L/F51
Seat	A105+ENP/LF2+ENP/F304/F316/F304L/F316L/F51
Stem	A105+ENP/LF2+ENP/F304/F316/F304L/F316L/F51
Seat ring	PTFE/MYLON/PEEK/TEFLON
O-ring	VITON/NBR
Bolt	B7M/B8M/L7M/B16M
Support cover	A105+ENP/LF2+ENP/F304/F316/F304L/F316L/F51
Spring	17-4PH/17-7PH/Inconel
Bearing	304+PTFE/316+PTFE
Gasket	Flexible graphite+PTFE



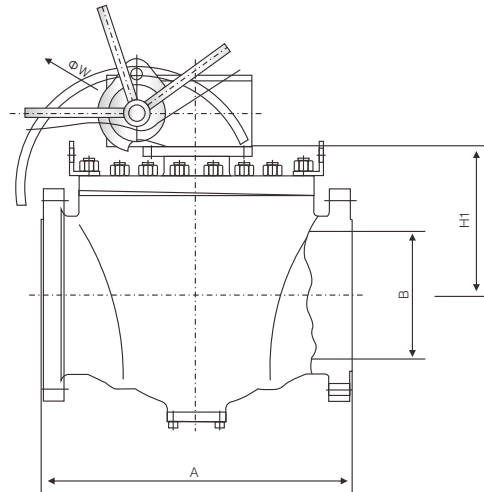
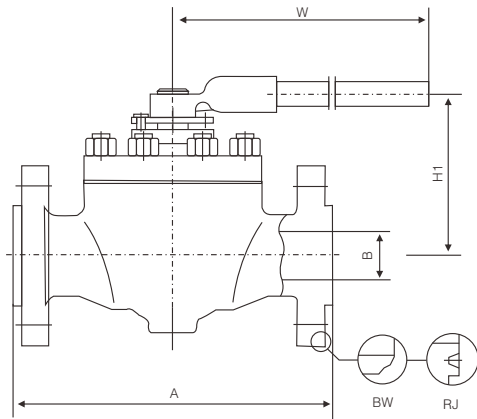
No	Part Name	No	Part Name
1	Body	12	Screw
2	Lid	13	Body gasket
3	Ball	14	Support cover
4	Seat	15	Seat retainer ring
5	Sealing ring	16	Spring support cover
6	O-ring	17	Packing
7	Stem	18	Connected disk
8	Seat grease injection valve	19	Elastic cylindrical pin
9	Spring	20	Flat key
10	Blow-down valve	21	Stem gasket
11	Ball lubricating bearing	22	Antistatic spring

Materials could be chosen according to customers' requirement & working condition.

Features and Application:

This product is a new type top entry combination ball valve, the seat can be installed and move around the body. Through the thread, the outer margin of the seat connected to the retainer ring. There is spring on the support cover, which installed on the valve body, and the retainer ring can compress spring. The fabrication holes are on the outer margin of the seat and the retainer ring. This new type product adopts total body design, the compensation can be automatically, the possibility of leakage is small, safety in use, vibrate resistance, and double seal. The ball is installed from the top part, so can finish the maintenance without removing the pipe, it is very convenient.

Top Entry Ball Valve



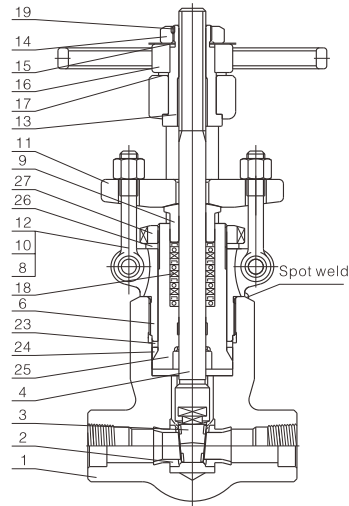
Dimensional datas

NPS inch	DN	A mm	B mm	H1 mm	W mm	WT kg	T N.m	NPS inch	DN	A mm	B mm	H1 mm	W mm	WT kg	T N.m
ANSI Class 150#															
2	50	292	51	207	300	30	50	★ 14	350	889	334	455	600	760	2426
3	80	356	76	223	400	57	65	★ 16	400	991	385	460	600	1100	3016
4	100	432	100	280	450	100	151	★ 18	450	1092	436	503	600	1512	4574
★ 6	150	559	150	275	460	215	320	★ 20	500	1194	487	560	700	1930	6016
★ 8	200	660	201	321	460	407	1020	★ 24	600	1397	589	610	700	3200	9750
★ 10	250	787	252	355	600	560	1085	★ 28	700	1549	684	730	700	4600	14540
★ 12	300	838	303	470	600	710	1562	★ 30	750	1651	735	800	760	5630	18005

Dimensional datas

NPS inch	DN	A mm	B mm	H1 mm	W mm	WT kg	T N.m	NPS inch	DN	A mm	B mm	H1 mm	W mm	WT kg	T N.m
ANSI Class 300#															
2	50	292	51	211	300	36	86	★ 14	350	889	334	460	600	766	3800
3	80	356	76	226	500	63	110	★ 16	400	991	385	480	600	1106	5376
4	100	432	100	286	550	106	270	★ 18	450	1092	436	508	600	1519	8000
★ 6	150	559	150	282	460	221	500	★ 20	500	1194	487	565	600	2010	10610
★ 8	200	660	201	325	460	412	1620	★ 24	600	1397	589	617	760	3208	17280
★ 10	250	787	252	360	600	566	1824	★ 28	700	1549	684	678	760	4607	25102
★ 12	300	838	303	420	600	715	2632	★ 30	750	1651	735	738	760	5638	31664

