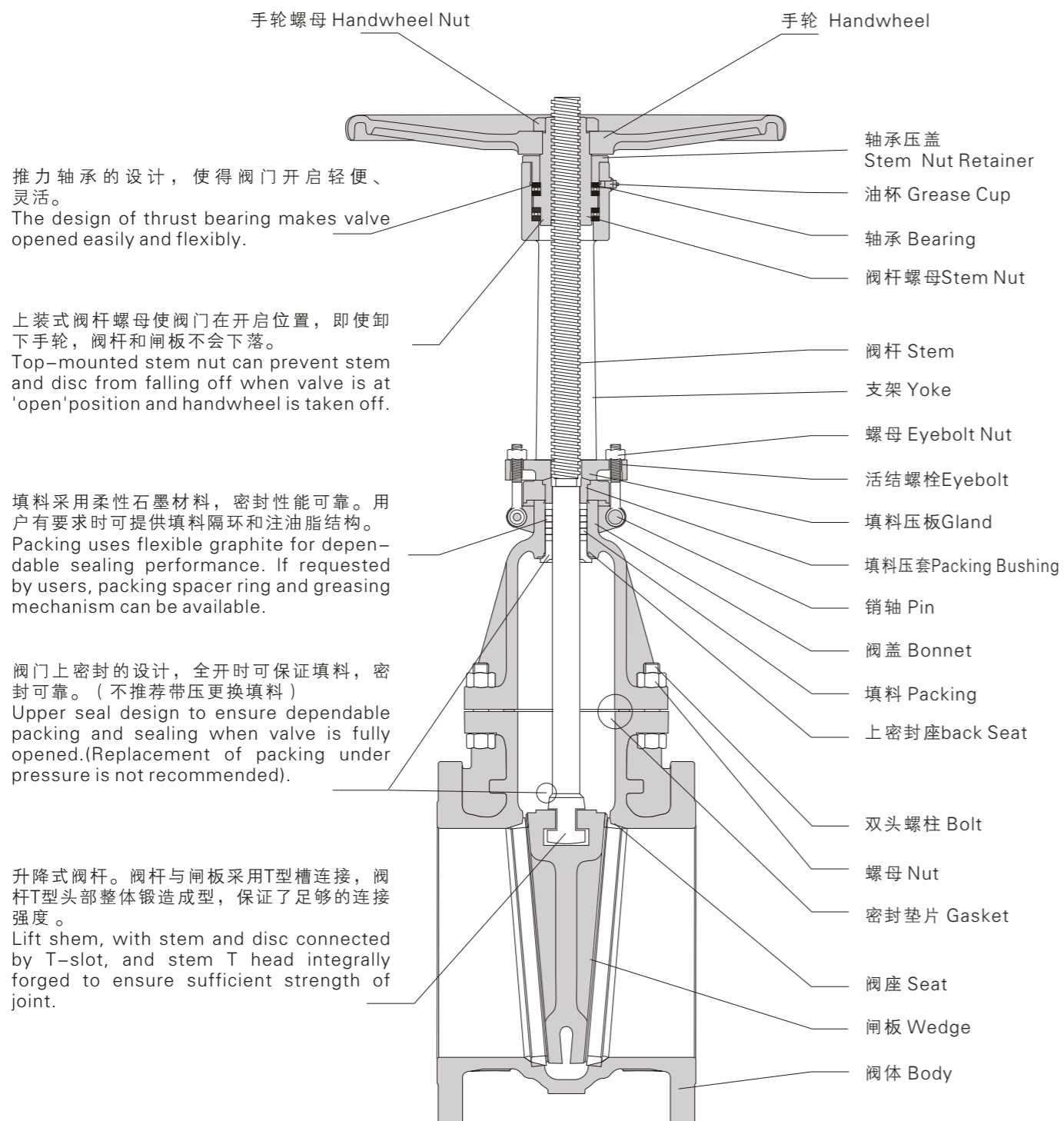


## 铸钢闸阀 CAST STEEL GATE VALVE

铸钢闸阀的结构特征 DESIGN CHARACTERISTICS OF API600 CAST STEEL GATE VALVE



推力轴承的设计，使得阀门开启轻便、灵活。  
The design of thrust bearing makes valve opened easily and flexibly.

