



FORGED STEEL VALVE

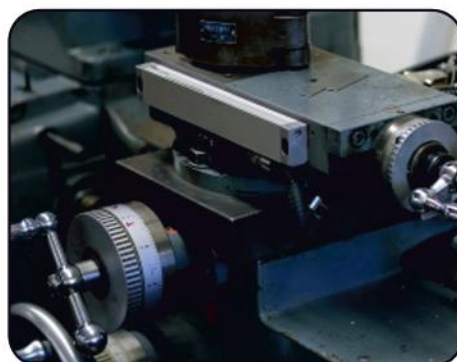
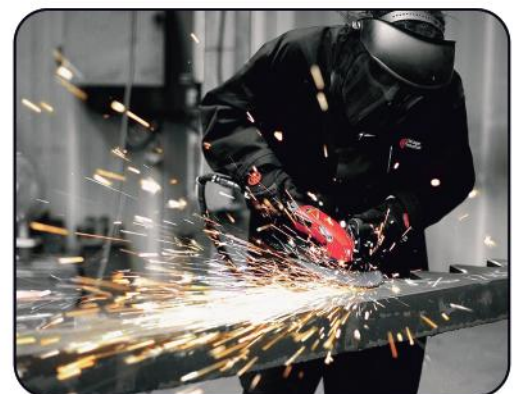
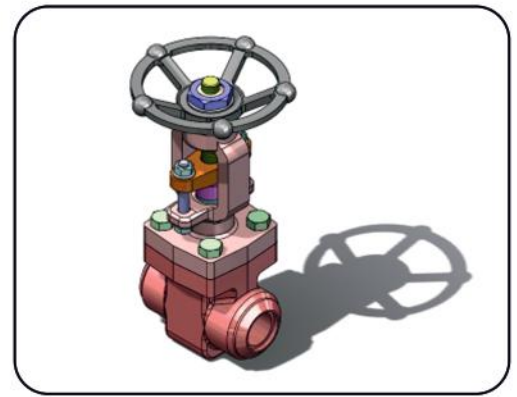
Proudly Manufactured in South Africa

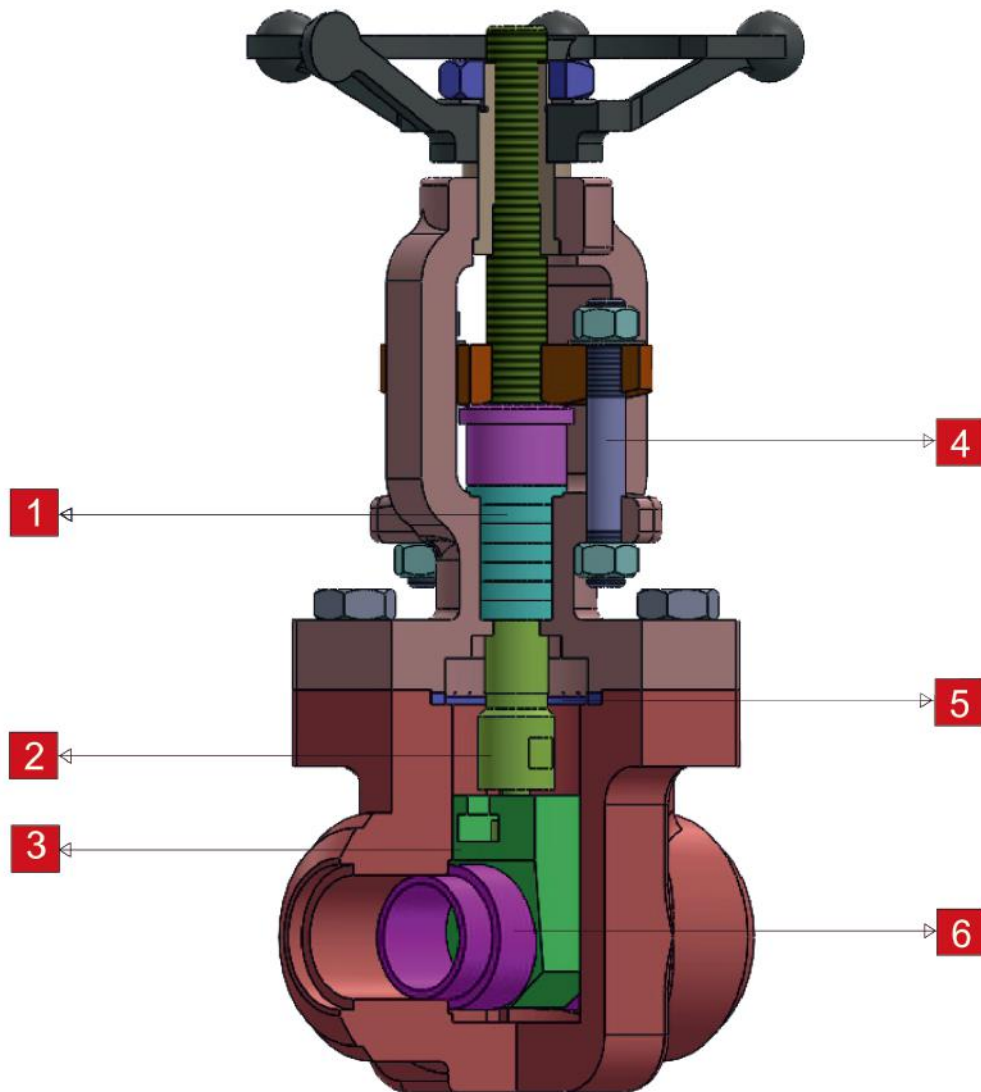
LVSA GROUP compact forged steel valves series consist of gate, globe and check valves, optimized by the most advanced FEA (Finite Element Analysis) design and manufactured in accordance with API 602, EN/ISO 15761 and ASME B16.34. These valves are available in size from NPS 1/2" to 2" in ASME class 150 to 4500.

