

GATE VALVE

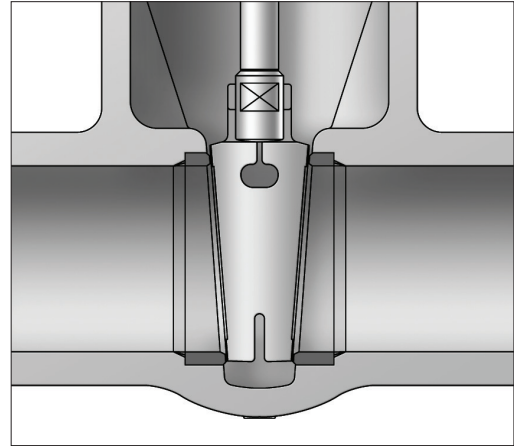
FLEXIBLE GATE

A flexible wedge is a one piece and fully guided cast with a central hub allowing the seating faces to move reciprocally and thus compensating for the distortion on body seats due to thermal expansion or pipe loads.

Seat ring and wedge seating face are set to 9° angle from the vertical to minimize the sliding contacts between wedge and seat ring while opening or closing them.

Wedging helps lead to a tight seal in a low differential pressure service.

A flexible wedge resists wedge sticking or binding in a service. The wedge may be closed in a hot condition and opened in cold. The seating surface are stellite to provide high cycle capability in a very high differential pressure service.

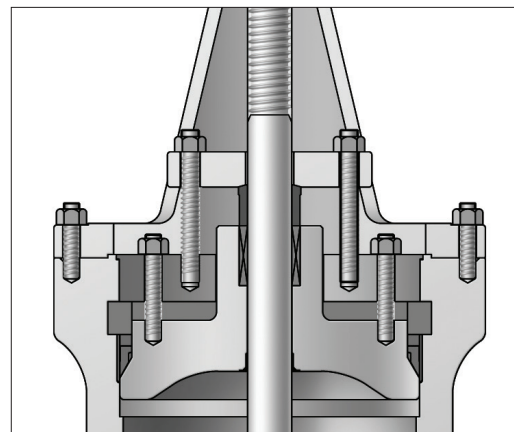


STANDARD PRESSURE SEAL DESIGN

A segment thrust ring absorbs all the thrusts applied by internal pressure. A protective ring made by hardened stainless steel prevents the deformation on the top surface of soft metal gasket. The gasket can be removed smoothly without any damage on the sealing surface of body.

PACKING ADJUSTMENT

All gate and globe valve have a two-piece packing gland to minimize the scoring on valve stem which may occur if tightened unevenly. Gland bolts remain fastened to the bonnet. They swing out of the way to simplify the packing replacement and are oriented to adjust the packing from one side of valve.



DEEP STUFFING BOXES

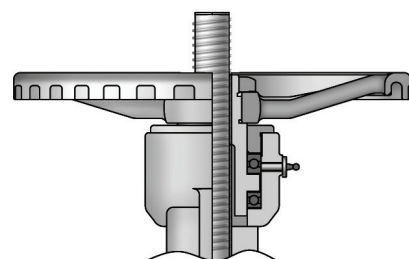
Deep stuffing boxes are standard type for gate and globe valve. They allow for extra packing to ensure more reliable stem seal and sufficient packing depth containing an optional lantern ring in the middle of box. where lantern ring is included, a tapped and plugged hole is made. If specified, a ball grease injector can be fitted with.

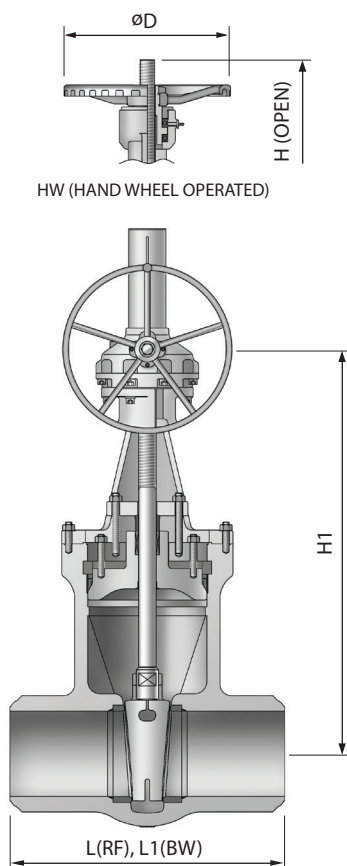
BEARING INSERT TYPE YOKE SLEEVE

Large and high pressure valve may require a tremendous amount of torque to open or close the valve. Ball bearing in the yoke sleeve will reduce the operating torque of valve by up to 50 percent.

UNIT : NPS

CASS	GATE	GLOBE
600	SIZE 6 & LARGER	
900	SIZE 2, 2 1/2 & 6 LARGER	SIZE 6 & LARGER
1500	SIZE 2 & LARGER	
2500		SIZE 3 & LARGER





SERVICE RECOMMENDATION

1. The gate valve is normally used for on-off service.

It is not recommended for throttling.

2. The gate valve is normally installed to pipe horizontally and the valve stem stands vertically. It can also be mounted to the vertical direction with the stem facing to the opposite or other directions except the vertical, provided that a special construction is prepared depending on the valve size, service conditions, or materials. In case of valve purchase for a special purpose other than the normal installation, the orientation of valve should be specified.

