

# JH PRODUCT

WENZHOU JIAHUA FLUID EQUIPMENT CO., LTD.

#### **ABOUTUS**

JiaHua Fluid Equipment Co., Ltd. offers an extensive range of precision-engineered valves, gate valves, globe valves, ball valves, check valves, plug valves, and butterfly valves in various industries and flow control fields.

Our high pressure/ temperature valves are known for the robustness and abilityto handle very harsh applications. Our control valves provide accurate regulation, while on-off valves offer quick and reliable shut-off. JH valves bring our own unique advantages to various fluid situation. Our products are distinguished by our remarkable qualities, delivery and before/after sales service.































# **ABOUT US**



● CNC line 粉烛生产细



● Big lathe&boring 大型立车、大型镗床



● Dust-free workshop 无尘装配车间



Assembly workshop



● Gas shielded welding 气体保护焊



OCNC drilling&boring



Machining worksho



● Assembly workshop 装配车间



Static hydrulic test
 同门检验测试



 Automatic welding for inner cavity 特殊材料内腔自动焊



● MC Machine CNC 加工中心生产线



Large vertical lathe



● Test bench for high pressure 大型高磅级试压机



● Static hydrulic test 同门检验测试



● Painting line 順漆漉水线

# **Hot Products**



**Gate Valve**Cast steel gate valve



**Ball Valve**Steel trunnion mounted ball valve



**Gate Valve**Cast steel high pressure gate valve



**Check Valve**Cast steel lift check valve



**Butterfly Valve**Concentric butterfly valves



**Plug Valve**Self-lubricated plug valve



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# MODEL OF VALVE

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- 2. HIGH PRESSURE CAST STEEL GATE VALVE
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#### **GLOBE VALVE**

- 1. CAST STEEL GLOBE VALVE
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# **CHECK VALVE**

- 1. CAST STEEL CHECK VALVE
- 2. HIGH PRESSURE CAST STEEL CHECK VALVE
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#### **BALL VALVE**

- 1. CAST STEEL FLOATING BALL VALVE
- 2. FORGED STEEL FLOATING BALL VALVE
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# **PLUG VALVE**

- 1. SELF-LUBRICATED PLUG VALVE
- 2. PRESSURE BALANCE LUBRICATED PLUG VALVE

# **BUTTERFLY VALVE**

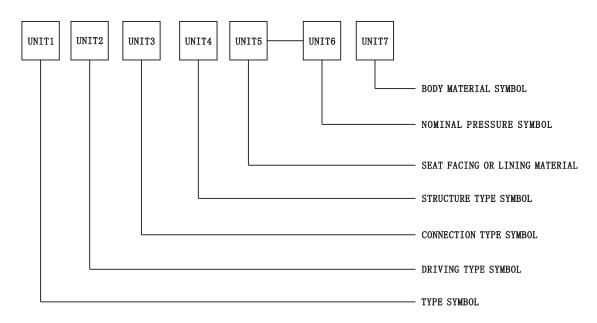
- 1. CONCENTRIC BUTTERFLY VALVE
- 2. DOUBLE OFFSET BUTTERFLY VALVE
- 3. TRIPLE OFFSET BUTTERFLY VALVE

# **STRAINER**

- 1. Y TYPE STRAINER
- 2. BASKET STRAINER
- 3. T TYPE STRAINER



#### **MODEL OF VALVE**



# **TYPE SYMBOL**

VALVE TYPE	GATE VALVE	GLOBE VALVE	CHECK VALVE	BALL VALVE	PLUG VALVE	BUTTERFLY VALVE	STRAINER VALVE
NUMBER	Z	Ј	Н	Q	Х	D	S

#### **DRIVING TYPE SYMBOL**

DRIVING TYPE	WORM GEAR	SPUR GEAR	BEVEL GEAR	PNEUMATIC	HYDRAULIC	PNEUMATIC-HYDRAULIC	ELECTRICAL
NUMBER	3	4	5	6	7	8	9

Note: (1) Handwheels, handles, and wrench drives are omitted in this designation.

(2) For pneumatic or hydraulic: Normally open is indicated by 6K, 7K; normally closed is indicated by 6, 7B; pneumatic with manual override is indicated by 6S; explosion-proof electric is indicated by 9B

# **CONNECTION TYPE SYMBOL**

CONNECTION TYPE	FEMALE THREAD	MALE THREAD	FLANGE	WELDING	WAFER
NUMBER	1	2	4	6	7



# STRUCTURE TYPE SYMBOL

NUMBER	0	1	2	3	4	5	6	7	8
TYPE			S1	RUCTURE 1	TYPE SYMB	OL			
		RISING	STEM			NONRISI	NG STEM		
GAMD WALLED		WEDGE		PARA	LLEL	WED	GE		
GATE VALVE	FLEXIBLE			RIGID GA	TE VALVE				
	WEDGE	SINGLE SLUICE GATE	DOUBLE GATE	SINGLE SLUICE GATE			DOUBLE GATE		
GLOBE VALVE		STRAIGHT-THROUGH				DIRECT CURRENT			
BALL VALVE			FLOAT 1	BALL VALVE			TRRUI	ON BALL VA	LVE
BALL VALVE		CTDATCHT THOOLIGH		THREE	E-WAY		DOLD WAY		
		STRAIGHT-THROUGH	Y-TYPE		L-TYPE	T-TYPE	FOUR-WAY	STRAIGHT-THROUGH	
OTEON MALTE		TELES	COPIC			SWING CHECK		BUTTER	FLY
CHECK VALVE		STRAIGHT-THROUGH	UPRIGHT		SINGLE-PETAL TYPE	MULTI-PETAL Type	DOUBLE-DISC TYPE	DOUBLE VALVE	SINGLE PETAL
DI UC VALVE					PACKING			OIL	SEAL
PLUG VALVE				STRAIGHT-THROUGH	T-TYPE TEE	FOUR-WAY		STRAIGHT-THROUGH	T-TYPE TEE
BUTTERFLY			SEALED TYPE						
VALVE		CENTER LINE STYLE	DOUBLE ECCENTRICITY	TRIPLE OFFSET					

# SEAT FACING OR LINING MATERIAL

SEAT FACING OR LININGMATERIAL	COPPER ALLOY	RUBBER	NYLON	FLUOROPLASTIC	TIN BEARING ALLOY	ALLOY STEEL
NUMBER	T	X	N	F	В	Н
SEAT FACING OR LININGMATERIAL	NITRIDING STEEL	HARD STEEL	RUBBER LINING	LEAD LINED	ENAMEL	BORON INFILTRATED STEEL
NUMBER	D	Y	J	Q	С	P

Note: (1) The valve body directly processes the valve seat seal material, which is represented by "W".

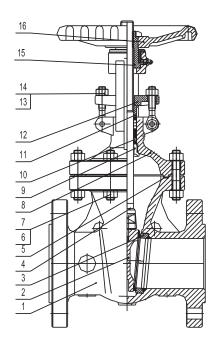
# **NOMINAL PRESSURE SYMBOL**

NOMINAL PRESSURE SYMBOL	CLASS150	CLASS300	CLASS400	CLASS600	CLASS800	CLASS900	CLASS1500	CLASS2500	CLASS4500
NUMBER	01	03	04	06	08	09	15	25	45

# **BODY MATERIAL SYMBOL**

BODY MATERIAL SYMBOL	GREY CAST IRON	MALLEABLE IRON	DUCTILE IRON	COPPER ALLOY	CARBON STEEL	1Cr5Mo, ZG1Cr5Mo
NUMBER	Z	K	Q	Т	В	I
SEAT FACING OR LININGMATERIAL	1Cr18Ni9Ti ZG1Cr18Ni9Ti	1Cr18Ni12Mo2Ti ZG1Cr18Ni12Mo2Ti	12CrMoV ZG12CrMoV			
NUMBER	P	R	V			





#### **CAST STEEL GATE VALVE**

#### **STANDARDS**:

• DESIGN AND MANUFACTURE: API 600&ASME B16.34

• FACE TO FACE DIMENSIONS: ASME B16. 10

• END FLANGE DIMENSIONS:

• NPS 1/2"~24" ASME B16.5
• NPS 26" & ABOVE ASME B16.47
• END BW DIMENSIONS: ASME B16.25
• PRESSURE-TEMPERATURE RATINGS: ASME B16.34
• NORMAIL PRESSURE: CLASS 150~1500

• NORMAIL DIAMETER: NPS 2"~40"

# **BILL OF MATERIAL (PART)**

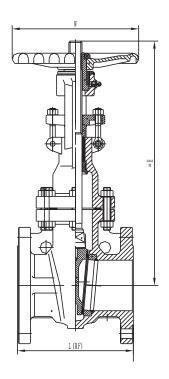
ITEM	PART NAME	MATERIAL
1	BODY	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
2	WEDGE	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
3	SEAT	A105, A350 LF2, A182 F11/F22/F5/F6a/F304/F316/F304L/F316L
4	STEM	A182 F6a/F304/F316/F304L/F316L
5	GASKET	304SS/316SS + GRAPHITE/PTFE
6	BOLT	A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
7	NUT	A194 2H/2HM/4/7/7M/8/8M
8	BONNET	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
9	BACK SEAT	A276 410/304/316/304L/316L
10	PACKING	GRAPHITE/PTFE
11	GLAND	A276 410/304/316/304L/316L
12	GLAND FLANGE	A216 WCB, A352 LCB, A217 WC6/WC9/C5, A351 CF8
13	EYEBOLT	A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
14	GLAND NUT	A194 2H/2HM/4/7/7M/8/8M
15	STEM NUT	ASTM A439 D2/Cu-ALLOY
16◆	HANDWHEEL	STEEL/DUCTILE IRON

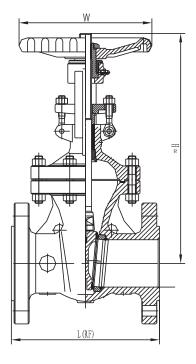
NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST

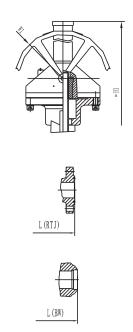
GEAR OPERATOR, ELECTRIGAL OPERATOR, PNEUMATIC OPERATOR, HYDRAULIC OPERATOR ETC. ARE AVAILABLE



# **CAST STEEL GATE VALVE**







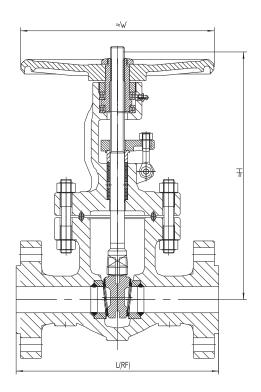
# CLASS 150

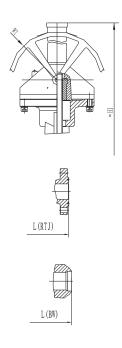
		_			_	_									_			_		-
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	40
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000
L(RF)	mm	178	191	203	229	267	292	330	356	381	406	432	457	508	559	610	610	660	711	762
L(BW)	mm	216	241	283	305	403	419	457	502	572	610	660	711	813	864	914	914	965	1016	1066
L(RTJ)	mm	191	203	216	241	279	305	343	368	394	419	445	470	521	570	622	622	673	724	-
Н	mm	381	398	435	522	610	750	935	1065	1224	1315	1487	1627	1931	1	-	-	ı	-	-
W	mm	250	250	280	300	350	400	400	500	600	600	600	680	920	-	-	-	-	-	-
H1	mm	-	-	-	-	-	-	1280	1510	1670	1885	2045	2210	2675	2980	3050	3426	3515	4000	4300
₩1	mm	-	-	-	-	-	-	310	400	460	460	460	460	460	460	600	600	600	600	600
WT (RF)	Kg	20	30	33	49	75	120	205	290	400	511	650	789	1200	1700	1800	2560	3060	3500	4800

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	28	30	32	36	
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	700	750	800	900	
L(RF)	mm	216	241	283	305	403	419	457	502	762	838	914	991	1143	1346	1397	1524	1727	
L(BW)	mm	216	241	283	305	403	419	457	502	762	838	914	991	1143	1346	1397	1524	1727	
L(RTJ)	mm	232	257	298	321	419	435	473	518	778	854	930	1010	1165	1372	1422	1553	1756	
H	mm	352	390	420	496	635	772	995	1090	1265	1385	1510	1630	-	-	-	-	-	
₩	mm	250	250	250	300	400	450	500	600	650	750	750	920	-	-	-	-	-	
H1	mm	-	-	-	1	-	-	1375	1524	1718	1860	2077	2310	2809	3078	3395	3700	4115	
₩1	mm	-	-	-	-	-	-	460	460	460	460	460	460	600	600	600	600	600	
WT (RF)	Kg	24	36	47	69	123	195	333	440	710	950	1405	1720	2770	3312	4100	5200	6700	



# **CAST STEEL GATE VALVE**





#### CLASS 600

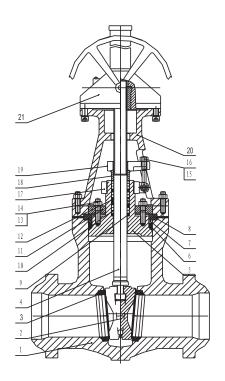
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L(RF)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L(BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L(RTJ)	mm	295	333	359	435	562	663	790	841	892	994	1095	1200	1407
H	mm	375	410	463	550	713	874	995	1140	1365	-	-	-	-
₩	mm	250	250	300	350	500	600	600	650	700	-	_	-	-
H1	mm	-	-	-	-	958	1148	1350	1580	1830	2008	2140	2360	2710
₩1	mm	-	-	-	-	310	460	460	460	460	600	600	600	600
WT (RF)	Kg	39	52	88	114	285	413	650	800	1140	1700	2208	2850	3500

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130
L(BW)	mm	368	419	381	457	610	737	838	965	1029	1130
L(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140
Н	mm	445	480	513	613	834	875	1040	1150	-	-
W	mm	300	300	350	400	600	600	660	700	-	-
H1	mm	-	-	-	-	1000	1130	1580	1720	1795	1908
₩1	mm	-	-	-	-	310	460	460	460	600	600
WT (RF)	Kg	72	101	130	197	404	680	850	1177	1500	1920

**CLASS 1500** 

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384
L(BW)	mm	368	419	470	546	705	832	991	1130	1257	1384
L(RTJ)	mm	371	422	473	549	711	841	1000	1146	1276	1407
Н	mm	482	512	560	752	-	-	-	-	-	-
W	mm	300	350	400	550	-	-	-	-	-	-
H1	mm	-	-	-	860	1123	1360	1585	1800	2200	2660
₩1	mm	-	-	-	310	460	460	460	600	600	600
WT (RF)	Kg	85	130	170	304	646	1100	1600	2106	2700	3500





#### **HIGH PRESSURE CAST STEEL GATE VALVE**

• DESIGN AND MANUFACTURE: API 600&ASME B16.34

• FACE TO FACE DIMENSIONS:
• END FLANGE DIMENSIONS:
• END BW DIMENSIONS:
• PRESSURE-TEMPERATURE RATINGS: ASME B16. 34
• NORMAIL PRESSURE:
• NORMAIL DIAMETER:
CLASS 900~2500
• NORMAIL DIAMETER:
NPS 2"~16"

