RAPID VALVES

Always in Control

RAPID VALVES

Plant at Palghar

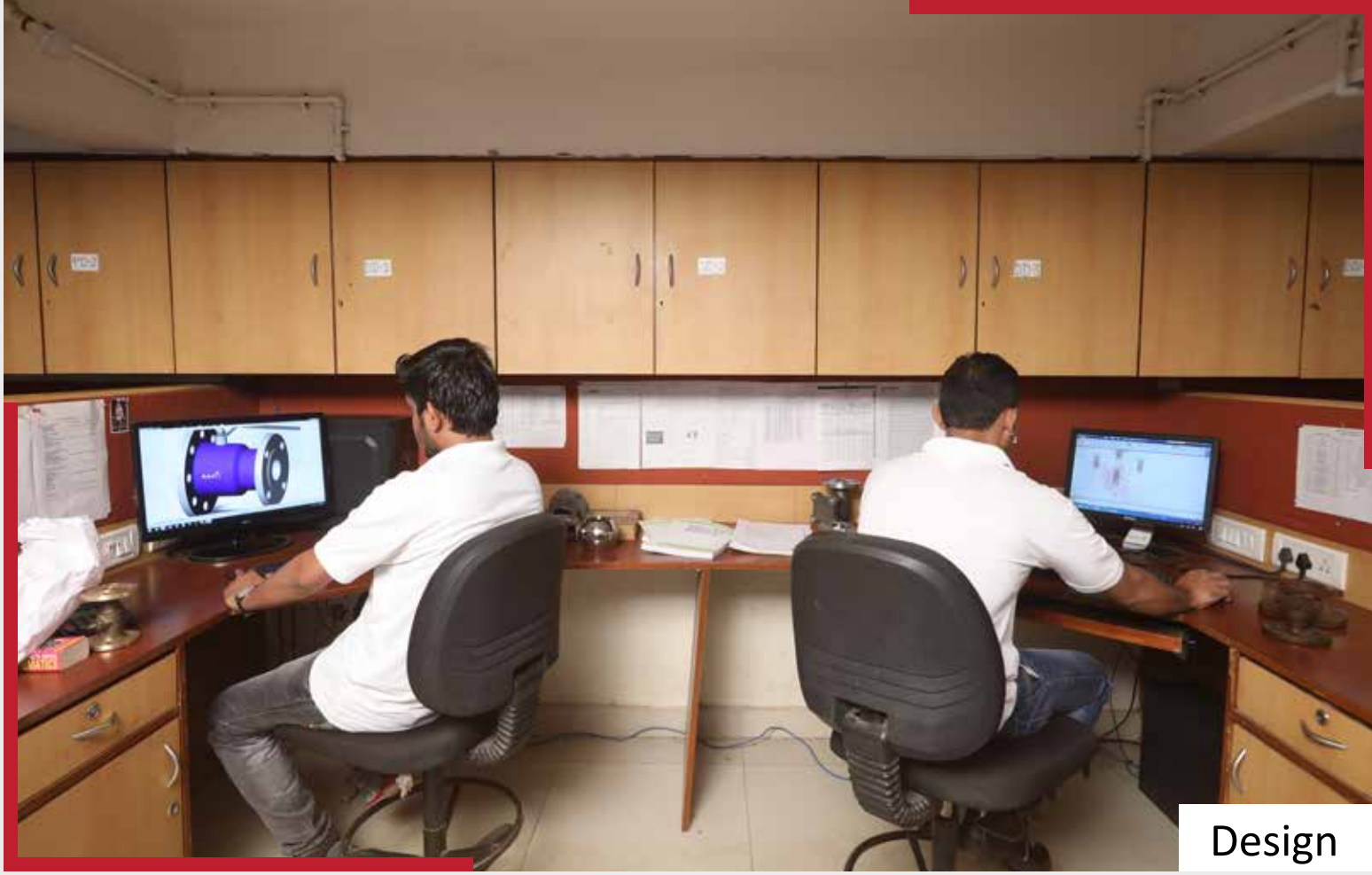
RAPID VALVES

Shop Floor

Core Team

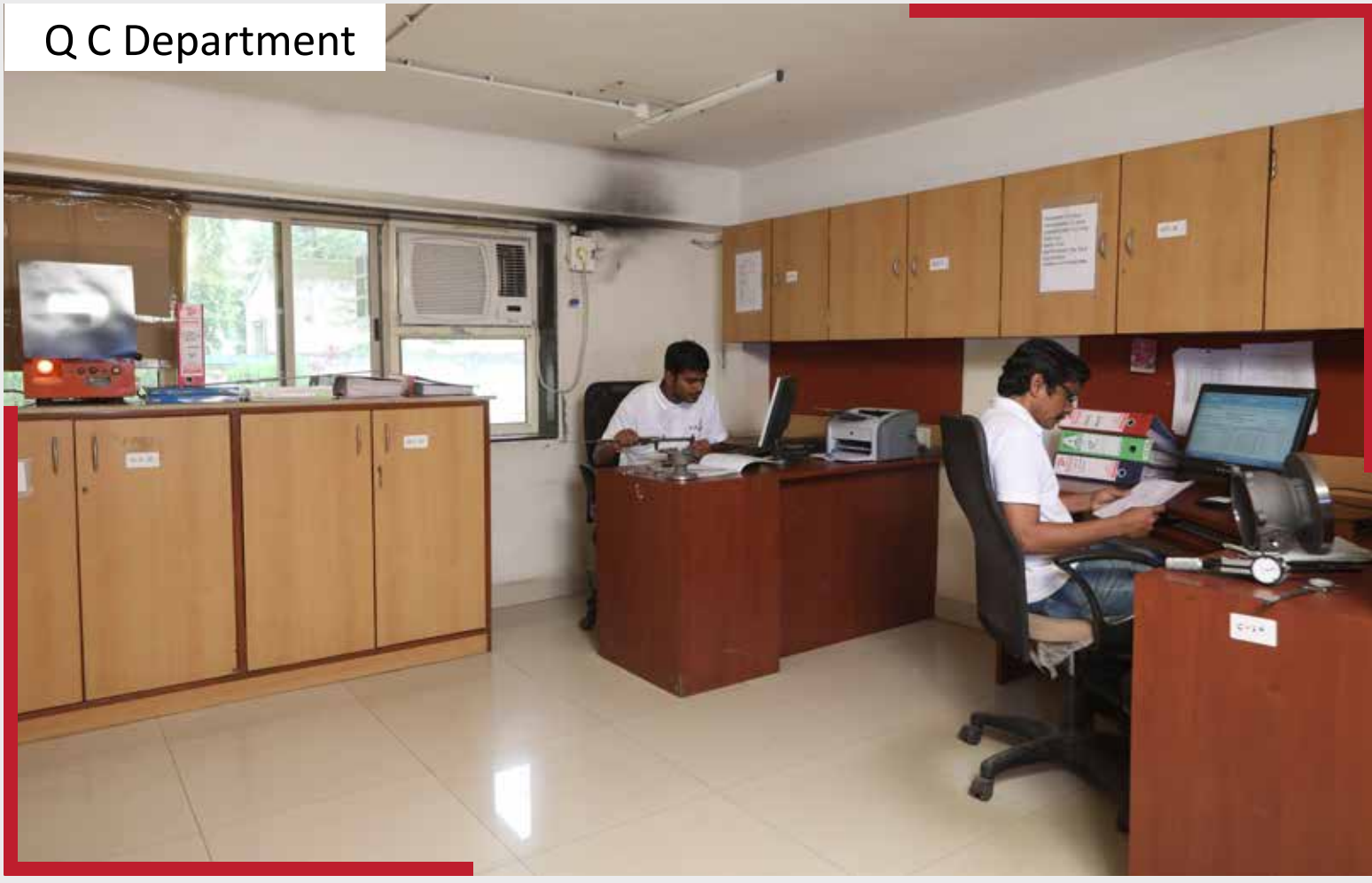
Conference

Reception



Design

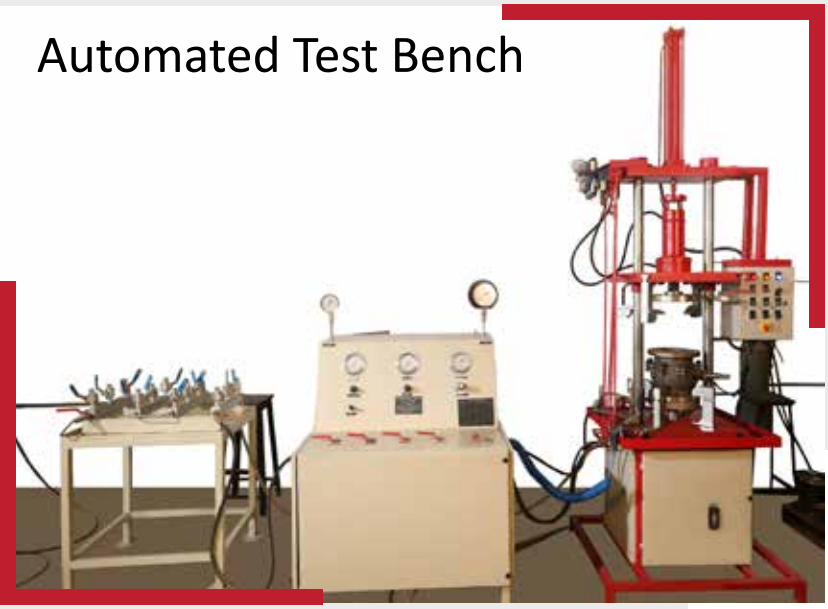
Q C Department



Paint Shop

CNC Facility

Automated Test Bench



Laser Machine

Certificates

IRCLASS
SYSTEMS AND SOLUTIONS PRIVATE LIMITED

CERTIFICATE OF APPROVAL

Issued by Indian Register Quality Systems
(A Division of IRCLASS Systems and Solutions Private Limited)

This is to certify that the Quality Management Systems of

Organisation: Rappid Valves (India) Pvt. Ltd.

Address: Genesis Industrial Township Plot No.30,

bsi.

By Royal Charter

Statement of Compliance

This is to certify that

M/S RAPPID VALVES (INDIA) PRIVATE LIMITED
GENISES INDUSTRIAL COMPOUND, PLOT NO. 30 & 31,
VILLAGE KOLGAON, PALGHAR EAST, PALGHAR - 401404, MAHARASHTRA, INDIA.

The system established by M/S RAPPID VALVES (INDIA) PRIVATE LIMITED has been assessed from August 2017 to March 2018 by British Standards Institution (BSI) for Praj Green Protocol for Vendors based on various aspects of environment compliance required for "Business Sustainability".

We confirm that the system established conforms to the requirements of Praj Green Protocol for Vendors (PGPV) & you have been certified under "Level 2 Category" of Green Protocol Program of Praj Industries Ltd.

Praj Green Protocol (PGPV) covers below aspects of environment compli

DET NORSKE VERITAS

TO,
RAPID VALVES (INDIA) PVT. LTD.

Dear sir,
Reference to your Letter Ref, No : Email Dated 2008-08-12 requesting us to witness fire testing of 8" class 150 2PC BALL VALVE, our undersigned surveyor visited your works on 16th July 2008 and witnessed the same .

FIRE TEST WITNESS REPORT

Description of valve tested :

Manufacturing standard	: BS- 5351, API-6D/B16.34
Type	: BALL VALVE ,2 PC, FP
Size /class	: DN200 CLASS 150
Valve sl.no	: S 4437
Heat no.	: BODY:160D08, 9E08
Adapter Flange	: 160D08, 9E08
Drg.	: RV/BLV-2PC/FP/150/8/100

Material of construction

1) Body & Side Piece	: ASTM A 216 GR.WCB
2) Ball	: AISI 304
3) Stem	: AISI 304
4) Seat	: PTFE
5) Stem seal	: GRAFOIL
6) Fastnesrs	: ASTM 193 GR B7

Witnessed fire safe testing in accordance to BS EN ISO 10497 / API 607 and found the test results conforming with the below specifications.

Range Qualified:

This valve qualifies following sizes and class ratings as per API 607 & ISO 10497-5:2004 (IDENTICAL)

SIZE: 8" and Larger
Class: 150 & 300

N T RAO
Surveyor of DET NORSKE VERITAS AS

Our Offering

Typical Bolted Bonnet Gate Valve Structure

- **Body:**

  Body is cast to provide liberal strength to meet operating conditions and to permit unobstructed flow. Turbulence, erosion and pressure drop are minimized. All flanged and butt welding end valves are designed to confirm to CLASS B 16.5 and CLASS B16.34 standards.

- **Yoke & bonnet:**

  Some designs incorporate a two piece bonnet and yoke for NPS > 10". All bonnet assemblies are cast and finished to the same exacting to lerances as the bodies for accurate alignment of stems and ease of sealing. Bonnet joint varies from flat face gasket-joint to ring type bonnet joint, depending on class.

- **Seat rings:**

  Seat rings are seal welded to eliminate leak path behind rings and for long trouble free service. The surfaces are precision ground to fit accurately with the disc.

- **Disc:**

  Rappid's one piece flexible disc provides accurate alignment of mating seating surfaces so the valve can absorb piping strains without leakage. Also, it avoids any tendency to stick in the seated position. Valves are also furnished with solid wedge discs that have proved successful in millions of applications.

- **Stem:**

  The tee head disc stem connection prevents lateral strain on the stem for smooth, easy operation. Accurately cut threads engage the yoke sleeve for positive control of disc position.

- **Yoke sleeve**
- **Handwheel nut**
- **Yoke sleeve retaining nut**
- **Packing:**

  Packing contains corrosion inhibitor to avoid stem pitting. Stuffing box is deep, assuring long packing life.

- **Gland:**

  Gland is a two piece ball type which exerts even pressure on the packing without binding the stem.

- **Gland flange**
- **Gland Eye Bolts:**

  Eyebolts swing aside for ease in repacking the stuffing box.

- **Gland eye bolt nuts**
- **Bonnet gasket**
- **Bonnet studs:**

  Number is dependent on valve size and class.

- **Bonnet nuts:**

  Number is dependent on valve size and class.

- **Groove pin**
- **Bonnet bushing**
- **Handwheel:**

  Rappid's Gate Valves can also be supplied with gear or motor operators.

- **Hydraulic grease fitting:**

  Hydraulic grease fitting provides for lubrication of yoke sleeve bearing surfaces (not shown).

Cast Steel Gate Valve with Fixed Handwheel and Rising Stem

(OS&Y - Outside Screw and Yoke)

Stem Nut, replaceble in line.

Rising stem with precision ACME double thread for quick operation.

Stem-Gate connection designed so that under severe applied loads (stuck gate), the stem will fail outside of the stuffing box pressure boundry.