A wide range of body materials are available including A105, LF2, F11/F22, F5/F9, F304L, F316/L etc.; special service applications valves such as NACE MR 0175 can also be provided.

Bolted bonnet is the standard design; threaded, seat-welded or welded bonnet are optional. A complete range of integral flanged end gate, globe and check valves are now provided.

Emission proof: API 624 Type tested valves for fugitive emission (with methane 97%) for both rising and rising & rotating stem valves (under 100 ppmv) equipped with API 622 compliant packings.



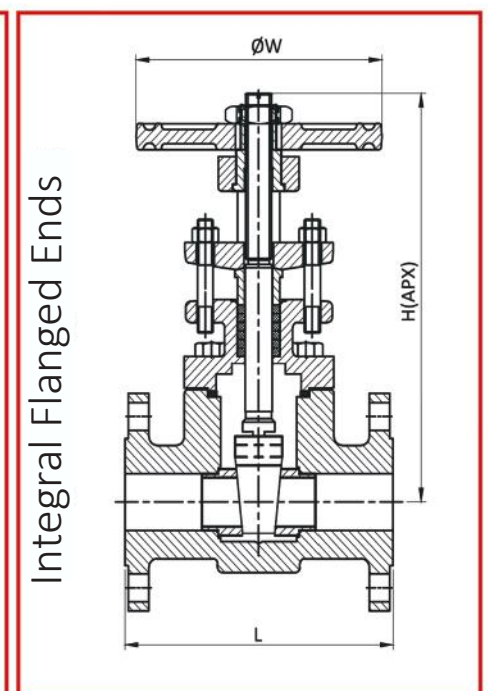
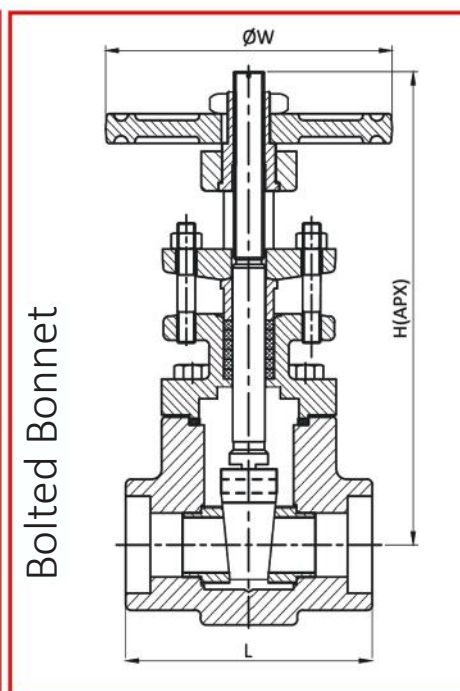
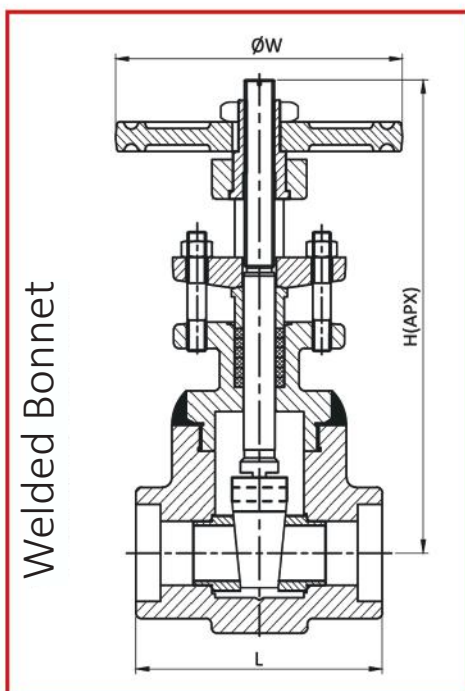


- Positive backseat, high quality packing material and improved stuffing box design ensure tighter stem seal.
- T-head stem design provides positive disc to stem connection and ensures effective seating operation.
- Fully guided solid wedge reduces wear on seating surfaces.
- Stud and bolt arrangement facilitates packing maintenance.
- Recessed body-bonnet joint design captures the stainless steel spiral wound gasket ensuring body/bonnet sealing integrity.
- Flared seat design ensures tight and effective seat assembly.