# **BILL OF MATERIAL (PART)**

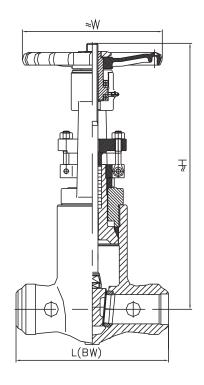
ITEM	PART NAME	MATERIAL
1	BODY	A216 WCB/WCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
2	WEDGE	A216 WCB/WCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
3	SEAT	A105, A182 F11/F22/F5/F6a/F304/F316/F304L/F316L
4	STEM	A182 F6a/F304/F316/F304L/F316L
5	BONNET	A105, A182 F6a/F304/F316/F304L/F316L
6	SEALING RING	SS304, SS316, SS304L, SS316L, SS304/SS316/SS304L/SS316L + GRAPHITE
7	SPACER RING	A182 F6a/F304/F316/F304L/F316L
8	SEGMENT RING	A182 F6a/F304/F316/F304L/F316L
9	PACKING WASHER	A276 410/304/316/304L/316L
10	PACKING	GRAPHITE/SS+GRAPHITE
11	SUPPORTING PLANT	A105, A182 F11/F22/F304/F316/F304L/F316L
12	LANTERN RING	A276 410/304/316/304L/316L
13	BOLT	A193 B7/B7M/B16/B8/B8M
14	NUT	A194 2H/2HM/4/7/7M/8/8M
15	EYEBOLT	A193 B7/B7M/B16/B8/B8M
16	GLAND NUT	A194 2H/2HM/4/7/7M/8/8M
17	SPLIT RING	A216 WCB, A351 CF8
18	GLAND	A276 410/304/316/304L/316L
19	GLAND FLANGE	A216 WCB, A217 WC6/WC9/C5, A351 CF8
20	YOKE	A216 WCB, A217 WC6/WC9/C5, A351 CF8
21	GEAR	ASSEMBLY

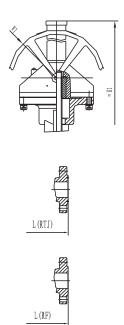
NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST

GEAR OPERATOR, ELECTRIGAL OPERATOR, PNEUMATIC OPERATOR, HYDRAULIC OPERATOR ETC. ARE AVAILABLE



# **HIGH PRESSURE CAST STEEL GATE VALVE**





#### CLASS 900

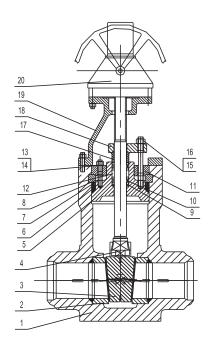
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130
L(BW)	mm	216	254	305	356	508	660	787	914	991	1092
L(RTJ)	mm	371	422	384	460	613	740	841	968-	1038	1140
Н	mm	445	525	660	886	928	-	-	-	-	-
₩	mm	300	300	350	400	600	-	-	-	-	-
H1	mm	-	-	-	-	-	1261	1530	1730	1842	2010
₩1	mm	-	-	-	-	-	460	460	460	600	600
WT (RF)	Kg	50	74	90	110	195	745	745	1060	1410	1960

#### **CLASS 1500**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384
L(BW)	mm	216	254	305	406	559	711	864	991	1067	1194
L(RTJ)	mm	371	422	473	549	711	841	1000	1146	1276	1407
H	mm	482	554	672	768	-	-	-	-	-	-
₩	mm	300	350	400	550	-	-	-	-	-	-
H1	mm	-	-	-	-	1123	1360	1550	1800	2060	2320
₩1	mm	-	-	-	-	460	460	600	600	600	600
WT (RF)	Kg	50	74	90	158	350	690	1030	1460	1810	2760

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	451	508	578	673	914	1022	1270	1422	-	-
L(BW)	mm	279	330	368	457	610	762	914	1041	1118	1245
L(RTJ)	mm	454	514	584	683	927	1038	1292	1445	-	-
H	mm	594	753	840	880	-	-	-	-	-	-
₩	mm	350	400	560	600	-	-	-	-	-	-
H1	mm	-	-	-	-	1205	1454	1610	2096	2291	2470
₩1	mm	-	-	ı	-	600	600	600	760	760	760
WT (RF)	Kg	60	100	110	200	530	750	1610	3010	3410	4210





#### HIGH PRESSURE FORGING STEEL GATE VALVE

• DESIGN AND MANUFACTURE: API 600&ASME B16.34

• FACE TO FACE DIMENSIONS:
• END FLANGE DIMENSIONS:
• END BW DIMENSIONS:
• PRESSURE-TEMPERATURE RATINGS:
• NORMAIL PRESSURE:
• NORMAIL DIAMETER:

CLASS 1500~2500

NPS 2"~16"

# **BILL OF MATERIAL (PART)**

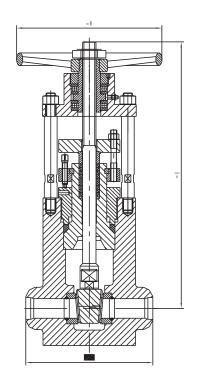
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ITEM	PART NAME	MATERIAL
1	BODY	A105, A182 F11/F22/F5/F9/F304/F316/F304H/F321/F347
2	WEDGE	A105, A182 F11/F22/F5/F9/F304/F316/F304H/F321/F347
3	SEAT	A105, A182 F11/F22/F5/F6a/F304/F316/F304L/F316L
4	STEM	A182 F6a/F304/F316/F304L/F316L/XM-19
5	BONNET	A105, A182 F11/F22/F5/F9/F304/F316/F304H/F321/F347
6	SEALING RING	SS304/SS316/SS304L/SS316L/SS321/SS347 + GRAPHITE
7	SPACER RING	A182 F6a/F304/F316/F304L/F316L/F304H/F321/F347
8	SEGMENT RING	A182 F6a/F304/F316/F304L/F316L/F304H/F321/F347
9	PACKING WASHER	A276 410/304/316/304L/316L/304H/321/347
10	PACKING	GRAPHITE/SS+GRAPHITE
11	SUPPORTING PLANT	A105, A182 F11/F22/F5/F9/F304/F316/F304L/F316L/F304H/F321/F347
12	LANTERN RING	A276 410/304/316/304L/316L/304H/321/347
13	BOLT	A193 B7/B7M/B16/B8/B8M
14	NUT	A194 2H/2HM, 4, 7/7M, 8, 8M
15	EYEBOLT	A193 B7/B7M/B16
16	GLAND NUT	A194 2H/2HM, 4, 7/7M, 8, 8M
17	GLAND	A276 410/304/316/304L/316L/304H/321/347
18	GLAND FLANGE	A216 WCB, A217 WC6/WC9/C5, A351 CF8
19	YOKE	A216 WCB, A217 WC6/WC9/C5, A351 CF8
20◆	GEAR	ASSEMBLY

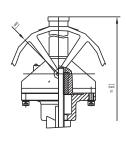
NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST

GEAR OPERATOR, ELECTRIGAL OPERATOR, PNEUMATIC OPERATOR, HYDRAULIC OPERATOR ETC. ARE AVAILABLE



# HIGH PRESSURE FORGING STEEL GATE VALVE









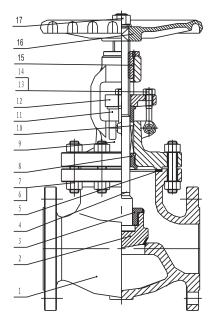
**CLASS 1500** 

					_					$\overline{}$
NPS	in	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	65	80	100	150	200	250	300	350	400
L (RF)	mm	419	470	546	705	832	991	1130	1257	1384
L(BW)	mm	254	305	406	559	711	864	991	1067	1194
L(RTJ)	mm	422	473	549	711	841	1000	1146	1276	1407
Н	mm	693	745	821	-	-	-	-	-	-
₩	mm	350	400	550	-	-	-	-	-	-
H1	mm	-	-	-	1123	1360	1550	1800	2060	2320
W1	mm	-	-	-	460	460	600	600	600	600
WT (RF)	Kg	85	108	158	350	690	1030	1460	1810	2760

**CLASS 2500** 

NPS	in	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	65	80	100	150	200	250	300	350	400
L(RF)	mm	508	578	673	914	1022	1270	1422	-	-
L(BW)	mm	330	368	457	610	762	914	1041	1118	1245
L(RTJ)	mm	514	584	683	927	1038	1292	1445	-	-
Н	mm	700	762	850	1300	-	-	-	-	-
₩	mm	280	350	350	500	-	-	-	-	-
H1	mm	-	-	-	-	1454	1610	2096	2291	2470
₩1	mm	-	-	-	-	600	600	760	760	760
WT (RF)	Kg	100	152	245	438	750	1610	3010	3410	4210





#### **CAST STEEL GLOBE VALVE**

#### **STANDARDS:**

• DESIGN AND MANUFACTURE: BS1837/ASME B16.34

NPS 1/2"~16"

• FACE TO FACE DIMENSIONS: ASME B16.10

• END FLANGE DIMENSIONS:

• NORMAIL DIAMETER:

NPS1/2"~24" ASME B16.5

• END BW DIMENSIONS: ASME B16.25

• PRESSURE-TEMPERATURE RATINGS: ASME B16.34

• NORMAIL PRESSURE: CLASS 150~900

# **BILL OF MATERIAL (PART)**

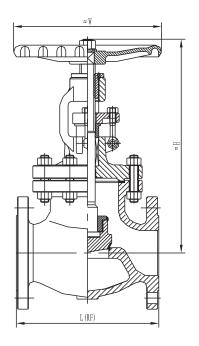
ITEM	PART NAME	MATERIAL
1	BODY	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
2	DISC	A105, A350 LF2, A182 F11/F22/F5/F304/F316/F304L/F316L
3	DISC NUT	CARBON STEEL, STAINLESS STEEL
4	STEM	A182 F6a/F304/F316/F304L/F316L
5	GASKET	304SS/316SS + GRAPHITE/PTFE, SOFT STEEL, SS304/SS316 METAL RING
6	BOLT	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
7	NUT	ASTM A194 2H/2HM/7/7M/8/8M
8	BACK SEAT	A182 F6a/F304/F316/F304L/F316L
9	BONNET	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
10	PACKING	GRAPHITE/PTFE/SS+GRAPHITE
11	GLAND	ASTM 276 410/304/316/304L/316L
12	GLAND FLANGE	ASTM 216 WCB/A351 CF8
13	EYEBOLT	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
14	GLAND NUT	ASTM A194 2H/2HM/7/7M/8/8M
15	STEM NUT	ASTM A439 D2/Cu-ALLOY
16◆	HANDWHEEL	STEEL/DUCTILE IRON
17	H. W NUT	CARBON STEEL, STAINLESS STEEL
	SEALING FACE OVERLAY	API TRIMS AVAILABLE

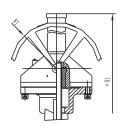
NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST

 ${\tt GEAR\ OPERATOR,\ ELECTRIGAL\ OPERATOR,\ PNEUMATIC\ OPERATOR,\ HYDRAULIC\ OPERATOR\ ETC.\ ARE\ AVAILABLE}$ 



# **CAST STEEL GLOBE VALVE**









#### CLASS 600

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12
DN	mm	50	65	80	100	150	200	250	300
L(RF)	mm	292	330	356	432	559	660	787	838
L(BW)	mm	292	330	356	432	559	660	787	838
L(RTJ)	mm	295	333	359	435	562	663	790	841
H	mm	385	430	475	685	901	913	1060	1227
₩	mm	250	280	320	400	560	600	650	760
H1	mm	-	-	-	-	1027	1160	1380	1433
₩1	mm	-	-	-	-	460	460	600	600
WT (RF)	Kg	32	45	62	139	342	483	870	1067

#### CLASS 150

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	203	216	241	292	406	495	622	699	787	914
L(BW)	mm	203	216	241	292	406	495	622	699	787	914
L(RTJ)	mm	216	229	254	305	419	508	638	711	800	927
Н	mm	350	362	385	490	537	707	788	820	-	-
₩	mm	220	250	280	320	400	450	680	680	-	-
H1	mm	-	1	-	-	-	760	830	890	1400	1648
W1	mm	ı	ı	ı	-	ı	310	310	460	600	600
WT (RF)	Kg	21	29	34	54	93	182	268	400	650	1113

# CLASS 900

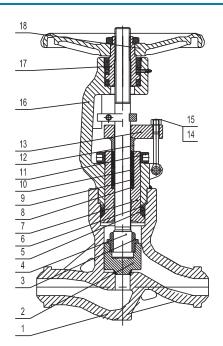
NPS	in	2	$2\frac{1}{2}$	3	4	6	8
DN	mm	50	65	80	100	150	200
L(RF)	mm	368	419	381	457	610	737
L(BW)	mm	368	419	381	457	610	737
L(RTJ)	mm	371	422	384	460	613	740
Н	mm	430	580	675	780	870	980
W	mm	320	320	350	500	500	560
H1	mm	-	1	-	-	100	1257
₩1	mm	-	-	-	-	460	600
WT (RF)	Kg	58	92	144	225	502	720

#### CLASS 300

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12
DN	mm	50	65	80	100	150	200	250	300
L(RF)	mm	267	292	318	356	445	559	622	711
L(BW)	mm	267	292	318	356	445	559	622	711
L(RTJ)	mm	282	308	333	371	460	575	638	727
Н	mm	345	377	405	468	708	777	935	906
₩	mm	220	250	280	320	150	500	560	600
H1	mm	-	-	-	-	836	854	997	1320
W1	mm	-	-	_	-	460	460	460	600
WT (RF)	Kg	28	36	50	75	200	287	510	720

	NPS	in	2	$2\frac{1}{2}$	3	4	6	8
	DN	mm	50	65	80	100	150	200
	L(RF)	mm	368	419	470	546	6705	832
	L(BW)	mm	368	419	470	546	705	832
	L(RTJ)	mm	371	422	473	549	711	842
	H	mm	430	580	705	820	910	1015
	W	mm	320	400	450	600	700	800
1	H1	mm	-	-	-	-	1200	1460
Ì	₩1	mm	-	-	-	-	460	600
1	WT (RF)	Kg	66	115	188	292	620	808





#### **HIGH PRESSURE CAST STEEL GLOBE VALVE**

# **STANDARDS**:

• DESIGN AND MANUFACTURE: BS1837/ASME B16.34

• FACE TO FACE DIMENSIONS: ASME B16.10

• END FLANGE DIMENSIONS:

NPS1/2"~24" ASME B16.5
• END BW DIMENSIONS: ASME B16.25
• PRESSURE-TEMPERATURE RATINGS: ASME B16.34

• NORMAIL PRESSURE: CLASS 150~900 • NORMAIL DIAMETER: NPS 1/2"~16"