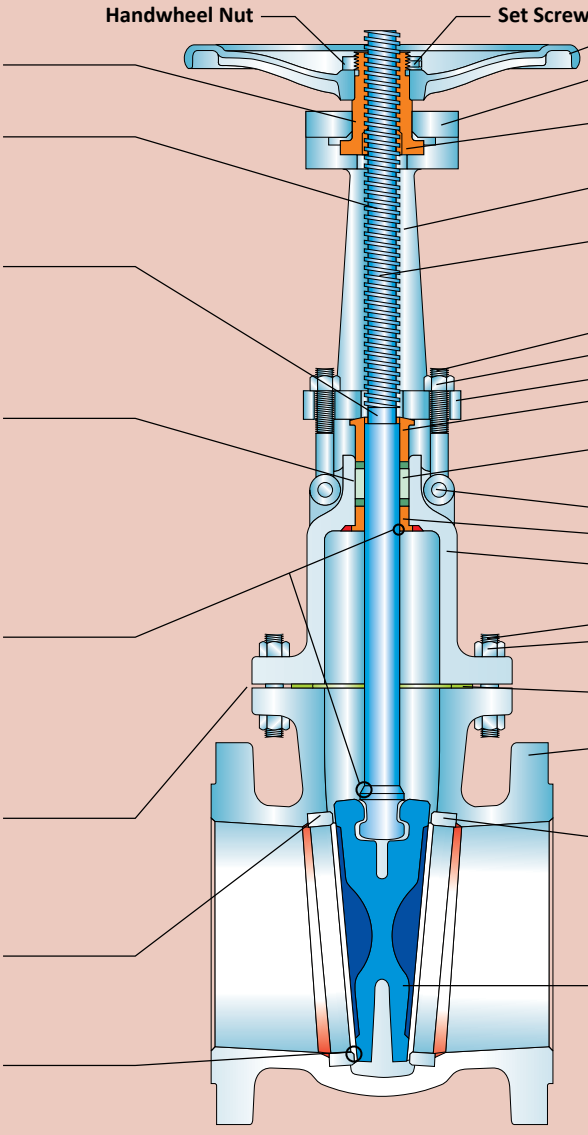
Stem Packing is designed for optimum control of fugitive emission leakage rate is assured by the fine finishing on the stem sealing area, the reduced diametrical clearances and the stem straightness control.

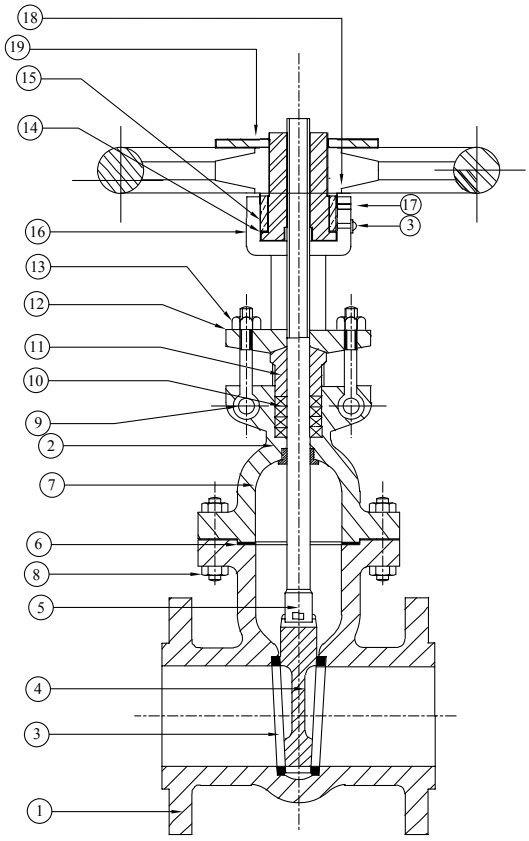
Backseat, designed to relieve back pressure on the stem packing when fully seated. Replacing stem packing under pressure is not recommended.

Body-to-Bonnet joint designed to apply a uniform load to the gasket to assure a leak proof seal.

Seat rings are threaded/seal welded to provided a bubble tight joint.

Stellited Seat Rings provide increased resistance to wear, abrasion and erosion of the sealing surfaces.





Design Standards

1. Design and Manufacturer Standard API 600/BS1414
2. End to End Dimensions Standard ASME B 16.10
3. Flange Dimensions Standard ASME B 16.5
4. Testing Standard BS EN 12266
5. Material Pressure - Temp Standard ASME B 16.34

TEST PRESSURE			
1. Pressure Grade	Class 150	Class 300	Class 600
2. Shell Test Pressure	3.0 MPa	7.5 MPa	16.5 MPa
3. Sealing Test Pressure	2.2MPa	5.5MPa	12.1MPa
4. Back Sealing Pressure	2.2MPa	5.5MPa	12.1MPa
5. Sealing Air Pressure	0.8MPa	0.8MPa	0.8MPa

1MPa = 10Bar

Special Features :

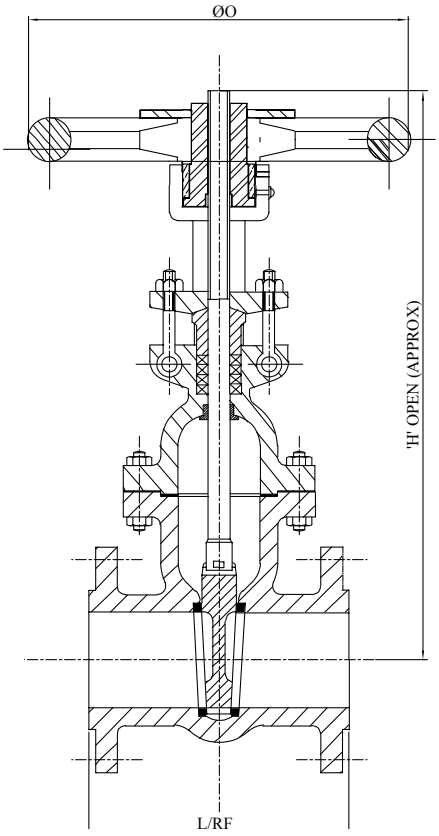
- Bypass Arrangement
- Jacketed
- Motorized / Actuator

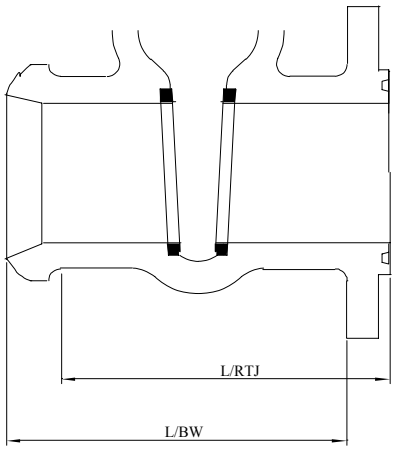
Part Details Table

SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	A 216 G R WCB	ASTM A351 CF8	ASTM A351 CF8M
2	BONNET	A 216 G R WCB	ASTM A351 CF8	ASTM A351 CF8M
3	SEAT RING	A216 WCB + 13% Cr	ASTM A351 CF8	ASTM A351 CF8M
4	WEDGE	A216 GR + 13% Cr	ASTM A351 CF8	ASTM A351 CF8M
5	SPINDLE	A 276 TP 410	A 276 TP 304	A 276 TP 316
6	GASKET	CAF/SOFT IRON	SS304 SPIRAL WOUND/PTFE	SS316 SPIRAL WOUND/PTFE
7	BACK SEAT BUSH	A 276 TP 410	ASTM A351 CF8	ASTM A351 CF8M
8	BODY BONNET S & N	ASTM A 193 GR B7/A 194 GR 2 H	ASTM A 193 GR B8/A 194 GR 8	ASTM A 193 GR B8M/A 194 GR 8M
9	CROSS BOLT & NUT	ASTM A 193 GR B7/A 194 GR 2 H	ASTM A 193 GR B8/A 194 GR 8	ASTM A 193 GR B8M/A 194 GR 8M
10	GLAND PACKING	BRAIDED ASBESTOS WITH REINFORCE WIRE	GRAPHITE/PTFE ROPE	GRAPHITE/PTFE ROPE
11	GLAND	A 276 TP 410	A 276 TP 304	A 276 TP 316
12	GLAND FLANGE	A 216 WCB	ASTM A 351 CF8	ASTM A 351 CF8M
13	EYE BOLT & NUT	ATSM A 193 GR B7/A194 GR 2H	ATSM A 193 GR B8/A194 GR 8	ATSM A 193 GR B8M/A194 GR 8M
14	YOKE SLEEVE	S G IRON / ASTM A439 D2C	S G IRON / ASTM A439 D2C	S G IRON / ASTM A439 D2C
15	YOKE NUT	C S	C S	C S
16	GRUB SCREW	STEEL	STEEL	STEEL
17	NIPPLE	STEEL	STEEL	STEEL
18	HAND WHEEL	C.I/M.I/CS	C.I/M.I/CS	C.I/M.I/CS
19	HAND WHEEL NUT	C S	C S	C S

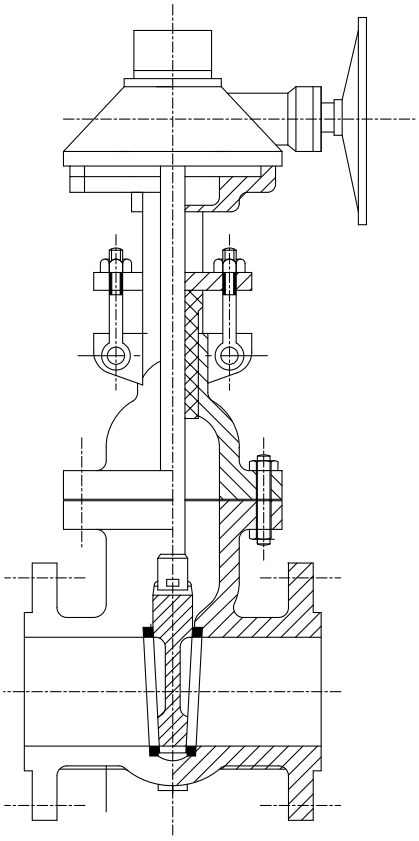
*Also Available in LCB, HIGH ALLOY STEEL and any special material, Hastalloy 'B' & 'C', Monel Stellite Facing and any other specified material.
*(Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

Dimensions





Bolt Weld & RTJ



Gear Box Arrangement

CLASS 150																
SIZE NPS (Inch)			1	1 1/2	2	21/2	3	4	6	8	10	12	14	16	18	20	24
SIZE DN (MM)			25	40	50	65	80	100	150	200	250	300	350	400	450	500	600
L	RF	MM	127	165	178	190	203	229	267	292	330	356	381	406	432	457	508
L	BW	MM	-	-	216	241	282	305	403	419	457	502	572	610	660	711	813
L	RTJ	MM	-	-	191	203	216	242	280	305	343	369	394	419	445	470	521
H	OPEN	MM	210	350	405	435	530	579	770	980	1170	1370	1500	1760	1975	2225	2680
ØO		MM	150	150	210	210	230	255	310	380	460	510	560	610	700	700	800
Wt. App		Kg	11	14	18	25	32	52	78	132	205	320	425	508	670	840	1210

CLASS 300																	
SIZE NPS (Inch)			1	1 1/2	2	21/2	3	4	6	8	10	12	14	16	18	20	24
SIZE DN (MM)			25	40	50	65	80	100	150	200	250	300	350	400	450	500	600
L	RF/BW	MM	165	190	216	241	282	305	403	419	457	502	762	838	432	457	508
L	RTJ	MM	-	-	232	257	298	321	419	435	473	518	778	854	930	1010	1165
H	OPEN	MM	220	360	410	490	510	590	835	1020	1260	1470	1660	1840	2025	2295	3040
ØO		MM	150	150	210	210	230	255	380	460	510	560	610	700	700	800	1100
Wt. App		Kg	15	22	28	37	43	72	128	210	355	450	760	980	1265	1825	2425

CLASS 600																	
SIZE NPS (Inch)			1	1 1/2	2	21/2	3	4	6	8	10	12	14	16	18	20	24
SIZE DN (MM)			25	40	50	65	80	100	150	200	250	300	350	400	450	500	600
L	RF/BW	MM	216	242	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L	RTJ	MM	-	-	295	333	359	435	562	663	790	841	892	994	1095	1200	1407
H	OPEN	MM	230	360	415	510	540	640	910	1330	1415	1740	1760	1885	2135	2370	2800
ØO		MM	160	216	216	216	230	255	310	380	460	510	560	610	700	700	800
Wt. App		Kg	20	29	35	48	60	110	210	360	685	970	1239	1840	2380	2710	4190

Rappid valves are available with an option of flexible wedges and solid wedges to meet customer requirements.

Flexible Wedge Characteristics



- Provides resistance to possible wedge/seat sticking from high temperature to low temperature fluctuations by compensating for the resulting small body/seat movement.
- Facilitates seating and sealing and assures a long wear life.
- Susceptible to build up when used with fluids having a high solid content.

Solid Wedge Characteristics


- More susceptible to wedge/seat “sticking” and difficulty in opening when closed hot and allowed to cool due to the resulting small body/seat movement.
- Less able to compensate for the normal wedge/seat wear over the long term.
- Will handle fluids with a high solid content without difficulty.

Globe Valve

Cast Steel Globe Valve with Rising Handwheel and Stem

Impactor, Hadwheel, the mechanism is based on transmitted the momentum generated but the mass of the handwheel through the impact/impulse generated during the snap closure action of the handwheel. This type of handwheel is used when a standard handwheel cannot create enough closing force to effect a seal.

Stem Nut replaceable in the line.

Revolving rising stem with precision ACME thread.

Stem packing is designed for optimum control of fugitive emissions leakage to the atmosphere. The ultra low emission leakage rate is assured by the fine finish in the stem, the reduced diametrical clearances and the stem straightness control.

