

**TANA**  
TOPNOTCH MACHINE CO.,LTD.

API Gate  
**Valve** Series



## ■ Design Features

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Design complies with the API 600, API 602, API 603, BS 1414  
Face to Face dimension: ASME B16.10, BS2080 and ISO 5752, JIS B2002.  
Flanged End: ASME B 16.5, 26" and larger sizes according to ASME B 16.47 Series A or Series B, JIS B2212, B2214.  
Butt-weld End: ASME B16.25.  
Inspection and Test: API 598, BS EN 12266, ISO 5208, JIS B2003.

## ■ Casting Steel Material

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Visual check for cast steel material includes: surface quality, dimension, chemical properties, mechanical performance, non-destructive testing to ensure that the comprehensive performance of raw materials comply with the relevant ASTM, BS, EN, JIS standards,

## ■ Body

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The design provides the whole structure of low flow resistance channel structure, enables the body stiffness and strength to bear the nominal piping pressure and stress loading, the valve body wall thickness design complies with the API 600 with sufficient margin corrosion resistance for the medium.

## ■ Bonnet

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Bonnet can be designed with a variety of seal structure of body connection to meet the needs of different operating conditions, the structure can be equipped to connect with jacketed, flat, spiral or metal ring gasket, and self pressure-seal valve bonnet for class 900/1500/2500.

## ■ Seat

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Seat structure can be designed as per user requirements as a whole alloy steel materials pressed-in sealing structure, welding sealing, or screw connection in assembly. The austenitic stainless steel body material can be provided with integral seat.

## ■ Wedge

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The wedge structure design can be solid, flexible, or parallel dual plates, and has enough strength and stiffness to ensure the valve sealing performance,

## ■ Seat and other seal material

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The choice of materials for the seat and other seal material can be as per API 600 standard, or users design and manufacturing requirements.

### ■ Stem

The stem is thoroughly forged, its T-shape connecting end is of good stiffness and strength to ensure its safe use and reliability. The stem transmission bearing structure applies sophisticated ACME trapezoidal thread to enable its up and down travel.

### ■ Backseat

All backseats are used on the valve seat seal design. They are replaceable, and for austenitic stainless steel material it can be integral backseat design.

### ■ Bonnet and Body seal structure

Class 150: jacketed flexible graphite and stainless steel gasket

Class 300.600: spiral stainless steel and flexible graphite wound gasket

Class 900 and above: metal ring gasket

Choice for bonnet and body seal can be based on the use of specific operating conditions (medium temperature and pressure)

### ■ Stuffing box

Stuffing box is designed in accordance with API 600 standards with precise control of surface finish in 32RMS below and its inner verticality.

### ■ Packing gland / bushing

Packing gland / bushing are separate structure to ensure packing seal performance.

### ■ Stem Nut

Stem Drive nut bearing structure is provided with sophisticated ACME trapezoidal thread, top entry connection design to the yoke, so even the valves are taken off the handwheel at service, the locking device can be ensured to be at original position and working.