# **BILL OF MATERIAL (PART)**

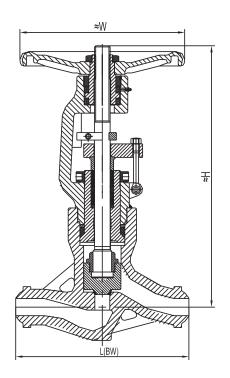
ITEM	PART NAME	MATERIAL
1	BODY	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
2	DISC	A105, A350 LF2, A182 F11/F22/F5/F304/F316/F304L/F316L
3	DISC NUT	CARBON STEEL, STAINLESS STEEL
4	STEM	A182 F6a/F304/F316/F304L/F316L, AISI 4140/4340
5	SEALING RING	304SS/316SS + GRAPHITE/PTFE, SOFT STEEL, SS304/SS316/SS304L/SS316L
6	SPACER RING	A182 F6a/F304/F316/F304L/F316L
7	BONNET	ASTM A105, A182 F11/F22/F5/F304/F316/F304L/F316L
8	PACKING WASHER	ASTM A276 410/304/316/304L/316L
9	PACKING	GRAPHITE/PTFE/SS+GRAPHITE
10	LANTERN RING	ASTM A276 410/304/316/304L/316L
11	NUT	ASTM A105, A182 F11/F304
12	GLAND	ASTM 276 410/304/316/304L/316L
13	GLAND FLANGE	ASTM 216 WCB, A217 WC6, A351 CF8
14	EYEBOLT	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
15	GLAND NUT	ASTM A194 2H/2HM/7/7M/8/8M
16	YOKE	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8
17	STEM NUT	ASTM A439 D2/Cu-ALLOY
18◆	HANDWHEEL	STEEL/DUCTILE IRON

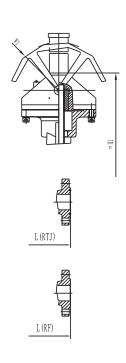
NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST

GEAR OPERATOR, ELECTRIGAL OPERATOR, PNEUMATIC OPERATOR, HYDRAULIC OPERATOR ETC. ARE AVAILABLE



# **HIGH PRESSURE CAST STEEL GLOBE VALVE**





NPS	in	2	$2\frac{1}{2}$	3	4	6	8
DN	mm	50	65	80	100	150	200
L(RF)	mm	368	419	381	457	610	737
L(BW)	mm	368	419	381	457	610	737
L(RTJ)	mm	371	422	384	460	613	740
H	mm	620	660	682	780	-	-
W	mm	350	400	450	560	-	-
H1	mm	-	-	-	-	1240	1520
₩1	mm	-	-	-	-	610	710
WT (RF)	Kg	110	120	150	190	420	770

**CLASS 1500** 

NPS	in	2	$2\frac{1}{2}$	3	4	6	8
DN	mm	50	65	80	100	150	200
L(RF)	mm	368	419	470	546	705	832
L(BW)	mm	368	419	470	546	708	832
L(RTJ)	mm	371	422	473	549	711	841
Н	mm	620	660	692	-	-	-
₩	mm	350	400	450	-	-	-
H1	mm	-	-	-	907	1300	1750
W1	mm	-	-	-	460	710	800
WT (RF)	Kg	110	120	210	300	620	1180

**CLASS 2500** 

NPS	in	2	$2\frac{1}{2}$	3	4	6
DN	mm	50	65	80	100	150
L(RF)	mm	451	508	578	673	914
L(BW)	mm	451	508	578	673	914
L(RTJ)	mm	454	514	584	683	927
H	mm	620	840	-	-	-
W	mm	350	510	-	-	-
H1	mm	-	-	940	1100	1400
₩1	mm	-	-	610	610	800
WT (RF)	Kg	110	180	286	465	550



#### **SWING CHECK VALVE**

#### **STANDARDS:**

• DESIGN AND MANUFACTURE: BS1868&API 6D&ASME B16.34

• FACE TO FACE DIMENSIONS: ASME B16. 10

• END FLANGE DIMENSIONS:

NPS1/2"~24" ASME B16.5

• NPS 26" & ABOVE ASME B16.47

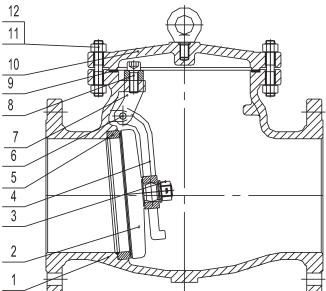
• END BW DIMENSIONS: ASME B16.25

• PRESSURE-TEMPERATURE RATINGS: ASME B16.34

• NORMAIL PRESSURE: CLASS 150~900

• PRESSURE-TEMPERATURE RATINGS: ASME B16.34
• NORMAIL PRESSURE: CLASS 150~900
• NORMAIL DIAMETER: NPS 2"~36"

7
6
5

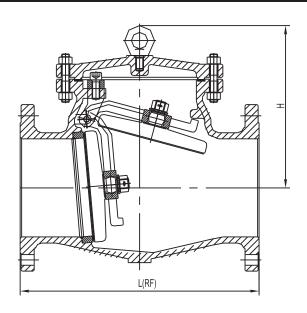


# **BILL OF MATERIAL (PART)**

ITEM	PART NAME	MATERIAL
1	BODY	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
2	DISC	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
3	DISC NUT	CARBON STEEL/SS304/SS316/SS304L/SS316L
4	HINGE	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
5	SEAT	ASTM A105, A350 LF2, A182 F304/F316/304L/F316L
6	HINGE PIN	ASTM A182 F6a/F304/F316/F304L/F316L
7	YOKE	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
8	BOLT	ASTM A193 B7/B7M/B8/B8M/B16, A320 L7/L7M
9	GASKET	304SS/316SS + GRAPHITE/PTFE
10	BONNET	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
11	BOLT	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
12	NUT	ASTM A194 2H/2HM/7/7M/8/8M
	SEALING FACE OVERLAY	API TRIMS AVAILABLE

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST





# **CAST STEEL SWING CHECK VALVE**





#### CLASS 150

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L(RF)	mm	203	216	241	292	356	495	622	699	787	864	978	978	1295	1524	1956
L(BW)	mm	203	216	241	292	356	495	622	699	787	864	978	978	1295	1524	1956
L(RTJ)	mm	216	229	254	305	368	508	635	711	800	876	991	991	1308	1537	1968
Н	mm	144	150	180	259	303	373	417	478	540	652	690	720	740	980	-
WT (RF)	Kg	17	20	25	40	93	134	199	305	370	542	750	900	1200	2100	-

#### CLASS 300

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750
L(RF)	mm	267	292	318	356	445	533	622	711	838	864	978	1016	1346	1594
L(BW)	mm	267	292	318	356	445	533	622	711	383	864	978	1016	1346	1594
L(RTJ)	mm	282	308	333	371	460	549	638	727	854	879	994	1035	1368	1619
Н	mm	167	185	210	281	320	399	440	462	571	659	676	742	810	1000
WT (RF)	Kg	23	37	46	71	118	202	293	428	583	751	935	1115	1408	1819

#### CLASS 600

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L(RF)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L(BW)	mm	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
Н	mm	168	215	231	297	365	444	500	542	610	765	786	845	940
WT (RF)	Kg	26	32	49	86	252	429	557	670	944	1300	1760	2200	2864

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130
L(BW)	mm	368	419	381	457	610	737	838	965	1029	1130
L(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140
Н	mm	200	260	285	324	424	522	545	590	640	700
WT (RF)	Kg	58	76	100	140	294	700	724	870	1254	1800



#### HIGH PRESSURE CAST STEEL SWING CHECK VALVE

#### **STANDARDS:**

• DESIGN AND MANUFACTURE: BS1868&API 6D&ASME B16.34

• FACE TO FACE DIMENSIONS: ASME B16.10

• END FLANGE DIMENSIONS:

NPS1/2"~24"
• END BW DIMENSIONS:
• PRESSURE-TEMPERATURE RATINGS:
• NORMAIL PRESSURE:

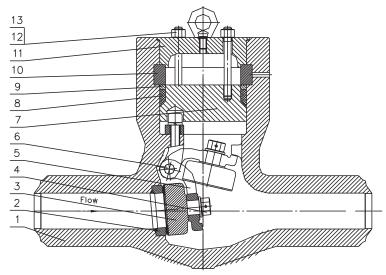
ASME B16. 5

ASME B16. 25

ASME B16. 34

CLASS900~2500

• NORMAIL DIAMETER: NPS 2"~16"



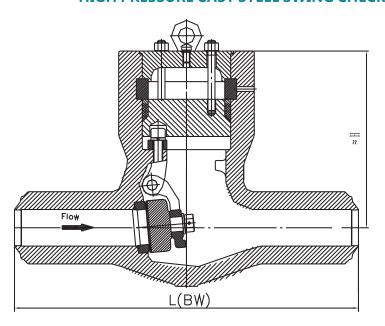
# **BILL OF MATERIAL (PART)**

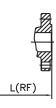
ITEM	PART NAME	MATERIAL
1	BODY	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
2	SEAT RING	ASTM A105, A350 LF2, A182 F304/F316/304L/F316L
3	DISC	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
4	DISC NUT	CARBON STEEL/SS304/SS316/SS304L/SS316L
5	HINGE	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
6	HINGE PIN	ASTM A182 F6a/F304/F316/F304L/F316L
7	COVER	ASTM A105, A350 LF2, A182 F304/F316/304L/F316L
8	SEALING RING	304SS/316SS + GRAPHITE/PTFE, SOFT STEEL, SS304/SS316/SS304L/SS316L
9	PRESSURE RING	ASTM A105, A350 LF2, A182 F304/F316/304L/F316L
10	SEGMENT RING	CARBON STEEL, STAINLESS STEEL
11	BONNET	ASTM A105, A350 LF2, A182 F304/F316/304L/F316L
12	BOLT	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
13	NUT	ASTM A194 2H/2HM/7/7M/8/8M

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



# HIGH PRESSURE CAST STEEL SWING CHECK VALVE







#### CLASS 900

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130
L(BW)	mm	368	454	305	356	508	660	787	914	991	1092
L(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140
Н	mm	215	245	292	318	400	464	517	592	640	700
WT (RF)	Kg	25	35	46	68	170	460	700	1020	1220	1350

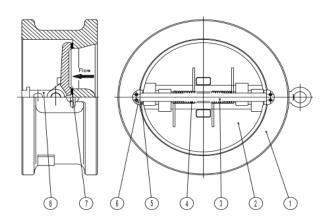
#### **CLASS 1500**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384
L(BW)	mm	368	254	305	406	559	711	864	911	1067	1194
L(RTJ)	mm	371	422	473	549	559	841	1000	1146	1276	1407
H	mm	245	260	285	324	424	522	545	590	640	700
WT (RF)	Kg	25	35	50	80	290	490	750	1110	1415	1605

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12
DN	mm	50	65	80	100	150	200	250	300
L(RF)	mm	451	508	578	673	914	1022	1270	1422
L(BW)	mm	279	330	368	457	610	762	914	1041
L(RTJ)	mm	454	514	584	683	927	1038	1292	1445
Н	mm	250	280	308	352	440	540	580	660
WT (RF)	Kg	62	85	100	165	460	900	1300	1800



# **WAFER DUAL PLATE CHECK VALVE**



#### STANDARDS:

. DESIGN AND MANUFACTURE: API 594 . FACE TO FACE DIMENSIONS: API 594

. END FLANGE DIMENSIONS:

 NPS1/2"~24"
 ASME B16.5

 NPS26"~48"
 ASME B16.47

 PRESSURE-TEMPERATURE RATINGS:
 ASME B16.34

 NORMAIL PRESSURE:
 CLASS150~2500

 NORMAIL DIAMETER:
 NPS 2"~48"

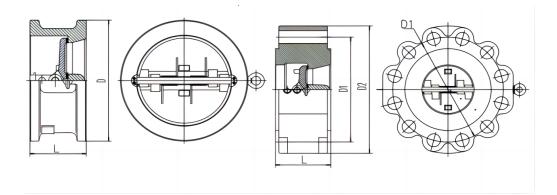
# BILL OF MATERIAL (PART)

ITEM	PART NAME	MATERIAL
1	BODY	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
2	PLATE	A216 WCB/WCC, A352 LCB/LCC, A217 WC6/WC9/C5, A351 CF8/CF8M/CF3, CF3M
3	PIN	ASTM A182 F6a/F304/F316/F304L/F316L
4	SPRING	INCONEL X-750
5	BEARING	ASTM A276 410/304/316/304L/316L
6	HOLDER LOCK	ASTM A105, A350 LF2, A182 F304/F316/304L/F316L
7	SEAT	INTERGAL OVERLAY/NBR/EPDM/HNBR
8	PIN HOLDER	ASTM A182 F6a/F304/F316/F304L/F316L

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



# WAFER DUAL PLATE CHECK VALVE



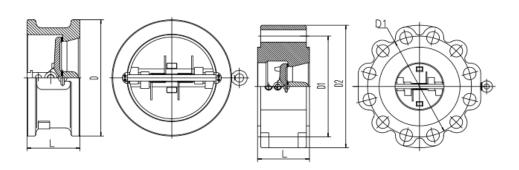
CLASS	150																	
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900	1050	1200
L	mm	60	67	73	73	98	127	146	181	184	191	203	219	222	305	368	432	524
D	mm	102	121	134	172	220	278	338	406	448	512	546	604	715	880	1046	1217	1382
D1	mm	120.7	139.7	152.4	190.5	241.3	298. 5	362	431.8	476. 3	539.8	577. 9	635	749.3	914	1086	1257	1422
D2	mm	150	180	190	230	280	345	405	485	535	595	635	700	815	984	1168	1364	1511
WT	Kg	1.2	2.3	3	7	15	23	30	37	49	62	78	97	125	300	395	470	595

CLASS	300																	
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900	1050	1200
L	mm	60	67	73	73	98	127	146	181	222	232	264	292	318	368	483	568	629
D	mm	109	127	146	178	248	305	359	420	484	538	595	652	773	950	1115	1163	1322
D1	mm	127	149. 2	168.3	200	269. 9	330. 2	387.4	450.8	514.4	571.5	628.6	685.8	812.8	997	1168	1207	1372
D2	mm	165	190	210	255	320	380	445	520	585	650	710	775	915	1092	1270	1289	1467
WT	Kg	2	2.9	5. 5	9. 5	20	25	32	39	52	67	82	102	135	321	400	515	611

CLASS	600																
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36	42
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900	1050
L	mm	60	67	73	79	136	165	213	229	273	305	362	368	438	505	635	701
D	mm	109	128	147	192	265	318	398	455	490	563	610	680	788	969	1128	1218
D1	mm	127	149.2	168.3	215.9	292. 1	349.2	431.8	489	527	603. 2	654	723. 9	838.2	1022	1194	1283
D2	mm	165	190	210	275	355	420	510	560	605	685	745	815	940	1130	1314	1403
WT	Kg	2.5	3.4	6.3	10.2	22	35	41	57	72	83	100	140	350	410	589	698