Note: ★ Turbine drives



Application standards

Design and manufacture conform to

API 602, BS5352, ANSI B16.34

Connection ends conform to;

Socket welded dimension conform to

ANSI B16.11;JB/T1751

Screw ends dimension conform to

ANSI B1.20.1;JB/T7306

Butt-welded conform to ANSI B16.25;

JB T12224

Flanged ends conform to ANSI B16.5;JB79

Test and inspection conform to;

API 598; GB/T13927; JB/T9092

Structure features:

A threaded and pressure seal bonnet

Materials conform to ANIS/ASTM

Main materials:

A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321;

F91; Monel;

Carbon steel temperature–pressure rate

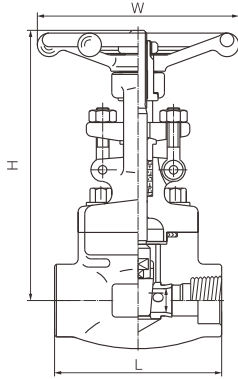
CL1500–3705 P.S.I @ 100° F CL2500–6170 P.S.I @ 100° F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F91/410 HF
1	Body	A105	A105	LF2	F11	F304(L)	F316(L)	F91
2	Seat	410	410HF	304	410HF	304(L)	316(L)	410HF
3	Wedge	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F6aHF
4	Stem	410	410	304	410	304(L)	316(L)	410
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F91
8	Pin	410	410	410	410	304	304	410
9	Gland	410	410	304	410	304	316	410
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8
11	Gland flange	A105	A105	LF2	F11	F304	F304	F91
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A190
17	Lubricating gasket	410	410	410	410	410	410	410
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
19	Stop nut	35	35	35	35	35	35	35
23	Seal gasket	420	420	304	304	304(L)	316(L)	420
24	P.S.ring	304	304	304	304	304	316	316
25	P.S.seat	420	420	304	304	304(L)	316(L)	F91
26	Nut pad	410	410	410	410	410	410	410
27	Packing nut	Cast steel	Cast steel	Cast steel	Cast steel	Stainless steel	Stainless steel	Stainless steel

Female Threaded and Socket

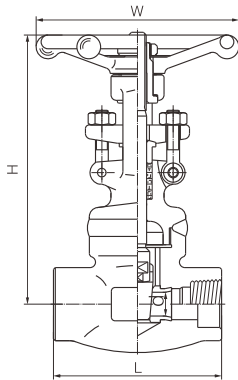
Welded Gate Valve



CL800

Bolted bonnet, full port reducing port outside screw and yoke(OS & Y)
Threaded, butt-welded or socket welded ends; design to API 602

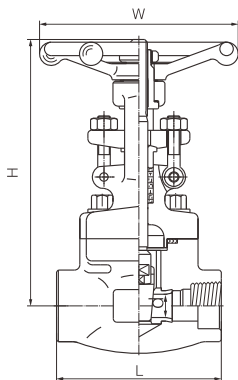
(NPS) Specification	R.P	-	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂	3
	F.P	1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂
(mm) Face to face	L	79	79	92	111	120	120	140	178	180
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	220
(mm) Height	H	161	161	163	196	223	251	290	333	370
(mm) Flow port dimension	d	8	10.5	13.5	18	24	29	36.5	45	51
(Kg) Weight		2.22	2.3	2.39	4.24	5.7	7.05	10.9	16.8	24



CL800

Welded bonnet, full port reducing port outside screw and yoke(OS & Y)
Threaded, butt-welded or socket welded ends; design to API 602

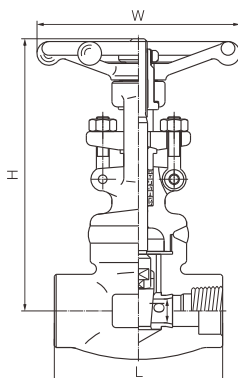
(NPS) Specification	R.P	-	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂	3
	F.P	1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂
(mm) Face to face	L	79	79	92	111	120	120	140	178	180
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	220
(mm) Height	H	161	161	163	196	223	251	290	333	370
(mm) Flow port dimension	d	8	10.5	13.5	18	24	29	36.5	45	51
(Kg) Weight		1.9	1.9	2.1	3.2	5.2	6.9	10.4	15.8	22



CL900-CL1500

Bolted bonnet, full port reducing port outside screw and yoke(OS & Y)
Threaded, butt-welded or socket welded ends; design to API 602

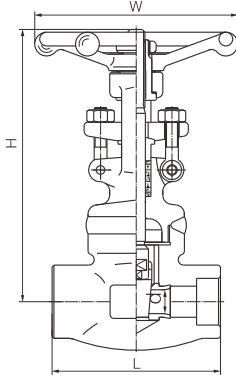
(NPS) Specification	R.P	-	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂	3
	F.P	1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂
(mm) Face to face	L	92	92	111	120	120	140	178	180	-
(mm) Handwheel diameter	W	100	100	125	160	160	180	200	220	-
(mm) Height	H	191	171	192	219	243	296	316	370	-
(mm) Flow port dimension	d	8	10.5	13.5	18	24	29	36.5	45	-
(Kg) Weight		2.4	2.4	4.4	6	7.2	11.4	16	23	-