上装式阀杆螺母使阀门在开启位置，即使卸下手轮，阀杆和闸板不会下落。  
Top-mounted stem nut can prevent stem and disc from falling off when valve is at 'open' position and handwheel is taken off.

填料采用柔性石墨材料，密封性能可靠。用户有要求时可提供填料隔环和注油脂结构。  
Packing uses flexible graphite for dependable sealing performance. If requested by users, packing spacer ring and greasing mechanism can be available.

阀门上密封的设计，全开时可保证填料，密封可靠。(不推荐带压更换填料)  
Upper seal design to ensure dependable packing and sealing when valve is fully opened. (Replacement of packing under pressure is not recommended).

升降式阀杆。阀杆与闸板采用T型槽连接，阀杆T型头部整体锻造成型，保证了足够的连接强度。  
Lift stem, with stem and disc connected by T-slot, and stem T head integrally forged to ensure sufficient strength of joint.

## 铸钢闸阀 CAST STEEL GATE VALVE

铸钢闸阀的材料明细(ASTM 标准材料) MATERIALS LIST FOR API600 CAST STEEL GATE VALVE

序号 No.	零件名称 Part Name	碳钢系列 Carbon Steel	不锈钢系列 Stainless Steel	合金钢系列 Alloy Steel	低温钢系列 Low Temperature Steel
1	阀体 Body	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A217 GR WC6	ASTM A352 GR LCB
2	闸板 Wedge	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A217 GR WC6	ASTM A352 GR LCB
3	阀座 Seat	ASTM A105	/	ASTM A182 GR F304	ASTM A182 GR F304
4	密封垫片 Gasket	柔性石墨 + SS304 Soft Graphit + Ss304			
5	六角螺母 Nut	ASTM A194 GR 2H	ASTM A194 GR B8	ASTM A194 GR 4	ASTM A194 GR B8
6	双头螺柱 Stud	ASTM A193 GR B7	ASTM A193 GR 8	ASTM A193 GR B7	ASTM A193 GR 8
7	上密封座 Back Seat	ASTM A182 GR F6a	ASTM A182 GR F304	ASTM A182 GR F304	ASTM A182 GR F304
8	填料 Packing	柔性石墨 Soft Graphite			
9	阀盖 Bonnet	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A217 GR WC6	ASTM A352 GR LCB
10	销轴 Pin	ASTM A194 GR 2H	ASTM A276 TYPE 304	ASTM A276 TYPE 410	ASTM A276 TYPE 304
11	填料压套 Packing Bushing	ASTM A182 GR F6a	ASTM A182 GR F304	ASTM A182 GR F6a	ASTM A182 GR F304
12	填料压板 Gland	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A216 GR WCB	ASTM A352 GR LCB
13	活结螺栓 Eyebolt	ASTM A193 GR B7	ASTM A193 GR B8	ASTM A193 GR B7	ASTM A194 GR B8
14	螺母 Eyebolt Nut	ASTM A194 GR 2H	ASTM A193 GR 8	ASTM A193 GR 4	ASTM A193 GR 8
15	支架 Yoke	ASTM A216 GR WCB	ASTM A351 GR CF8	ASTM A216 GR WCB	ASTM A352 GR LCB
16	阀杆 Stem	ASTM A276 GR WCB	ASTM A276 TYPE 304	ASTM A182 GR F22	ASTM A276 TYPE 304
17	阀杆螺母 Stem Nut	ASTM B148 UNS C95600	ASTM B148 UNS C95600	ASTM B148 UNS C95600	ASTM B148 UNS C95600
18	轴承 Bearing	/			
19	油杯 Grease Cup	铜合金 COPPER ALLOY			
20	轴承压盖 Stem Nut Retainer	ASTM A108 GR 1020	ASTM A182 GR F304	ASTM A108 GR 1020	ASTM A182 GR F304
21	手轮 Handwheel	ASTM A197	ASTM A197	ASTM A197	ASTM A197
22	手轮螺母 Handwheel Nut	ASTM A 108 GR 1020	ASTM A182 GR F304	ASTM A108 GR 1020	ASTM A182 GR F304