# **WAFER DUAL PLATE CHECK VALVE**



#### CLASS 900

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L	mm	70	83	83	102	159	206	241	292	356	384	451	451	495
D	mm	140	163	166	205	286	357	433	496	519	573	636	696	836
D1	mm	165. 1	190.5	190. 5	235	317.5	393.7	469. 9	533. 4	558.8	616	685.8	749. 3	901.7
D2	mm	215	245	240	290	380	470	545	610	640	705	785	855	1040
WT	Kg	2.8	4	8.3	13	25	4.1	59	82	105	198	225	255	398

# CLASS 1500

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L	mm	70	83	83	102	159	206	248	305	356	384	468	533	559
D	mm	140	163	173	208	280	350	433	519	576	639	703	753	900
D1	mm	165. 1	190.5	203. 2	241.3	317.5	393.7	482.6	571.5	635	704.8	774.7	831.8	990.6
D2	mm	215	245	265	310	395	485	585	675	750	825	915	985	1170
WT	Kg	3.8	7	10.5	27. 5	48.8	62	89	125	154	275	300	458	525

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12
DN	mm	50	65	80	100	150	200	250	300
L	mm	70	83	86	105	159	206	254	305
D	mm	143	166	195	233	316	386	475	548
D1	mm	171.4	196.8	228.6	273	368.3	438.2	539.8	619.1
D2	mm	235	265	305	355	485	550	675	760
WT	Kg	7	11	21	46	65	97	155	325



#### **CAST STEEL FLOATING BALL VALVE**

#### **STANDARDS:**

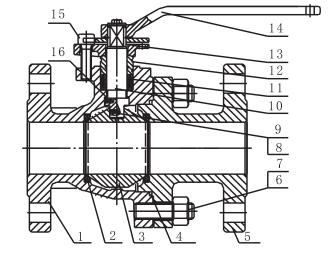
• DESIGN AND MANUFACTURE: BS5351/API 608/API 6D/ASME B16.34

• FACE TO FACE DIMENSIONS: ASME B16.10/API 6D

• END FLANGE DIMENSIONS:

NPS1/2"~24" ASME B16.5
• END BW DIMENSIONS: ASME B16.25
• PRESSURE-TEMPERATURE RATINGS: ASME B16.34
• FIRE SAFE DESIGN: API 607/API 6FA

• NORMAIL PRESSURE: CLASS150~1500 • NORMAIL DIAMETER: NPS 1/2"~10"



# **BILL OF MATERIAL (PART)**

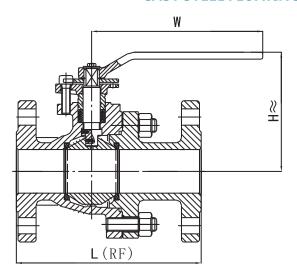
ITEM	PART NAME	MATERIAL
1	BODY	ASTM A216 WCB/WCC, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
2	SEAT	PTFE, RPTFE, DEVLON, PEEK
3	BALL	ASTM A105+ENP, A350 LF2+ENP, A182 F6a/F304/F316/F304L/F316L
4	GASKET	SS304/SS316 + GRAPHITE
5	BONNET	ASTM A216 WCB/WCC, A352 LCB, A351 CF8/CF8M/CF3/CF3M
6	BOLT	ASTM A193 B7/B7M/B8/B8M, A320 L7/L7M
7	NUT	ASTM A194 2H/2HM/8/8M/7/7M
8	ANTI STATIC BALL	SS304/SS316
9	ANTI STATIC SPRING	SS304/SS316
10	STEM	AISI 1045+ENP, ASTM A182 F6a/F304/F316/F304L/F316L, 17-4PH
11	PACKING	GRAPHITE/PTFE
12	GLAND	ASTM 276 410/304/316
13	GLAND FLANGE	ASTM A216 WCB, A351 CF8
14◆	LEVER	CARBON STEEL
15	BOLT	ASTM A193 B7/B7M/B8/B8M, A320 L7/L7M
16	THRUST WASHER	PTFE

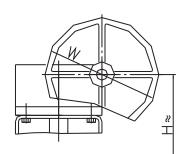
NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST

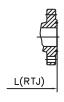
GEAR OPERATOR, ELECTRIGAL OPERATOR, PNEUMATIC OPERATOR, HYDRAULIC OPERATOR ETC. ARE AVAILABLE



# **CAST STEEL FLOATING BALL VALVE**









#### **FULL PORT CLASS 150**

NPS	in	$\frac{1}{2}$	34	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	6	8	10
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250
L(RF)	mm	108	117	127	140	165	178	191	203	229	394	457	533
L(BW)	mm	140	152	165	178	191	216	241	283	305	457	521	559
L(RTJ)	mm	119	130	140	152	178	191	203	216	241	406	470	546
Н	mm	70	93	93	102	118	145	148	152	203	338	456	510
W	mm	130	130	160	180	200	230	300	350	400	750	300	400
WT (RF)	Kg	3	4	5	7	8	12	18	24	38	82	185	280

# FULL PORT CLASS 300

NPS	in	$\frac{1}{2}$	<u>3</u>	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	6	8
DN	mm	15	20	25	32	40	50	65	80	100	150	200
L(RF)	mm	140	152	165	178	191	216	241	283	305	403	502
L(BW)	mm	140	152	165	178	191	216	241	283	305	457	521
L(RTJ)	mm	151	165	178	191	203	232	257	298	321	419	518
H	mm	70	93	93	102	118	145	156	170	210	366	440
₩	mm	130	130	160	200	230	230	300	350	400	800	400
WT (RF)	Kg	3	5	6	8	11	16	24	34	56	125	267

#### **FULL PORT CLASS 600**

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4
DN	mm	15	20	25	32	40	50	65	80	100
L(RF)	mm	165	191	216	229	241	292	330	356	432
L(BW)	mm	165	191	216	229	241	292	330	356	432
L(RTJ)	mm	163.5	191	216	229	241	295	333	359	435
Н	mm	85	93	99	100	115	180	175	244	265
₩	mm	160	200	200	200	200	350	600	700	800
WT (RF)	Kg	5	7	9	13	17	25	42	56	82

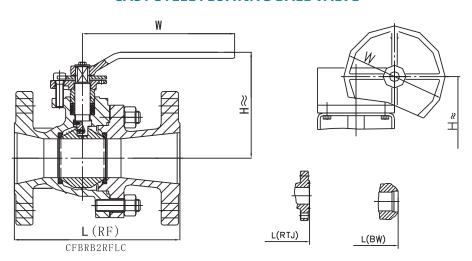
#### FULL PORT CLASS 900~CLASS1500

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
DN	mm	15	20	25	32	40	50
L(RF)	mm	216	229	254	279	305	368
L(BW)	mm	216	229	254	279	305	368
L(RTJ)	mm	216	229	254	279	305	371
Н	mm	85	93	100	110	125	195
₩	mm	160	200	200	350	600	800
WT (RF)	Kg	10	14	17	25	33	48

NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 8"



# **CAST STEEL FLOATING BALL VALVE**



#### REDUCED PORT CLASS 150

NPS	in	$\frac{1}{2}$	34	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	6	6sp	8	8sp	10	10sp
DN	mm	15	20	25	32	40	50	65	80	100	150	150sp	200	200sp	250	250sp
L(RF)	mm	108	117	127	140	165	178	191	203	229	394	267	457	292	533	330
L(BW)	mm	140	152	165	178	191	216	241	283	305	457	403	521	419	559	457
L(RTJ)	mm	119	130	140	152	178	191	203	216	241	406	279	470	305	546	343
Н	mm	70	70	93	93	93	118	145	145	152	203	203	338	338	456	456
₩	mm	130	130	130	160	160	200	230	230	350	400	400	750	750	300	300
WT (RF)	Kg	2.5	3	4.5	5. 2	5.5	5.8	13	14	26	70	57	165	75	248	145

#### REDUCED PORT CLASS 300

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	6	8	8sp
DN	mm	15	20	25	32	40	50	65	80	100	150	200	200sp
L(RF)	mm	140	152	165	178	191	216	241	283	305	403	502	419
L(BW)	mm	140	152	165	178	191	216	241	283	305	457	521	419
L(RTJ)	mm	151	165	178	191	203	232	257	298	321	419	518	435
Н	mm	70	70	93	93	93	118	145	145	170	210	366	366
W	mm	130	130	130	160	160	230	230	230	350	400	800	800
WT (RF)	Kg	3	4	4.5	5.5	5.6	6	13	14	38	57	130	100

#### REDUCED PORT CLASS 600

NPS	in	$\frac{1}{2}$	<u>3</u>	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4
DN	mm	15	20	25	32	40	50	65	80	100
L(RF)	mm	165	190	216	229	241	292	330	356	432
L(BW)	mm	165	190	216	229	241	292	330	356	432
L(RTJ)	mm	163.5	190	216	229	241	295	333	359	435
Н	mm	85	85	93	99	99	115	180	175	244
₩	mm	160	160	200	200	200	200	350	600	700
WT (RF)	Kg	4	6	7.5	10	13	20	29	33	60

#### REDUCED PORT CLASS 900~CLASS 1500

	. •						
NPS	in	$\frac{1}{2}$	<u>3</u>	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
DN	mm	15	20	25	32	40	50
L(RF)	mm	216	229	254	279	305	368
L(BW)	mm	216	229	254	279	305	368
L(RTJ)	mm	216	229	254	279	305	371
Н	mm	85	85	93	100	100	125
W	mm	160	160	200	200	200	600
WT (RF)	Kg	8	11	12	20	26	36

SP=SHORT PATTERN----SHORT OR LONG PATTERN TO BE SPECIFIED AT TIME OF ORDER NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 8"



#### FORGED STEEL FLOATING BALL VALVE

# **STANDARDS:**

BS5351/API 608/API 6D/ASME B16.34 • DESIGN AND MANUFACTURE:

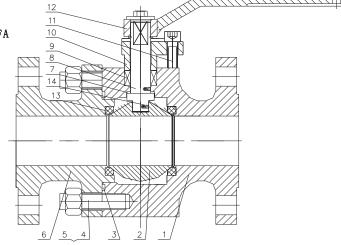
• FACE TO FACE DIMENSIONS: ASME B16. 10/API 6D

• END FLANGE DIMENSIONS:

NPS1/2"~24" **ASME B16.5** • END BW DIMENSIONS: ASME B16.25 • PRESSURE-TEMPERATURE RATINGS: ASME B16.34 • FIRE SAFE DESIGN: API 607/API 6FA

CLASS150~1500 NPS 1/2"~10" • NORMAIL PRESSURE:

• NORMAIL DIAMETER:



# **BILL OF MATERIAL (PART)**

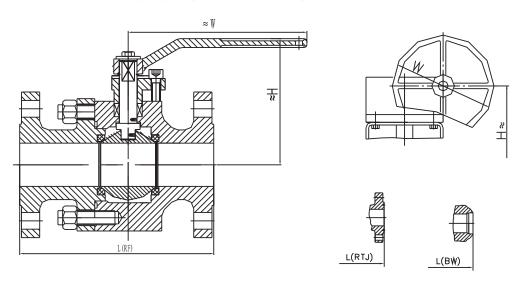
ITEM	PART NAME	MATERIAL
1	BODY	ASTM A105, A350 LF2, A182 F304/316/304L/316L
2	BALL	ASTM A105+ENP, ASTM A182 F6a/F304/F316/F304L/F316L
3	GASKET	304SS/316SS +GRAPHITE
4	BOLT	ASTM A193 B7/B7M/B8/B8M, A320 L7/L7M
5	NUT	ASTM A194 2H/2HM/8/8M/7/7M
6	BONNET	ASTM A105, A350 LF2, A182 F304/316/304L/316L
7	THRUST WASHER	PTFE
8	STEM	AISI 1045+ENP, ASTM A182 F6a/F304/F316/F304L/F316L, 17-4PH
9	PACKING	GRAPHITE/PTFE
10	GLAND FLANGE	ASTM 276 410, 304
11	SCREW	ASTM A193 B7/B7M/B8/B8M, A320 L7/L7M
12◆	LEVER	CARBON STEEL
13	SEAT	PTFE, RPTFE, DEVLON, PEEK
14	ANTI STATIC BALL/SPRING	SS304/SS316

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST

GEAR OPERATOR, ELECTRIGAL OPERATOR, PNEUMATIC OPERATOR, HYDRAULIC OPERATOR ETC. ARE AVAILABLE



# FORGED STEEL FLOATING BALL VALVE



#### **FULL PORT CLASS 150**

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	6	8	10
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250
L(RF)	mm	108	117	127	140	165	178	191	203	229	394	457	533
L(BW)	mm	140	152	165	178	191	216	241	283	305	457	521	559
L(RTJ)	mm	119	130	140	152	178	191	203	216	241	406	470	546
Н	mm	70	93	93	102	118	145	148	152	203	338	456	510
₩	mm	130	130	160	180	200	230	300	350	400	750	300	400
WT (RF)	Kg	3	4	5.5	7.6	8.5	12	18	24	40	82	182	300

# FULL PORT CLASS 300

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	6	8
DN	mm	15	20	25	32	40	50	65	80	100	150	200
L(RF)	mm	140	152	165	178	191	216	241	283	305	403	502
L(BW)	mm	140	152	165	178	191	216	241	283	305	457	521
L(RTJ)	mm	151	165	178	191	203	232	257	298	321	419	518
Н	mm	70	93	93	102	118	145	156	170	210	366	440
₩	mm	130	130	160	200	230	230	300	350	400	800	400
WT (RF)	Kg	4. 2	5	6	8	11	16	30	36	56	125	267

# **FULL PORT CLASS 600**

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4
DN	mm	15	20	25	32	40	50	65	80	100
L(RF)	mm	165	190	216	229	241	292	330	356	432
L(BW)	mm	165	190	216	229	241	292	330	356	432
L(RTJ)	mm	163.5	190	216	229	241	292	333	359	435
H	mm	85	93	99	100	115	180	175	244	265
₩	mm	160	200	200	200	200	350	600	700	800
WT (RF)	Kg	5	7	12	18	24	25	42	56	85

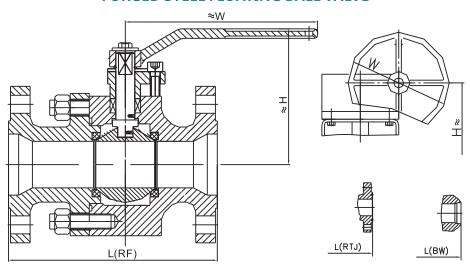
# FULL PORT CLASS 900~CLASS1500

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
DN	mm	15	20	25	32	40	50
L(RF)	mm	216	229	254	279	305	368
L(BW)	mm	216	229	254	279	305	368
L(RTJ)	mm	216	229	254	279	305	371
H	mm	85	93	100	110	125	195
W	mm	160	200	200	350	600	800
WT (RF)	Kg	10	14	17	25	33	48

NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 8"