### ■ Operator

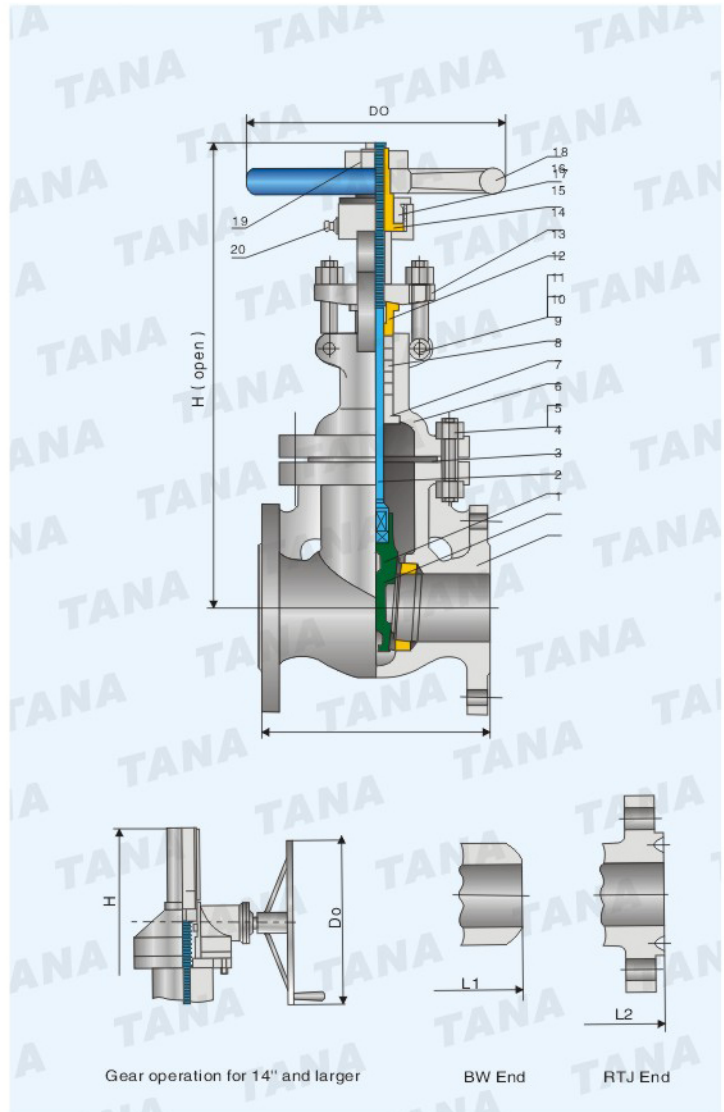
The valve operators are normally handwheel, gearbox, with clear open and close marking. Electric, or other operation device can be supplied according to customers requirements.

**Features**

Design and manufacture: API 600 API 603 JIS B2073, B2083  
Face-to-Face dimension: 36"and smaller to ASME B16.10.  
40"and larger to manufacturer's standard  
Flanged End: 24"and smaller to ASME B16.5  
26"and larger to ASME B16.47 series A  
B.W.End: ASME B 16.25  
Shell Wall Thickness: 24"and smaller to API 600  
26"and larger to manufacturer's standard  
8"and smaller valves have a one-piece bonnet and yoke design  
10"and larger valves have a split bonnet and yoke design.

**Parts List**

No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+13Cr
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Gasket	304S.S.Jacketed Graphite
6	Stud	ASTM A193 Gr.B7
7	Nut	ASTM A 194 Gr.2H
8	Bonnet	ASTM A216 Gr,WCB
9	Backseat	ASTM A276 410
10	Packing	Graphite
11	Pin	C.S.
12	Gland bolt	ASTM A 193 Gr.B7
13	Gland nut	ASTM A194 Gr.2H
14	Bushing	ASTM A276 410
15	Gland	ASTM A216 Gr.WCB
16	Stem nut	Aluminum Bronze
17	Retaining nut	C.S.
18	Handwheel	Malleable Iron
19	H.W. lock nut	C.S.
20	Lubricator	Assemy