提示：1、壳体材料压力温度等级表见附录  
Remark: Pressure and temperature rating of casing material referred to Appendix  
2、壳体材料化学成分及力学性能见附录  
Chemical compositions and mechanical property of casing material referred to Appendix  
3、内件材料及推荐服务范围见附录  
Trim materials and recommended service coverage referred to Appendix

## 技术性能规范 Technical Specification

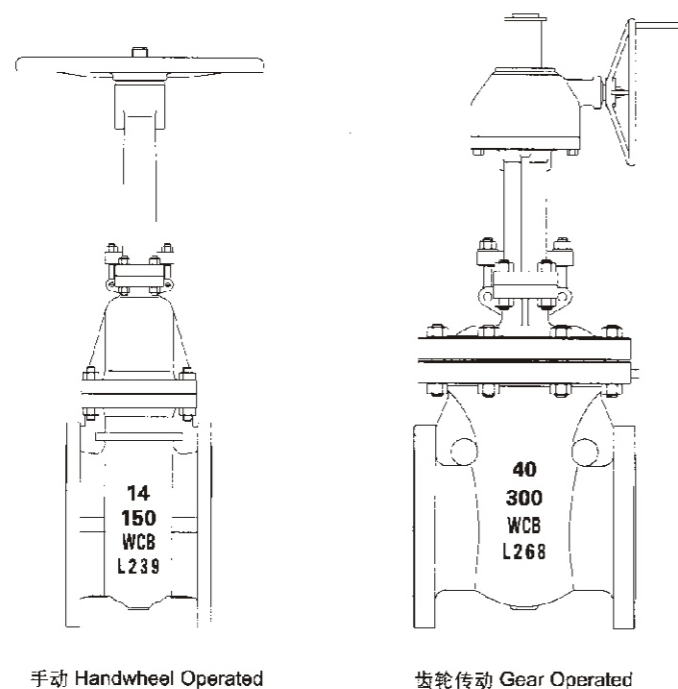
设计标准 Design Standard	API600 API603							
压力温度等级 Pressure-Temperature Rating	ASME B16.34							
结构长度 Face-Face	ASME B16.10							
法兰型式尺寸 Flange Ends	ASME B16.5、ASME B16.47							
对焊端连接 Buttwelding Ends	ASME B16.25							
检验与试验 Inspection & Test	API598							
公称压力 Norminal Pressure (Class)	150	300	400	600	900	1500	2500	
试验压力 (MPa) Test-Pressure	壳体试验 Shell Test	2.93	7.55	10.0	15.0	22.5	37.5	63.0
	高压密封 High Pressure Seal Test	2.07	5.52	7.31	11.03	16.5	27.5	46.0
	低压密封 Low Pressure Seal Test	0.6						
适用温度 Applicable Temperature	-196°C-550°C (不同的工况温度选用不同材质) Different raw material for different work temperature							
适用介质 Applicable Medium	水、油、气及各类腐蚀性介质 (不同的介质选用不同材质) Water、Oil、gas and other causticity medium (Different raw material for different medium)							

铸钢闸阀 API CAST STEEL GATE VALVE

铸钢闸阀供货范围API CAST STEEL GATE VALVE PRODUCT LINE

规格Size		压力 Pressure (CLASS)																			
DN	NPS	栓接阀盖 Bolted Bonnet					自密封阀盖 Pressure Seal Bonnet														
		手动 Hand operated					齿轮传动 Gear operated					手动 Hand operated						齿轮传动 Gear operated			
		150	300	600	900	1500	300	600	900	1500	600	900	1500	2500	600	900	1500	2500			
40	1-1/2	*	*	*	*	*															
50	2	*	*	*	*	*															
65	2-1/2	*	*	*	*	*															
80	3	*	*	*	*	*								*	*	*	*				
100	4	*	*	*	*	*								*	*	*	*				
125	5	*	*	*	*	*								*	*	*	*				
150	6	*	*	*	*	*								*	*	*	*				
200	8	*	*	*	*	*								*	*	*	*	*			
250	10	*	*	*	*	*								*	*	*	*	*			
300	12	*	*	*	*	*								*	*	*	*	*			
350	14	*	*	*	*	*								*	*	*	*	*			
400	16	*	*	*	*	*								*	*	*	*	*			
450	18	*	*	*	*	*								*	*	*	*	*			
500	20	*	*	*	*	*								*	*	*	*	*			
600	24	*	*	*	*	*								*	*	*	*	*			
650	26	*	*	*	*	*								*	*	*	*	*			
700	28	*	*	*	*	*								*	*	*	*	*			
750	30	*	*	*	*	*								*	*	*	*	*			
800	32	*	*	*	*	*								*	*	*	*	*			
900	36	*	*	*	*	*								*	*	*	*	*			
1000	40	*	*	*	*	*								*	*	*	*	*			
1050	42	*	*	*	*	*								*	*	*	*	*			
1200	48	*	*	*	*	*								*	*	*	*	*			