Material List

No.	Description of parts	Material				
		Standard	High temperature	Stainless steel	Sour service	Low temperature
1	BODY	ASTM A105 N	ASTM A182-F11/F22	ASTM A182-F304/F316	ASTM A105 N	ASTM A350-LF2
2	BONNET	ASTM A105 N	ASTM A182-F11/F22	ASTM A182-F304/F316	ASTM A105 N	ASTM A350-LF2
3	WEDGE	A182-F6A/A217 CA 15	A182-F6A/A217 CA 15	ASTM A182-F304/F316	ASTM A182-F6a-NC	ASTM A182-F304/F316
4	STEM NUT	ASTM A240 SS 420/416	ASTM A240 SS 420/416	ASTM A240 SS 420/416	ASTM A240 SS 420/416	ASTM A240 SS 420/416
5	GLAND FLANGE	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8	ASTM A216 WCB	ASTM A352 LCB
6	HANDWHEEL	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
7	SEAT RING	ASTM A276-410/STL. OVERLAY	ASTM A276-410/STL. OVERLAY	ASTM A182-F304/F316/STL. OVERLAY	ASTM A276-410/STL. OVERLAY	ASTM A276-410/STL. OVERLAY
8	STEM	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F304/F316	ASTM A182-F6a-NC	ASTM A182-F304/F316
9	GLAND	ASTM A276-420	ASTM A276-420	ASTM A240-304/316	ASTM A276-420-NC	ASTM A240-304/316
10	GASKET	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE
11	PACKING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
12	PACKING	BRAIDED GRAPHITE	BRAIDED GRAPHITE	BRAIDED GRAPHITE	BRAIDED GRAPHITE	BRAIDED GRAPHITE
13	HANDWHEEL NUT	CARBON STEEL	CARBON STEEL	ASTM A276-304	CARBON STEEL	ASTM A276-304
14	WASHER	ASTM A276-304	ASTM A276-304	ASTM A276-304	ASTM A276-304	ASTM A276-304
15	STUD	ASTM A193-B7	ASTM A193-B16	ASTM A193-B8	ASTM A193-B7M	ASTM A320-L7M
16	BOLT	ASTM A193-B7	ASTM A193-B8	ASTM A193-B8	ASTM A193-B8A	ASTM A193-B8
17	NUT	ASTM A194-2H	ASTM A194-8	ASTM A194-8	ASTM A194-8A	ASTM A194-8
18	NAME PLATE	ASTM A240-304	ASTM A240-304	ASTM A240-304	ASTM A240-304	ASTM A240-304



Dimensions

WELDED BONNET (SOCKET WELD END / BUTT WELD END / SCREWED END)												
CLASS	SIZE		L		H				ØW		Wt. (Approx.) KG	
	INCH	MM			OPEN		CLOSE					
			RB	FB	RB	FB	RB	FB	RB	FB		
800#	1/2	15	90	90	168	175	160	159	96	96	2.1	2.2
	3/4	20	90	102	175	190	159	175	96	112	2.2	3.6
	1	25	102	130	190	280	178	243	112	150	3.6	6.8
	1 1/2	40	130	148	280	285	243	250	150	200	6.8	12.9
	2	50	148	180	285	342	250	250	200	200	12.9	24.5

1500#	1/2	15	90	90	164	161	154	151	175	170	2.1	2.2
	3/4	20	90	102	165	244	150	222	175	250	2.2	4.8
	1	25	102	102	247	247	230	230	250	250	4.8	4.8
	1 1/2	40	130	130	254	254	237	237	300	350	6.8	6.8
	2	50	148	148	275	295	251	262	300	350	12.9	14.6

2500#	1/2	15	90		234		222		170		2.2	
	3/4	20	102		243		228		250		5.8	
	1	25	130		264		248		250		8.7	
	1 1/2	40	148		275		250		350		17.5	
	2	50	180		333		280		400		18.4	

BOLTED BONNET (SOCKET WELD END / BUTT WELD END / SCREWED END)												
CLASS	SIZE		L		H				ØW		Wt. (Approx.) KG	
	INCH	MM			OPEN		CLOSE					
			RB	FB	RB	FB	RB	FB	RB	FB		
800#	1/2	15	90	90	168	175	160	159	96	96	2.1	2.2
	3/4	20	90	102	175	190	159	178	96	112	2.2	3.6
	1	25	102	130	190	280	178	243	112	150	3.6	6.8
	1 1/2	40	130	148	280	285	243	250	150	200	6.8	12.9
	2	50	148	180	285	342	250	282	200	200	12.9	24.5

1500#	1/2	15	90	90	158	189	146	173	175	175	2.2	4.8
	3/4	20	102	130	189	272	173	243	175	230	4.8	6.8
	1	25	130	148	272	286	243	254	230	300	6.8	12.9
	1 1/2	40	148	180	286	333	254	285	300	300	12.9	14.6
	2	50	180	180	333	338	286	290	350	350	14.6	14.6

2500#	1/2	15	102		245		227		175		7	
	3/4	20	130		280		245		175		8.8	
	1	25	148		285		250		250		17.5	
	1 1/2	40	279		415		370		350		40	
	2	50	279		432		387		350		40	