3. After the gate valve is closed completely with a sufficient force enough to shut off, the stem should be backed slightly about 1/8 to 1/4 turn to relieve the load on stem. This will cause the stem to expand a little without valve bending or damage, not affecting the valve shutoff.

END CONNECTION

- R.F FLANGED ENDS TO ASME B16.5
- B.W. ENDS TO ASME B16.25
- R.T.J FLANGED ENDS TO ASME B16.5
- SIZE 26" AND LARGER, FLANGED ENDS ACCORDING TO ASME B16.47 SER.A OR SER.B

STANDARD MATERIAL SPECIFICATIONS

NO.	PART NAME	MATERIAL	
1	BODY	A216 - WCB	A217 - WC6
2	BONNET	A216 - WCB	A217 - WC6
3	WEDGE	A216 - WCB+STL	A217 - WC6+STL
4	STEM	A479 - 410	A479 - 410
5	HAND WHEEL	A53	A53
6	BODY SEAT RING	A576 - 1020+Cr(S20C)	A182 - F11+STL
7	BACK SEAT	A216 - WCB+STL	A217 - WCB+STL
8	GASKET	SOFT STEEL	304 S.S
9	PACKING	GRAPHITE+GRAPHITE WITH INCONEL WIRE	
10	GLAND FLANGE	A283 - D	A283 - D
11	GLAND BOLT	A193 - B7	A193 - B7
12	GLAND NUT	A194 - 2H	A194 - 2H
14	PACKING GLAND	A576 - 1020+Cr	A479 - 410
15	BONNET BOLT	A193 - B7	A193 - B16
16	NUT	A194 - 2H	A194 - 4
17	GEAR BOX	DUCTILE IRON	DUCTILE IRON
20	STEM PROTECTOR	A53	A53
23	YOKE	A216 - WCB	A216 - WCB
24	YOKE BOLT	A193 - B7	A193 - B7
25	NUT	A194 - 2H	A194 - 2H
27	BONNET CLAMP	A576 - 1045	A576 - 1045
28	RETAINER	A576 - 1045+Cr	A240 - 304
29	ADAPTER RING	A576 - 1045+Cr	A240 - 304
30	HAND WHEEL	A197	A197
31	YOKE CAP	A576 - 1045	A576 - 1020
32	YOKE SLEEVE	A439 - D2C	A439 - D2C

DIMENSION AND WEIGHT

CLASS 600

UNIT :mm

SIZE	2	3	4	6	8	10	12	14	16	18	20	24	26	30
L	292.1	355.6	431.8	558.8	660.4	787.4	838.2	889.0	990.6	1092.2	1193.8	1397.0	1447.8	1651
L1	177.8	254.0	304.8	457.2	584.2	711.2	812.8	889.0	990.6	1092.2	1193.8	1397.0	1447.8	1651
D	200	250	355	-	-	-	-	-	-	-	-	-	-	-
D1	-	-	-	355	500	500	630	630	710	710	800	900	900	900
H	507	588	710	-	-	-	-	-	-	-	-	-	-	-
H1	-	-	-	1160	1302	1480	1697	1825	2148	2354	2741	3042	3118	3383
WEIGHT(Kg)	29	52	121	189	339	497	758	1057	1549	2183	2763	3915	5010	7033

CLASS 900

UNIT :mm

SIZE	2	3	4	6	8	10	12	14	16	18	20	24
L	368.3	381.0	457.2	609.6	736.6	838.2	965.2	1028.7	1130.3	1219.2	1320.8	1549.4
L1	215.9	304.8	355.6	508.0	660.4	787.4	914.4	990.6	1092.2	1219.2	1320.8	1549.4
D	315	355	355	-	-	-	-	-	-	-	-	-
D1	-	-	-	500	500	630	710	710	710	900	900	900
H	586	628	740	-	-	-	-	-	-	-	-	-
H1	-	-	-	1151	1355	1626	1764	1934	2160	2512	2750	3000
WEIGHT(Kg)	33	59	110	227	349	622	922	1493	1638	2284	3577	4338

CLASS 1500

UNIT :mm

SIZE	2	3	4	6	8	10	12	14	16	18	20	24	26	30
L	368.3	469.9	546.1	704.9	831.9	990.6	1130.3	1257.3	1384.3	1536.7	1663.7	1943.1	-	2159
L1	215.9	304.8	406.4	558.8	711.2	863.6	990.6	1066.8	1193.8	1346.2	1473.2	1397.0	1473.2	2032
D	315	355	400	-	-	-	-	-	-	-	-	-	-	-
D1	-	-	-	500	630	710	710	800	900	900	900	900	900	900
H	586	712	856	-	-	-	-	-	-	-	-	-	-	-
H1	-	-	-	1065	1300	1745	1908	2040	2213	2350	2950	3218	3236	4329
WEIGHT(Kg)	40	66	121	312	458	1121	1344	1658	2064	2883	5678	5360	7015	19320

CLASS 2500

UNIT :mm

SIZE	2	3	4	6	8	10	12	14	16	18
L	450.9	577.9	673.1	914.4	1022.4	1270.0	1422.4	-	-	-
L1	279.4	368.3	457.2	609.6	762.0	914.4	1041.4	1117.6	1244.6	1397.0
D	315	355	450	-	-	-	-	-	-	-
D1	-	-	-	500	710	800	900	900	900	900
H	586	693	805	-	-	-	-	-	-	-
H1	-	-	-	1165	1500	1740	2100	2080	2540	2900
WEIGHT(Kg)	47	75	129	379	654	1276	1910	2420	3238	5944