欲订购表中列出的产品可与本公司销售部门联系。  
For sizes classes not shown please contact our sales department

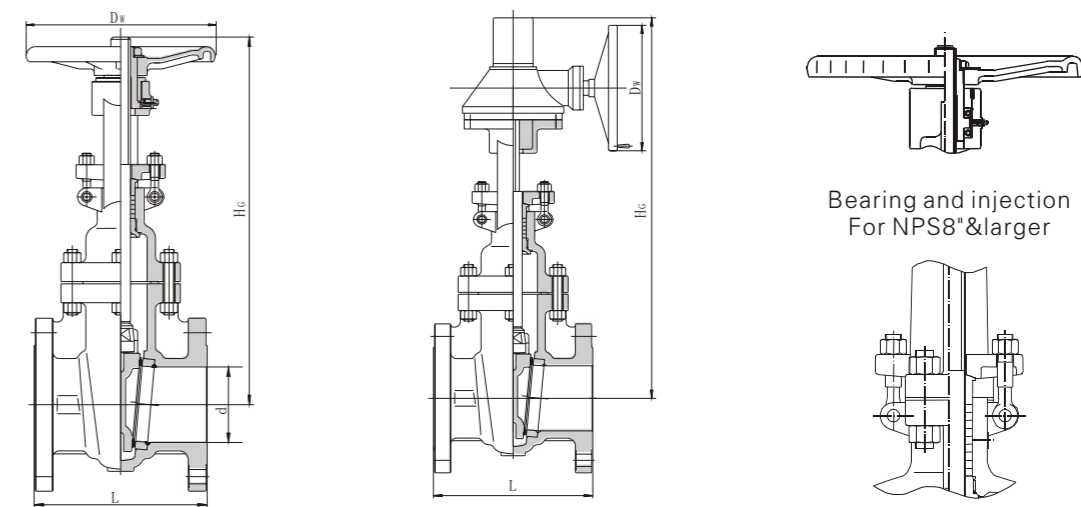


手动 Handwheel Operated

齿轮传动 Gear Operated

铸钢闸阀 CAST STEEL GATE VALVE

ANSI 150Lb



Handwheel operation

Gear operation for 14" and larger

Yoke For NPS10" & larger

设计标准 Design Standard

- 1、Design and Manufacture Standard 设计制造标准: API 600 API603;
- 2、Material Pressure-Temp Standard 压力-温度基准: ANSI B16.34;
- 3、End to End Dimension Standard 结构长度标准: ANSI B16.10;
- 4、Flange Ends Dimension Standard 法兰连接端尺寸:  
ANSI B16.5(NPS≤24") ASME B16.47 (NPS > 24")
- 5、Inspection and Test Standard 检验和试验标准: API 598

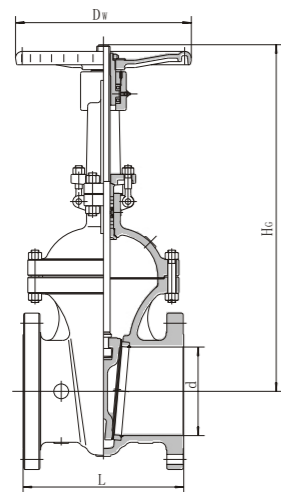
Main dimension and weight

Unit(mm)