**Dimensions & Weights**

Valve Size	in. mm	1-1/2 40	2 50	2-1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	28 700	30 750	32 800	36 900	40 1000	42 1050	48 1200
L(RF)	in. mm	6.5 165	7 178	7.5 190	8 203	9 229	10 254	10.5 267	11.5 292	13 330	14 356	15 381	16 406	17 432	18 457	20 508	24 610	24 610	26 660	28 711	30 762	31 787	34 864
L1 (BW)	in. mm	6.5 165	8.5 216	9.5 241	11.13 282	12 305	15 381	15.88 403	16.5 419	18 457	19.75 502	22.5 572	24 610	26 660	28 711	32 813	36 914	36 914	38 965	40 1016	42 1067	43 1092	46 1168
L2 (RTJ)	in. mm	7.0 178	7.5 191	8 203	8.5 216	9.5 242	10.5 267	11 280	12 305	13.5 343	14.5 369	15.5 394	16.5 419	17.5 445	18.5 470	20.5 521	24.5 623	24.5 622	26.5 673	28.5 724	--	--	--
H (open)	in. mm	15.7 392	16.13 409	18.56 472	20.94 532	24.13 612	27.94 710	31.75 806	39 990	46.69 1186	55.31 1405	63.56 1615	71.31 1811	78.19 1986	87 2210	106.25 2698	119.31 3030	130.56 3317	137.25 3487	150.56 3825	183.86 4670	193.75 4920	217.5 5525
Do	in. mm	7.86 200	7.86 200	7.86 200	9.86 250	9.86 250	11.81 300	11.81 300	13.75 350	17.69 450	19.69 500	18.13 460	18.13 460	18.13 460	24 610	24 610	24 610	24 610	24 610	30 760	30 760	30 760	30 760
WT (kg)	RF BW	18.5 15.5	20 17	30 26	36 29	53 46	71 66	85 77	136 116	220 202	323 294	387 350	553 506	660 575	810 720	1250 1130	1931 1765	2380 2028	2490 2280	3600 3080	4815 4840	5300 5275	7110 7050

**Class300/JIS20K Bolted bonnet, outside screw & yoke,  
Rising stem, flexible wedge**

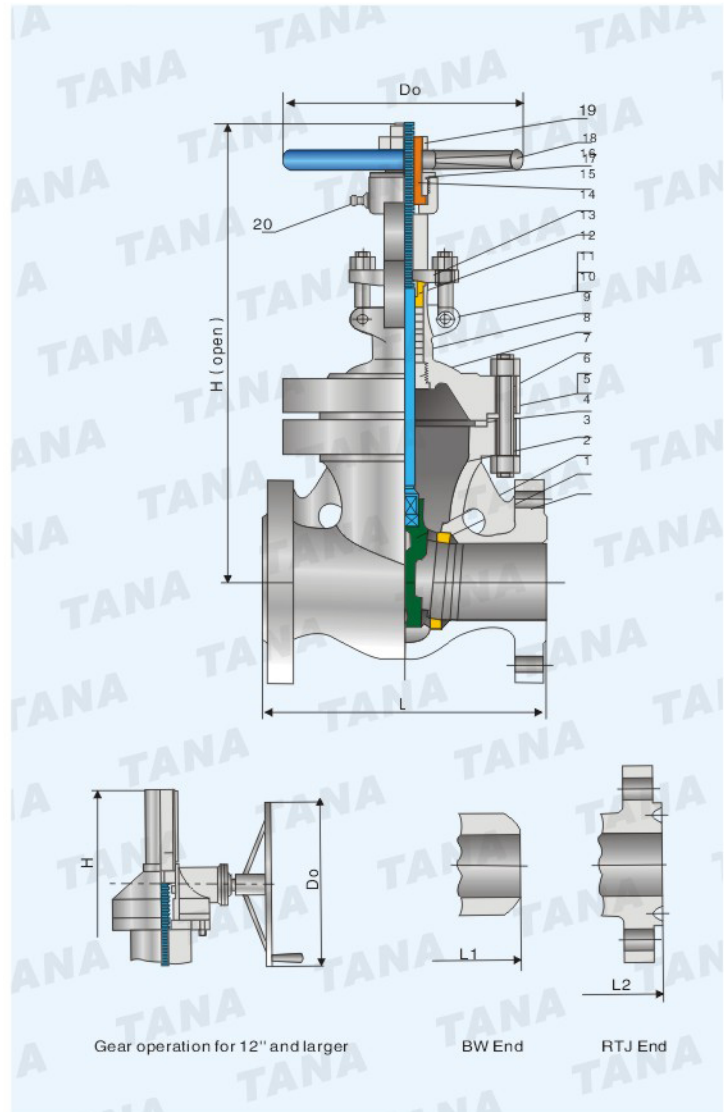


**■ Features**

Design and manufacture: API 600 /API 603, JIS B2073, B2083.  
 Face-to-Face dimension: 36"and smaller to ASME B16.10.  
 40"and larger to manufacturer's standard  
 Flanged End: 24"and smaller to ASME B16.5  
 26"and larger to ASME B16.47 series A  
 B.W.End: ASME B 16.25  
 Shell Wall Thickness: 24"and smaller to API 600  
 26"and larger to manufacturer's standard  
 8"and smaller valves have a one-piece bonnet and yoke design  
 10"and larger valves have a split bonnet and yoke design.