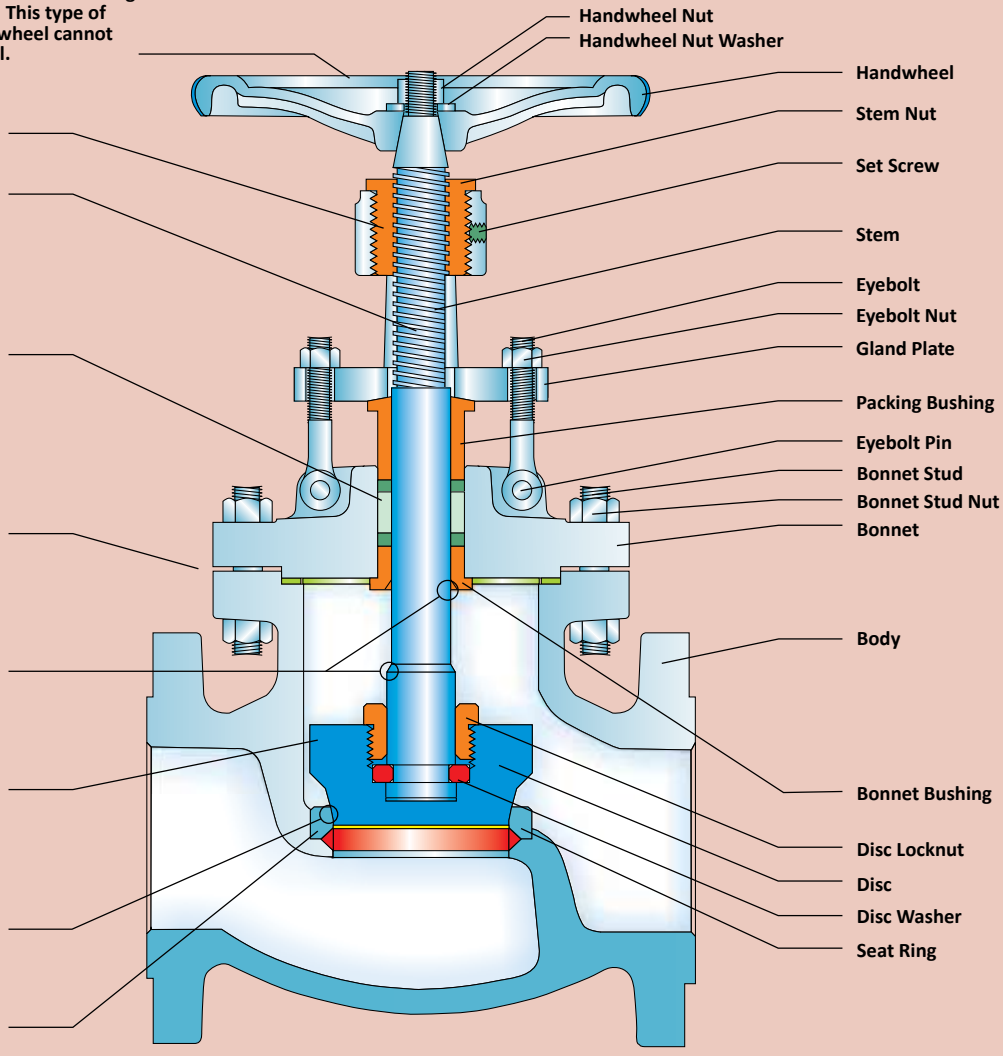
Body-to-Bonnet Joint designed to apply a uniform load to the gasket to assure a leak proof seal.

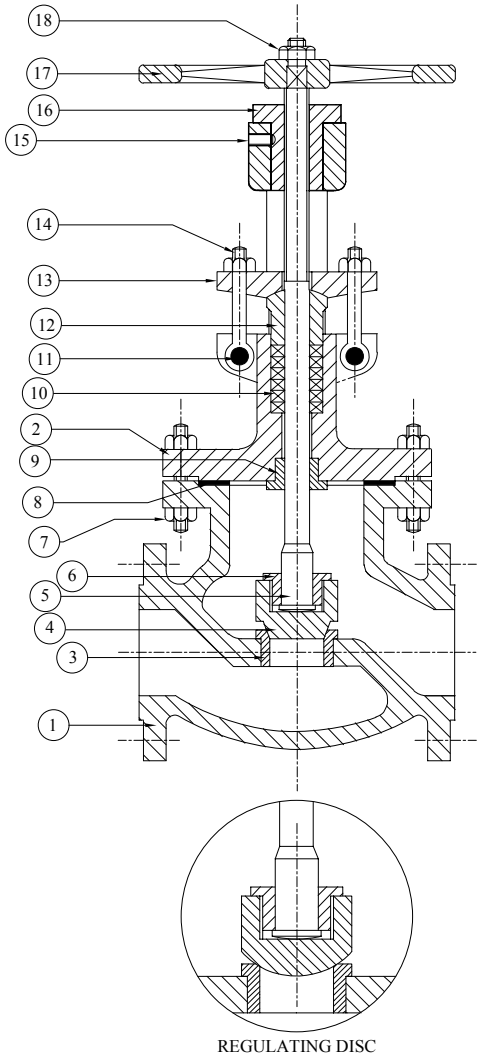
Backseat designed to relieve back pressure on the stem packing when fully seated. Replacing stem packing under pressure is not recommended.

Conical Disc, integrally guided to assure true alignment between disc and valve body. The loose disc design allows the disc and seat rising sealing surface to seat correctly without damage.

Stellited Seat Ring, providing increased resistance to ware, abrasion and erosion of the sealing surface.

Seat rings are threaded/seal welded to provided a bubble tight joint.





Design Standards

1. Design and Manufacture Standards BS 1873
2. Material Pressure - Temp Standards ASME B16.34
3. End-to-End Standard ASME B 16.10
4. Flange Ends Dimensions ASME B 16.5
5. Test Standards BS EN 12266

TEST PRESSURE			
1. Pressure Grade	Class 150	Class 300	Class 600
2. Shell Test Pressure	3.0 MPa	7.5 MPa	16.5 MPa
3. Sealing Test Pressure	2.2MPa	5.5MPa	12.1MPa
4. Back Sealing Pressure	2.2MPa	5.5MPa	12.1MPa
5. Sealing Air Pressure	0.8MPa	0.8MPa	0.8MPa

1MPa = 10Bar

Special Features :

- Bypass Arrangement
- Jacketed
- Motorized / Actuator
- Gear Box

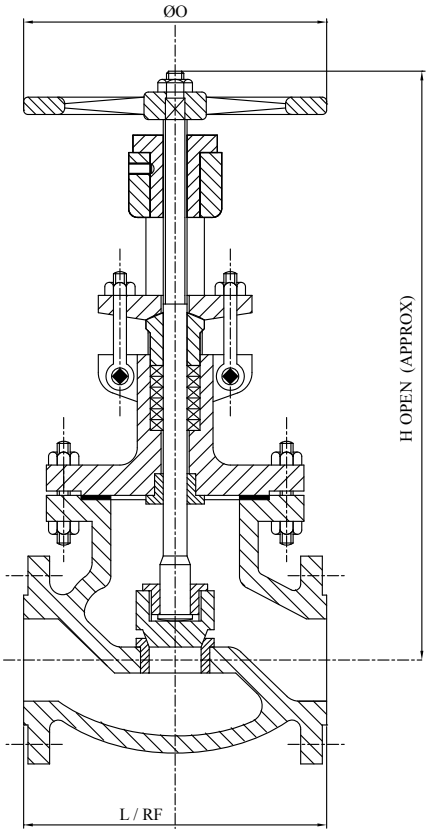
Part Details Table

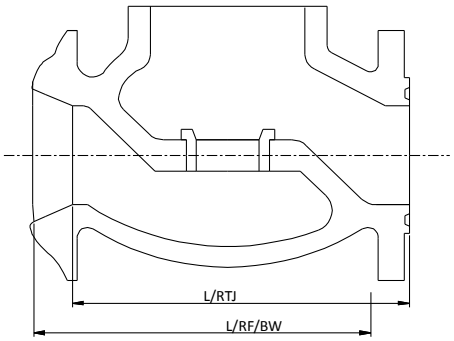
SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	ASTM A 216 WCB.	ASTM A 351 CF8.	ASTM A 351 CF8M.
2	BONNET	ASTM A 216 WCB.	ASTM A 351 CF8.	ASTM A 351 CF8M.
3	SEAT RING	ASTM A 216 + 13% CR.	ASTM A 351 CF8.	ASTM A 351 CF8M.
4	PLUG	ASTM A 216 + 13% CR.	ASTM A 351 CF8.	ASTM A 351 CF8M.
5	SPINDLE	A 276 TP 410.	A 276 TP 304.	A 276 TP 316.
6	PLUG NUT	CS	A 276 TP 304.	A 276 TP 316.
7	STUD AND NUT	ASTM A 193 GR B7 & A194 GR 2H	ASTM A 193 GR B8 & A194 GR 8	ASTM A 193 GR B8M & A194 GR 8M
8	GASKET	CAF	SS SPIRAL WOUND / PTFE.	SS SPIRAL WOUND / PTFE.
9	BACK SEAT	A 276 TP 410.	A 276 TP 304.	A 276 TP 316.
10	GLAND PACKING	GRAPHITE ASBESTOS.	PTFE ROPE.	PTFE ROPE.
11	CROSS BOLT	ASTM A 193 GR B7 & A194 GR 2H	ASTM A 193 GR B8 & A194 GR 8.	ASTM A 193 GR B8M & A194 GR 8M.
12	GLAND	A 276 TP 410.	A 276 TP 304.	A 276 TP 316.
13	GLAND FLANGE	ASTM A 216 WCB.	ASTM A 351 CF8.	ASTM A 351 CF8M.
14	EYE BOLT AND NUT	ASTM A 193 GR B7 & A194 GR 2H	ASTM A 193 GR B8 & A194 GR 8	ASTM A 193 GR B8M & A194 GR 8M
15	GRUB SCREW	CS	CS	CS
16	YOKE SLEVEE	SG IRON/ASTM A 439 D2.	SG IRON/ASTM A 439 D2C.	SG IRON/ASTM A 439 D2C.
17	HAND WHEEL	M I / C.I	M I / C.I	M I / C.I
18	HAND WHEEL NUT	C S	C S	C S

*Also Available in LCB, HIGH ALLOY STEEL and any Special Material, Hastalloy 'B' & 'C', Monel Stellite Facing.

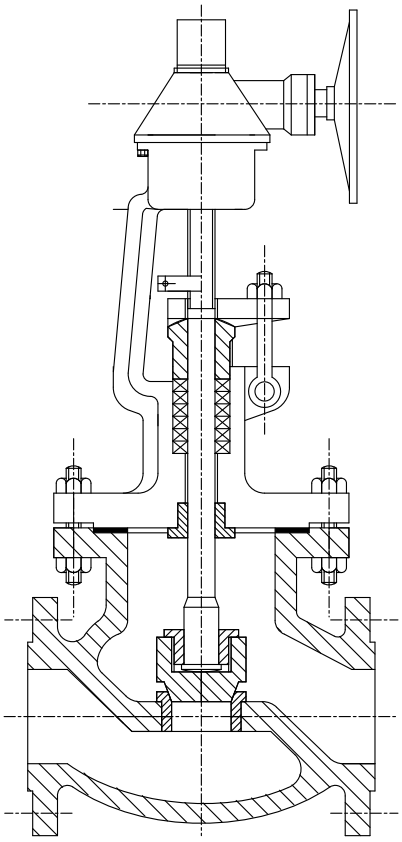
*(Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

Dimensions





Bolt Weld & RTJ



Gear Box Arrangement

CLASS 150												
SIZE NPS (Inch)			1	1 1/2	2	21/2	3	4	6	8	10	12
SIZE DN (MM)			25	40	50	65	80	100	150	200	250	300
L	RF/BW	MM	127	165	203	216	241	292	406	495	622	698
L	RTJ	MM	-	-	216	229	254	305	419	508	635	711
H	OPEN	MM	267	280	310	345	390	460	590	720	834	930
ØO		MM	150	150	230	230	254	350	458	560	565	710
Wt. App		Kg	9	12	18	25	32	52	78	132	205	320

CLASS 300												
SIZE NPS (Inch)			1	1 1/2	2	21/2	3	4	6	8	10	12
SIZE DN (MM)			25	40	50	65	80	100	150	200	250	300
L	RF/BW	MM	203	229	267	292	318	356	444	559	622	711
L	RTJ	MM	-	-	283	308	334	372	460	575	638	727
H	OPEN	MM	270	284	379	428	525	618	746	875	955	1050
ØO		MM	150	200	255	350	350	458	560	620	700	700
Wt. App		Kg	12	21	28	42	56	110	158	285	375	520

ASA 600											
SIZE NPS (Inch)			1	1 1/2	2	21/2	3	4	6	8	10
SIZE DN (MM)			25	40	50	65	80	100	150	200	250
L	RF/BW	MM	216	242	292	330	356	432	559	660	787
L	RTJ	MM	-	-	295	333	359	435	562	663	790
H	OPEN	MM	200	300	385	430	535	625	850	930	1135
ØO		MM	205	254	350	350	458	560	620	700	700
Wt. App		Kg	18	32	41	63	71	110	240	435	665

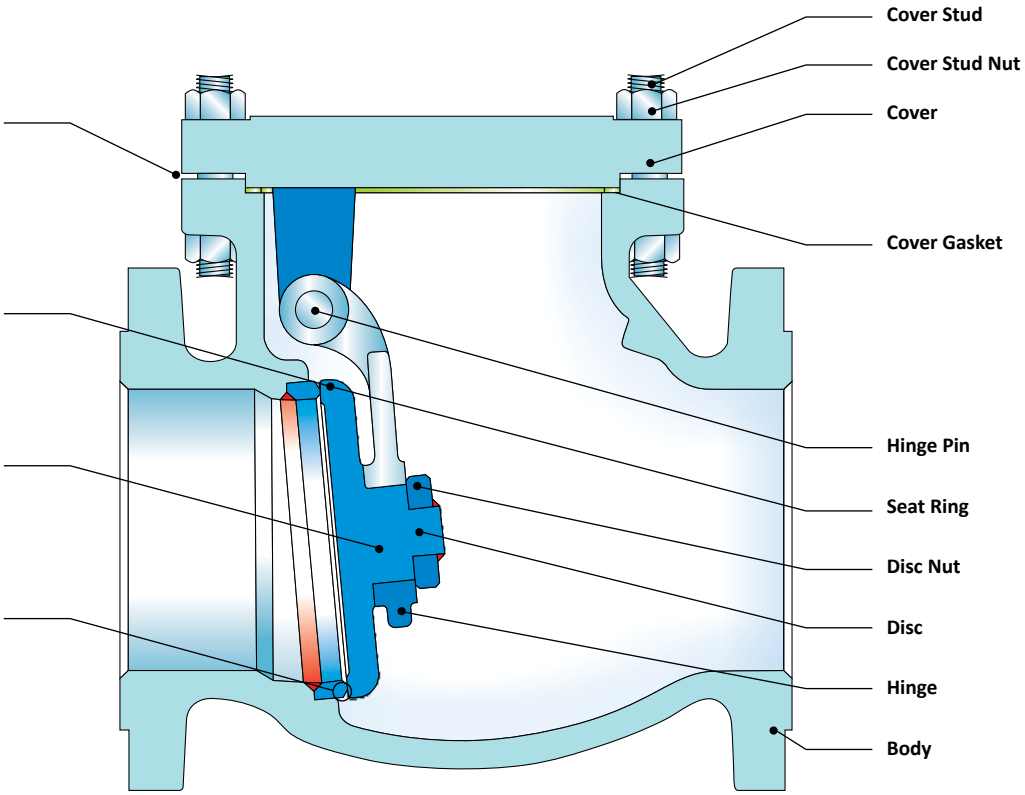
Cast Steel Swing Check Valve

Body to Cover Joint designed to apply a uniform load to the gasket to assure a leak proof seal. Seat Ring are seal welded to provide a bubble tight joint.