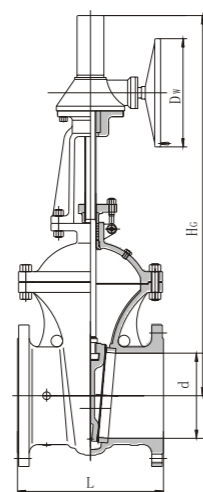
NPS		L			d	H <sub>w</sub>	H <sub>G</sub>	D <sub>w</sub>	D <sub>G</sub>	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W	G.O
2	50	178	191	216	51	400	-	200	-	19	-
2 1/2	65	191	203	241	64	435	-	200	-	25	-
3	80	203	216	283	76	515	-	250	-	33	-
4	100	229	241	305	102	595	-	280	-	49	-
5	125	254	267	381	127	725	-	280	-	62	-
6	150	267	279	403	152	780	820	300	310	77	104
8	200	292	305	419	203	975	1020	350	310	123	150
10	250	330	343	457	254	1150	1200	400	310	188	215
12	300	356	368	502	305	1380	1430	450	310	288	315
14	350	381	394	572	337	1545	1580	500	310	385	435
16	400	406	419	610	387	1733	1780	500	460	500	552
18	450	432	445	660	438	1915	1990	500	460	601	653
20	500	457	470	711	489	2122	2220	600	460	764	816
24	600	508	521	813	591	2520	2600	600	460	1007	1185
26	650	559	-	864	633	-	2800	-	600	-	1550
28	700	610	-	914	684	-	3050	-	600	-	1880
30	750	610	-	914	735	-	3130	-	600	-	2300
32	800	711	-	965	779	-	3280	-	600	-	2550
34	850	762	-	1016	830	-	3500	-	600	-	2950
36	900	711	-	1016	84	-	3720	-	600	-	3390

铸钢闸阀 CAST STEEL GATE VALVE

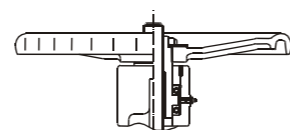
ANSI 300Lb



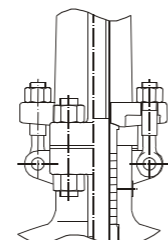
Handwheel operation



Gear operation for 12" and larger



Bearing and injection  
For NPS 8" & larger



Yoke For NPS 10" & larger

设计标准 Design Standard

- 1、Design and Manufacture Standard 设计制造标准：API 600 API603;
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- 4、Flange Ends Dimension Standard 法兰连接端尺寸：  
ANSI B16.5(NPS≤24") ASME B16.47 (NPS>24")
- 5、Inspection and Test Standard 检验和试验标准：API 598

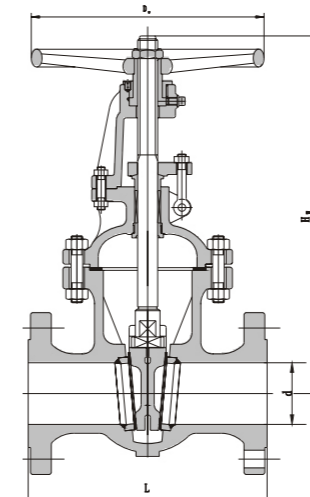
Main dimension and weight

Unit(mm)

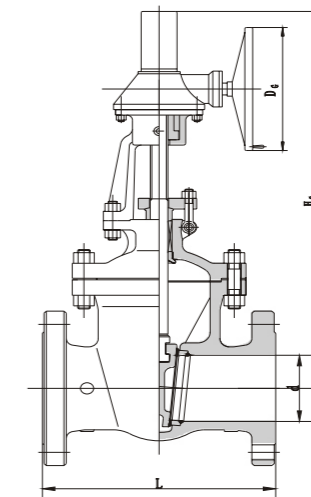
NPS		L			d	Hw	Hc	Dw	Dc	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W	G.O
2	50	216	232	216	51	420	-	200	-	-	-
2 1/2	65	241	257	241	64	446	-	200	-	30	-
3	80	283	298	283	76	537	-	250	-	48	-
4	100	305	321	305	102	619	650	280	-	73	100
5	125	381	397	381	127	722	750	300	-	99	126
6	150	403	419	403	152	806	835	350	310	130	186
8	200	419	435	419	203	1000	1030	400	310	208	235
10	250	457	473	457	254	1240	1280	450	310	334	386
12	300	502	518	502	305	1425	1460	500	310	450	502
14	350	762	778	762	337	1585	1620	600	310	704	756
16	400	838	854	838	387	1790	1830	500	460	923	965
18	450	914	930	914	438	1960	2000	650	460	1131	1224
20	500	991	1010	991	489	2158	2220	750	460	1345	1400
24	600	1143	1165	1143	591	2576	2620	900	460	2122	2385
26	650	1245	1270	1245	633	-	2850	-	600	-	3000
28	700	1346	1372	1346	684	-	3080	-	600	-	3300
30	750	1397	1422	1397	735	-	3180	-	600	-	3550
32	800	1524	1553	1524	779	-	3300	-	600	-	4400
34	850	1626	1654	1626	830	-	3550	-	600	-	5200
36	900	1727	1756	1727	874	-	3760	-	600	-	6050