# FORGED STEEL FLOATING BALL VALVE



#### **REDUCED PORT CLASS 150**

NPS	in	1/2	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	6	6sp	8	8sp	10	10sp
DN	mm	15	20	25	32	40	50	65	80	100	150	150sp	200	200sp	250	250sp
L(RF)	mm	108	117	127	140	165	178	191	203	229	394	267	457	292	533	330
L(BW)	mm	140	152	165	178	191	216	241	283	305	457	403	521	419	559	457
L(RTJ)	mm	119	130	140	152	178	191	203	216	241	406	279	470	305	546	343
Н	mm	70	70	93	93	93	118	145	145	152	203	203	338	338	456	456
W	mm	130	130	130	160	160	200	230	230	350	400	400	750	750	300	300
WT (RF)	Kg	2.5	3	4.5	5. 2	5.5	5.8	13	14	26	70	57	165	75	248	145

#### **REDUCED PORT CLASS 300**

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4	6	8	8sp
DN	mm	15	20	25	32	40	50	65	80	100	150	200	200sp
L(RF)	mm	140	152	165	178	191	216	241	283	305	403	502	419
L(BW)	mm	140	152	165	178	191	216	241	283	305	457	521	419
L(RTJ)	mm	151	165	178	191	203	232	257	298	321	419	518	435
Н	mm	70	70	93	93	93	118	145	145	170	210	366	366
₩	mm	130	130	130	160	160	230	230	230	350	400	800	800
WT (RF)	Kg	3	4	4.5	5.5	5.6	6	13	14	38	57	130	100

#### REDUCED PORT CLASS 600

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	4
DN	mm	15	20	25	32	40	50	65	80	100
L(RF)	mm	165	190	216	229	241	292	330	356	432
L(BW)	mm	165	190	216	229	241	292	330	356	432
L(RTJ)	mm	163.5	190	216	229	241	295	333	359	435
Н	mm	85	85	93	99	99	115	180	175	244
₩	mm	160	160	200	200	200	200	350	600	700
WT (RF)	Kg	4	6	7.5	10	13	20	29	33	60

#### REDUCED PORT CLASS 900~CLASS 1500

NPS	in	$\frac{1}{2}$	3 4	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
DN	mm	15	20	25	32	40	50
L(RF)	mm	216	229	254	279	305	368
L(BW)	mm	216	229	254	279	305	368
L(RTJ)	mm	216	229	254	279	305	371
Н	mm	85	85	93	100	100	125
W	mm	160	160	200	200	200	600
WT (RF)	Kg	8	11	12	20	26	36

SP=SHORT PATTERN----SHORT OR LONG PATTERN TO BE SPECIFIED AT TIME OF ORDER NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 8"



#### **STANDARDS:**

• DESIGN AND MANUFACTURE: BS 5351, API 608, API 6D OR ASME B16.34 STANDARD

• FACE TO FACE DIMENSIONS: ASME B16. 10 OR API 6D STANDARD

• END FLANGE DIMENSIONS:

NPS 1/2"~24" ASME B16. 5 STANDARD

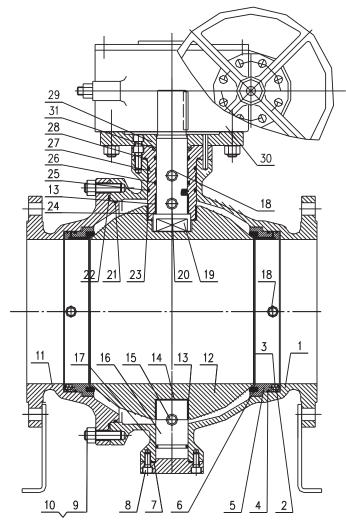
NPS 26" & ABOVE ASME B16. 47 STANDARD

END BW DIMENSIONS: ASME B16. 25 STANDARD

PRESSURE-TEMPERATURE RATINGS: ASME B16. 34 STANDARD

• FIRE-RESISTANT DESIGN: API 607 OR API 6FA STANDARD

• NORMAIL PRESSURE: CLASS 150~900 • NORMAIL DIAMETER: NPS 2"~36"





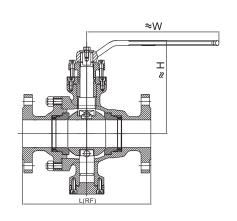
# **BILL OF MATERIAL (PART)**

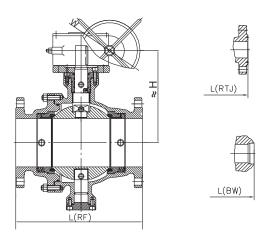
ITEM	PART NAME	MATERIAL
1	BODY	ASTM A216 WCB/WCC, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
2	GASKET	GRAPHITE
3	SPRINGS	INCONEL X-750
4	O-RING	VITON/HNBR
5	SEAT RING	ASTM A105+ENP, A350 LF2+ENP, A182 F6a/F304/F316/F304L/F316L
6	SEAL RING	PTFE/RPTFE/NYLON/DEVLON/PEEK
7	TRUNNION	ASTM A105+ENP, A182 F6a/F304/F316/F304L/F316L
8	GASKET	304SS/316SS +GRAPHITE
9	SCREW	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
10	BOLT	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
11	NUT	ASTM A194 2H/2HM/7/7M/8/8M
12	BONNET	ASTM A216 WCB/WCC, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
13	BALL	ASTM A105+ENP, A350 LF2+ENP, A182 F6a/F304/F316/F304L/F316L
14	BEARING	SS+PTFE
15	DRAIN VALVE	CARBON STEEL, STAINLESS STEEL
16	TRUNNION	ASTM A105+ENP, A350 LF2+ENP, A182 F6a/F304/F316/F304L/F316L
17	O-RING	VITON/HNBR
18	GREASE FITING	CARBON STEEL, STAINLESS STEEL
19	STEM	AISI 1045+ENP, ASTM A182 F6a/F304/F316/F304L/F316L, 17-4PH
20	VENT VALVE	CARBON STEEL, STAINLESS STEEL
21	O-RING	VITON/HNBR
22	GASKET	304SS/316SS +GRAPHITE
23	BEARING	SS+PTFE
24	THRUST WASHER	SS+PTFE
25	O-RING	VITON/HNBR
26	O-RING	VITON/HNBR
27	PACKING BOX	ASTM A105+ENP, A350 LF2+ENP, A182 F6a/F304/F316/F304L/F316L
28	GASKET	304SS/316SS +GRAPHITE
29	MOUNTING FLANGE	ASTM A105, A182 F304
30♠	GEAR OPERATOR	ASSEMBLY
31	PACKING	GRAPHITE/PTFE

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST

GEAR OPERATOR, ELECTRIGAL OPERATOR, PNEUMATIC OPERATOR, HYDRAULIC OPERATOR ETC. ARE AVAILABLE







#### **FULL PORT CLASS 150**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	40	42	48	56
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200	1400
L(RF)	mm	178	191	203	229	394	457	533	610	686	762	864	914	1067	1143	1245	1295	1372	1524	1753	1855	2083	2250
L(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	1727	1753	2015	2225	2489
L(RTJ)	mm	191	203	216	241	406	470	546	622	699	775	876	927	1079	-	-	-	-	-	-	-	-	-
Н	mm	170	186	210	255	392	390	548	688	722	722	804	952	1154	1300	1550	1650	1740	1948	-	-	-	-
W	mm	300	300	350	450	300	300	300	400	400	400	500	600	600	762	762	762	762	762	-	-	-	-
WT (RF)	Kg	11	15	20	36	73	110	217	385	457	723	930	1260	2458	3120	3033	3350	3700	6892	-	-	-	-

#### **FULL PORT CLASS 300**

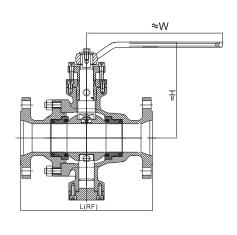
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	40	42	48	56
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200	1400
L(RF)	mm	216	241	283	305	403	502	568	648	762	838	914	991	1143	1245	1346	1397	1524	1727	1850	1900	2170	2300
L(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	1727	1930	2015	2225	2489
L(RTJ)	mm	232	257	298	321	419	518	584	664	778	854	930	1010	1165	1270	1372	1422	1553	1756	-	-	-	-
Н	mm	175	186	210	255	402	498	655	658	686	880	1050	1110	1400	1498	1589	1718	1800	2200	-	-	-	-
W	mm	300	300	350	450	300	300	400	400	400	600	762	762	762	762	762	762	762	914	-	-	-	-
WT (RF)	Kg	15	24	30	55	90	201	350	510	720	1167	1326	1672	3008	3416	4016	5223	5957	7944	-	-	-	-

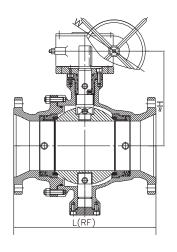
#### **CFULL PORT CLASS 600**

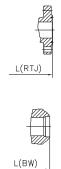
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	40	42	48	56
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200	1400
L(RF)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549	1651	1778	2083	2080	2175	2435	2710
L(BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549	1651	1778	2083	2170	ı	-	-
L(RTJ)	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1562	1664	1794	2099	-	-	-	-
Н	mm	195	220	247	275	445	498	653	665	738	920	1100	1200	1480	-	-	-	-	-	-	-	-	-
W	mm	500	600	700	900	400	400	400	500	600	762	762	762	762	-	-	-	-	-	-	-	-	-
WT (RF)	Kg	33	47	58	83	174	339	515	960	1250	1415	1828	2320	3665	-	-	-	-	-	-	-	-	-

NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 6"









#### REDUCED PORT CLASS 150

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36	40	42	48	56
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900	1000	1050	1200	1400
L(RF)	mm	178	191	203	229	394	457	533	610	686	762	864	914	1067	1295	1524	-	-	-	-
L(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1397	1727	-	-	-	-
L(RTJ)	mm	191	203	216	241	406	470	546	622	699	775	876	927	1079	-	-	-	-	-	-
Н	mm	158	170	170	210	255	392	490	548	688	722	722	804	952	1154	1650	-	-	-	-
W	mm	300	300	300	350	300	300	300	300	400	400	400	500	600	600	762	-	-	_	-
WT (RF)	Kg	10	11	12	25	41	83	122	235	402	481	765	980	1810	2904	3700	-	-	-	-

#### REDUCED PORT CLASS 300

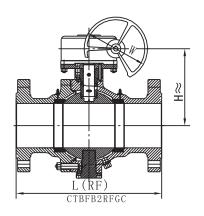
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36	40	42	48	56
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900	1000	1050	1200	1400
L(RF)	mm	216	241	283	305	403	502	568	648	762	838	914	991	1143	1397	1727	-	-	-	-
L(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1397	1727	-	-	-	-
L(RTJ)	mm	232	257	298	321	419	518	584	664	778	854	930	1010	1165	1422	1756	-	-	-	-
Н	mm	158	175	175	210	255	402	498	655	658	686	880	1050	1110	1400	1718	-	-	-	-
W	mm	300	300	300	350	450	300	300	400	400	400	600	762	762	762	762	-	-	-	-
WT (RF)	Kg	13	16	20	44	66	107	222	381	547	760	1257	1656	2252	3758	5982	_	-	-	-

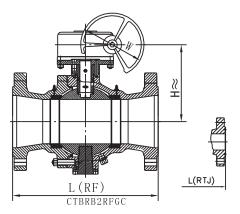
#### REDUCED PORT CLASS 600

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L(RF)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L(BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L(RTJ)	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1407
Н	mm	180	195	195	247	275	445	498	653	665	738	920	1100	1200
₩	mm	500	500	500	700	900	400	400	400	500	600	762	762	762
WT (RF)	Kg	28	38	37	72	103	198	386	545	992	1328	1615	1843	3081

NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 6"









#### **FULL PORT CLASS 900**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1880	2286
L(BW)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	-	-
L(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1334	1902	2315
Н	mm	217	241	259	297	477	520	628	680	750	940					
W	mm	500	600	900	1000	400	400	400	500	600	762					
WT (RF)	Kg	39	55	68	98	220	500	942	1200	1655	1903					

#### **FULL PORT CLASS 1500**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500
L(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664
L(BW)	mm	368	419	470	546	705	832	991	1130	1257	1384	-	-
L(RTJ)	mm	371	422	473	549	711	841	1000	1146	1276	1407	1559	1686
H	mm	237	261	254	415	580	584	650	700	780	980		
W	mm	800	900	1000	300	400	400	500	600	762	762		
WT (RF)	Kg	40	64	95	180	380	750	1165	1625	1980	3540		

#### REDUCED PORT CLASS 900

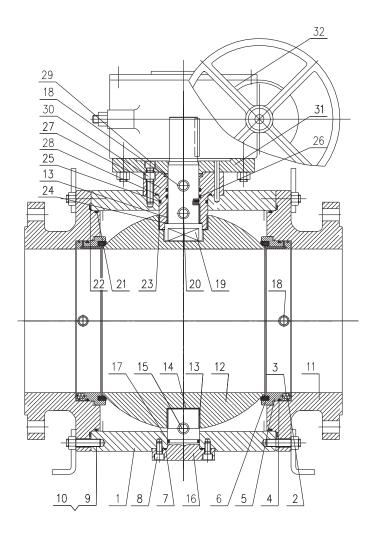
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1880	2286
L(BW)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	-	-
L(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568	1902	2315
Н	mm	201	217	217	259	297	477	520	628	680	750					
W	mm	500	500	500	900	1000	400	400	400	500	600					
WT (RF)	Kg	31	33	44	82	127	263	551	1010	1310	1855					

#### REDUCED PORT CLASS 1500

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500
L(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1667
L(BW)	mm	368	419	470	546	705	832	991	1130	1257	1384	-	-
L(RTJ)	mm	371	422	473	549	711	841	1000	1146	1276	1407	1559	1686
Н	mm	217	237	237	254	415	580	584	650	700	780		
W	mm	800	800	800	300	300	400	400	500	600	762		
WT (RF)	Kg	40	46	50	108	225	485	956	1267	1825	2280		

NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 6"





#### **STANDARDS:**

• DESIGN AND MANUFACTURE: BS 5351, API 608, API 6D OR ASME B16.34 STANDARD

• FACE TO FACE DIMENSIONS: ASME B16. 10 OR API 6D STANDARD

• END FLANGE DIMENSIONS:

ASME BIO. 10 OR API OD STANDARD

 NPS 1/2"~24"
 ASME B16. 5 STANDARD

 • NPS 26" & ABOVE
 ASME B16. 47 STANDARD

• END BW DIMENSIONS: ASME B16.25 STANDARD
• PRESSURE-TEMPERATURE RATINGS: ASME B16.34 STANDARD

• FIRE-RESISTANT DESIGN: API 607 OR API 6FA STANDARD

• NORMAIL PRESSURE: CLASS 150~2500 • NORMAIL DIAMETER: NPS 2"~36"