CL900-CL1500

Welded bonnet, full port reducing port outside screw and yoke(OS & Y)
Threaded, butt-welded or socket welded ends; design to API 602

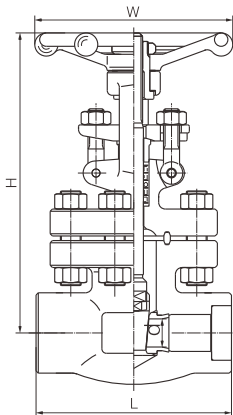
(NPS) Specification	R.P	-	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂	3
	F.P	1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂
(mm) Face to face	L	92	92	111	120	120	140	178	180	-
(mm) Handwheel diameter	W	100	100	125	160	160	160	200	220	-
(mm) Height	H	171	171	207	240	258	330	355	370	-
(mm) Flow port dimension	d	8	10.5	13.5	18	24	29	36.5	45	-
(Kg) Weight		2.4	2.4	4	4.8	7.1	11	16	22.8	-



CL2500

Welded bonnet, full port outside screw and yoke (OS & Y)
Socket welded ends, design conform to ASME B16.34

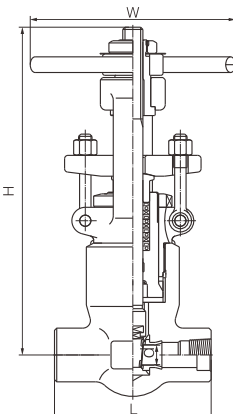
(NPS) Specification		1/4	3/8	1/2	3/4	1	1 1/4	2	
(mm) Face to face	L		111	111	120	120	140		
(mm) Handwheel diameter	W		125	125	160	180	220		
(mm) Height	H		215	218	220	238	281		
(mm) Flow port dimension	d		14	14	14	19	25		
(Kg) Weight			7	7	8.7	11.7	17		



CL1500-CL2500

Bolted bonnet, full port outside screw and yoke (OS & Y)
Socket welded ends, design conform to ASME B16.34

(NPS) Specification	F.P		1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
(mm) Face to face	L	CL1500	111	120	120		178	210	
		CL2500	120	120	140		180	235	
(mm) Handwheel diameter	W	CL1500	110	130	130		180	250	
		CL2500	130	130	250		300	300	
(mm) Height	H	CL1500	277	300	390		400	435	
		CL2500	293	300	390		435	435	
(mm) Flow port dimension	d	CL1500	14	17	22		35	37	
		CL2500	14	14	14		25	30	
(Kg) Weight		CL1500	4.2	6.6	8.8		17.2	23.5	
		CL2500	11	11.3	22.4		38	38	

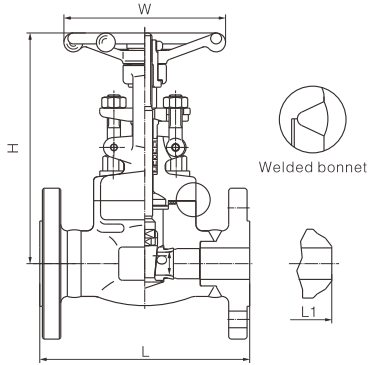


CL1500-CL2500

Pressure seal bonnet, full port outside screw and yoke (OS & Y)
Socket welded ends, design conform to ASME B16.34

(NPS) Specification	F.P		3/8	1/2	3/4	1	1 1/4	1 1/2	2
(mm) Face to face	L	CL900~1500	140	140	140	140	178	178	216
		CL2500	186	186	186	186	232	232	279
(mm) Handwheel diameter	W	CL900~1500	200	200	200	200	280	280	300
		CL2500	200	200	200	200	280	280	300
(mm) Height	H	CL900~1500	318	318	318	322	467	468	540
		CL2500	325	325	325	327	467	468	540
(mm) Flow port dimension	d	CL900~1500	14	14	14	19	25	30	36.5
		CL2500	14	14	14	19	25	30	36.5
(Kg) Weight		CL900~1500	11.5	10.8	10.8	10.5	19.6	21.0	55.4
		CL2500	12.3	11.6	11.6	10.8	26.0	28.4	60.0

Forged Steel Flange Gate Valve

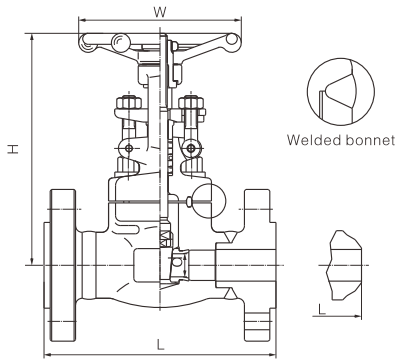


CL150-300-600

Bolted bonnet, reducing port outside screw and yoke(OS & Y)
Flange-welded or butt-welded ends; design to API602;BS5352