**■ Parts List**

No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+13Cr
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Gasket	304S.S.Jacketed Graphite
6	Stud	ASTM A193 Gr.B7
7	Nut	ASTM A 194 Gr,2H
8	Bonnet	ASTM A216 Gr,WCB
9	Backseat	ASTM A276 410
10	Packing	Graphite
11	Pin	C.S.
12	Gland bolt	ASTM A 193 Gr.B7
13	Gland nut	ASTM A194 Gr.2H
14	Bushing	ASTM A276 410
15	Gland	ASTM A216 Gr.WCB
16	Stem nut	Aluminum Bronze
17	Retaining nut	C.S.
18	Handwheel	Malleable Iron
19	H.W. lock nut	C.S.
20	Lubricator	Assembly



**■ Dimensions & Weights**

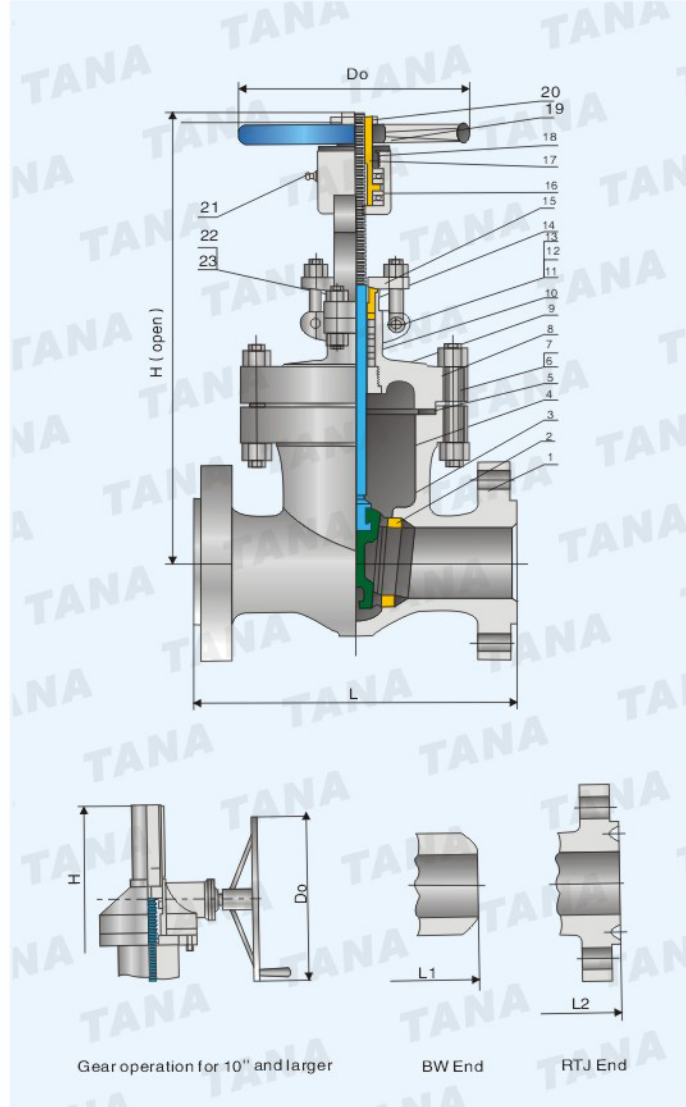
Valve Size	in.	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	30	32	36	40	42	48
mm		40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1000	1050	1200
L-L1	in.	7.5	8.5	9.5	11.12	12	15	15.88	16.5	18	19.75	30	33	36	39	45	54	55	61.12	68	76	78	88
mm		190	216	241	282	305	381	403	419	457	502	762	838	914	991	1143	1346	1397	1524	1727	1930	1981	2235
L2 (RTJ)	in.	8.0	9.12	10.12	11.74	12.62	15.62	16.5	17.12	18.62	20.27	30.62	33.62	36.62	39.75	45.88	54	56	61.12	69.12	---	---	---
mm		203	232	257	298	321	397	419	435	473	518	778	854	930	1010	1165	1371	1422	1581	1755	---	---	---
H (open)	in.	14.7	15.75	18.75	21.38	25.63	30.31	34.63	40.81	50.19	56.63	65	72.44	79.94	88.19	114.19	122	139.38	152	169.75	188.63	198.13	217.38
mm		374	400	477	543	650	770	880	1037	1275	1438	1650	1840	2030	2240	2900	3100	3540	3860	4312	4791	5032	5522
Do	in.	7.88	7.88	9.88	9.88	11.81	11.81	13.75	17.69	19.69	22.06	18.13	18.13	24	24	24	24	30	30	30	24	24	24
mm		200	200	250	250	300	300	350	450	500	560	460	460	610	610	610	610	760	760	760	610	610	610
WT (kg)	RF BW	26 22	30 26	39 34	55 47	83 68	92 77	137 118	240 195	333 271	536 432	699 595	1010 848	1205 1025	1720 1460	2800 2294	3150 2870	3786 3220	4210 3675	6850 4990	8460 6160	9500 6800	12400 9000