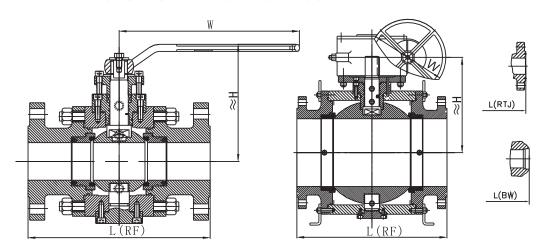


## **BILL OF MATERIAL (PARTIAL)**

ITEM	PART NAME	STANDARD
1	BODY	ASTM A105, A350 LF2, A182 F304/F316/F304L/F316L
2	GASKET	GRAPHITE
3	SPRINGS	NICONEL X-750
4	O-RING	VITON/HNBR
5	SEAT RING	ASTM A105+ENP, A350 LF2+ENP, A182 F304/F316/F304L/F316L
6	SEAL RING	PTFE/RPTFE/NYLON/DEVLON/PEEK
7	GASKET	304SS/316SS +GRAPHITE
8	SCREW	ASTM A193 B7/B7M/B8/B8M, A320 L7/L7M
9	BOLT	ASTM A193 B7/B7M/B8/B8M, A320 L7/L7M
10	NUT	ASTM A194 2H/2HM/7/7M/8/8M
11	ADAPTER	ASTM A105, A350 LF2, A182 F304/F316/F304L/F316L
12	BALL	ASTM A105+ENP, A350 LF2+ENP, A182 F6a/F304/F316/F304L/F316L
13	BEARING	SS+PTFE
14	GASKET	SS+PTFE
15	DRAIN VALVE	CARBON STEEL, STAINLESS STEEL
16	TRUNNION	ASTM A105+ENP, A350 LF2+ENP, A182 F6a/F304/F316/F304L/F316L
17	O-RING	VITON/HNBR
18	GREASE FITING	CARBON STEEL, STAINLESS STEEL
19	STEM	AISI 1045+ENP, ASTM A182 F6a/F304/F316/F304L/F316L, 17-4PH
20	VENT VALVE	CARBON STEEL, STAINLESS STEEL
21	O-RING	VITON/HNBR
22	GASKET	304SS/316SS +GRAPHITE
23	BEARING	SS+PTFE
24	THRUST WASHER	SS+PTFE
25	O-RING	VITON/HNBR
26	O-RING	VITON/HNBR
27	PACKING BOX	ASTM A105+ENP, A350 LF2+ENP, A182 F6a/F304/F316/F304L/F316L
28	GASKET	304SS/316SS +GRAPHITE
29	PACKING	GRAPHITE/PTFE
30	SCREW	ASTM A193 B7/B7M/B8/B8M, A320 L7/L7M
31	MOUNTING FLANGE	ASTM A105, A182 F304
32◆	GEAR OPERATOR	ASSEMBLY

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST





#### **FULL PORT CLASS 150**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	40	42	48	56
MIS	111		42	٥	*	· ·	۰	10	12	14	10	10	20	24	20	20	30	32	30	40	44	40	30
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200	1400
L(RF)	mm	178	191	203	229	394	457	533	610	686	762	864	914	1067	1143	1245	1295	1372	1524	1753	1855	2083	2250
L(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	1727	1753	2015	2225	2489
L(RTJ)	mm	191	203	216	241	406	470	546	622	699	775	876	927	1079	1	-	-	-	-	1	-	-	-
Н	mm	170	186	210	255	392	490	548	688	722	722	804	952	1154	1300	1550	1650	1740	1948	ı	-	-	-
W	mm	300	300	350	450	300	300	300	400	400	400	500	600	600	762	762	762	762	762	-	-	-	-
WT (RF)	Kg	26	42	50	60	101	166	283	463	622	900	1150	1360	2514	3200	4000	4800	500	8000	-	-	-	-

#### **FULL PORT CLASS 300**

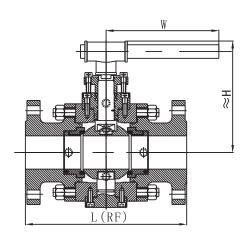
			, ,																				
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	40	42	48	56
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200	1400
L(RF)	mm	216	241	283	305	403	502	568	648	762	838	914	991	1143	1245	1346	1397	1524	1727	1850	1900	2170	2300
L(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1245	1346	1397	1524	1727	1930	2015	2225	2489
L(RTJ)	mm	232	257	298	321	419	518	584	664	778	854	930	1010	1165	1270	1372	1422	1553	1756	-	-	-	-
H	mm	175	186	210	255	402	498	655	658	686	880	1050	1110	1400	1498	1589	1718	1800	2200	-	-	-	- 1
W	mm	300	300	350	450	300	300	400	400	400	600	762	762	762	762	762	762	762	914	-	-	-	-
WT (RF)	Kg	28	52	55	70	128	234	403	602	803	1273	1450	1700	3100	4500	6000	7500	9000	12000	-	-	-	-

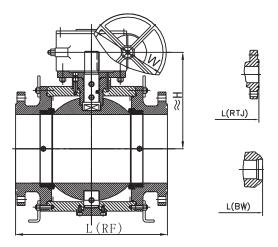
#### **CFULL PORT CLASS 600**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	26	28	30	32	36	40	42	48	56
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	650	700	750	800	900	1000	1050	1200	1400
L(RF)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549	1651	1778	2083	2080	2175	2435	2710
L(BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397	1448	1549	1651	1778	2083	2170	-	-	-
L(RTJ)	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1407	1461	1562	1664	1794	2099	-	-	-	-
Н	mm	195	220	247	275	446	498	653	665	738	920	1100	1200	1480									
W	mm	500	600	700	900	400	400	400	500	600	762	762	762	762									
WT (RF)	Kg	33	47	68	106	241	444	668	1050	1317	1800	2400	3000	5400									

NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 6"







#### **FULL PORT CLASS 900**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	1880	2286
L(BW)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549	-	-
L(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568	1902	2315
H	mm	217	241	259	297	477	520	628	680	750	940					
W	mm	500	600	900	1000	400	400	400	500	600	762					
WT (RF)	Kg	45	55	94	141	325	580	850	1330	1660	2280					

#### **FULL PORT CLASS 1500**

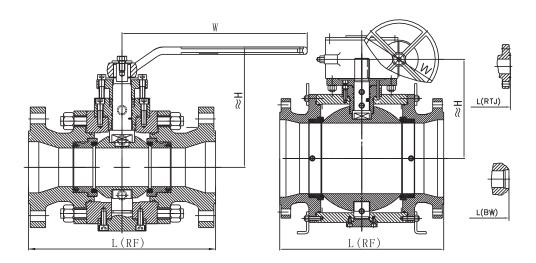
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500
L(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664
L(BW)	mm	368	419	470	546	705	832	991	1130	1257	1384	-	-
L(RTJ)	mm	371	422	473	549	711	841	1000	1146	1276	1407	1559	1686
Н	mm	217	241	254	415	580	584	650	700	780	980		
W	mm	500	900	1000	300	400	400	500	600	762	760		
WT (RF)	Kg	67	80	130	192	475	820	1320	2050	1980	3540		

#### **FULL PORT CLASS 2500**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12
DN	mm	50	65	80	100	150	200	250	300
L(RF)	mm	451	508	578	673	914	1022	1270	1422
L(BW)	mm	451	508	578	673	914	1022	1270	1422
L(RTJ)	mm	454	540	584	683	927	1038	1292	1445
Н	mm	237	261	300	415	580	584	650	
W	mm	1000	1000	1000	400	500	500	600	
WT (RF)	Kg	104	140	202	305	760	1200	2080	

NOTE: CLASS 900 -----GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 6"
CLASS 1500~CLASS2500 -----GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 4"





#### **REDUCED PORT CLASS 150**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L(RF)	mm	178	191	203	229	394	457	533	610	686	762	864	914	1067	1295	1524
L(BW)	mm	216	241	253	305	457	521	559	635	762	838	914	991	1143	1397	1727
L(RTJ)	mm	191	203	216	241	406	470	546	622	699	778	876	927	1079	-	-
H	mm	158	170	170	210	255	392	490	548	688	722	722	804	952	1154	1650
W	mm	300	300	300	350	300	300	300	300	400	400	400	500	600	600	762
WT (RF)	Kg	10	11	12	25	41	83	122	238	402	481	765	980	1810	2904	3700

#### REDUCED PORT CLASS 300

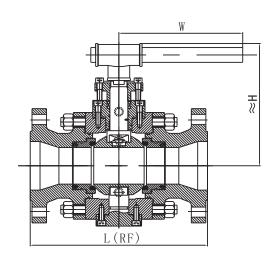
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L(RF)	mm	216	241	283	305	403	502	568	648	762	838	914	991	1143	1397	1727
L(BW)	mm	216	241	283	305	457	521	559	635	762	838	914	991	1143	1397	1727
L(RTJ)	mm	232	257	298	321	419	518	584	664	778	854	930	1010	1165	1422	1756
Н	mm	158	175	175	210	255	402	498	655	658	868	880	1050	1110	1400	1718
W	mm	300	300	300	350	450	300	300	400	400	400	600	762	762	762	762
WT (RF)	Kg	13	16	20	44	66	107	222	381	547	760	1257	1656	2252	3758	5982

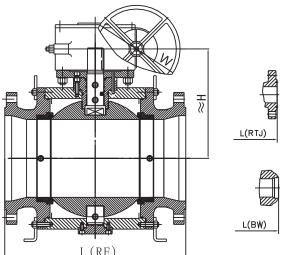
#### **REDUCED PORT CLASS 600**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L(RF)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L(BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L(RTJ)	mm	295	333	359	435	562	664	791	841	892	994	1095	1200	1407
H	mm	180	195	195	247	275	445	498	653	665	738	920	1100	1200
W	mm	500	500	500	700	900	400	400	400	500	600	762	762	762
WT (RF)	Kg	28	38	37	72	103	198	386	545	992	1328	1615	1843	3081

NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 6"







#### **REDUCED PORT CLASS 900**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130
L(BW)	mm	368	419	381	457	610	737	838	965	1029	1130
L(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140
Н	mm	208	217	217	259	297	477	520	628	680	750
W	mm	500	500	500	900	1000	400	400	400	500	600
WT (RF)	Kg	31	33	44	82	127	263	551	1010	1310	1855

#### **REDUCED PORT CLASS 1500**

				-							
NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10	12	14	16
DN	mm	50	65	80	100	150	200	250	300	350	400
L(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384
L(BW)	mm	368	419	470	546	705	832	991	1130	1257	1384
L(RTJ)	mm	371	422	473	549	711	841	1000	1146	1276	1407
Н	mm	208	217	217	254	415	580	584	650	700	780
W	mm	500	500	500	300	300	400	400	500	600	762
WT (RF)	Kg	58	65	70	124	296	595	988	1505	2476	3198

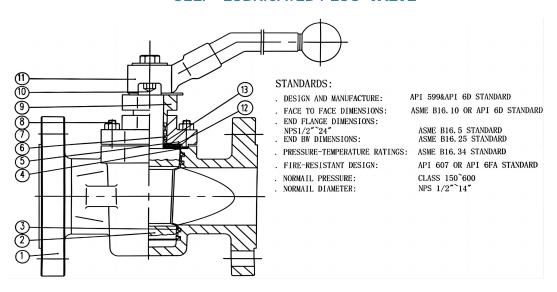
#### **REDUCED PORT CLASS 2500**

NPS	in	2	$2\frac{1}{2}$	3	4	6	8	10
DN	mm	50	65	80	100	150	200	250
L(RF)	mm	451	508	578	673	914	1022	1270
L(BW)	mm	451	508	578	673	914	1022	1270
L(RTJ)	mm	454	540	584	683	927	1038	1292
Н	mm	218	237	237	300	415	580	584
₩	mm	1000	1000	1000	400	400	500	500
WT (RF)	Kg	96	115	185	275	526	960	1800

NOTE: GEAR OPERATOR IS APPLIED TO SIZE MORE THAN OR EQUAL TO NPS 8"



# SELF- LUBRICATED PLUG VALVE



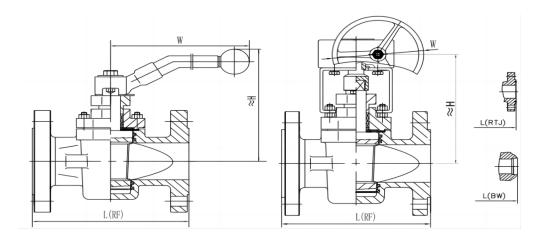
### BILL OF MATERIAL (PART)

ITEM	PART NAME	MATERIAL
1	BODY	ASTM A216 WCB/WCC, A352 LCB/LCC,, A351 CF8/CF8M/CF3/CF3M
2	PLUG	ASTM A351 CF8/CF8M/CF3/CF3M/CN7M
3	SEAT	PTFE/RPTFE/PPL
4	GASKET	PTFE/RPTFE
5	BONNET	ASTM A216 WCB/WCC, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
6	PACKING	GRAPHITE/PTFE
7	BOLT	ASTM A193 B7/B7M/B8/B8M, A320 L7/L7M,
8	NUT	ASTM A194 2H/2HM/7/7M/8/8M
9	GLAND FLANGE	ASTM A216 WCB, A352 LCB, A351 CF8
10	ADJUST BOLT	ASTM A193 B7/B7M/B8/B8M, A320 L7/L7M,
11	GLAND	ASTM A276 410/304/316/304L/316L
12◆	WRENCH	ASTM A216 WCB
13	ADJUSTING PAD	SS316/SS304
14	PACKING PAD	SS316/SS304

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



# SELF- LUBRICATED PLUG VALVE



#### CLASS 150

NPS	in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250	300	350
L(RF)	mm	108	117	127	140	165	178	191	203	229	267	292	330	356	381
L(BW)	mm	140	152	165	178	191	216	241	283	305	403	419	457	635	762
L(RTJ)	mm	119	130	140	152	178	191	203	216	241	279	305	343	369	394
Н	mm	110	115	115	135	140	150	165	180	380	520	580	620	680	760
W	mm	175	175	175	220	280	305	350	405	300	320	320	350	380	450
WT (RF)	Kg	8.5	9.5	10.5	12	14	18	22	26	40	70	130	219	381	570

# CLASS 300

NPS	in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250	300	350
L(RF)	mm	140	152	165	178	191	216	241	283	305	403	419	457	502	762
L(BW)	mm	140	152	165	178	241	267	305	330	356	457	521	559	635	762
L(RTJ)	mm	151	165	178	191	203	232	257	298	321	419	435	473	518	778
Н	mm	110	115	115	135	140	150	165	180	380	502	580	620	680	760
W	mm	175	175	175	220	280	305	350	405	300	320	320	350	380	450
WT (RF)	Kg	9. 5	10.5	12	14	16	20	24	29	53	85	185	230	390	550

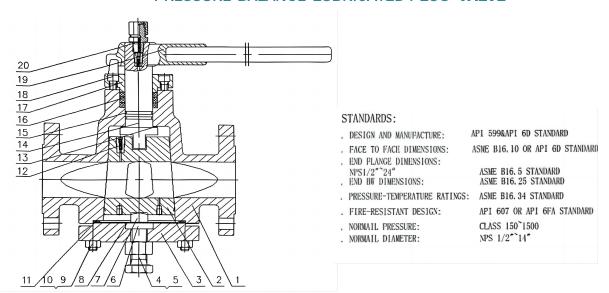
## CLASS 600

NPS	in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250	300	350
L(RF)	mm	165	191	216	229	241	292	330	356	432	559	660	787	838	889
L(BW)	mm	165	191	216	229	241	292	330	356	432	559	660	787	838	889
L(RTJ)	mm	163	191	216	229	241	295	333	359	435	562	663	790	841	892
Н	mm	110	115	115	135	140	150	165	180	380	502	580	620	680	760
W	mm	175	175	175	220	280	305	350	405	300	320	320	350	380	450
WT (RF)	Kg	11	13	17	20	23	27	31	36	72	141	245	330	515	710