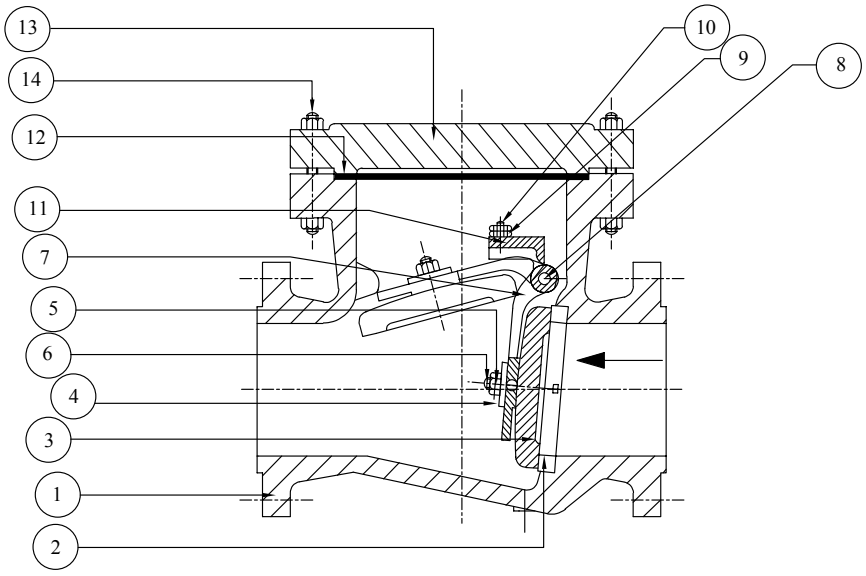
Disc-to-Hanger connection allows the disc a controlled movement independent of the hanger to assure proper disc alignment with the seal at closer.

The connection is secured by a welded disc nut to prevent disassembly due to vibration and closure impact.

Stellited Seat Ring provides incresed resistance to wear abrasion and erosion of the sealing surface.



Swing Check Valve



Design Standards

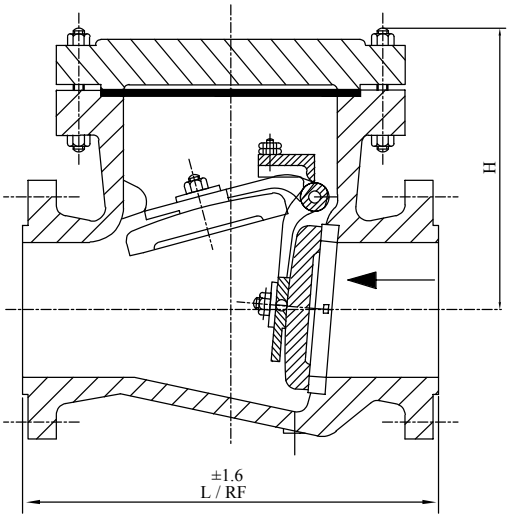
1. Design and Manufacture Standards BS 1868
2. Material Pressure - Temp Standards ANSI B16.34
3. End-to-End Standard ANSI B 16.10
4. Flange Ends Dimensions ANSI B 16.5
5. Test Standards BS EN 12266

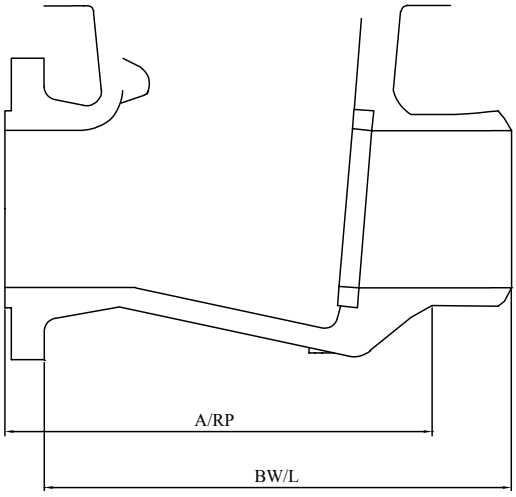
TEST PRESSURE			
1. Pressure Grade	Class 150	Class 300	Class 600
2. Shell Test Pressure	3.0 MPa.	7.5 MPa.	16.5 MPa.
3. Sealing Test Pressure	2.2MPa.	5.5MPa.	12.1MPa.

1MPa = 10Bar

Part Details Table				
SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	ASTM A216 WCB	ASTM A351CF8	ASTM A351 CF8M
2	SEAT RING	ASTM A216 WCB + 13% Cr	ASTM A351 CF8	ASTM A351 CF8M
3	DISC	ASTM A216 WCB + 13% Cr	ASTM A 351 CF8	ASTM A 351 CF8
4	WASHER	A 276 TP 410	A 276 TP 304	A 276 TP 316
5z	SPLIT PIN	A 276 TP 410	A 276 TP 304	A 276 TP 316
6	DISC NUT	A 276 TP 410	A 276 TP 304	A 276 TP 316
7	HINGE	A 276 TP 410	A 276 TP 304	A 276 TP 316
8	HINGE PIN	A 276 TP 410	A 276 TP 304	A 276 TP 316
9	LOCK NUT	A 276 TP 410	A 276 TP 304	A 276 TP 316
10	BRACKET STUD	A 276 TP 410	A 276 TP 304	A 276 TP 316
11	BEARING BRACKET	A 276 TP 410	A 276 TP 304	A 276 TP 316
12	GASKET	CAF/S S SPIRAL WOUND	PTFE/S S SPIRAL WOUND	PTFE/S S SPIRAL WOUND
13	COVER	ASTM A216 WCB	ASTM A351 CF8	ASTM A351 CF8M
14	STUD AND NUT	A 193 GR B7 & 194 GR 2H	A 193 GR B8 & 194 GR 8	A 193 GR B8M & 194 GR 8M

- Also Available LCB, HIGH ALLOY STEEL and any special material on request Hard Stellited Facing.
- (Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).





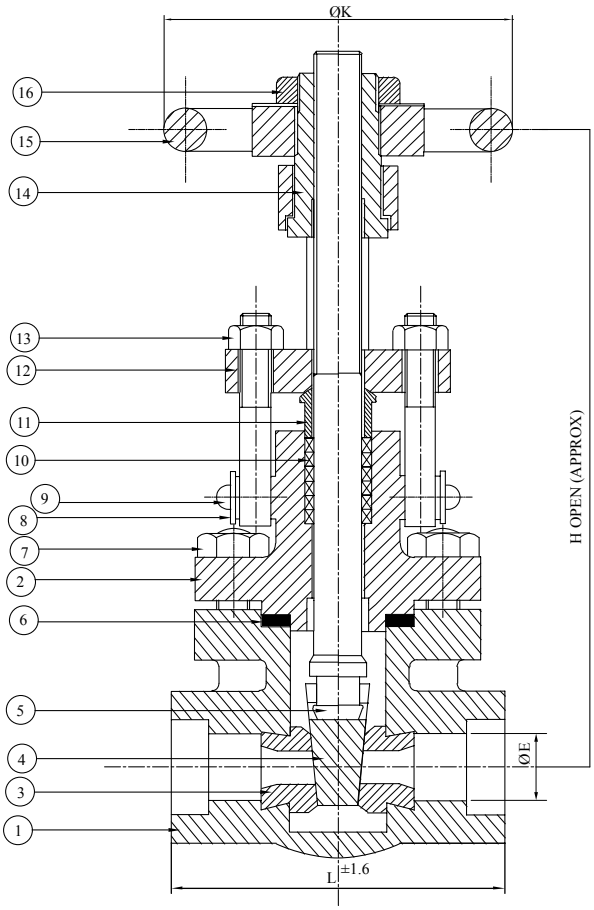
Bolt Weld & RTJ

CLASS 150															
SIZE NPS (Inch)			2	21/2	3	4	6	8	10	12	14	16	18	20	24
SIZE DN (MM)			50	65	80	100	150	200	250	300	350	400	450	500	600
L	RF/BW	MM	203	216	241	292	356	495	622	698	787	864	978	978	1295
L	RTJ	MM	216	229	254	305	369	508	635	711	800	877	991	991	1308
H		MM	137	158	173	208	254	308	335	368	435	512	575	635	735
Wt. App		Kg	15	23	28	46	75	130	240	298	530	615	815	935	1280

CLASS 300															
SIZE NPS (Inch)			2	21/2	3	4	6	8	10	12	14	16	18	20	24
SIZE DN (MM)			50	65	80	100	150	200	250	300	350	400	450	500	600
L	RF/BW	MM	267	292	318	356	444	533	622	711	838	864	978	1016	1346
L	RTJ	MM	283	308	334	372	460	549	638	727	854	880	994	1035	1368
H		MM	158	175	210	342	292	358	390	450	480	530	610	659	760
Wt. App		Kg	28	37	43	72	128	210	355	450	760	980	1265	1825	2425

ASA 600														
SIZE NPS (Inch)			2	21/2	3	4	6	8	10	12	14	16	18	20
SIZE DN (MM)			50	65	80	100	150	200	250	300	350	400	450	500
L	RF/BW	MM	292	330	356	432	559	660	787	838	889	991	1092	1194
L	RTJ	MM	295	333	359	435	562	663	790	841	892	994	1095	1200
H		MM	415	510	540	640	910	1330	1415	1740	1760	1885	2135	2370
Wt. App		Kg	35	48	62	110	215	390	485	735	895	1095	1830	1985

Bolted Bonnet Forged Gate Valve



Design Standards

1. Manufacturing Standards BS 5352
2. Testing Standards API 598
3. Socket Weld End as per ASME B 16.11
4. Butt Weld End as per ASME B 16.25
5. Screwed End as per ASME B1.20.1

TEST PRESSURE	
1. Pressure Grade	Class 800
2. Shell Test Pressure	21.1 MPA
3. Sealing Test Pressure	15.5 MPA
4. Back Sealing Pressure	15.5 MPA
5. Sealing Air Pressure	0.8 MPA

1MPa = 10Bar

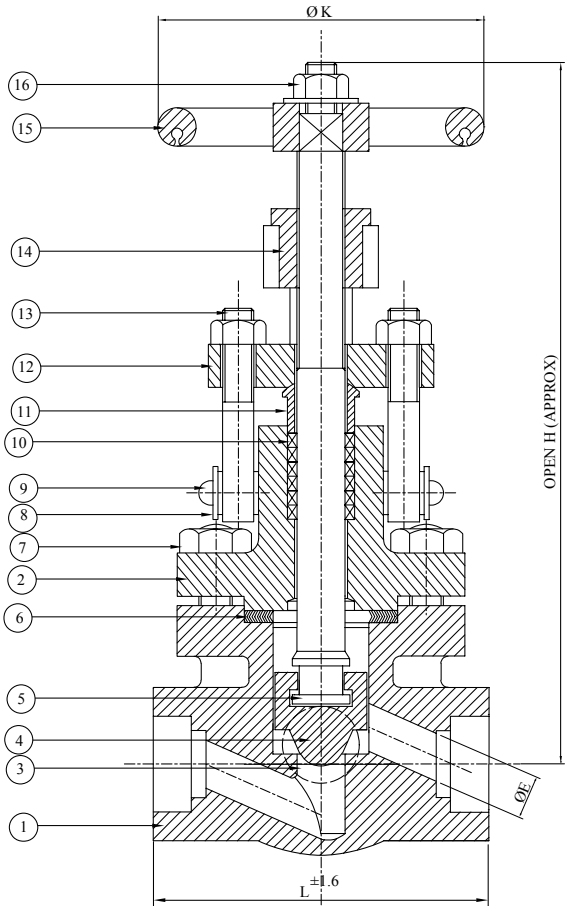
FACE TO FACE DIMENSIONS AS PER MANUFACTURING STANDARDS						
Size N.B.	MM	15	20	25	40	50
	INCH	1/2"	3/4"	1"	1 1/2"	2"
L		80	92	104	120	140
H		160	170	190	260	270
ØK		85	90	95	150	150
ØE		9	12	18	30	36

Part Details Table

SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	ASTM A 105 FCS	ASTM A 182 Gr F 316	ASTM A 182 Gr F 304
2	BONNET	ASTM A 105 FCS	ASTM A 182 Gr F 316	ASTM A 182 Gr F 304
3	SEAT RING	A 276 TP 410	A 276 TP 316	A 276 TP 304
4	WEDGE	A 276 TP 410	A 276 TP 316	A 276 TP 304
5	SPINDLE	A 276 TP 410	A 276 TP 316	A 276 TP 304
6	GASKET	SS 304 SPIRAL WOUND WITH GRAPHITE FILLER	316 SPIRAL WOUND WITH GRAPHITE FILLER	304 SPIRAL WOUND WITH GRAPHITE FILLER
7	STUD / NUT	A 193 GR B7 & A 194 GR 2 H	A 193 GR B7 & A 194 GR 2 H	A 193 GR B7 & A 194 GR 2 H
8	WASHER	STEEL	SS	SS
9	SCREW	STEEL	SS	SS
10	GLAND PACKING	GRAPHITED ASBESTOS	GRAPHITED ASBESTOS / PTFE	GRAPHITED ASBESTOS / PTFE
11	GLAND	A 276 TP 410	A 276 TP 316	A 276 TP 304
12	GLAND FLANGE	ASTM A 105 FCS	SS	SS
13	EYE BOLT & NUT	A 193 GR B7 & A 194 GR 2 H	A 193 GR B7 & A 194 GR 2 H	A 193 GR B7 & A 194 GR 2 H
14	YOKE STEEL	S.G. IRON	S.G. IRON	S.G. IRON
15	HAND WHEEL	M I	M I	M I
16	HAND WHEEL NUT	C S	C S	C S

(Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

Bolted Bonnet Forged Globe Valve



Design Standards

1. Manufacturing Standards BS 5352
2. Testing Standards BS EN 12266
3. Socket Weld End as per ASME B 16.11
4. Butt Weld End as per ASME B 16.25
5. Screwed End as per ASME B1.20.1

TEST PRESSURE	
1. Pressure Grade	Class 800
2. Shell Test Pressure	21.1 MPA
3. Sealing Test Pressure	15.5 MPA
4. Back Sealing Pressure	15.5 MPA
5. Sealing Air Pressure	0.7 MPA

1MPa = 10Bar

FACE TO FACE DIMENSIONS AS PER MANUFACTURING STD.						
Size N.B.	MM	15	20	25	40	50
	INCH	1/2"	3/4"	1"	1 1/2"	2"
L		80	92	104	120	140
H		160	170	185	266	266
ØK		90	90	90	150	150
ØE		9	12	17.5	29.5	35