■ **Features**

Design and manufacture: API 600.  
Face-to-Face dimension: 36" and smaller to ASME B16.10.  
40" and larger to manufacturer's standard  
Flanged End: 24" and smaller to ASME B16.5  
26" and larger to ASME B16.47 series A  
B.W. End: ASME B 16.25  
Shell Wall Thickness: 24" and smaller to API 600  
26" and larger to manufacturer's standard  
6" and smaller valves have a one-piece bonnet and yoke design  
8" and larger valves have a split bonnet and yoke design.

■ **Parts List**

No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+13Cr
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Gasket	304S.S.Jacketed Graphite
6	Stud	ASTM A193 Gr.B7
7	Nut	ASTM A 194 Gr.2H
8	Bonnet	ASTM A216 Gr.WCB
9	Backseat	ASTM A276 410
10	Packing	Graphite
11	Pin	C.S.
12	Gland bolt	ASTM A 193 Gr.B7
13	Gland nut	ASTM A194 Gr.2H
14	Bushing	ASTM A276 410
15	Gland	ASTM A216 Gr.WCB
16	Bearing	Assembly
17	Stemnut	Aluminum Bronze
18	Retaining nut	C.S.
19	Handwheel	Malleable Iron
20	H.W. lock nut	C.S.
21	Lubricator	Assembly
22	Yoke bolt	ASTM A 193 Gr.B7
23	Yoke nut	ASTM A 194 Gr.2H



■ **Dimensions & Weights**

Valve Size	in. mm	2 50	2-1/2 65	3 80	4 100	5 125	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	26 650	28 700	30 750	32 800	36 900
L-L1 (RF-BW)	in. mm	11.5 292	13 330	14 356	17 432	20 508	22 559	26 660	31 787	33 838	35 889	39 991	43 1092	47 1194	55 1397	57 1448	61 1549	65 1651	70 1778	82 2083
L2 (RTJ)	in. mm	11.62 295	13.12 333	14.12 359	17.12 435	20.12 511	22.12 562	26.12 663	31.12 790	33.12 841	35.12 892	39.12 994	43.12 1095	47.25 1200	55.38 1407	---	---	---	---	---
H (open)	in. mm	18.63 474	21.75 553	23.38 593	28.06 713	30.3 770	38.19 970	44.19 1122	52.38 1330	59./81 1519	68.13 1730	72.75 1835	90.13 2290	98.81 2510	119 3022	127.25 3232	140.25 2562	152.75 3880	163 4140	179.5 4560
Do	in. mm	9.88 250	9.88 250	11.81 300	13.75 350	15.7 400	19.69 500	22.06 560	28.38 720	24 610	24 610	24 610	24 610	30 760	30 760	30 760	30 760	24 610	24 610	24 610
WT (kg)	RF BW	41 35	58 50	88 68	131 104	205 192	253 208	413 328	623 496	784 637	1288 1120	1820 1448	2150 1828	2540 2201	4080 3360	5220 4295	6050 4980	6945 5710	7965 5223	10000 8220