Specification(NPS)		1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂	
(mm) Face to face	CL150	L(RF) L1(BW)	-	-	108	117	127	140	165	178	190
	CL300		-	-	140	152	165	178	190	216	241
	CL600		-	-	165	190	216	229	241	292	330
(mm) Handwheel diameter		W	-	-	100	100	125	160	160	180	200
(mm) Height	CL150	H	-	-	176	184	217	226	250	290	357
	CL300,CL600		-	-	161	163	196	226	250	290	357
(mm) Flow port dimension		d	-	-	10	13.5	18	24	29	36.5	45
(Kg) Weight	CL150	RF	-	-	3.4	3.98	6.12	7.2	10.4	15.5	24.5
		BW	-	-	2.8	3.3	5.4	6.5	8.2	12.5	20
	CL300	RF	-	-	3.77	4.89	7.23	9.6	12.54	18	26.2
		BW	-	-	3.5	4.4	6.8	8.1	9.2	15.4	22
	CL600	RF	-	-	4.2	5.8	8.8	12.1	15.6	19.5	32
		BW	-	-	4.5	5.1	8.2	10.5	12.4	20.1	28

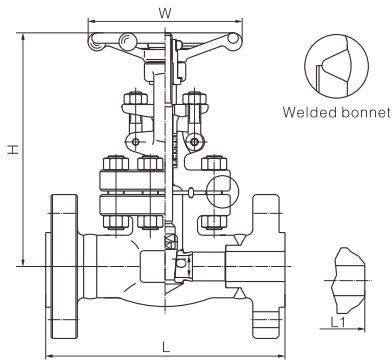
Flange Integrity Forged Steel Valve enquiry please contact sales department.



CL900-1500

Welded bonnet, full port outside screw and yoke(OS & Y)
Flange-welded or butt-welded ends; design to BS5352

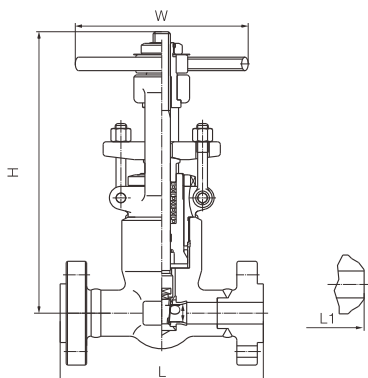
Specification(NPS)		1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2
(mm) Face to face	L(RF),L1(BW)	-	-	216	229	254	279	305	368
	L(RTJ)	-	-	216	229	254	279	305	371
Handwheel diameter(mm)	W	-	-	125	125	160	180	200	220
Height(mm)	H	-	-	191	192	219	257	296	316
Flow port dimension(mm)	d	-	-	13.5	18	24	29	36.5	45
Weight(Kg)		-	-	7.2	11.5	15.6	16.2	22.6	28.2



CL2500

Bolted bonnet, full port outside screw and yoke(OS & Y)
Flange-welded or butt-welded ends; design to ASME B16.34

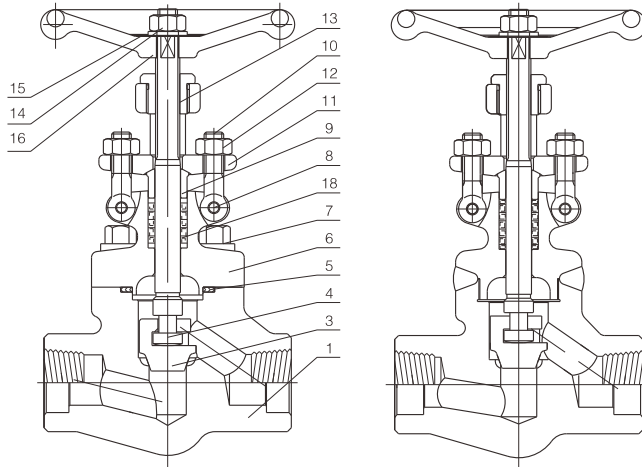
Specification(NPS)		1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2
(mm) Face to face	L(RF),L1(BW)	-	-	264	273	308	349	384	451
	L(RTJ)	-	-	264	273	308	352	387	454
Handwheel diameter(mm)	W	-	-	125	160	160	200	200	240
Height(mm)	H	-	-	207	240	258	352	355	370
Flow port dimension(mm)	d	-	-	13.5	13.5	19	24	30	36.5
Weight(Kg)		-	-	19.5	21.5	42	42	65	95



CL2500

Pressure seal gate valves full port outside screw and yoke(OS & Y)
Flange-welded or butt-welded ends; design to ASME B16.34

Specification(NPS)		1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2
(mm) Face to face	L(RF),L1(BW)	-	-	264	273	308	-	384	451
	L(RTJ)	-	-	264	273	308	-	387	454
Handwheel diameter(mm)	W	-	-	200	200	200	-	280	300
Height(mm)	H	-	-	325	325	327	-	478	540
Flow port dimension(mm)	d	-	-	13.5	13.5	19	-	30	36.5
Weight(Kg)		-	-	14.6	16.8	17.6	-	25	31.9



Application standards

Design and manufacture conform to BS5352
MSS SP-118;

Connection ends conform to:
Socket welded ends conform to
ANSI B16.11;JB/T1751

Screw ends conform to ANSI B1.20.1;
JB/T7306

Butt-welded ends conform to
ANSI B16.25;JB/T12224

Flanged ends conform to ANSI B16.5;JB79
Test and inspection conform to:

API 598; GB/T13927; JB/T9092

Structure features:

Bolted bonnet, outside screw and yoke

Welded bonnet, outside screw and yoke

Main materials-

A105; LF2; F5; F11; F22; 304(L); 316(L); F347;
F321; F51; Monel;

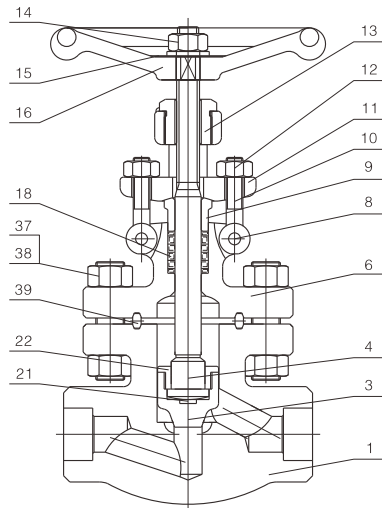
Carbon steel temperature–pressure rate

CL150–285 P.S.I @ 100° F CL300–740 P.S.I @ 100° F CL600–1480 P.S.I @ 100° F CL800–1975 P.S.I @ 100° F CL1500–3705 P.S.I @ 100° F

Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
5	Gasket	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	304+ Flexible graphite	316+ Flexible graphite	316+ Flexible graphite
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
7	Bolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8M
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite

Female Threaded and Socket Welded Globe Valve



Application standards

Design and manufacture conform to BS5352
MSS SP-118;

Connection ends conform to;
Socket welded ends conform to
ANSI B16.11;JB/T1751

Screw ends conform to ANSI B1.20.1;
JB/T7306

Butt-welded ends conform to
ANSI B16.25;JB/T12224

Flanged ends conform to ANSI B16.5;JB79

Test and inspection conform to;

Structure features;

Bolted bonnet, outside screw and yoke

Welded bonnet, outside screw and yoke

Main materials-

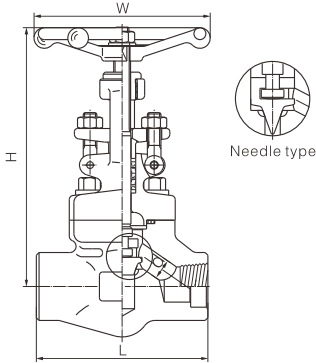
A105; LF2; F5; F11; F22; 304(L); 316(L); F347;
F321; F51; Monel;

Carbon steel temperature–pressure rate

CL150–285 P.S.I @ 100° F CL300–740 P.S.I @ 100° F CL600–1480 P.S.I @ 100° F CL800–1975 P.S.I @ 100° F CL1500–3705 P.S.I @ 100° F

Main part materials list

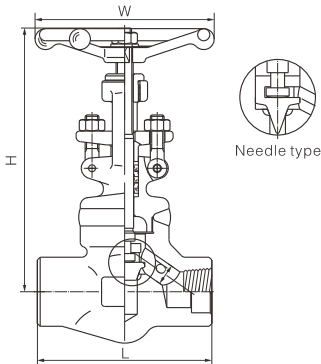
NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F51
3	Disc	F6a	F6a	F304	F6aHF	F304(L)	F316(L)	F51
4	Stem	410	410	304	410	304(L)	316(L)	F51
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F51
8	Pin	410	410	410	410	304	304	304
9	Gland	410	410	304	410	304	316	F51
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8M
11	Gland flange	A105	A105	LF2	F11	F304	F304	F304
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8M
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
21	Stem pad	420	420	420	420	316SH	316SH	316SH
22	Disc nut	410	410	410	410	410	410	410
37	Screwed stud	B7	B7	L7	B16	B8(M)	B8(M)	B8(M)
38	Nut	2H	2H	8	8	8(M)	8(M)	8(M)
39	Metal ring	304	304	304	304	304(L)	316(L)	F51



CL800

Bolted bonnet, full port & reducing port outside screw and yoke (OS&Y)
Threaded, butt-welded or socket welded ends; design to BS5352

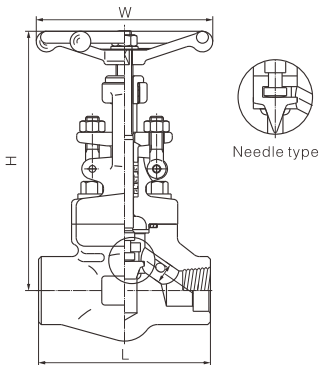
(NPS) Specification	R.P	-	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂	3
	F.P	1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂
(mm) Face to face	L	79	79	92	111	120	152	172	200	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm) Height	H	164	164	164	203	224	260	300	355	
(mm) Flow port dimension	d	7	9	13	17.5	23	30	35	46	
(Kg) Weight		1.9	2.28	2.37	4.3	5.75	7.8	12.5	17.5	



CL800

Welded bonnet, full port & reducing port outside screw and yoke (OS & Y)
Threaded, butt-welded or socket welded ends; design to BS5352