铸钢闸阀 CAST STEEL GATE VALVE

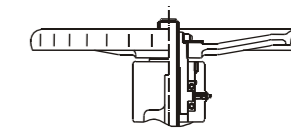
ANSI 600Lb



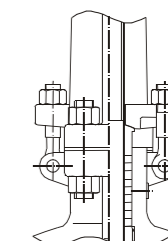
Handwheel operation



Gear operation for 10" and larger



Bearing and injection  
For NPS 6" & larger



Yoke For NPS 8" & larger

设计标准 Design Standard

- 1、Design and Manufacture Standard 设计制造标准：API 600 API603;
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- 3、End to End Dimension Standard 结构长度标准：ANSI B16.10;
- 4、Flange Ends Dimension Standard 法兰连接端尺寸：  
ANSI B16.5(NPS≤24") ASME B16.47 (NPS>24")
- 5、Inspection and Test Standard 检验和试验标准：API 598

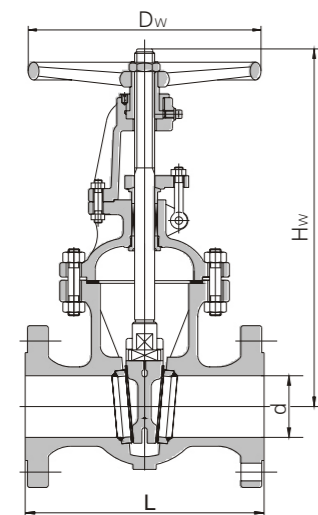
Main dimension and weight

Unit(mm)

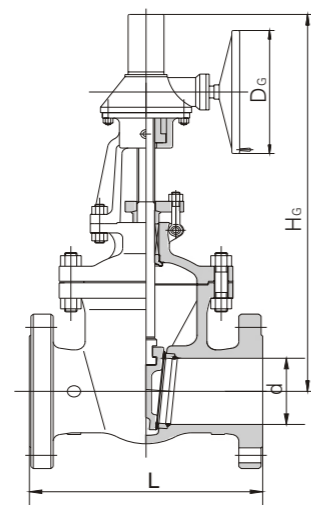
NPS		L			d	Hw	Hc	Dw	Dc	Weight(Kg)	
inch	mm	RF	RTJ	BW						H.W	G.O
2	50	292	295	292	51	444	-	200	-	32	-
2 1/2	65	330	333	330	64	500	-	250	-	52	-
3	80	356	359	356	76	558	-	280	310	60	87
4	100	432	435	432	102	665	585	300	310	107	134
5	125	508	511	508	127	750	695	350	310	175	227
6	150	559	562	559	152	868	790	450	310	216	268
8	200	660	664	660	203	1073	900	500	310	399	451
10	250	787	791	787	254	1263	1110	650	460	605	657
12	300	838	841	838	305	1600	1300	700	460	851	893
14	350	889	892	889	337	1705	1650	900	460	1177	1232
16	400	991	994	991	387	1835	1750	900	460	1513	1568
18	450	1092	1095	1092	438	-	1900	-	600	-	1980
20	500	1194	1200	1194	489	-	2020	-	600	-	2460
24	600	1397	1407	1397	591	-	2172	-	600	-	3650