Part Details Table

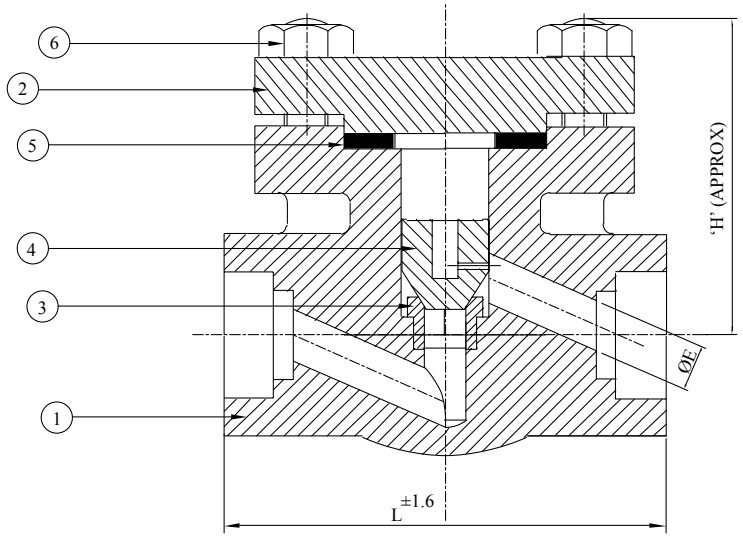
SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	ASTM A 105	ASTM A 182 Gr F 316	ASTM A 182 Gr F 304
2	BONNET	ASTM A 105	ASTM A 182 Gr F 316	ASTM A 182 Gr F 304
3	SEAT RING	A 276 TP 410	A 276 TP 316	A 276 TP 304
4	WEDGE	A 276 TP 410	A 276 TP 316	A 276 TP 304
5	SPINDLE	A 276 TP 410	A 276 TP 316	A 276 TP 304
6	GASKET	SS 304 SPIRAL WOUND WITH GRAPHITE FILLER	316 SPIRAL WOUND WITH GRAPHITE FILLER	304 SPIRAL WOUND WITH GRAPHITE FILLER
7	STUD / NUT	A 193 GR B7 & A 194 GR 2 H	A 193 GR B7 & A 194 GR 2 H	A 193 GR B7 & A 194 GR 2 H
8	WASHER	STEEL	SS	SS
9	SCREW	STEEL	SS	SS
10	GLAND PACKING	GRAPHITED ASBESTOS	GRAPHITED ASBESTOS / PTFE	GRAPHITED ASBESTOS / PTFE
11	GLAND	A 276 TP 410	A 276 TP 316	A 276 TP 304
12	GLAND FLANGE	ASTM A 105 FCS	SS	SS
13	EYE BOLT & NUT	A 193 GR B7 & A 194 GR 2 H	A 193 GR B7 & A 194 GR 2 H	A 193 GR B7 & A 194 GR 2 H
14	YOKE STEEL	S.G. IRON	S.G. IRON	S.G. IRON
15	HAND WHEEL	M I	M I	M I
16	HAND WHEEL NUT	C S	C S	C S

(Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

Bolted Bonnet Forged Lift Valve

Design Standards

1. Manufacturing Standard BS 5352
2. Testing Standard BS EN 12266
3. Socket Weld End as per ASME B 16.11
4. Butt Weld End as per ASME B 16.25
5. Screwed End as per ASME B1.20.1
6. SS valves will have integral seat



HYDROSTATIC TEST PRESSURE	PNEUMATIC
BODY	SEAT
21.1 MPA	15.5 MPA

1MPa = 10Bar

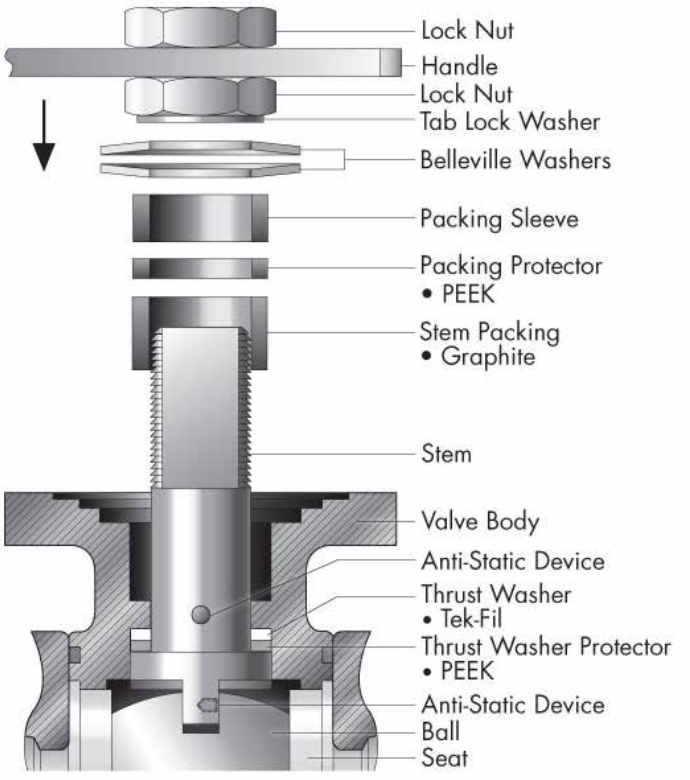
FACE TO FACE DIMENSIONS AS PER MANUFACTURING STANDARD						
Size N.B.	MM	15	20	25	40	50
	INCH	1/2"	3/4"	1"	1 1/2"	2"
L		85	92	109	127	140
H		56	56	74	88	97
ØE		9.5	12.7	17.5	28	34

Part Details Table

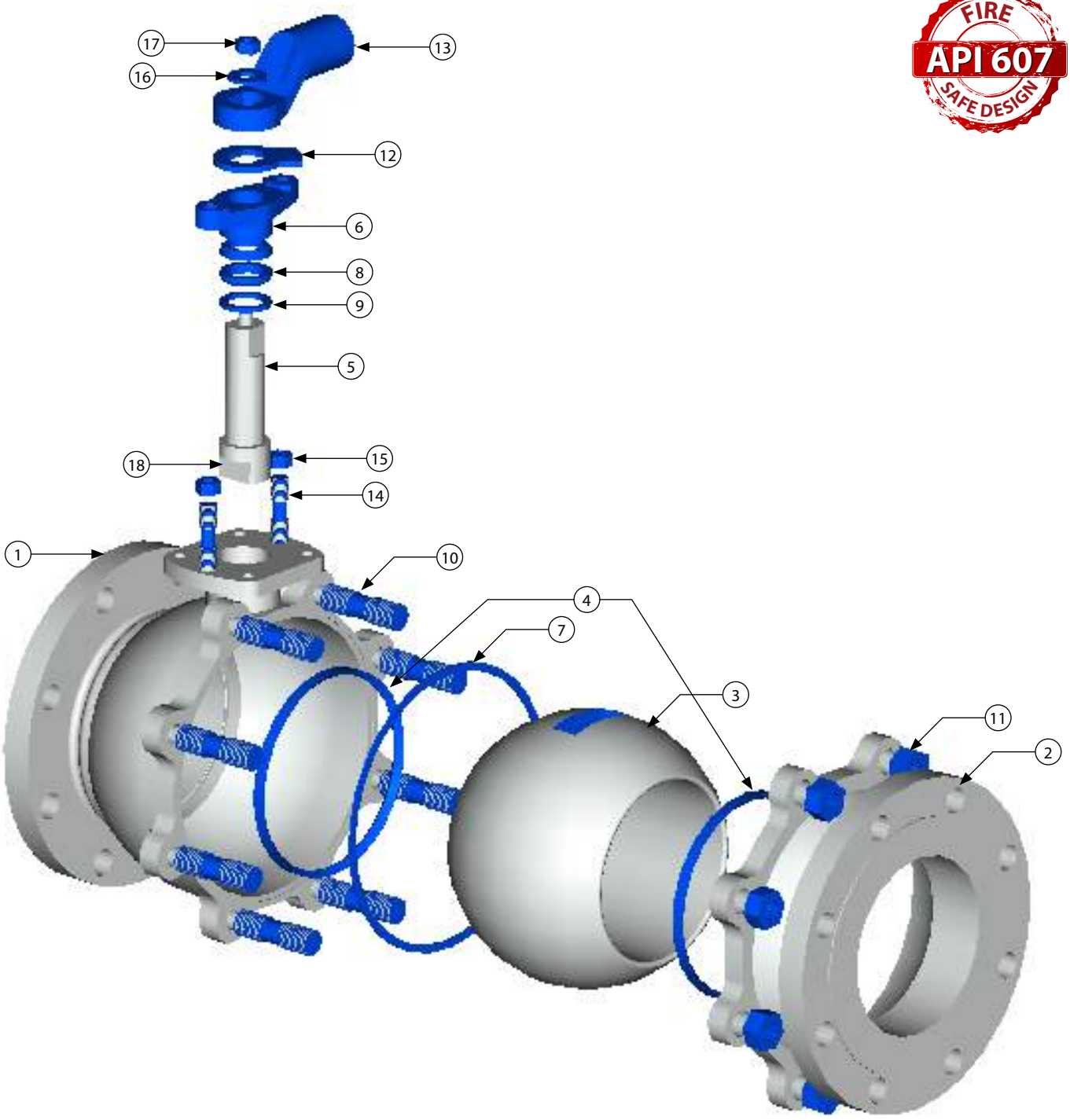
SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	ASTM 105 GR FCS	ASTM A 182 GR F304	ASTM A 182 GR F304
2	BONNET	ASTM A 105 GR FCS	ASTM A 182 GR F304	ASTM A 182 GR F304
3	SEAT RING	A 276 TP 410	A 276 TP 304	A 276 TP 304
4	PLUG	A 276 TP 410	A 276 TP 304	A 276 TP 304
5	GASKET	SS 304 SPRIAL WOUND WITH P.T.F.E FILLER	SS 304 SPRIAL WOUND WITH P.T.F.E FILLER	SS 304 SPRIAL WOUND WITH P.T.F.E FILLER
6	STUD / NUT	A 193 GR A 194 GR 2H	A 193 GR A 194 GR 2H	A 193 GR A 194 GR 2H

• (Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

Fire Testing
The Test exposes the valves to a flame temperature of 1400° F to 1800° F for 30 minutes with controlled limits on leakage

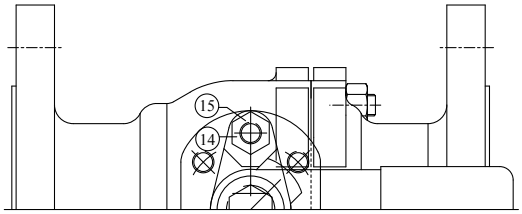


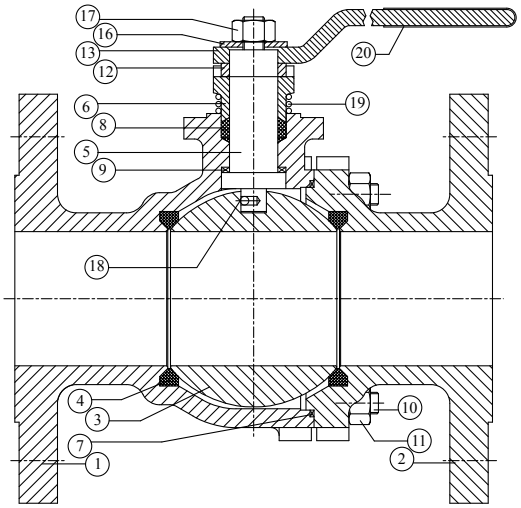
All 'Rapid' Ball have special feature in their ball called Pressure Relief Hole. When the ball is on closed position it maintains equilibrium pressure in it's valve resulting in smoother operation, enhanced performance and life of the valve.



1. Body
2. Side Piece
3. Ball
4. Seat Ring
5. Stem
6. Gland
7. Body Seal
8. Gland Packing
9. Stem Seal
10. Stud
11. Nut
12. Stopper Plate
13. Lever
14. Gland Stud
15. Gland Nut
16. Washer
17. Stem Nut
18. Antistatic Spring

2 Piece Design Floating Ball Valve





Design Standards

1. Design and Manufacturer Standard API 607 / BS EN 17292
2. End-to-End Dimensions Standard ANSI B 16.10
3. Flange Dimensions Standard ANSI B 16.5
4. Testing Standards BS EN 12266 / BS EN IS010497
5. Material Pressure - Temp Standard ANSI B 16.34

Special Features :

- Rotary Actuators
- Electrical Actuators
- Extended Bonnet
- Gear Box

TEST PRESSURE			
1. Pressure Grade	Class 150	Class 300	Class 600
2. Shell Test Pressure	3.0MPa	7.5MPa	16.5MPa
3. Sealing Test Pressure	2.2MPa	5.5MPa	12.1MPa
4. Sealing Air Pressure	0.8MPa	0.8MPa	0.8MPa

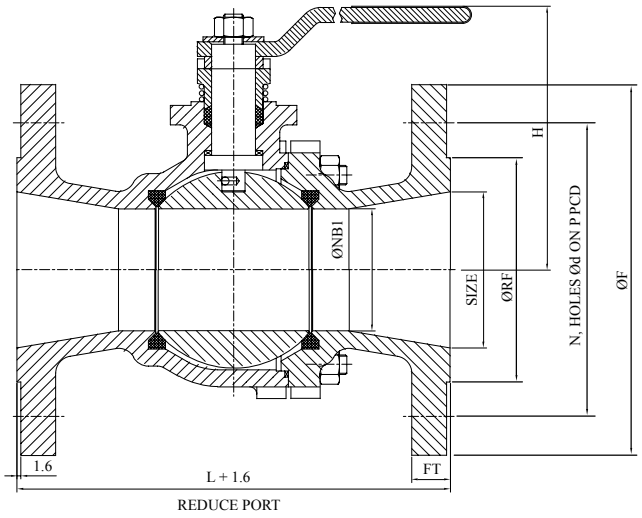
1MPa = 10Bar

Part Details Table

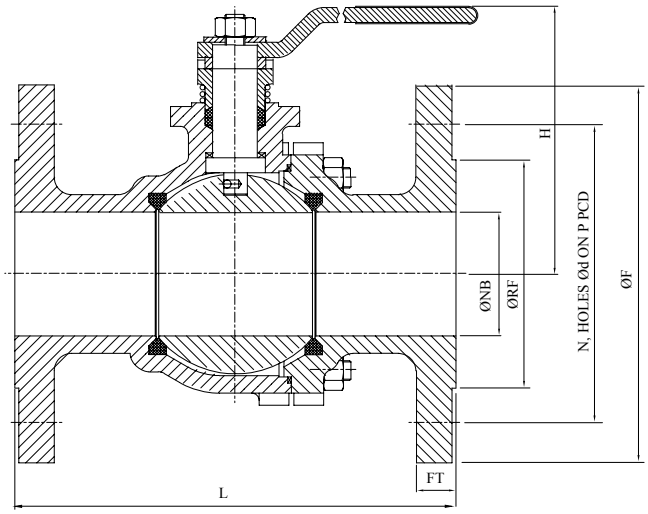
SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	ASTM A 216 Gr. WCB	ASTM A 351 Gr. CF8	ASTM A 351 Gr. CF8M
2	SIDE PIECE	ASTM A 216 Gr. WCB	ASTM A 351 Gr. CF8	ASTM A 351 Gr. CF8M
3	BALL	A 276 TP 304	A 276 TP 304	A 276 TP 316
4	SEAT RING	PTFE	PTFE	PTFE
5	STEM	A 276 TP 304	A 276 TP 304	A 276 TP 316
6	GLAND	A 276 TP 304	A 276 TP 304	A 276 TP 316
7	BODY SEAL	PTFE/GRAPHOIL	PTFE/GRAPHOIL	PTFE/GRAPHOIL
8	GLAND PACKING	PTFE/GRAPHOIL	PTFE/GRAPHOIL	PTFE/GRAPHOIL
9	STEM SEAL	PTFE	PTFE	PTFE
10	STUD	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7
11	NUT	ASTM A 194 2H	ASTM A 194 2H	ASTM A 194 2H
12	STOPPER PLATE	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
13	LEVER	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
14	GLAND STUD	CARBON STEEL	SS	SS
15	GLAND NUT	CARBON STEEL	SS	SS
16	WASHER	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
17	STEM NUT	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
18	ANTISTATIC SPRING	SS	SS	SS
19	ANTISTATIC SPRING	SS	SS	SS
20	LEVER SLEEVE	PVC	PVC	PVC