GEAR OPERATOR FOR ≥4"



# PRESSURE BALANCE LUBRICATED PLUG VALVE



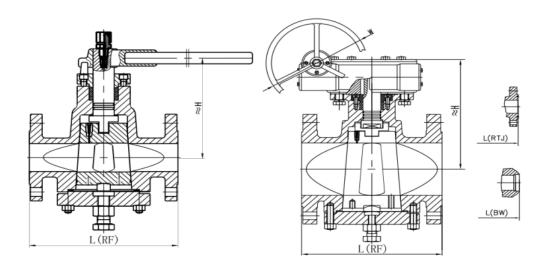
#### BILL OF MATERIAL (PART)

LTEM	PART NAME	MATERIAL
1	BODY	ASTM A216 WCB/WCC, A217 WC6/WC9, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
2	PLUG	ASTM A216 WCB/WCC, A217 WC6/WC9/CA15, A351 CF8/CF8M/CF3/CF3M
3	COVER	ASTM A216 WCB/WCC, A217 WC6/WC9, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
4	BOLT	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
5	NUT	ASTM A194 2H/2HM/4/7/7M/8/8M
6	ADJUSTABLE BLOCK	ASTM A276 410/304/316
7	ADJUSTABLE BLOCK	ASTM A276 410/304/316
8	METAL DIAPHRAGM	SS304/SS316
9	BOLT	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
10	NUT	ASTM A194 2H/2HM/4/7/7M/8/8M
11	GASKET	SS304/SS316/SS304L/SS316L+ GRAPHITE,
12	CHECK VALVE	CARBON STEEL,
13	GASKET	PTFE
14	STEM	A182 F6a/F304/F316/F304L/F316L/XM-19
15	O-RING	VITON
16	PACKING	GRAPHITE
17	GLAND	ASTM A216 WCB/A351 CF8
18	BOLT	ASTM A193 B7/B7M/B16/B8/B8M, A320 L7/L7M
19◆	LEVER	CARBON STEEL
20	GREASE FITTING	CARBON STEEL/SS304/SS316

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



# PRESSURE BALANCE LUBRICATED PLUG VALVE



CLASS 1	50								1					1	
NPS	in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250	300	350
L(RF)	mm	108	117	127	140	165	178	191	203	229	267	292	330	356	381
L(BW)	mm	152	178	203	216	229	267	305	330	356	394	457	533	610	686
L(RTJ)	mm	119	130	140	152	178	191	203	216	241	279	305	343	368	394
Н	mm	180	180	185	200	210	215	250	270	300	365	400	450	510	590
W	mm	400	400	500	500	600	600	820	820	300	320	320	350	380	380
WT (RF)	Κσ	10	12	14	17	19	21	29	33	48	98	125	171	230	370

	000
CLASS	300

NPS	in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250	300	350
L(RF)	mm	140	152	165	178	191	216	241	283	305	403	419	457	502	762
L(BW)	mm	152	178	203	216	229	267	305	330	356	457	521	559	635	762
L(RTJ)	mm	151	165	178	191	203	232	257	298	321	419	435	473	518	778
Н	mm	180	180	185	200	210	215	250	270	300	365	400	450	510	590
W	mm	400	400	500	600	600	820	1000	1000	300	320	320	350	380	380
WT(RF)	Kg	12	14	16	19	21	24	31	36	61	130	190	255	380	560

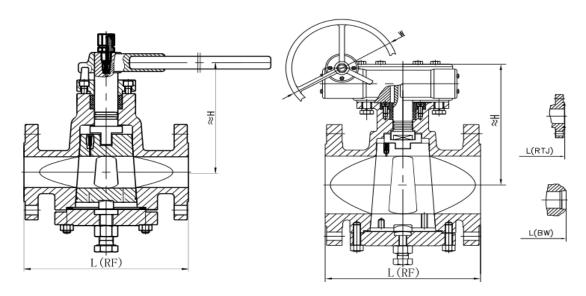
### CLASS 600

NPS	in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250	300	350
L(RF)	mm	165	191	216	229	241	292	330	356	432	559	660	787	838	889
L(BW)	mm	165	191	216	229	241	292	330	356	432	559	660	787	838	889
L(RTJ)	mm	163	191	216	229	241	295	333	359	435	562	663	790	841	892
Н	mm	180	180	185	200	210	215	250	270	300	365	400	450	510	590
W	mm	400	400	500	500	600	820	1000	1000	300	320	320	350	380	380
WT (RF)	Kg	14	16	18	20	24	29	35	47	91	210	320	660	920	1250

GEAR OPERATOR FOR  $\geqslant$ 4"



# PRESSURE BALANCE LUBRICATED PLUG VALVE



CI	.A	SS	9	0	0

NPS	in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250	300	350
L(RF)	mm	229	229	254	279	305	368	419	381	457	610	737	838	965	1029
L(BW)	mm	229	229	254	279	305	368	419	381	457	610	737	838	965	1029
L(RTJ)	mm	229	229	254	279	305	371	422	384	460	613	740	841	968	1038
Н	mm	180	180	185	200	210	215	250	270	300	365	400	450	510	590
W	mm	400	400	500	600	600	820	1000	1000	300	320	320	350	380	380
WT(RF)	Kg	17	20	21	24	30	37	44	65	110	255	380	810	1050	1480

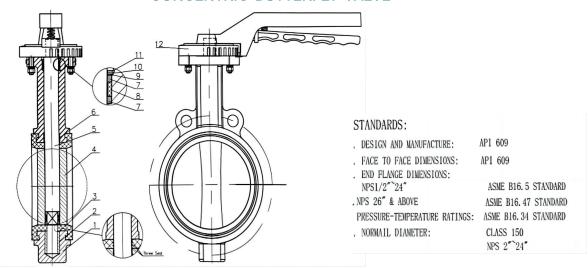
CLASS 1500

NPS	in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6	8	10	12	14
DN	mm	15	20	25	32	40	50	65	80	100	150	200	250	300	350
L(RF)	mm	229	229	254	279	305	368	419	470	546	705	832	991	1130	1257
L(BW)	mm	229	229	254	279	305	368	419	470	546	705	832	991	1130	1257
L(RTJ)	mm	229	229	254	279	305	371	422	473	549	711	841	1000	1146	1276
Н	mm	180	180	185	200	210	253	255	270	338	416	468	520	595	630
W	mm	400	400	500	600	600	1000	1000	350	350	350	350	350	600	600
WT(RF)	Kg	17	20	21	24	30	57	78	100	180	425	734	1165	1889	2800

CLASS900 GEAR OPERATOR FOR  $\geqslant$ 4" CLASS1500 GEAR OPERATOR FOR  $\geqslant$ 3"



# CONCENTRIC BUTTERFLY VALVE



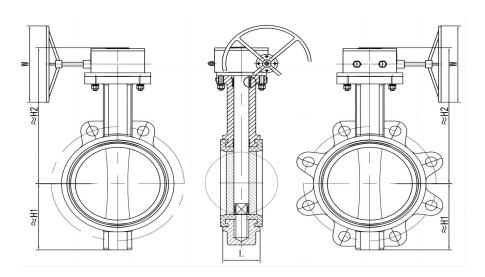
### BILL OF MATERIAL (PART)

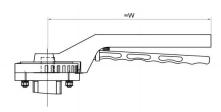
ITEM	PART NAME	MATERIAL
1	BODY	ASTM A216 WCB/WCC, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M, B148 C95800
2	BEARING BUSHING	BRASS
3	SEAT	PTFE/NBR/VITON/EPDM
4	DISC	ASTM A351 CF8/CF8M/CF3/CF3M, B148 C95800, MONEL, A890 4A/5A
5	STEM	ASTM A276 420/304/316, 17-4PH, B150 C63200, MONEL K500, A182 F51/F53
6	BEARING BUSHING	BRASS
7	BEARING BUSHING	BRASS
8	SEAL RING	NBR/VITON/EPDM
9	CIRCLIP	STAINLESS STEEL
10	GASKET	STAINLESS STEEL
11	EXTERNAL CIRCLIPS	AISI 1566
12◆	WERCH	DUCTILE IRON, CARBON STEEL

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



# CONCENTRIC BUTTERFLY VALVE





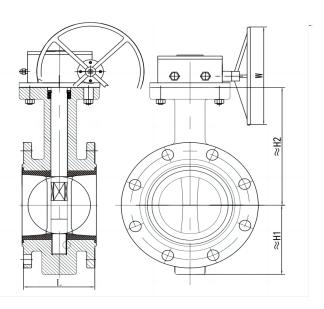
### CLASS 150

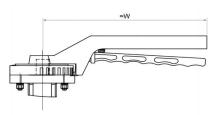
NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L	mm	43	46	46	52	56	60	68	78	78	102	114	127	154	165	200
H1	mm	67	75	283	105	135	165	200	230	274	304	335	368	428	-	1-
H2	mm	133	137	82	171	209	258	299	337	350	405	409	460	516	-	1 -
W	mm	300	300	350	400	200	200	200	250	250	450	450	450	450	-	-
WT (WAFER)	Kg	2. 9	3. 9	5	7	12	15	20	33	44	54	75	125	200	-	-
WT (LUG)	Kg	3. 5	4.5	7	13	15	23	33	48	71	90	105	180	278	_	-

GEAR OPERATOR FOR NPS≥6"



# CONCENTRIC BUTTERFLY VALVE





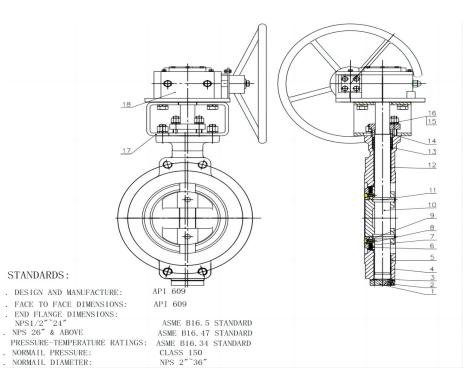
CLASS 150

NPS	in	2	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600	750	900
L	mm	108	114	127	140	152	165	178	190	216	222	229	267	318	330
HI	mm	67	283	105	135	165	200	230	274	304	335	368	428	-	-
H2	mm	133	82	171	209	258	299	337	350	405	409	460	516	-	1-1
W	mm	300	350	400	200	200	200	250	250	450	450	450	450	-	
WT	Kg	8	11	14	22	32	45	58	82	108	150	230	340	-	-

GEAR OPERATOR FOR NPS≥6"



# DOUBLE OFFSET BUTTERFLY VALVE



#### BILL OF MATERIAL (PART)

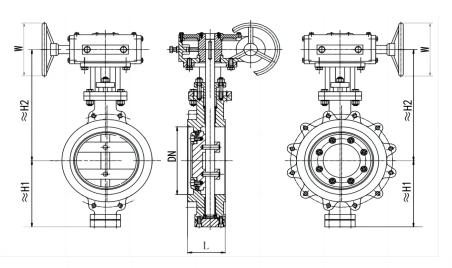
STANDARDS:

ITEM	PART NAME	MATERIAL
1	COVER	ASTM A105, A350 LF2, A182 F304/F316/304L/316L
2	BOLT	ASTM A193 B7/B7M, A320 L7/L7M, A193 B8/B8M
3	SEAL GASKET	GRAPHITE
4	BEARING BUSHING	SS+PTFE
5	BODY	ASTM A216 WCB/WCC, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
6	DISC	ASTM A351 CF8/CF8M/CF3/CF3M
7	SEAL RING	PTFE/RPTFE/NBR/VITON/EPDM
8	DISC COVER	ASTM A182 F304/F316/304L/316L
9	BOLT	ASTM A193 B7/B7M, A320 L7/L7M, A193 B8/B8M
10	STEM	ASTM A276 420/304/316, 17-4PH
11	PIN	ASTM A276 420/304/316, 17-4PH
12	BEARING BUSHING	SS+PTFE
13	PACKING	GRAPHITE
14	PACKING GLAND	ASTM A216 WCB, A352 LCB, A351 CF8
15	BOLT	ASTM A193 B7/B7M, A320 L7/L7M, A193 B8/B8M
16	NUT	ASTM A194 2H/2HM/7/7N/8/8M
17	YOKE	AISI 1020
18◆	GEAR OPERATOR	ASSEMBLY

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



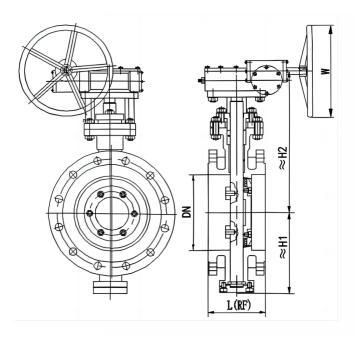
# DOUBLE OFFSET BUTTERFLY VALVE



NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L	mm	43	46	48	54	57	64	71	81	92	102	114	127	154	165	200
H1	mm	65	80	85	107	147	185	215	252	287	317	342	372	439	585	675
H2	mm	189	216	226	233	314	349	406	449	491	541	558	586	673	980	1130
W	mm	205	205	205	205	300	400	400	500	600	600	700	700	700	700	700
WT (WAFER)	Kg	5	8	10	12	18	22	35	51	85	115	155	200	333	595	950
WT (LUG)	Kg	7	10	12	15	22	33	45	65	105	165	205	260	385	745	1100



# DOUBLE OFFSET BUTTERFLY VALVE

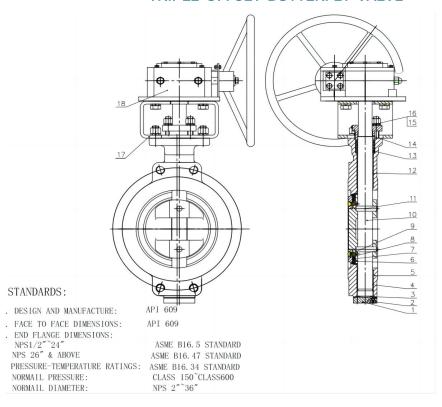


CLASS 150

NPS	in	2	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	80	100	150	200	250	300	350	400	450	500	600	750	900
L(RF)	mm.	108	114	127	140	152	165	178	190	216	222	229	267	318	330
H1	min	65	85	107	147	185	215	252	287	317	342	372	439	585	675
H2	min	189	226	233	314	349	406	1449	491	541	558	586	673	980	113
W	mm	205	205	205	300	400	400	500	600	600	700	700	700	700	700
MJ	Kg	12	16	23	33	50	73	108	143	186	234	277	408	816	115