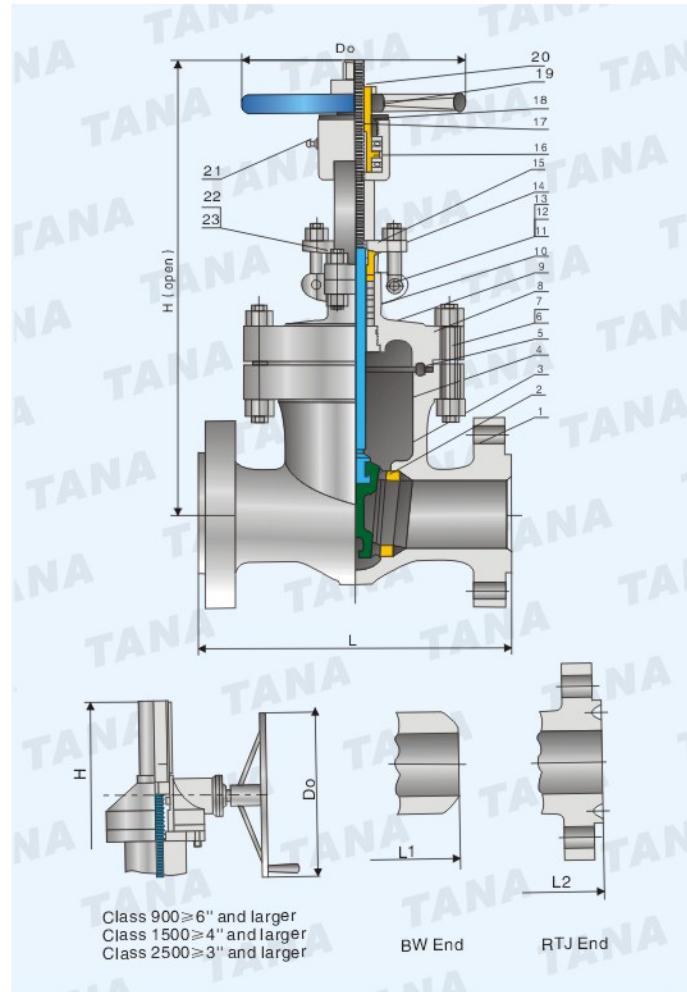
**Class 900/1500/2500 Bolted bonnet, outside screw & yoke,  
Rising stem, flexible wedge**

**Features**

Design and manufacture: API 600.  
Face-to-Face dimension: 36"and smaller to ASME B16.10.  
40"and larger to manufacturer's standard  
Flanged End: 24"and smaller to ASME B16.5  
26"and larger to ASME B16.47 series A  
B.W.End: ASME B 16.25  
Shell Wall Thickness: 24"and smaller to API 600  
26"and larger to manufacturer's standard  
6"and smaller valves have a one-piece bonnet and yoke design  
8"and larger valves have a split bonnet and yoke design.

**Parts List**

No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+13Cr
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Gasket	Soft Iron
6	Stud	ASTM A 193 Gr.B7
7	Nut	ASTM A194 Gr.2H
8	Bonnet	ASTM A216 Gr WCB
9	Backseat	ASTM A276 410
10	Packing	Graphite
11	Pin	C.S.
12	Gland bolt	ASTM A 193 Gr.B7
13	Gland nut	ASTM A194 Gr.2H
14	Bushing	ASTM A276 410
15	Gland	ASTM A216 Gr.WCB
16	Bearing	Assembly
17	Stemnut	Aluminum Bronze
18	Retaining nut	C.S
19	Handwheel	Malleable Iron
20	H.W. lock nut	C.S.
21	Lubricator	Assembly
22	Yoke bolt	ASTM A 193 Gr.B7
23	Yoke nut	ASTM A 194 Gr.2H