- Also Available in LCB, Alloy 20, Super Duplex Stainless Steel, Monel, Hast Alloy 'B' & 'C' or any other specified material.
- Seat : Rulon, Glass filled PTFE, Carbon Filled, PEEK or any other specified material.
- (Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

Dimensions



REDUCE PORT

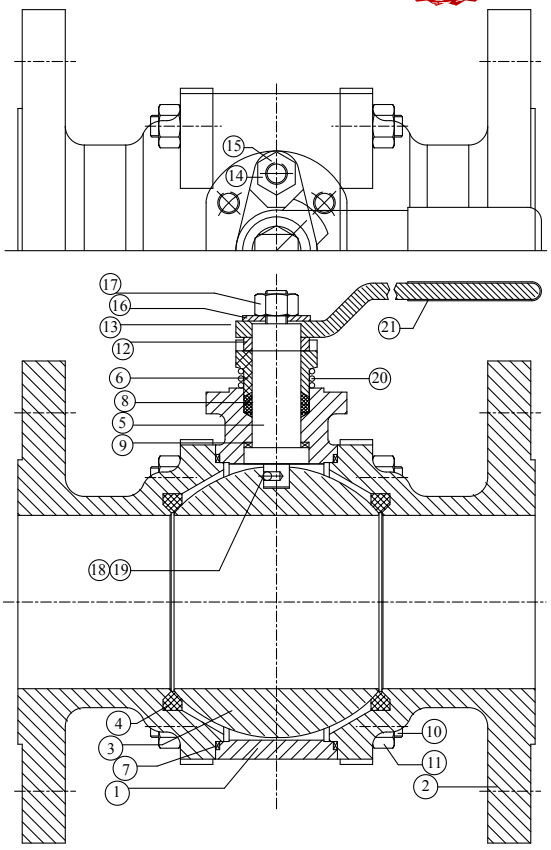


FULL PORT

CLASS 150											
Size	ØNB	ØNB1	L	ØF	FT	ØRf	'P'	Ø'D	'N'	H	App. WT
15	12.7	12.7	108	89	11.1	35	60.3	15.7	4	60	1.8
20	19	12.7	118	98.5	11.1	42.5	69.8	15.7	4	65	2.2
25	25.4	19.1	165.1	124	17.5	51	88.9	19	4	84	2.7
40	38.1	25.4	190.1	155.5	20.6	73	114.3	22.2	4	100	5
50	50.8	38.1	177.8	152	15.9	92	120.6	19	4	108	7.5
65	63.5	50.8	190.5	178	17.5	105	139.7	19	4	118	12
80	76.2	63.5	203.2	190.5	19.1	127	152.4	19	4	160	15
100	101.6	76.2	228.6	228.6	23.9	157	190.4	19	8	178	25
150	152.4	101.6	267	279.4	25.4	216	241.3	22.2	8	237	62
200	203.2	152.4	292.1	343	28.6	170	298.5	22.2	8	272	130
250	254	203.2	330.2	406.4	30.2	324	362.0	25.4	12	342	242
300	305	254	355.6	482.6	31.8	281	431.8	25.4	12	360	298
Note:- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED											
CLASS 300											
Size	ØNB	ØNB1	L	ØF	FT	ØRf	'P'	Ø'D	'N'	H	App. WT
15	12.7	12.7	140	95.2	14.2	35	66.5	15.7	4	60	3
20	19.1	12.7	152	117.3	15.7	42.8	82.5	15.7	4	65	3.5
25	25.4	19.1	165.1	124	17.5	51	88.9	19	4	85	5
40	38.1	25.4	190.1	155.5	20.6	73	114.3	22.2	4	100	10
50	50.8	38.1	216	165.1	22.2	92	127	19	8	108	18
65	63.5	50.8	241.3	190.5	25.4	105	149.4	22.2	8	118	26
80	76.2	63.5	282.4	209.5	28.6	127	168.1	22.2	8	160	30
100	101.6	76.2	305	254	31.8	157	200.1	22.2	8	178	61
150	152.4	101.6	403.3	317.5	36.6	216	269.8	22.2	12	237	110
200	203.2	152.4	419	381	41.2	270	330.2	25.4	12	272	170
250	254	203.2	457	445.5	47.8	324	387.4	28.6	16	342	275
300	305	228	648	520.7	50.8	381	450.9	31.8	16	375	325
Note:- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED											
CLASS 600											
Size	ØNB	ØNB1	L	ØF	FT	ØRf	'P'	Ø'D	'N'	H	App. WT
15	12.7	12.7	165	953	14.2	35	66.5	16	4	60	9
20	19	12.7	190.5	117.5	15.8	43	82.5	19	4	65	10
25	25	19.1	216	124	17.5	51	88.9	19	4	85	15
40	38	25.4	241.3	155.5	22.2	73	114.3	22.2	4	102	26
50	50	38.1	292	165.1	25.4	92	127	19	8	110	34
65	64	50.8	330	190.5	28.6	105	149.4	22.2	8	122	51
80	74	63.5	356	209.5	31.8	127	168.2	22.2	8	170	82
100	100	76.2	432	273	38.1	157	215.9	25.4	8	190	159
150	150	101.6	559	355.6	47.8	216	292.1	28.6	12	248	235
200	201	152.4	660	419.1	55.6	270	349.25	31.8	12	285	235
250	252	203.2	787	508	63.5	324	432	35	16	352	285
300	303	228	838	559	66.5	381	489	35	20	385	375
Note:- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED											

•We are manufacturing Ball Valves upto 42". Request for details.

3 Piece Design Floating Ball Valve



Design Standards

1. Design & Manufacturer Standard API 607 / BS EN 17292
2. End-to-End Dimensions Standard ANSI B 16.10
3. Flange Dimensions Standard ANSI B 16.5
4. Testing Standards BS EN 12266 / BS EN ISO10497
5. Material Pressure - Temp Standard ANSI B 16.34

Special Features :

- Rotary Actuators
- Electrical Actuators
- Gear Box

TEST PRESSURE			
1. Pressure Grade	Class 150	Class 300	Class 600
2. Shell Test Pressure	3.0MPa	7.5MPa	16.5MPa
3. Sealing Test Pressure	2.2MPa	5.5MPa	12.1MPa
4. Sealing Air Pressure	0.8MPa	0.8MPa	0.8MPa

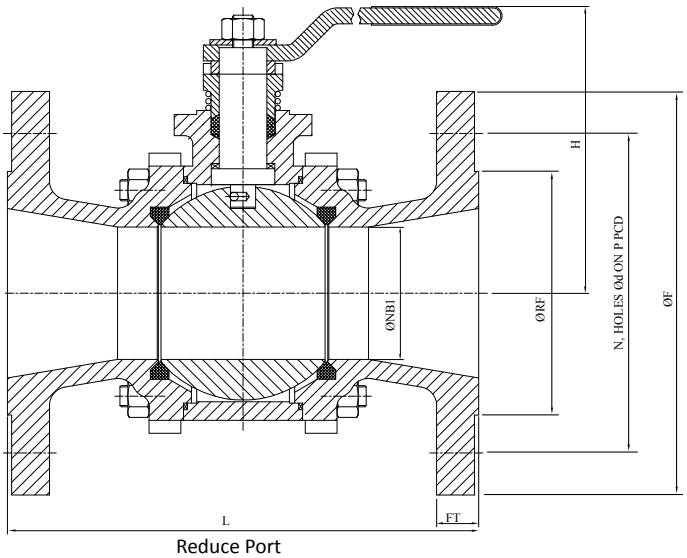
1MPa = 10Bar

Part Details Table

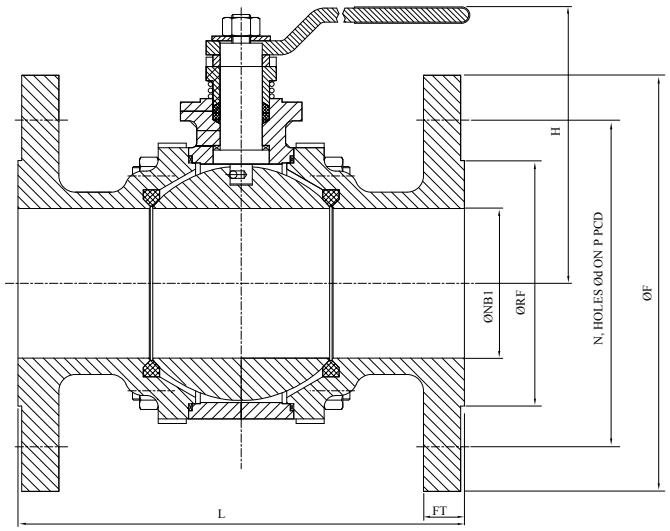
SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	ASTM A 216 GR. WCB	ASTM A 351 GR. CF8	ASTM A 351 GR. CF8M
2	SIDE PIECE	ASTM A 216 GR. WCB	ASTM A 351 GR. CF8	ASTM A 351 GR. CF8M
3	BALL	A 276 TP 304	A 276 TP 304	A 276 TP 316
4	SEAT RING	PTFE	PTFE	PTFE
5	STEM	A 276 TP 304	A 276 TP 304	A 276 TP 316
6	GLAND	A 276 TP 304	A 276 TP 304	A 276 TP 316
7	BODY SEAL	PTFE	PTFE	PTFE
8	GLAND PACKING	PTFE	PTFE	PTFE
9	STEM SEAL	PTFE	PTFE	PTFE
10	STUD	ASTM A 193 B7	ASTM A 193 B7	ASTM A 193 B7
11	NUT	ASTM A 194 2H	ASTM A 194 2H	ASTM A 194 2H
12	STOPPER PLATE	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
13	LEVER	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
14	GLAND STUD	CARBON STEEL	CARBON STEEL	CARBON STEEL
15	GLAND NUT	CARBON STEEL	CARBON STEEL	CARBON STEEL
16	WASHER	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
17	STEM NUT	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
18	ANTISTATIC SPRING	SS	SS	SS
19	ANTISTATIC SPRING	SS	SS	SS
20	ANTISTATIC SPRING	SS	SS	SS
21	LEVER SLEEVE	PVC	PVC	PVC

- Also Available in LCB, Alloy 20, Super Duplex Stainless Steel, Monel, Hast Alloy 'B' & 'C' or any other specified material.
- Seat : Rulon, Glass filled PTFE, Carbon Filled, PEEK or any other specified material.
- (Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

Dimensions



Reduce Port

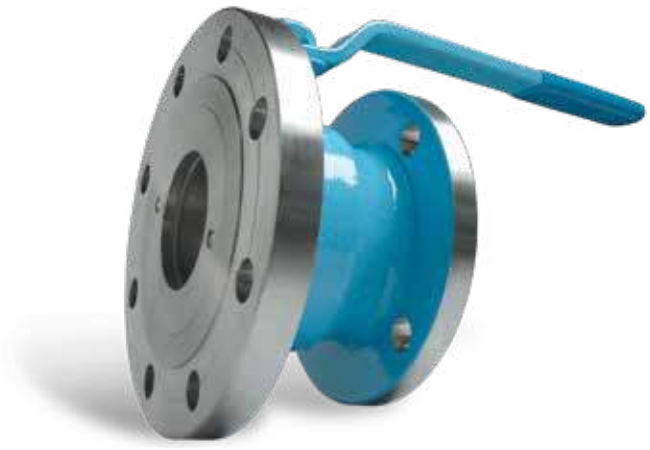


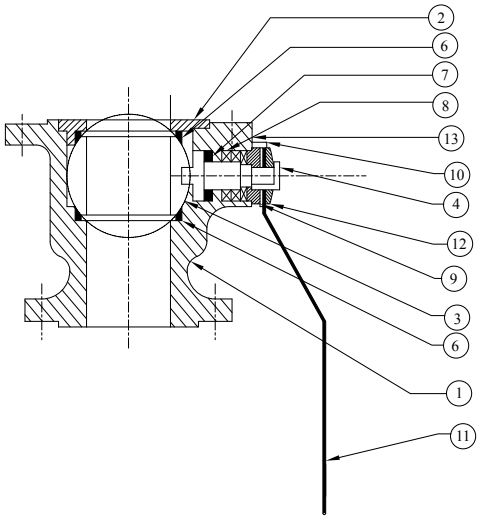
Full Port

CLASS 150											
Size	øNB	øNB1	L	øF	FT	øRf	'P'	ø'D	'N'	H	App. WT
15	12.7	12.7	108	89	11.1	35	60.3	15.7	4	60	1.8
20	19	12.7	118	98.5	11.1	42.5	69.8	15.7	4	65	2.2
25	25.4	19.1	127	108	11.1	51	79.2	15.7	4	84	2.7
40	38.1	25.4	165	127	14.2	73	98.4	15.7	4	100	5
50	50.8	38.1	177.8	152	15.9	92	120.6	19	4	108	7.5
65	63.5	50.8	190.5	178	17.5	105	139.7	19	4	118	12
80	76.2	63.5	203.2	190.5	19.1	127	152.4	19	4	160	15
100	101.6	76.2	228.6	228.6	23.9	157	190.4	19	8	178	25
150	152.4	101.6	166.7	279.4	25.4	216	241.3	22.2	8	237	62
200	203.2	152.4	292.1	343	28.6	170	298.5	22.2	8	272	130
250	254	203.2	330.2	406.4	30.2	324	362.0	25.4	12	342	242
300	305	254	355.6	482.6	31.8	281	431.8	25.4	12	360	298
Note :- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED											

CLASS 300											
Size	øNB	øNB1	L	øF	FT	øRf	'P'	ø'D	'N'	H	App. WT
15	12.7	12.7	140	95.2	14.2	35	66.5	15.7	4	60	3
20	19.1	12.7	152	117.3	15.7	42.8	82.5	15.7	4	65	3.5
25	25.4	19.1	165.1	124	17.5	51	88.9	19	4	85	5
40	38.1	25.4	190.1	155.5	20.6	73	114.3	22.2	4	100	10
50	50.8	38.1	216	165.1	22.2	92	127	19	8	108	18
65	63.5	50.8	241.3	190.5	25.4	105	149.4	22.2	8	118	26
80	76.2	63.5	282.4	209.5	28.6	127	168.1	22.2	8	160	30
100	101.6	76.2	305	254	31.8	157	200.1	22.2	8	178	61
150	152.4	101.6	403.3	317.5	36.6	216	269.8	22.2	12	237	110
200	203.2	152.4	419	381	41.2	270	330.2	25.4	12	272	170
250	254	203.2	457	445.5	47.8	324	387.4	28.6	16	342	275
300	305	228	648	520.7	50.8	381	450.9	31.8	16	375	325
Note :- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED											