Dimensions

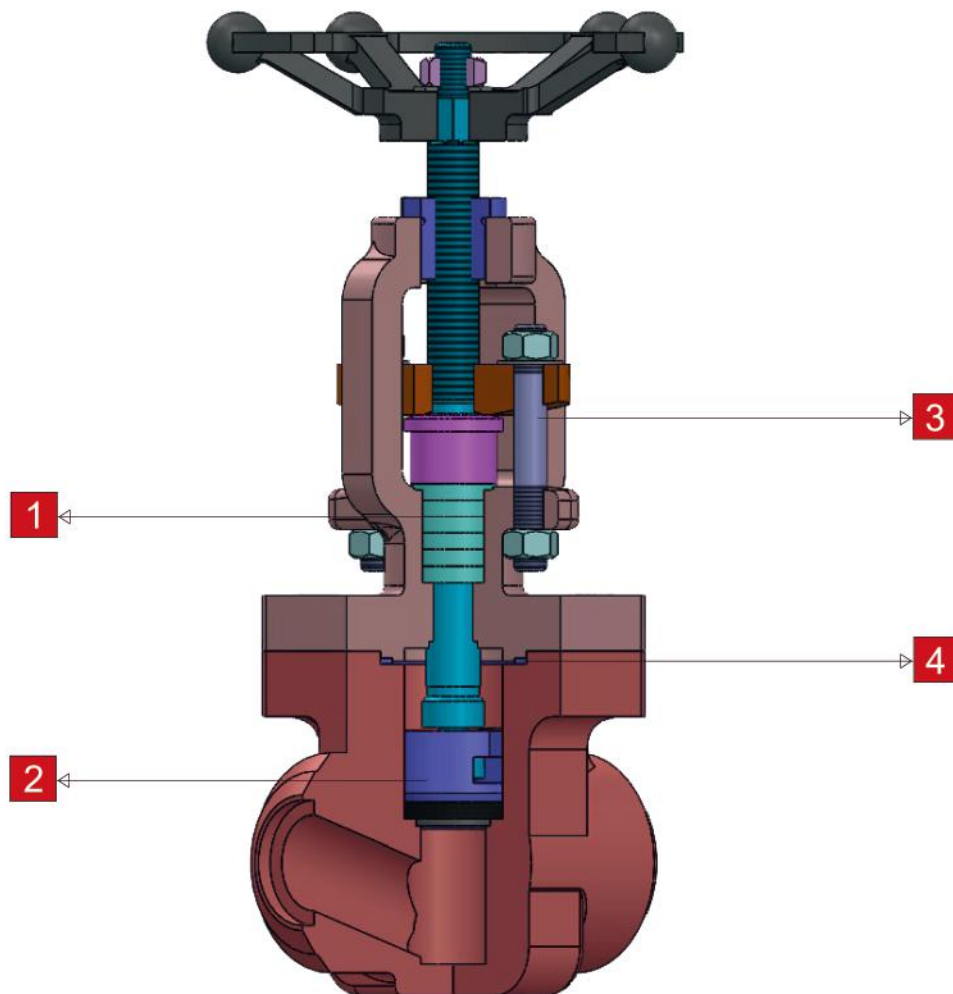
INTEGRAL FLANGE ENDS										
CLASS	SIZE		L	H				ØW		Wt. (Approx.) KG
	INCH	MM		OPEN		CLOSE		RB	FB	
				RB	FB	RB	FB			
150#	1/2	15	108	153	158	163	173	96	96	3.8
	3/4	20	117	158	171	173	193	96	112	5
	1	25	127	172	230	193	258	96	150	6.9
	1 1/2	40	165	239	255	272	295	150	200	13.2
	2	50	178	253	295	279	330	200	200	19.2

300#	1/2	15	140	153	158	163	173	96	96	4.9
	3/4	20	152	158	171	173	193	96	112	6.6
	1	25	165	172	230	193	258	112	150	8.1
	1 1/2	40	190	239	255	272	295	150	200	16.2
	2	50	216	253	295	279	330	200	200	21

600#	1/2	15	165	153	158	163	173	96	96	5.4
	3/4	20	190	158	171	173	193	96	112	6.9
	1	25	216	172	230	193	258	112	150	9
	1 1/2	40	241	239	255	272	295	150	200	19.2
	2	50	292	253	295	279	330	200	200	27.6



Design Features

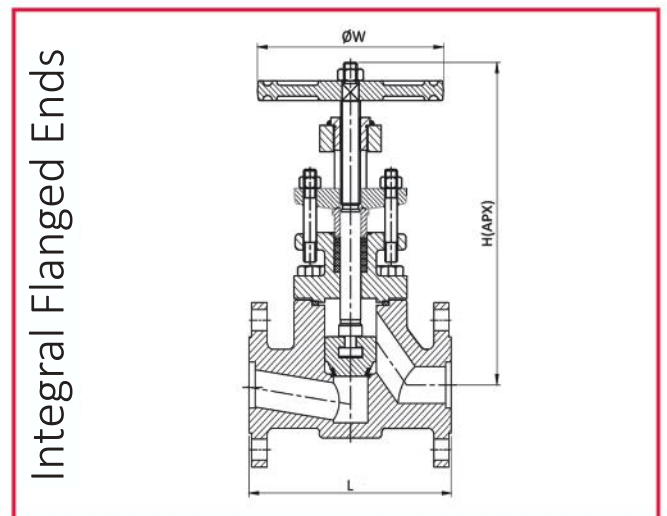
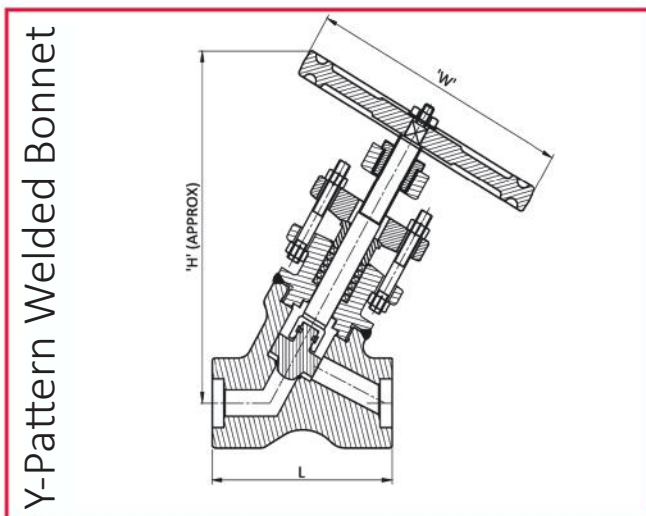
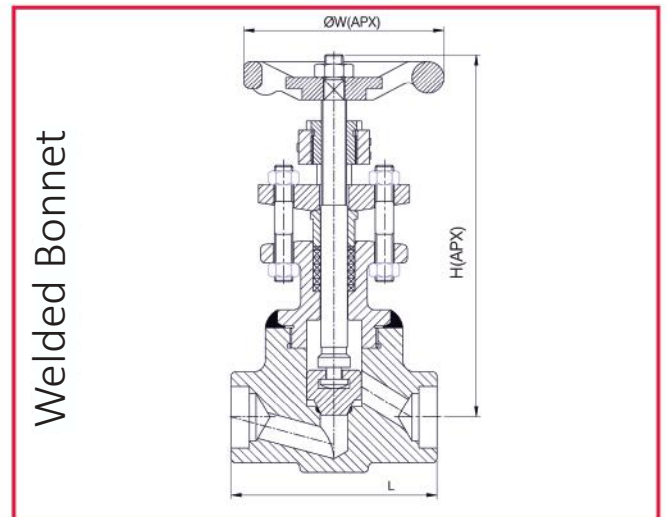
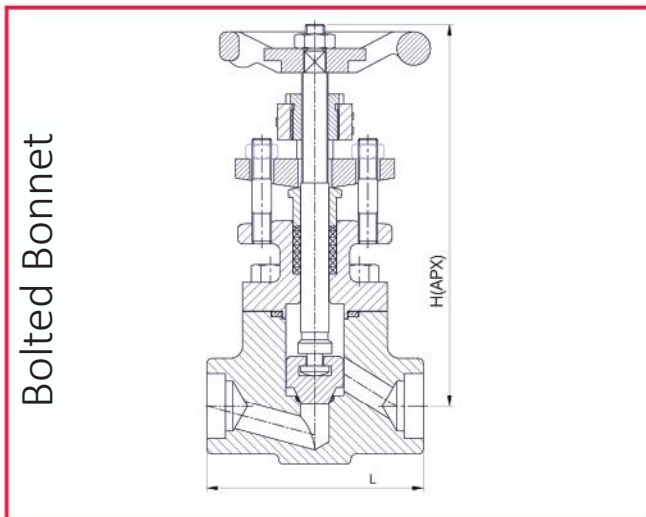