**Dimensions & Weights**

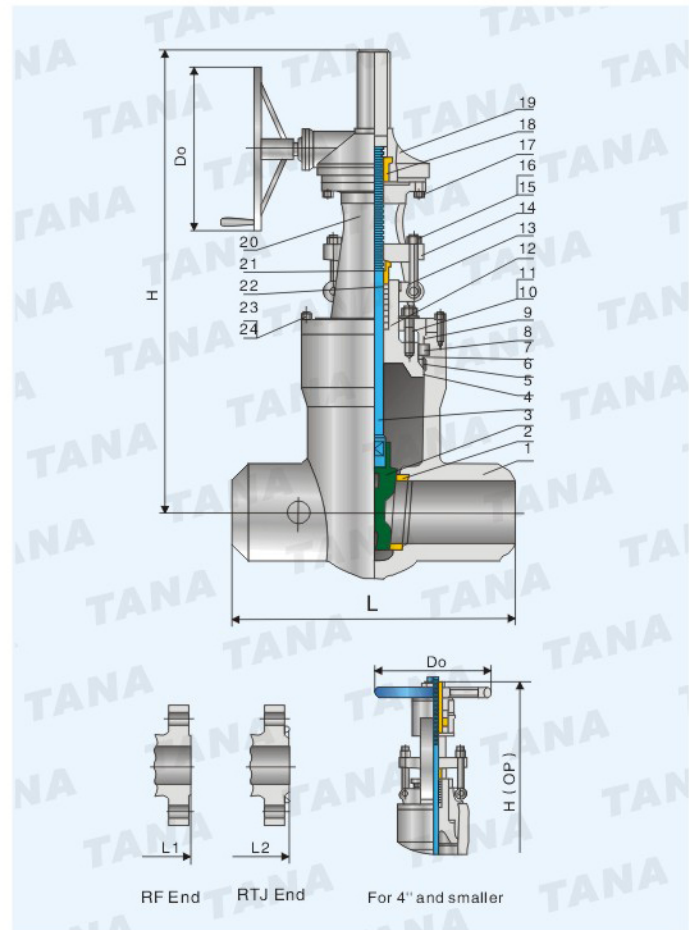
	Valve Size	in. mm	2	2-1/2	3	4	6	8	10	12
			50	65	80	100	150	200	250	300
Class 900	L-L1 (RF-BW)	in.	14.5	16.5	15	18	24	29	33	38
		mm	368	419	381	457	610	737	838	965
	L2 (RTJ)	in.	14.62	16.62	15.12	18.12	24.12	29.12	33.12	38.12
		mm	371	422	384	460	613	740	841	968
	H (open)	in.	21.56	27.56	28.15	28.69	41	49.63	62.63	70.69
		mm	547	700	715	729	1041	1260	1590	1795
	D0	in.	11.81	14	15.75	17.69	22.06	24	24	24
		mm	300	355	400	450	560	610	610	610
	WT (kg)	RF	90	110	123	148	420	650	1160	1700
		BW	82	93	108	122	359	566	980	1450
Class 1500	L-L1 (RF-BW)	in.	14.5	16.5	18.5	21.5	27.75	32.75	39	44.5
		mm	368	419	470	546	705	832	991	1130
	L2 (RTJ)	in.	14.62	16.62	18.62	21.62	28	33.13	39.38	45.12
		mm	371	422	473	549	711	842	1001	1146
	H (open)	in.	22.63	27.56	31.75	34.94	42.5	53.94	59.81	65
		mm	574	700	806	887	1079	1370	1520	1651
	D0	in.	13.75	15.75	17.75	22.06	24	24	30	30
		mm	350	400	450	560	610	610	760	760
	WT (kg)	RF	117	175	240	337	680	1228	2278	3260
		BW	93	144	185	385	584	978	1990	2850
Class 2500	L-L1 (RF-BW)	in.	17.75	20	22.75	26.5	36	40.25	50	--
		mm	451	508	578	673	914	1022	1270	--
	L2 (RTJ)	in.	17.87	20.25	23	26.88	36.5	40.87	50.88	--
		mm	454	514	584	683	927	1038	1292	--
	H (open)	in.	27.56	29.5	34.63	42.5	53.94	60.25	80.5	--
		mm	700	750	887	1079	1370	1530	2045	--
	D0	in.	13.75	17.75	22.06	28.38	18.13	24	30	--
		mm	350	450	560	720	460	610	760	--
	WT (kg)	RF	132	206	256	498	1550	2395	4460	--
		BW	99	155	192	390	1230	1980	3700	--