铸钢闸阀 CAST STEEL GATE VALVE

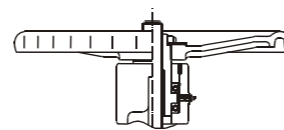
ANSI 900Lb



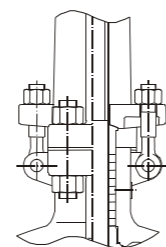
Handwheel operation



Gear operation for 10"and larger



Bearing and injection  
For NPS6"&larger



Yoke For NPS8"&larger

设计标准 Design Standard

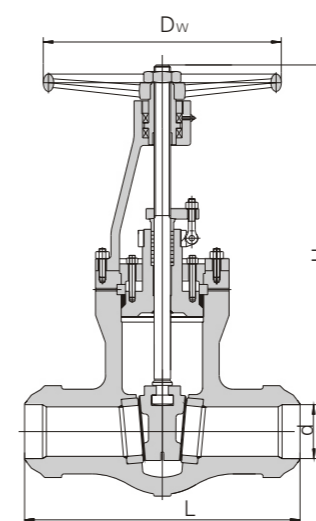
- 1、Design and Manufacture Standard 设计制造标准：API 600 API603;
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ANSI B16.5(NPS≤24") ASME B16.47 (NPS>24")
- 5、Inspection and Test Standard 检验和试验标准：API 598

Main dimension and weight

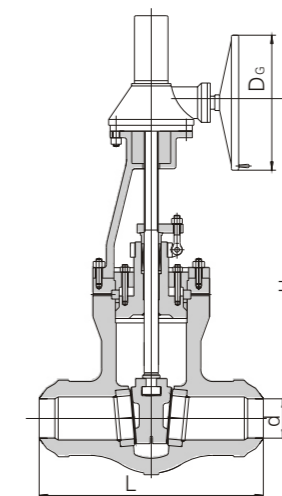
NPS					Unit(mm)						
L		d	Hw	Hg	Dw	Dg	Weight(Kg)				
inch	mm						RF	RTJ	BW	H.W	G.O
2	50	368	371	368	51	500		280	-	70	-
2 1/2	65	419	422	419	64	550		280	-	110	-
3	80	381	384	381	76	610		300	310	140	167
4	100	457	460	457	102	702	-	350	310	200	227
5	125	559	562	559	127	850	-	400	310	258	285
6	150	610	613	610	152	980	660	500	460	358	410
8	200	737	740	737	203	1100	750	650	460	550	600
10	250	838	841	838	254	1320	900	700	460	1000	1100
12	300	965	968	965	305	1500	1060	900	460	1215	1310
14	350	1029	1038	1029	322	1900	1140	900	600	1600	1700
16	400	1130	1140	1130	373	2050	1370	900	600	2150	2330

铸钢闸阀 CAST STEEL GATE VALVE

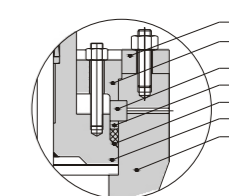
ANSI 1500Lb



Handwheel operation



Gear operation for 10"and larger



- 1、BODY
- 2、BONNET
- 3、SEALRING
- 4、HALF RING
- 5、RETAINER RING
- 6、RETAINER COVER
- 7、YOKE

Structure Feature

设计标准 Design Standard

- 1、Design and Manufacture Standard 设计制造标准：API 600 API603;
- 2、Material Pressure-Temp Standard 压力-温度基准：ANSI B16.34;
- 3、End to End Dimension Standard 结构长度标准：ANSI B16.10;
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- 5、Inspection and Test Standard 检验和试验标准：API 598

Main dimension and weight

NPS					Unit(mm)						
L		d	Hw	Hg	Dw	Dg	Weight(Kg)				
inch	mm						RF	RTJ	BW	H.W	G.O
2	50	368	371	368	51	510		280	-	70	-
2 1/2	65	419	422	419	64	560		300	-	110	-
3	80	470	473	470	76	620		350	310	175	202
4	100	546	549	546	102	728	-	400	310	270	300
5	125	673	676	673	127	870	-	450	310	378	405
6	150	705	711	705	144	1000	670	500	460	520	575
8	200	832	841	832	192	1130	770	750	460	820	915
10	250	991	1000	991	239	1360	920	900	600	1560	1750
12	300	1130	1146	1130	287	-	1070	-	600	-	2120
14	350	1257	1276	1257	315	-	1180	-	600	-	2600
16	400	1384	1407	1384	360	-	1410	-	600	-	3450