- Positive backseat, high quality packing material and improved stuffing box design ensure tighter stem seal.
- Fully guided solid disc ensures perfect alignment of disc and seat and reduces wear on seating surfaces.
- Stud and bolt arrangement facilitates packing maintenance.
- Recessed body-bonnet joint design captures the stainless steel spiral wound gasket ensuring body/bonnet sealing integrity.



Material List

No.	Description of parts	Material				
		Standard	High temperature	Stainless steel	Sour service	Low temperature
1	BODY	ASTM A105 N	ASTM A182-F11/F22	ASTM A182-F304/F316	ASTM A105 N	ASTM A350-LF2
2	BONNET	ASTM A105 N	ASTM A182-F11/F22	ASTM A182-F304/F316	ASTM A105 N	ASTM A350-LF2
3	DISC	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F304/F316	ASTM A182-F6a-NC	ASTM A182-F304/F316
4	STEM NUT	A276-420/416	A276-420/416	A276-420/416	A276-420/416	A276-420/416
5	GLAND FLANGE	ASTM A216 WCB	ASTM A216 WCB	ASTM A351 CF8	ASTM A216 WCB	ASTM A352 LCB
6	HANDWHEEL	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON	DUCTILE IRON
7	STEM	ASTM A182-F6a	ASTM A182-F6a	ASTM A182-F304/F316	ASTM A182-F6a-NC	ASTM A182-F304/F316
8	GLAND	ASTM A276-420	ASTM A276-420	ASTM A276-304/316	ASTM A276-420-NC	ASTM A276-304/316
9	GASKET	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE
10	PACKING	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
11	PACKING	BRAIDED GRAPHITE	BRAIDED GRAPHITE	BRAIDED GRAPHITE	BRAIDED GRAPHITE	BRAIDED GRAPHITE
12	STUD	ASTM A193-B7	ASTM A193-B16	ASTM A193-B8	ASTM A193-B7M	ASTM A320-L7M
13	BOLT	ASTM A193-B7	ASTM A193-B8	ASTM A193-B8	ASTM A193-B8A	ASTM A193-B8
14	NUT	ASTM A194-2H	ASTM A194-8	ASTM A194-8	ASTM A194-8A	ASTM A194-8
15	HANDWHEEL NUT	CARBON STEEL	CARBON STEEL	ASTM A276-304	CARBON STEEL	ASTM A276-304
16	HANDWHEEL WASHER	CARBON STEEL	CARBON STEEL	ASTM A276-304	CARBON STEEL	ASTM A276-304
17	NAME PLATE	ASTM A240-304	ASTM A240-304	ASTM A240-304	ASTM A240-304	ASTM A240-304
18	SEAT	INTEGRAL/OVERLAY	INTEGRAL/OVERLAY	INTEGRAL/OVERLAY	INTEGRAL/OVERLAY	INTEGRAL/OVERLAY



Dimensions

WELDED BONNET (SOCKET WELD END / BUTT WELD END / SCREWED END)												
CLASS	SIZE		L		H				ØW		Wt. (Approx.) KG	
	INCH	MM			OPEN		CLOSE					
			RB	FB	RB	FB	RB	FB	RB	FB		
800#	1/2	15	90	90	168	175	160	159	96	96	2.1	2.2
	3/4	20	90	102	175	190	159	178	96	112	2.2	3.6
	1	25	102	130	190	280	178	243	112	150	3.6	6.8
	1 1/2	40	130	148	280	285	243	250	150	200	6.8	12.9
	2	50	148	180	285	342	250	282	200	200	12.9	24.5

1500#	1/2	15	90	90	164	161	154	151	170	170	2.1	2.2
	3/4	20	90	102	165	244	150	222	170	230	2.2	4.8
	1	25	102	102	247	247	230	230	230	230	4.8	4.8
	1 1/2	40	130	130	254	254	237	237	280	350	6.8	6.8
	2	50	148	148	275	295	251	262	280	350	12.9	14.6