# TRIPLE OFFSET BUTTERFLY VALVE



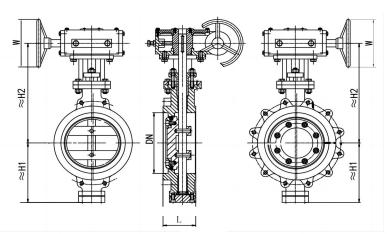
### BILL OF MATERIAL (PART)

ITEM	PART NAME	MATERIAL
1	COVER	ASTM A105, A350 LF2, A182 F11/F22/F304/F316/304L/316L
2	BOLT	ASTM A193 B7/B7M/B16, A320 L7/L7M, A193 B8/B8M
3	SEAL GASKET	GRAPHITE
4	BEARING BUSHING	SS+PTFE
5	BODY	ASTM A216 WCB/WCC, A217 WC6/WC9, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
6	DISC	ASTM A351 CF8/CF8M/CF3/CF3M
7	SEAL RING	SS+PTFE, SS+GRAPHITE
8	DISC COVER	ASTM A182 F304/F316/304L/316L
9	BOLT	ASTM A193 B7/B7M/B16, A320 L7/L7M, A193 B8/B8M
10	STEM	ASTM A276 420/304/316, 17-4PH
11	PIN	ASTM A276 420/304/316, 17-4PH
12	BEARING BUSHING	SS+PTFE
13	PACKING	GRAPHITE
14	PACKING GLAND	ASTM A216 WCB, A352 LCB, A351 CF8
15	BOLT	ASTM A193 B7/B7M/B16, A320 L7/L7M, A193 B8/B8M
16	NUT	ASTM A194 2H/2HM/7/7M/8/8M
17	YOKE	AISI 1020
18◆	GEAR OPERATOR	ASSEMBLY

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



# TRIPLE OFFSET BUTTERFLY VALVE



CLASS	150
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NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L	mm	43	46	48	54	57	64	71	81	92	102	114	127	154	165	203
HI	mm	105	115	125	150	185	245	275	315	330	365	390	430	470	525	625
H2	mm	189	216	226	233	314	349	406	449	491	541	558	586	673	980	1130
W	mm	300	300	350	205	300	400	400	500	600	600	700	700	700	700	700
WT (WAFER)	Kg	14	15	17	20	31	45	86	105	135	150	218	289	407	595	950
WT (LUG)	Kg	16	17	20	23	35	56	96	125	155	200	268	349	457	745	1100

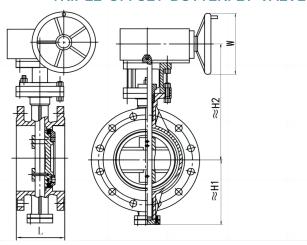
## CLASS 300

NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L	mm	43	46	48	54	59	73	83	92	117	133	149	159	181	241	241
H1	mm	115	125	140	150	220	250	300	335	375	380	420	475	540	585	675
H2	mm	235	245	260	300	375	390	465	510	605	630	715	765	860	980	1130
W	mm	300	300	350	205	300	400	400	500	700	700	700	700	700	700	1016
WT (WAFER)	Kg	19	22	30	35	47	68	130	158	216	225	327	434	610	-	-
WT (LUG)	Kg	24	27	35	45	60	83	155	198	326	335	452	515	810	_	_

NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L	mm	43	46	54	64	78	102	117	140	155	178	200	216	232
H1	mm	125	145	165	185	256	285	320	360	430	460	495	530	580
H2	mm	235	245	445	470	530	573	608	650	750	802	845	890	970
W	mm	300	300	400	400	400	500	400	700	700	700	700	700	1016
WT (WAFER)	Kg	22	27	35	42	60	91	168	230	300	395	525	650	980
WT (LUG)	Kg	27	32	40	52	75	120	190	290	395	500	680	780	1250



# TRIPLE OFFSET BUTTERFLY VALVE



## CLASS 150

CLADD 100																
NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L	mm	108	112	114	127	140	152	165	178	190	216	222	229	267	318	330
HI	mm	105	115	125	150	185	245	275	315	330	365	390	430	470	525	625
H2	mm	189	216	226	233	314	349	406	449	491	541	558	586	673	980	1130
W	mm	300	300	350	205	300	400	400	500	600	600	700	700	700	700	700
ИT	Kg	21	24	27	28	50	75	105	155	190	230	300	380	490	780	1180

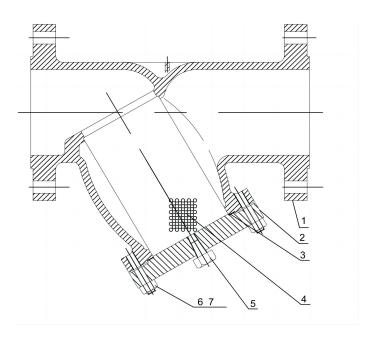
## CLASS 300

NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L	mm	150	170	180	190	210	230	250	270	290	310	330	350	390	450	510
H1	mm	115	125	140	150	220	250	300	335	375	380	420	475	540	585	675
H2	mm	235	245	260	300	375	390	465	510	605	630	715	765	860	980	1130
W	mm	300	300	350	205	300	400	400	500	700	700	700	700	700	700	1016
WT	Kg	32	39	42	48	80	120	168	248	304	368	480	608	784	-	-

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NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L	mm	150	170	180	190	210	230	250	270	290	310	330	350	390
H1	mm	125	145	165	185	256	285	320	360	430	460	495	530	580
H2	mm	235	245	445	470	530	573	608	650	750	802	845	890	970
W	mm	300	300	400	400	400	500	400	700	700	700	700	700	1016
WT	Kg	45	60	82	125	191	247	413	576	664	971	1117	1639	2082



# Y TYPE STRAINER



## STANDARDS:

ASME B16.34 . DESIGN AND MANUFACTURE:

. FACE TO FACE DIMENSIONS: ASME B16.10 (CHECK VALVE/GLOBE VALVE)

OR MANUFACTURER'S SPECIFICATION . END FLANGE DIMENSIONS:

NPS $1/2^{"^{\sim}}24"$ NPS 26" & ABOVE ASME B16.5 STANDARD ASME B16. 47 STANDARD ASME B16. 25 STANDARD . BW ENDS DIMENSIONS:

. PRESSURE-TEMPERATURE RATINGS: ASME B16.34 STANDARD

CLASS 150~CLASS1500 NPS 2"~36" . NORMAIL PRESSURE:

. NORMAIL DIAMETER:

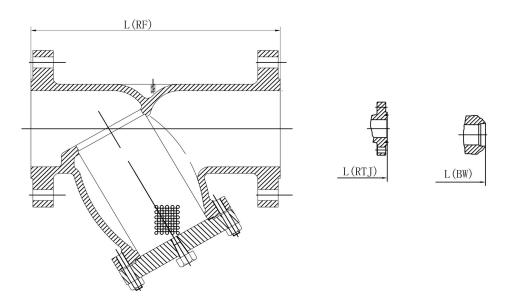
## BILL OF MATERIAL (PART)

ITEM	PART NAME	MATERIAL
1	BODY	ASTM A216 WCB/WCC, A217 WC6/WC9, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
2	COVER	ASTM A105, A350 LF2, A182 F11/F22/F304/F316/304L/316L
3	GASKET	SS304/316+GRAPHITE/PTFE
4	SCREEN	SS304, SS316
5	PLUG	CARBON STEEL, STAINLESS STEEL
6	BOLT	ASTM A193 B7/B7M/B16, A320 L7/L7M, A193 B8/B8M
7	NUT	ASTM A194 2H/2HM/7/7M/8/8M

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



# Y TYPE STRAINER



#### CLASS150

NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
L(RF)	mm	203	216	241	292	356	495	622	699	787	864	978	978	1295	1524	1956
L(BW)	mm	203	216	241	292	356	495	622	699	787	864	978	978	1295	1524	1956
L(RTJ)	mm	216	229	254	305	368	508	635	711	800	876	991	991	1308	1537	1968

#### CLASS300

	-														
NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750
L(RF)	mm	267	292	318	356	445	533	622	711	838	864	978	1016	1346	1594
L(BW)	mm	267	292	318	356	445	533	622	711	838	864	978	1016	1346	1594
L(RTJ)	mm	282	308	333	371	460	549	638	727	854	879	994	1035	1368	1619

## CLASS600

NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L(RF)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L(BW)	mm	292	330	356	432	559	660	787	838	889	991	1092	1194	1397
L (RT.I)	mm	295	333	359	435	562	663	790	841	892	994	1095	1200	1407

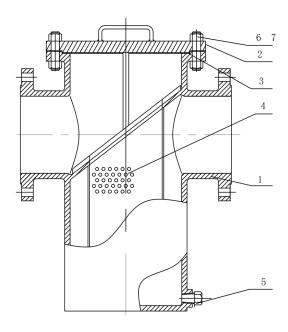
## CLASS900

NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L(RF)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
L(BW)	mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
L(RTJ)	mm	371	422	384	460	613	740	841	968	1038	1140	1232	1334	1568

NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L(RF)	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L(BW)	mm	368	419	470	546	705	832	991	1130	1257	1384	1537	1664	1943
L(RTJ)	mm	371	422	473	549	711	841	1000	1146	1276	1407	1559	1686	1972



# **BASKET STRAINER**



## STANDARDS:

. DESIGN AND MANUFACTURE: ASME B16.34

ASME B16. 10 (CHECK VALVE/GLOBE VALVE) . FACE TO FACE DIMENSIONS: OR MANUFACTURER'S SPECIFICATION

. END FLANGE DIMENSIONS: NPS1/2"~24" ASME B16.5 STANDARD . BW ENDS DIMENSIONS: ASME B16.25 STANDARD . PRESSURE-TEMPERATURE RATINGS: ASME B16.34 STANDARD CLASS 150 CLASS300 NPS 2" 24" . NORMAIL PRESSURE:

. NORMAIL DIAMETER:

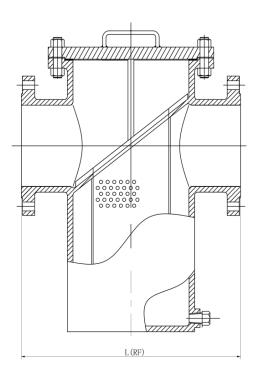
# BILL OF MATERIAL (PART)

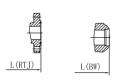
ITEM	PART NAME	MATERIAL
1	BODY	ASTM A216 WCB/WCC, A217 WC6/WC9, A352 LCB/LCC, A351 CF8/CF8M/CF3/CF3M
2	COVER	ASTM A105, A350 LF2, A182 F11/F22/F304/F316/304L/316L
3	GASKET	SS304/316+GRAPHITE/PTFE
4	SCREEN	SS304, SS316
5	PLUG	CARBON STEEL, STAINLESS STEEL
6	BOLT	ASTM A193 B7/B7M/B16, A320 L7/L7M, A193 B8/B8M
7	NUT	ASTM A194 2H/2HM/7/7M/8/8M

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



# **BASKET STRAINER**





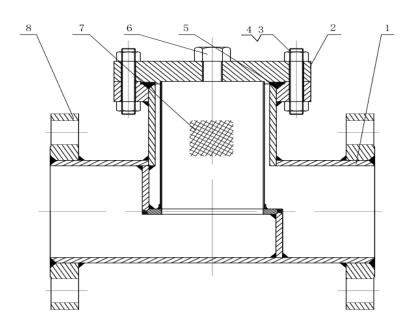
### CLASS150

NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L(RF)	mm	203	216	241	292	356	495	622	699	787	864	978	978	1295
L(BW)	mm	203	216	241	292	356	495	622	699	787	864	978	978	1295
L(RTJ)	mm	216	229	254	305	368	508	635	711	800	876	991	991	1308

NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600
L(RF)	mm	267	292	318	356	445	533	622	711	838	864	978	1016	1346
L(BW)	mm	267	292	318	356	445	533	622	711	838	864	978	1016	1346
L(RTJ)	mm	282	308	333	371	460	549	638	727	854	879	994	1035	1368



## T TYPE STRAINER



### STANDARDS:

. DESIGN AND MANUFACTURE: ASME B16.34

ASME B16. 10 (CHECK VALVE/GLOBE VALVE) . FACE TO FACE DIMENSIONS:

OR MANUFACTURER'S SPECIFICATION . END FLANGE DIMENSIONS:

NPS1/2"~24" NPS 26" & ABOVE ASME B16.5 STANDARD

NPS 26" & ABOVE ASME B16. 47 STANDARD
PRESSURE-TEMPERATURE RATINGS: ASME B16. 34 STANDARD
NORMAIL PRESSURE: CLASS 150°CLASS300
NORMAIL DIAMETER: NPS 2"36"

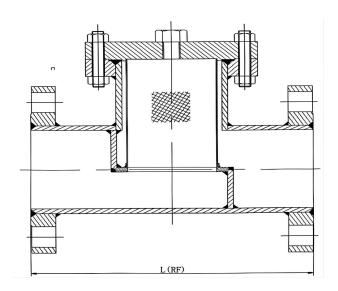
# BILL OF MATERIAL (PART)

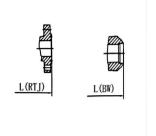
ITEM	PART NAME	MATERIAL
1	BODY (PIPE)	ASTM A106, A672 C70, A335 P11/P22, A312 TP304/TP316/TP304L/TP316L
2	COVER	ASTM A105, A350 LF2, A182 F11/F22/F304/F316/304L/316L
3	BOLT	ASTM A193 B7/B7M/B16, A320 L7/L7M, A193 B8/B8M
4	NUT	ASTM A194 2H/2HM/7/7M/8/8M
5	GASKET	SS304/316+GRAPHITE/PTFE
6	PLUG	CARBON STEEL, STAINLESS STEEL
7	SCREEN	SS304, SS316
8	FLANGE	ASTM A105, A350 LF2, A182 F11/F22/F304/F316/304L/316L

NOTE: OTHER MATERIALS AVAILABLE UPON REQUEST



# T TYPE STRAINER





### CLASS150

	NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
	DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900
	L(RF)	mm	203	216	241	292	356	495	622	699	787	864	978	978	1295	1524	1956
ſ	L(BW)	mm	203	216	241	292	356	495	622	699	787	864	978	978	1295	1524	1956
	L(RTJ)	mm	216	229	254	305	368	508	635	711	800	876	991	991	1308	1537	1968

CLA55300	J														
NPS	in	2	2-1/2	3	4	6	8	10	12	14	16	18	20	24	30
DN	mm	50	65	80	100	150	200	250	300	350	400	450	500	600	750
L(RF)	mm	267	292	318	356	445	533	622	711	838	864	978	1016	1346	1594
L(BW)	mm	267	292	318	356	445	533	622	711	838	864	978	1016	1346	1594
L(RTJ)	mm	282	308	333	371	460	549	638	727	854	879	994	1035	1368	1619









O DEPENDENCE OF SHEET OF SHEET



• 59 Chopairs on the Zitay funcional





















● DIN Swing check valve with counterweight H44H 德标重锤式止回阀













# WENZHOU JIAHUA FLUID EQUIPMENT CO.,LTD.

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