CLASS 600											
Size	øNB	øNB1	L	øF	FT	øRf	'P'	ø'D	'N'	H	App. WT
15	12.7	12.7	165	953	14.2	35	66.5	16	4	60	9
20	19	12.7	190.5	117.5	15.8	43	82.5	19	4	65	10
25	25	19.1	216	124	17.5	51	88.9	19	4	85	15
40	38	25.4	241.3	155.5	22.2	73	114.3	22.2	4	102	26
50	50	38.1	292	165.1	25.4	92	127	19	8	110	34
65	64	50.8	330	190.5	28.6	105	149.4	22.2	8	122	51
80	74	63.5	356	209.5	31.8	127	168.2	22.2	8	170	82
100	100	76.2	432	273	38.1	157	215.9	25.4	8	190	159
150	150	101.6	559	355.6	47.8	216	292.1	28.6	12	248	235
200	201	152.4	660	419.1	55.6	270	349.25	31.8	12	285	235
250	252	203.2	787	508	63.5	324	432	35	16	352	285
300	303	228	838	559	66.5	381	489	35	20	385	375
Note :- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED											



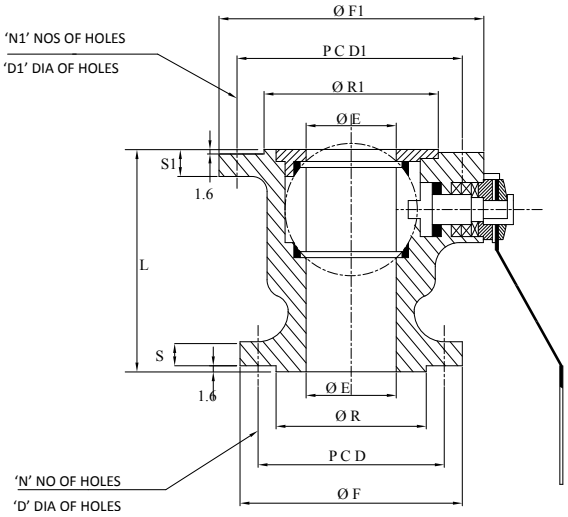


Design Standards

1. Design & Manufacturer Standard API 607 / BS EN 17292
2. End-to-End Dimensions Standard Manufacture Standard
3. Flange Dimensions Standard ASME B 16.5
4. Testing Standards BS EN 12266
5. Material Pressure - Temp Standard ASME B 16.34

Special Features :

- Rotary Actuators
- Electrical Actuators
- Jacketed
- 45° Stem



FACE TO FACE DIMENSIONS AS PER MANUFACTURING STANDARDS

SIZE (N.B.)	MM	25	40	50	65	80	100	150	200
	INCH	1	1½	2	2½	3	4	6	8
L		90	90	105	115	127	175	216	320
ØF / ØF1		108	127	152	178	190.5	229	279.5	243
		127	152	190.5	190.5	229	279.5	343	406.5
PC D / PCD1		79.2	98.5	121	140	152.4	190.5	241.3	298.4
		98.5	121	152.4	152.4	190.5	241.3	298.4	362
ØR / ØR1		50.8	73	92	105	127	157	216	270
		73	92	127	127	157	216	270	324
S / S1		12.7	14.2	15.7	17.5	19.1	23.8	25.4	28.4
		14.2	15.7	19.1	19.1	23.8	25.4	28.4	30.2
N / N1		4	4	4	4	4	8	8	8
		4	4	4	4	8	8	8	12
D / D1		15.7	19	19	19	19	19	22.2	22.2
		19	19	19	19	19	22.2	22.2	25.4
ØE		25.4	38.1	50.8	63.5	76.2	101.2	152.4	203.2
H		80	95	105	125	155	210		
K		205	240	240	300	400	475		

TEST PRESSURE	
1. Pressure Grade	Class 150
2. Shell Test Pressure	3.0MPa.
3. Sealing Test Pressure	2.2MPa.
4. Sealing Air Pressure	0.8MPa.

1MPa = 10Bar

Part Details Table

SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	A351 GR CF8M	A351 GR CF8	A261 GR WCB
2	SIDE PIECE	A351 GR CF8M	A351 GR CF8	A261 GR WCB
3	BALL	A351 GR CF8M	A351 GR CF8	A351 GR WCB
4	STEM	A 276 TP 316	A 276 TP 304	A 276 TP 304
5	SEAT RING	PTFE	PTFE	PTFE
6	BODY STEM	PTFE	PTFE	PTFE
7	STEM SEAL	PTFE	PTFE	PTFE
8	GLAND SEAL	PTFE	PTFE	PTFE
9	GLAND	A 276 TP 316	A 276 TP 304	A 276 TP 304
10	GLAND NUT	A 276 TP 316	A 276 TP 304	A 276 TP 304
11	LEVER	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
12	LEVER NUT	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
13	STOPPER	A 276 TP 316	A 276 TP 304	A 276 TP 304

- Also Available in LCB, Alloy 20, Super Duplex Stainless Steel, Monel, Hast Alloy 'B' & 'C' or any other specified material.
- Seat : Rulon, Glass filled PTFE, Carbon Filled, PEEK or any other specified material.
- (Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

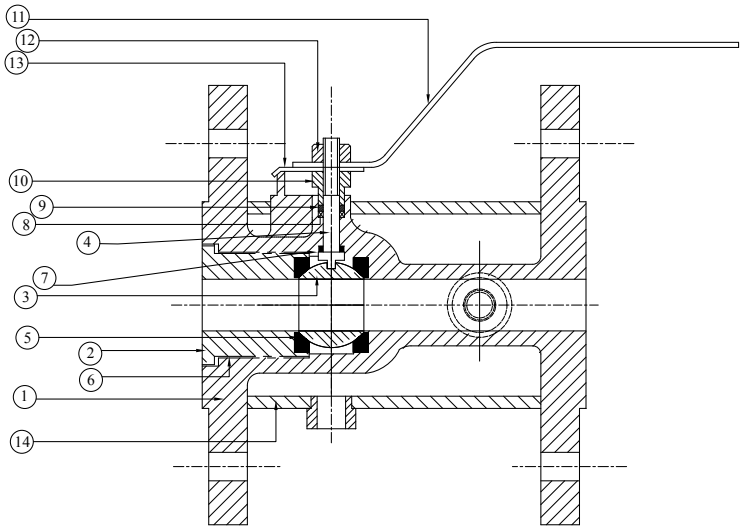
Jacketed Ball Valve

Features:

1. Design & Manufacturer Standard API 607 / BS EN 17292
2. End-to-End Dimensions Standard ASME B 16.10
3. Flange Dimensions Standard ASME B 16.5
4. Testing Standards BS EN 12266
5. Material Pressure - Temp Standard ASME B 16.34

TEST PRESSURE	
1. Pressure Grade	Class 150
2. Shell Test Pressure	3.0MPa.
3. Sealing Test Pressure	2.2MPa.
4. Sealing Air Pressure	0.8MPa.

1MPa = 10Bar



Special Features :

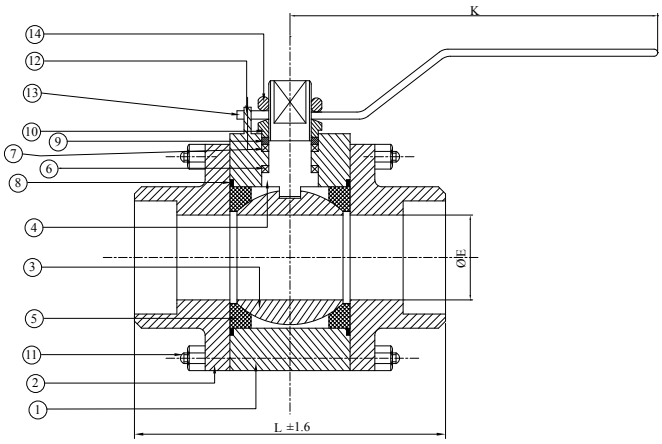
- Rotary Actuators
- Electrical Actuators
- Extended Bonnet

Part Details Table

SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	A351 GR CF8M	A351 GR CF8	A261 GR WCB
2	SIDE PIECE	A351 GR CF8M	A351 GR CF8	A261 GR WCB
3	BALL	A351 GR CF8M	A351 GR CF8	A351 GR WCB
4	STEM	A 276 TP 316	A 276 TP 304	A 276 TP 304
5	SEAT RING	PTFE	PTFE	PTFE
6	BODY STEM	PTFE	PTFE	PTFE
7	STEM SEAL	PTFE	PTFE	PTFE
8	GLAND SEAL	PTFE	PTFE	PTFE
9	GLAND	A 276 TP 316	A 276 TP 304	A 276 TP 304
10	GLAND NUT	A 276 TP 316	A 276 TP 304	A 276 TP 304
11	LEVER	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
12	LEVER NUT	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED	CARBON STEEL POWDER COATED
13	STOPPER PIN	INTEGRAL	INTEGRAL	INTEGRAL
14	JACKET	CS	CS	CS

- Also Available in LCB, Alloy 20, Super Duplex Stainless Steel, Monel, Hast Alloy 'B' & 'C' or any other specified material.
- Seat : Rulon, Glass filled PTFE, Carbon Filled, PEEK or any other specified material.
- (Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

FIRE API 607 SAFE DESIGN



Design Standards

1. Manufacturing Standards BS EN 17292
2. Testing Standards BS EN 12266 / BS EN ISO10497
3. Socket Weld End as per ASME B 16.11.

TEST PRESSURE		
1. Pressure Grade	Class 150	Class 300
2. Shell Test Pressure	3.0MPa.	7.7MPa.
3. Sealing Test Pressure	2.2MPa.	5.4MPa.
4. Sealing Air Pressure	0.8MPa.	0.8MPa.

1MPa = 10Bar

Special Features :

- Rotary Actuators
- Electrical Actuators
- Extended Bonnet
- Extended Nipples

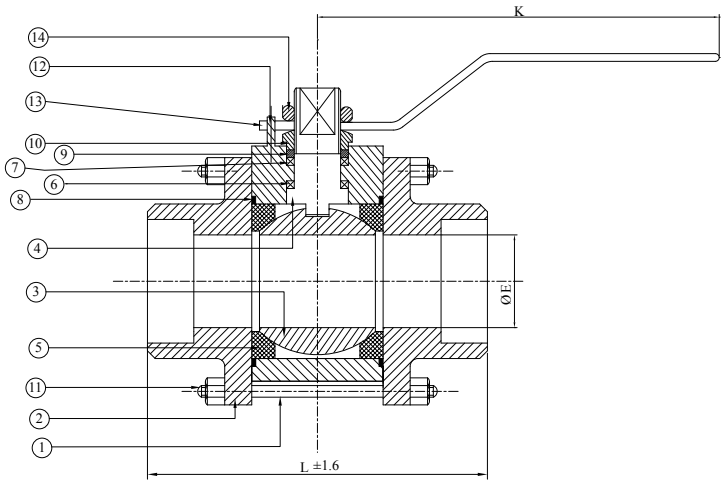
FACE TO FACE DIMENSIONS AS PER MANUFACTURING STANDARDS							
Size N.B.	MM	15	20	25	32	40	50
	INCH	1/2"	3/4"	1"	1 1/4	1 1/2"	2"
L		65	70	95	105	115	125
ØB		21.7	27.1	33.7	42.5	48.6	61.1
ØE		12.7	19.1	25.4	31.2	38.4	50.8
D		9.5	12.7	12.7	12.7	12.7	15.7
H		65	65	80	85	95	105
K		170	170	205	205	240	240

Part Details Table

SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	ASTM A 216 GR WCB	ASTM A 351GR CF8M	ASTM A 351 GR CF8
2	ADAPTOR	ASTM A WCB GR 216	ASTM A 351GR CF8M	ASTM A 351 GR CF8
3	BALL	A 276 TP 304	A 276 TP 316	A 276 TP 304
4	STEM	A 276 TP 304	A 276 TP 316	A 276 TP 304
5	SEAT RING	PTFE	PTFE	PTFE
6	STEM SEAL	PTFE	PTFE	PTFE
7	GLAND SEAL	PTFE	PTFE	PTFE
8	BODY STEM	PTFE	PTFE	PTFE
9	GLAND	A 276 TP 304	A 276 TP 316	A 276 TP 304
10	GLAND NUT	A 276 TP 304	A 276 TP 316	A 276 TP 304
11	STUD & NUT	A 193 GR B 7 / A 194 GR 2H	A 193 GR B 7 / A 194 GR 2H	A 193 GR B 7 / A 194 GR 2H
12	STOPPER	INTEGRAL	INTEGRAL	INTEGRAL
13	LEVER	C S POWDER COATED	C S POWDER COATED	C S POWDER COATED
14	LEVER NUT	C S POWDER COATED	C S POWDER COATED	C S POWDER COATED

- Also Available in LCB, Alloy 20, Super Duplex Stainless Steel, Monel, Hast Alloy 'B' & 'C' or any other specified material.
- Seat : Rulon, Glass filled PTFE, Carbon Filled, PEEK or any other specified material.
- (Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

Three-Piece Forged Steel Ball Valve



Design Standards

1. Manufacturing Standard BS EN 17292
2. Testing Standard BS EN 12266
3. Socket Weld End as per ASME B 1.20.1
4. Screwed End as per ASME B 1.20.1

TEST PRESSURE	
1. Pressure Grade	Class 800
2. Shell Test Pressure	21.1MPa.
3. Sealing Test Pressure	0.6.9MPa.
4. Sealing Air Pressure	00.8MPa.