2500#	1/2	15	90		234		222		170		2.2	
	3/4	20	102		243		228		230		5.8	
	1	25	130		264		248		230		8.7	
	1 1/2	40	148		275		250		350		17.5	
	2	50	180		333		280		400		18.4	

BOLTED BONNET (SOCKET WELD END / BUTT WELD END / SCREWED END)												
CLASS	SIZE		L		H				ØW		Wt. (Approx.) KG	
	INCH	MM			OPEN		CLOSE					
			RB	FB	RB	FB	RB	FB	RB	FB		
800#	1/2	15	90	90	168	175	160	159	96	96	2.1	2.2
	3/4	20	90	102	175	190	159	178	96	112	2.2	3.6
	1	25	102	130	190	280	178	243	112	150	3.6	6.8
	1 1/2	40	130	148	280	285	243	250	150	200	6.8	12.9
	2	50	148	180	285	342	250	282	200	200	12.9	24.5

1500#	1/2	15	90	90	172	175	162	169	175	230	2.2	2.2
	3/4	20	102	130	186	260	176	248	230	230	3.6	6.8
	1	25	130	130	257	258	247	244	230	300	6.8	6.8
	1 1/2	40	130	148	257	270	247	257	300	350	6.8	14.6
	2	50	148	180	295	342	262	282	350	350	14.6	24.5

2500#	1/2	15	102		245		234		175		5.8	
	3/4	20	130		260		250		175		8.8	
	1	25	148		276		266		250		17.5	
	1 1/2	40	279		340		315		350		40	
	2	50	279		340		315		350		40	



Dimensions

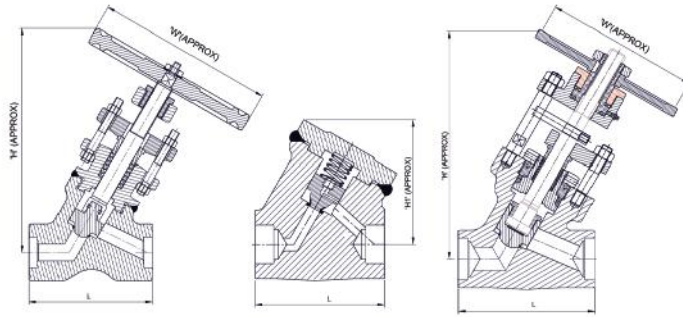
INTEGRAL FLANGE ENDS										
CLASS	SIZE		L	H				ØW		Wt. (Approx.) KG
	INCH	MM		OPEN		CLOSE		RB	FB	
				RB	FB	RB	FB			
150#	1/2	15	108	163	164	168	172	96	96	3.8
	3/4	20	117	161	181	172	190	96	112	5.1
	1	25	127	174	251	187	266	112	150	7
	1 1/2	40	165	246	261	267	279	150	200	12.9
	2	50	203	260	298	279	336	200	200	21.6

300#	1/2	15	152	163	164	168	172	96	96	4.8
	3/4	20	178	161	181	172	190	96	112	7.9
	1	25	203	174	251	187	266	112	150	10.2
	1 1/2	40	229	246	261	267	279	150	200	21.6
	2	50	267	260	298	279	336	200	200	31.2

600#	1/2	15	165	163	164	168	172	96	96	5.04
	3/4	20	190	161	181	172	190	96	112	8.1
	1	25	216	174	251	187	266	112	150	10.5
	1 1/2	40	241	246	261	267	279	150	200	22.8
	2	50	292	260	298	279	336	200	200	33.6



Dimensions



SEAL WELDED BONNET							
CLASS	SIZE		L	H	H1	ØW	Wt. (Approx.) KG
	INCH	MM					
800# / 1500#	1/2	15	90	205	95	150	10
	3/4	20	90	208	95	175	10
	1	25	102	250	100	175	16
	1 1/2	40	140	325	120	200	32
	2	50	279	372	120	250	32

2500#	1/2	15	102	230	100	175	10
	3/4	20	102	260	100	250	10
	1	25	140	263	120	250	16
	1 1/2	40	279	325	200	300	32
	2	50	279	380	200	300	32