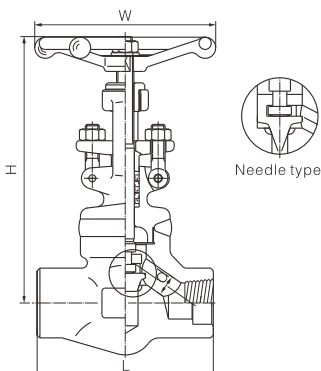
(NPS) Specification	R.P	-	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂	3
	F.P	1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂
(mm) Face to face	L	79	79	92	111	120	152	172	200	
(mm) Handwheel diameter	W	100	100	100	125	160	160	180	200	
(mm) Height	H	164	164	164	203	224	260	300	355	
(mm) Flow port dimension	d	7	9	13	17.5	23	30	35	46	
(Kg) Weight		1.7	1.7	1.9	3.3	5.2	6.8	10.6	13.8	



CL900-CL1500

Bolted bonnet, full port & reducing port outside screw and yoke (OS&Y)
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	R.P	-	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂	3
	F.P	1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂
(mm) Face to face	L	92	92	111	120	152	172	200	220	
(mm) Handwheel diameter	W	100	100	125	160	160	180	200	240	-
(mm) Height	H	171	271	207	240	258	330	355	370	-
(mm) Flow port dimension	d	7	12	15	20	28	32	40	45	-
(Kg) Weight		2.3	3.6	3.7	6.8	7.6	11.6	15	21.9	-

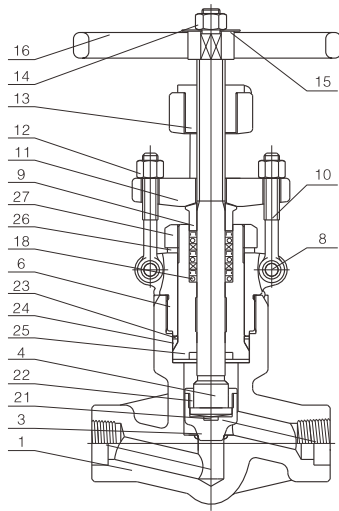


CL900-CL1500

Welded bonnet, full port & reducing port outside screw and yoke (OS&Y)
Threaded, butt-welded or socket welded ends; design to BS5352

(NPS) Specification	R.P	-	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂	3
	F.P	1/4	3/8	1/2	3/4	1	1 ¹ / ₄	1 ¹ / ₂	2	2 ¹ / ₂
(mm) Face to face	L	92	92	111	120	152	172	200	220	-
(mm) Handwheel diameter	W	100	100	125	160	160	180	200	240	-
(mm) Height	H	171	171	207	240	258	330	355	370	-
(mm) Flow port dimension	d	7	12	15	20	28	32	40	45	-
(Kg) Weight		2.2	3.3	3.4	5.6	6.0	10.3	14.2	18.0	-

Pressure Sealing Globe Valve



Application standards

Design and manufacture conform to ASME B16.34;

Connection ends conform to:

Socket welded ends conform to ANSI B16.11; JB/T1751

Screw ends conform to ANSI B1.20.1; JB/T7306

Butt-welded ends conform to ANSI B16.25; JB/T12224

Flanged ends conform to ANSI B16.5; JB79

Test and inspection conform to: API 598; GB/T13927; JB/T9092

Structure features:

A threaded and pressure seal bonnet;

Y type and T type

Main materials:

A105; LF2; F5; F11; F22; 304(L); 316(L); F347; F321; F91; Monel;

Carbon steel temperature–pressure rate

CL1500–3705 P.S.I @ 100° F CL2500–6170 P.S.I @ 100° F

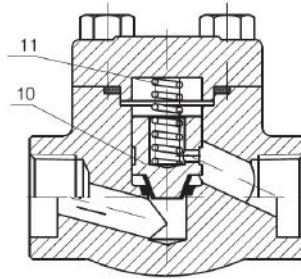
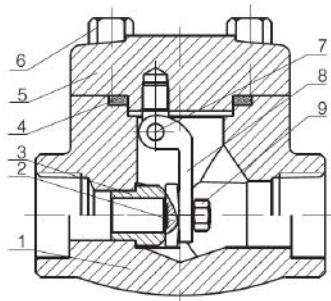
Main part materials list

NO.	Part name	A105/F6a	A105/F6aHFS	LF2/304	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)	F91/410HF
1	Body	A105	A105+HF	LF2	F11+HF	F304(L)	F316(L)	F91+HF
3	Disc	410	410	304	410	304(L)	316(L)	410+HF
4	Stem	410	410	304	410	304(L)	316(L)	410
6	Bonnet	A105	A105	LF2	F11	F304(L)	F316(L)	F91
8	Pin	410	410	410	410	304	304	410
9	Gland	410	410	304	410	304	316	410
10	Gland eyebolt	B7	B7	L7	B16	B8(M)	B8(M)	B8
11	Gland flange	A105	A105	LF2	F11	F304	F304	F91
12	Hex nut	2H	2H	2H	2H	8(M)	8(M)	8
13	Stem nut	410	410	410	410	410	410	410
14	Locking nut	35	35	35	35	35	35	35
15	Nameplate	AL	AL	AL	AL	AL	AL	AL
16	Handwheel	A197	A197	A197	A197	A197	A197	A197
18	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
21	Stem pad	420	420	420	420	316SH	316SH	420
22	Disc nut	410	410	410	410	304(L)	316(L)	410
23	Seal ring gasket	420	420	304	304	304(L)	316(L)	316(L)
24	P.S.ring	304	304	304	304	304	316	304
25	P.S.seat	420	420	304	304	304(L)	316(L)	F91
26	Nut pad	410	410	410	410	410	410	410
27	Draw-in stud	Cart steel	Cart steel	Cart steel	Cart steel	Stainless steel	Stainless steel	Cart steel