1MPa = 10Bar

FACE TO FACE DIMENSIONS AS PER MANUFACTURING STD							
Size N.B.	MM	15	20	25	32	40	50
	INCH	1/2"	3/4"	1"	1 1/4	1 1/2"	2"
L		62	72	95	105	115	125
ØE		11	14	20	25.4	31.1	38.1
H		65	65	80	85	95	105
K		170	170	205	205	240	240

Special Features :

- Rotary Actuators
- Electrical Actuators
- Extended Bonnet
- Extended Nipples

Part Details Table

SR. NO.	PART LIST	MATERIAL	MATERIAL	MATERIAL
1	BODY	ASTM A 105 GR FCS	ASTM A 182 GR F 316	ASTM A 182 GR F 304
2	ADAPTOR	ASTM A 105 GR FCS	ASTM A 182 GR F 316	ASTM A 182 GR F 304
3	BALL	A 276 TP 304	A 276 TP 316	A 276 TP 304
4	STEM	A 276 TP 304	A 276 TP 316	A 276 TP 304
5	SEAT RING	PTFE	PTFE	PTFE
6	STEM SEAL	PTFE	PTFE	PTFE
7	GLAND SEAL	PTFE	PTFE	PTFE
8	BODY STEM	PTFE	PTFE	PTFE
9	GLAND	A 276 TP 304	A 276 TP 316	A 276 TP 304
10	GLAND NUT	A 276 TP 304	A 276 TP 316	A 276 TP 304
11	STUD & NUT	A 193 GR B 7 / A 194 GR 2H	A 193 GR B 7 / A 194 GR 2H	A 193 GR B 7 / A 194 GR 2H
12	STOPPER	INTEGRAL	INTEGRAL	INTEGRAL
13	LEVER	C S POWDER COATED	C S POWDER COATED	C S POWDER COATED
14	LEVER NUT	C S POWDER COATED	C S POWDER COATED	C S POWDER COATED

- Also Available in LCB, Alloy 20, Super Duplex Stainless Steel, Monel, Hast Alloy 'B' & 'C' or any other specified material.
- Seat : Rulon, Glass filled PTFE, Carbon Filled, PEEK or any other specified material.
- (Other types of gaskets & gland packing can be provided as per service conditions & clients' requirements).

Wafer Type

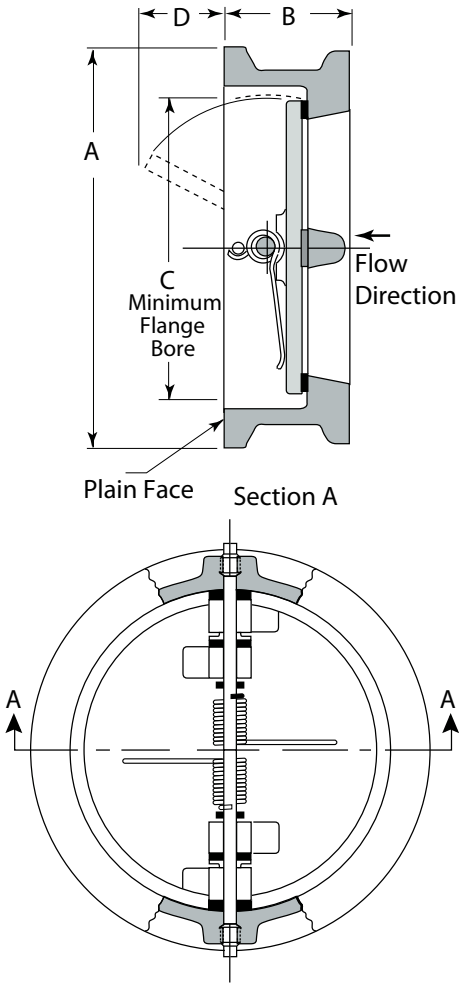
Lug Type

Flanged Type

Design Standard

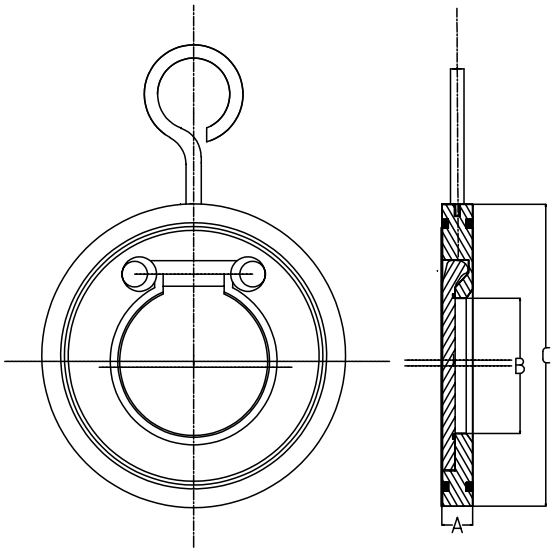
To flange drilling	:	ISO 5211 part II
Valve Inspection and Testing	:	API 598
Flange standing conformity	:	ANSI 150, DIN PN 6 /10 / 16 JIS SK / 10 K / 16 K BS 10 Tab D & E, IS 6392 PN 0.6 / 1.0 / 1.6

TECHNICAL SPECIFICATIONS			
1.	Valve type	:	Centric Disc Design Butterfly valve with a single piece Rubber Lined/PTFE Body
2.	Body type	:	Wafer (Sandwiched between flanges)
3.	Seat type	:	Integrally moulded with the Body/Replaceable
4.	End Connecting	:	Wafer Sandwiched/Flnged
5.	Pressure rating	:	PN 10/PN 16/PN25
6.	Operating Temp. range	:	-250 C to 200 (depending on MOC)
7.	Seat leakage	:	Tight shut off
8.	Operation	:	Hand lever for sizes from 40 NB to 300 NB Worm Gear Boxes for Sizes from 40 NB to 1200 NB Pneumatic / Electrical Actuator operation - optional
9.	Size range	:	40 NB to 1000 NB
10.	Standard Material of Construction		
	Body	:	CI (Optional SGI / WCB / CF8 / CF8M)
	Disc	:	SGI / WCB / CF8 / CF8M
	Seat	:	Nitrile / Neoprene / EPDM / Silicone / Viton / PTEE / Hypalon
	Shaft	:	AISI 410 / 304 / 316



Design Standard API-594 & API-6D
ASME Class 150#

SIZE	A	B	C	D	WEIGHT
INCH	IN MM				Kg
2”	50	105	60	49	3
21/2”	65	124	67	60	5
3”	80	137	73	74	6
4”	100	175	73	97	8
5”	125	197	86	122	12
6”	150	222	98	146	16
8”	200	279	127	194	32
10”	250	340	146	243	48
12”	300	410	181	289	78
14”	350	451	184	318	91
16”	400	514	191	381	125
18”	450	549	203	429	143
20”	500	606	219	478	281
24”	600	718	222	575	705



Design Standard API-594 & API-6D
ASME Class 150#

VALVE SIZE	A	B	C
25	16	14	62
40	19	22	84
50	19	30	102
65	19	40	120
80	19	52	133
100	19	71	170
125	19	93	192
150	19	114	219
200	27	157	275
250	27	195	336
300	36	230	406
350	44	270	445
400	50	310	508
450	60	360	542
500	62	406	599
600	72	490	710

Marine Valves

Design & Manufacture a vast range of high quality Isolation valves in a range of Bronze, NiAlBr and exotic alloys, for the Naval Defence, Oil & Gas, Marine, Industrial Fine Gas and Chemical markets…

High quality valve solutions for surface and sub –surface Naval Defence applications, where Bronze is the Norm

- Floating Ball Valves
- Gate Valves
- Globe Valves
- SDNR
- SDSL
- Angle SDNR
- Automated Valves
- Sounding Cock
- Fire Hydrant
- Storm Valve
- Quick Closing Valve

Ball valve - The floating ball valve is a quarter turn valve which uses a rotating ball with a hole through it, which can be aligned with the flow path (open Position) allowing flow and blocks flow when the ball is rotated 90 degree. A floating ball is where the ball is allowed to float against the seals. In normal operation the ball will float downstream slightly, causing the seating mechanism to compress under the ball pressing against it , thus using the system pressure to increase valve sealing. Ball Valves are used for on/off and throttling services.

Gate valve - The wedge gate valve is a linear motion , multi- turn general service valve , primarily for on / off, non-throttling service. The valve is closed by an angular faced wedge or gate that slides down to block flow.

SDNR / SDSL - THIS has an opening that forms a seat onto which a movable plug , called disk or disc, which can be screwed in to close (or shut), or screwed out to open valve. Valves offer two varieties of Globe Valves. **SDNR, Screw Down Not Return**, and SDSL, Screw Down Screw Lift.

Quick closing valve - The closing of the valve can be done either manually, hydraulically or even by using compressed air. A typical arrangement consists of wire operated valves with wire pull livers located externally to the machine space

Glove valve - The globe valve closure is by a plug with a flat or convex bottom lowered onto a matching seat. Raising the plug open the valve, allowing the fluid flow. The globe valve is used for on/ off service and can be used for throttling applications.

STORM VALVE - A Storm valve is basically a swing Check valve with a Closing device. The closing device is usually a hand wheel but they can also be actuated. Storm valves are usually found on ships in sanitary piping systems which have a ships side exit. They prevent sea water entering the system during a heavy sea

Our Range Offers : Ball Valves, SDNR, SDSL, Storm Valve, Butterfly Valve, Fire Hydreant, Swing Check Valve, Quick Closing Valve, Gate valve, Globe Valve

Size Range : 8mm to 300mm

Pressure Range : PN6, PN10, PN16, PN40, PN63, Pn100

Manufacturing Standard : DIN, JIS, ASME, IS, EN

Operation Type : Manual, Gear Box, Pneumatic, Electrical, Spring loaded, Hydraulic

Connection Type : Flanged, Screwed, Butt Weld, Socket Weld, Wafer type

Materials : NES747, LG4C, CC492K, CC491K, WCB, CF8, CF3, CF8M, CF3M, CN7M, All Grades of Gun Metal & Bronze

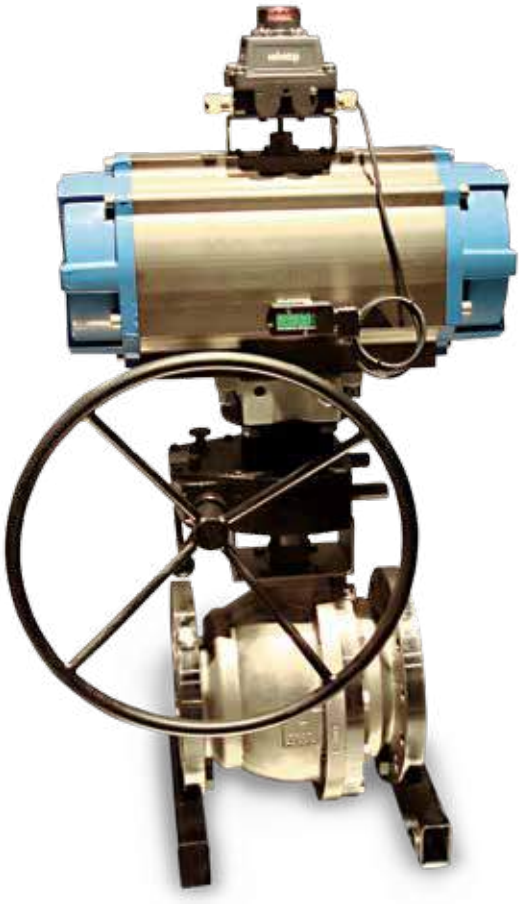
Special Exotic Material : Duplex, Super Duplex, Hastalloy, Monel, Inconel

AUTOMATED RAPID VALVES are offered with electrical actuator pneumatic rotary actuators of double acting or single acting / spring return actuators.

Accessories for Automated Valves

Proximity Switches
Limit Switches

Solenoid Valves,



BALL VALVE with manual overide, Actuator, Solenoid Valve with Switch Box.

Air filter, Regulators

Manual Overide.

3 Way Ball Valve 600# with Actuator

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Notes

Notes

RAPID VALVES

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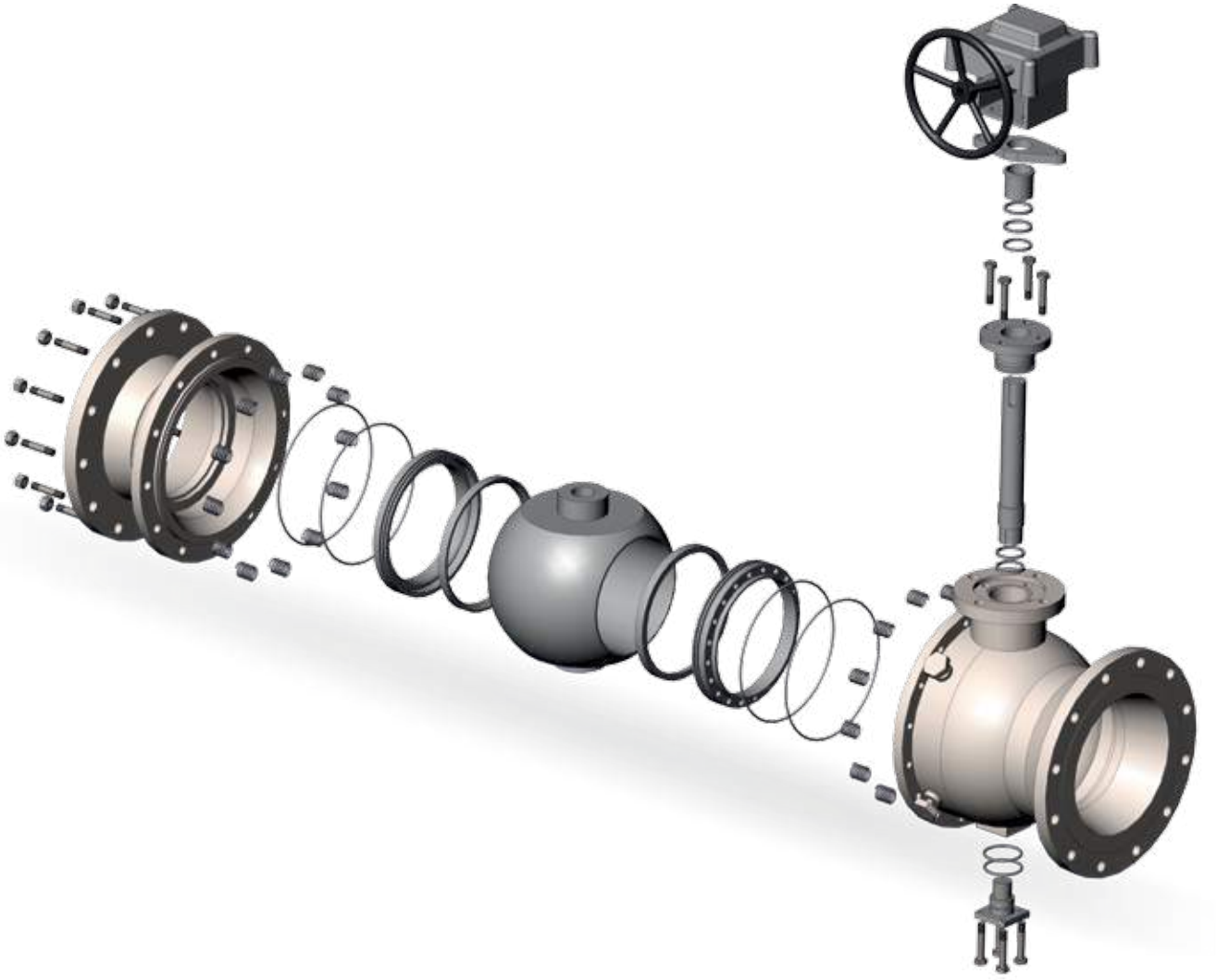

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Phone: +91 8408044770

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