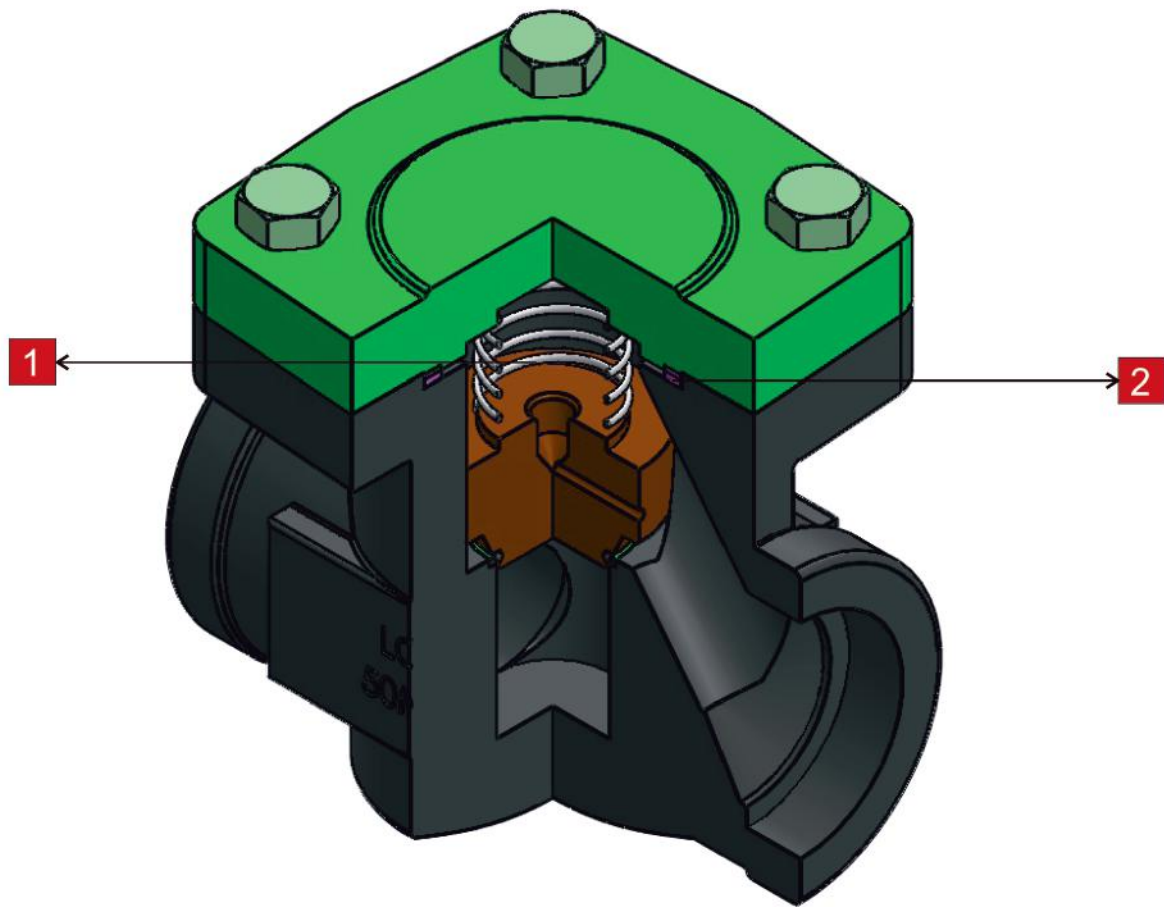
PRESSURE SEAL BONNET							
CLASS	SIZE		L	H	ØW	Wt. (Approx.) KG	
	INCH	MM					
1500#	1/2	15	120	238	150	10	
	3/4	20	120	238	150	10	
	1	25	140	326	230	21	
	1 1/2	40	279	372	250	40	
	2	50	279	372	250	40	

2500#	1/2	15	102	238	150	10
	3/4	20	102	238	150	10
	1	25	140	326	230	21
	1 1/2	40	279	372	250	40
	2	50	279	372	250	40

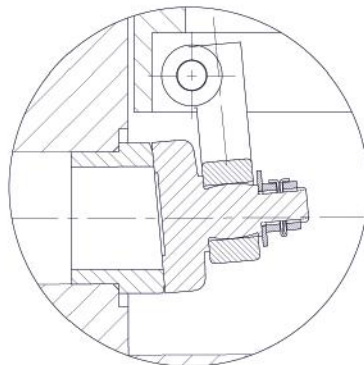
- Y-Type Pressure Seal Check Valve also available
- 4500# Pressure seal on request only
- Y-Pattern Valves option manufactured in Forging.



Dimensions

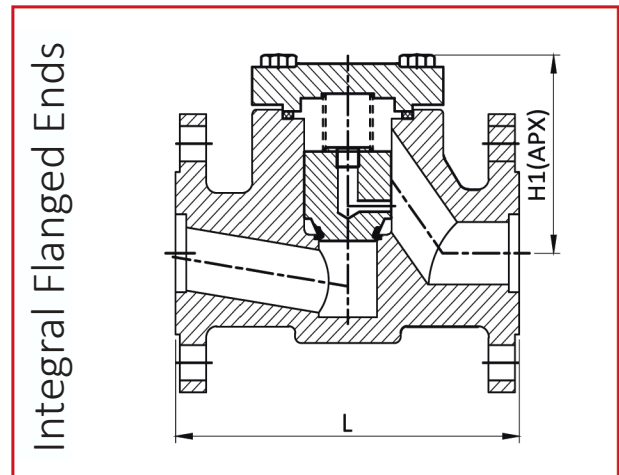
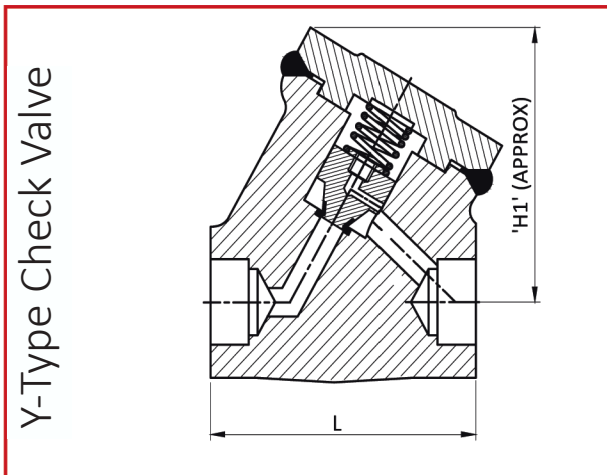
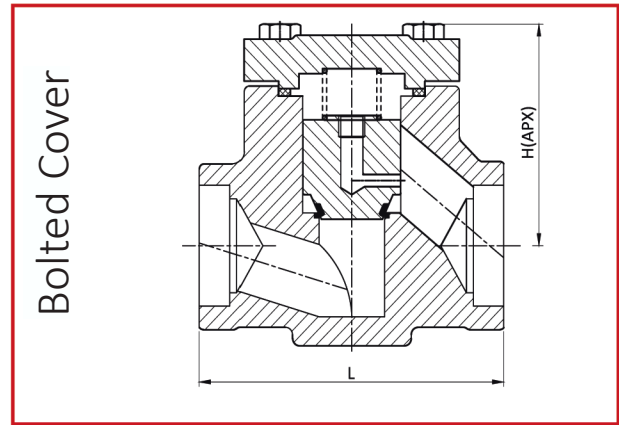
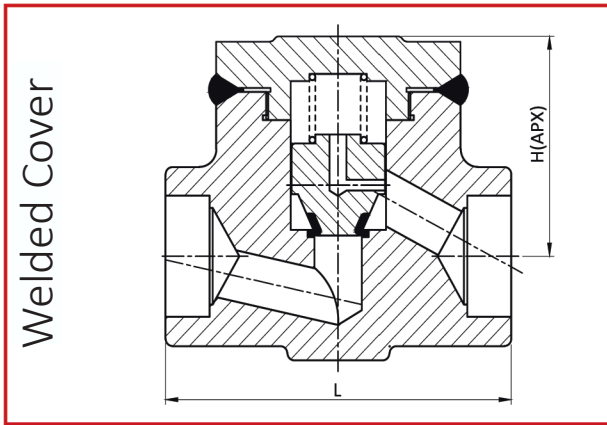