Forged Steel Check Valve



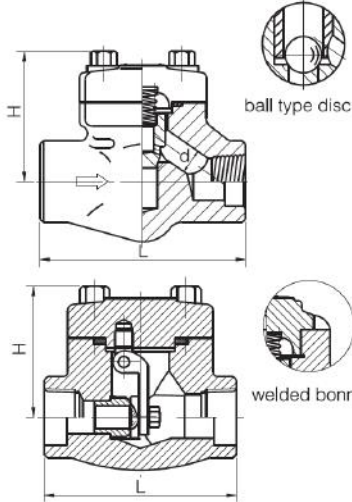
welded bonnet



Applicable Standards

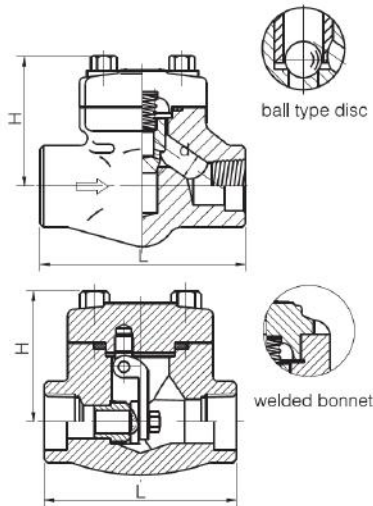
1. Design and Manufacture
API 602, BS5352, ASME B16.34
2. Connection end
Socket Weld End(SW):ASME B16.11
Threaded End(NPT):ASME B1.20.1
Butt-Weld End(BW):ASME B16.25
Flange End(RF/RTJ):ASME B16.5
3. Test & Inspection
API 602, API 598
4. Design Description
Bolted Bonnet(BB),
Welded Bonnet(WB),
5. Main Materials:
A105, LF2, F5, F11, F22,
304(L), 316(L), F347, F321,
F51, Alloy 20, Monel

No.	PART	ASTM Material					
		A105	LF2	F11	F304(L)	F316(L)	F51
1	BODY	A105	LF2	F11	F304(L)	F316(L)	F51
2	DISC	F6a	F6a	F6a+STL	F304(L)	F316(L)	F51
3	SEAT	410	410	410+STL	304(L)	316(L)	F51
4	GASKET	304 + Graphite			304+Graphite	316(L)+Graphite	316(L)+Graphite
5	BONNET	A105	LF2	F11	F304(L)	F316(L)	F51
6	BOLT	B7	L7	B16	B8(M)	B8(M)	B8M
7	PIN	410			304(L)	316(L)	F51
8	HINGE	304			304(L)	316(L)	F51
9	NUT	A194 2H			8	8M	8M
10	SPRING	Ss316					



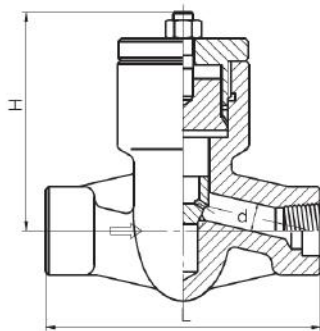
CL800 Bolted Bonnet/Welded Bonnet, Full Port /Reduced Port, Outside Screw and Yoke (OS&Y), Threaded, Butt Weld, Socket Weld. Design: API 602

Size (NPS)	R.P		1/2	3/4	1	1.1/4	1.1/2	2	
	F.P		3/8	1/2	3/4	1	1.1/4	1.1/2	2
Face To Face	L	Lift type	79	92	111	120	152	172	220
		Swing type	79	92	111	120	120	140	178
Height	H	Lift type	61	61	78	84	103	118	132
		Swing type	61	61	78	84	101	120	133
Flow Port Diameter	d	Lift type	10.5	13.5	17	22	28	34	43
		Swing type	10.3	13.5	18	23	29	36	45
Weight		Lift type	1.5	1.7	3.3	4.2	6.3	10.5	12.5
		Swing type	1.5	1.7	3.3	4.2	5.0	8.5	10.9



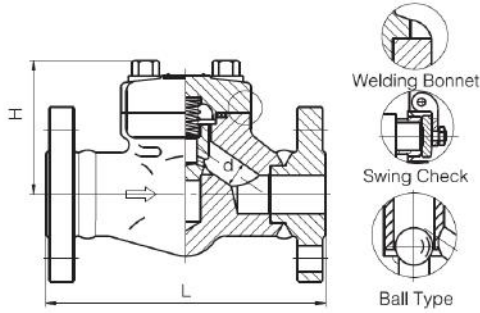
CL900~1500 Pressure Seal Bonnet, Full Port /Reduced Port, Outside Screw and Yoke (OS&Y), Threaded, Butt Weld, Socket Weld. Design: ASME B16.34