- Recessed body-bonnet joint design captures the stainless steel spiral wound gasket ensuring body/bonnet sealing integrity.
- Body guided disc to ensure perfect alignment of disc and seat under large flow conditions and high velocity.

**Swing Check Variant**

Material List

No.	Description of parts	Material				
		Standard	High temperature	Stainless steel	Sour service	Low temperature
1	BODY	ASTM A105 N	ASTM A182-F11/F22	ASTM A182-F304/F316	ASTM A105 N	ASTM A350-LF2
2	COVER	ASTM A105 N	ASTM A182-F11/F22	ASTM A182-F304/F316	ASTM A105 N	ASTM A350-LF2
3	DISC	ASTM A182-F6a / A217 CA15	ASTM A182-F6a	ASTM A182-F304/F316	ASTM A182-F6a-NC	ASTM A182-F304/F316
4	GASKET	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE	304/316SS SPIRAL WOUND GRAPHITE
5	STUD	ASTM A193-B7	ASTM A193-B16	ASTM A193-B8	ASTM A193-B7M	ASTM A320-L7M
6	NAME PLATE	ASTM A240-304	ASTM A240-304	ASTM A240-304	ASTM A240-304	ASTM A240-304
7	SEAT	INTEGRAL/OVERLAY	INTEGRAL/OVERLAY	INTEGRAL/OVERLAY	INTEGRAL/OVERLAY	INTEGRAL/OVERLAY



Dimensions

WELDED COVER (SOCKET WELD END / BUTT WELD END / SCREWED END)								
CLASS	SIZE		L		H		Wt. (Approx.) KG	
	INCH	MM	RB	FB	RB	FB	RB	FB
800#	1/2	15	90	90	54.3	56.5	2.1	2.2
	3/4	20	90	102	56.5	66.5	2.2	3.6
	1	25	102	130	66.5	90	3.6	6.75
	1 1/2	40	130	148	90	105	6.75	12.85
	2	50	148	180	105	125	12.85	24.5

1500#	1/2	15	90	90	50	50	1.3	1.3
	3/4	20	90	102	52	63	1.4	2.6
	1	25	102	130	63	63	2.6	2.6
	1 1/2	40	130	130	85	85	5.2	5.2
	2	50	148	148	90	90	8.8	8.8

2500#	1/2	15	90		47		1.4	
	3/4	20	102		77		2.6	
	1	25	130		87		5.2	
	1 1/2	40	148		93		8.8	
	2	50	180		109		15	

BOLTED COVER (SOCKET WELD END / BUTT WELD END / SCREWED END)								
CLASS	SIZE		L		H		Wt. (Approx.) KG	
	INCH	MM	RB	FB	RB	FB	RB	FB
800#	1/2	15	90	90	54.3	56.5	2.1	2.2
	3/4	20	90	102	56.5	66.5	2.2	3.6
	1	25	102	130	66.5	90	3.6	6.8
	1 1/2	40	130	148	90	105	6.8	12.9
	2	50	148	180	105	125	12.9	24.5

1500#	1/2	15	90	90	56	56	2.2	2.2
	3/4	20	102	130	66.5	90	3.6	7
	1	25	130	130	90	90	7	7
	1 1/2	40	148	148	90	110	7	12.9
	2	50	180	180	110	128	12.9	24.5

2500#	1/2	15	102		77		2.6	
	3/4	20	130		87		5.2	
	1	25	148		93		8.8	
	1 1/2	40	279		175		28	
	2	50	279		175		28	



Dimensions

INTEGRAL FLANGE ENDS						
CLASS	SIZE		L	H		Wt. (Approx.) KG
	INCH	MM		RB	FB	
150#	1/2	15	108	50.3	55	3.1
	3/4	20	117	55	63.6	4.5
	1	25	127	63.5	85	6.1
	1 1/2	40	165	85	99.6	10.6
	2	50	203	99.6	117.6	17.1

300#	1/2	15	152	50.3	55	3.6
	3/4	20	178	55	63.6	6.1
	1	25	203	63.5	85	7.2
	1 1/2	40	229	85	99.6	13
	2	50	267	99.6	117.6	22.8

600#	1/2	15	165	50.3	55	3.7
	3/4	20	190	55	63.6	6.3
	1	25	216	63.5	85	7.4
	1 1/2	40	241	85	99.6	15.3
	2	50	292	99.6	117.6	23



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