Size (NPS)	R.P		1/2	3/4	1	1.1/4	1.1/2	2
	F.P		3/8	1/2	3/4	1	1.1/4	1.1/2
Face To Face	L	Lift type	92	111	120	152	172	220
		Swing type	92	111	120	120	140	178
Height	H	Lift type	78	78	84	103	118	132
		Swing type	78	78	84	101	120	133
Flow Port Diameter	d	Lift type	10.5	13.5	17	22	28	34
		Swing type	10.3	13.5	18	23	29	36
Weight		Lift type	3.4	3.3	4.2	6.3	10.5	12.5
		Swing type	3.4	3.3	4.2	5.0	8.5	10.9



CL900~1500 Pressure Seal Bonnet, Reduce Port, Outside Screw and Yoke (OS&Y)
CL2500 Threaded, Butt Weld, Socket Weld, Design: ASME B16.34

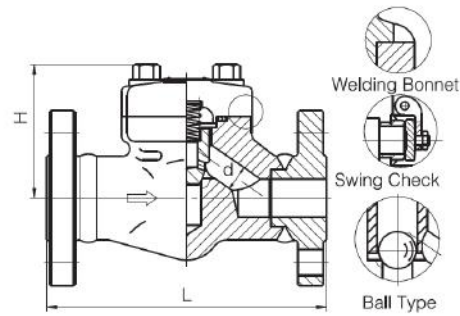
Size (NPS)	R.P	1/2	3/4	1	1.1/4	1.1/2	2	
Face to Face	L	CL900~CL1500	140	140	140	178	178	216
		CL2500	186	186	186	232	232	279
Height	H	CL900~CL1500	117	117	117	152	152	195
		CL2500						
Flow Port Diameter	d	10.5	13.5	18	22	28	34	
Weight		CL900~CL1500	7.5	8.5	10	15	18.1	20.3
		CL2500	10	11.5	15	23	26.4	39



CL150-300-600 Bolt Bonnet/Weld Bonnet, Reduce Port, Outside Screw
RF/RTJ Flange End, Design: API 602

Size (NPS)	R.P	1/2	3/4	1	1.1/4	1.1/2	2	
Face To Face	CL150	L (RF)	108	118	127	140	165	203
	CL300		153	178	203	216	229	267
	CL600		165	191	216	229	241	292
Height	CL150	H	77	81	93	95	103	118
	CL300/600		61	78	84	101	120	133
Flow Port Diameter (d)	Lift type	Swing type	10.5	13.5	17	22	28	34
			10.3	13.5	18	23	29	36
Weight	CL150	Lift type	3.6	4.6	8.5	9.2	12.5	14.8
		Swing type						
	CL300	Lift type	3.7	4.8	8.8	9.6	13.7	17.8
		Swing type						
	CL600	Lift type	4.0	5.8	9.5	10.4	15.6	24.5
		Swing type						

If you want to order the one piece body, please contact sale department



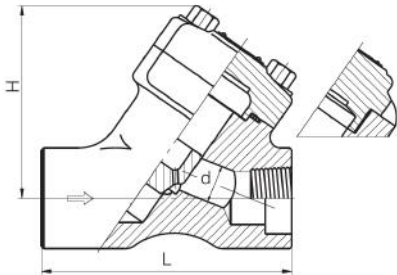
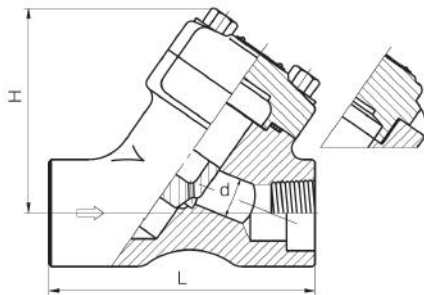
CL900~1500 RF/RTJ Flange End, Design: API 602

Size (NPS)	R.P	1/2	3/4	1	1.1/4	1.1/2	2	
Face To Face	L	(RF)	216	229	254	279	305	368
		(RTJ)	216	229	254	279	305	371
Height	H	81	93	95	101	118	130	
Flow Port Diameter (d)	Lift type	Swing type	10.5	13.5	17	22	28	34
			10.3	13.5	18	23	29	36
Weight(CL1500)			5.2	6.8	10.5	14.5	18	24

NOTE: If you want to order the one piece body, please contact sale department.

CL900 and CL1500 have the same face to face dimension.

Y-STRAINER 800-900-1500LB



CL800 Bolted bonnet/Welded bonnet, full port/reduce port, outside screw
Threaded, butt-weld, socket weld, Design: API 602

Size (NPS)	R.P	1/2	3/4	1	1.1/4	1.1/2	2	2.1/2
	F.P	3/8	1/2	3/4	1	1.1/4	1.1/2	2
Face To Face	L	98	98	111	140	140	155	170
Height	H	70	70	100	110	120	120	150
Flow Port Diameter	d	10	13	17.5	23	30	35	46
Weight		2.2	2.1	4.2	9	8.9	10	18.6

CL900~1500 Bolted Bonnet/Welded Bonnet, Full Port, Outside Screw and Yoke(OS&Y)
Threaded, Butt-Weld, Socket Weld, Design: API 602

Size (NPS)	F.P	1/2	3/4	1	1.1/4	1.1/2	2
Face To Face	L	111	111	140	140	155	170
Height	H	70	100	110	120	120	150
Flow Port Diameter	d	12	15	20	28	32	40
Weight		4.2	9	8.9	10	18.6	20