**Features**

Design and manufacture: API 600 and ASME B 16.34.  
Face-to-Face dimension: ASME B16.10.  
Flanged dimension: ASME B16.5.  
B.W.End: ASME B 16.25  
Shell Wall Thickness: API 600 BS 1868  
Inspection & Test: API 598

**Parts List**

No	Parts	Material
1	Body	ASTM A216 Gr.WCB
2	Seat ring	ASTM A 105+13Cr
3	Wedge	ASTM A216 Gr.WCB+13Cr
4	Stem	ASTM A182 F6a
5	Bonnet	ASTM A216 Gr.WCB
6	Sealing ring	ASTM A182 F304
7	Soacer ring	ASTM A182 F6a
8	Segment ring	ASTM A182 F6a
9	Supporting plate	ASTM A105
10	Stud	ASTM A193 Gr.B7
11	Nut	ASTM A 194 Gr.2H
12	Packing plate	ASTM A276 410
13	Split ring	ASTM A216 Gr.WCB
14	Gland flange	ASTM A216 Gr.WCB
15	Gland bolt	ASTM A193 Gr.B7
16	Gland nut	ASTM A 194 Gr.2H
17	Bolt	C.S
18	Stem nut	Aluminum Bronze
19	Gear box	Assembly
20	Yode	ASTM A 216 Gr.WCB
21	Bushing	ASTM A276 410
22	Packing	Graphite
23	Bolt	ASTM A 193 Gr B7
24	Nut	ASTM A 194 Gr 2H



**Dimensions & Weights**

	Valve Size	in. mm	2	2-1/2	3	4	6	8	10	12	14	16
			50	65	80	100	150	200	250	300	350	400
Class 900	BW(L)	in. mm	8.5 216	10 254	12 305	13.98 356	20 508	26 660	31 787	36 914	39 991	43 1092
	RF(L1)	in. mm	14.5 368	16.5 419	15 381	18 457	24 610	29 737	33 838	38 965	40.5 1029	44.5 1130
	RTJ(L2)	in. mm	14.62 371	16.62 422	15.12 384	18.12 460	24.12 613	29.12 740	33.12 841	38.12 968	40.88 1039	44.88 1140
	Open(H)	in. mm	21.81 554	25.08 637	26.77 680	31.34 796	42.68 1084	54.02 1372	58.82 1494	61.02 1550	77.17 1960	87 2210
	Do	in. mm	11.81 300	13.78 350	13.78 350	15.75 400	22.05 560	18.11 460	24 610	24 610	24 610	30 760
	WT(kg)	RF BW	48 37	82 62	90 80	152 118	339 364	620 522	948 758	1293 1088	1718 1448	2378 2016
	Class 1500	BW(L)	in. mm	8.5 216	10 254	12 305	16 406	22 559	28 711	34 864	39 991	42 1067
RF(L1)		in. mm	14.5 368	16.5 419	18.5 470	21.5 546	27.75 705	32.75 832	39 991	44.5 1130	49.5 1257	54.5 1384
RTJ(L2)		in. mm	14.62 371	16.62 422	18.62 473	21.62 549	28 711	33.13 842	39.38 1001	45.12 1146	50.25 1276	55.38 1407
Open(H)		in. mm	21.81 554	25.08 637	30.2 767	34.45 875	43.07 1094	54 1372	65.16 1655	72.20 1834	84.65 2150	88.98 2260
Do		in. mm	11.81 300	17.72 450	17.72 450	22.05 560	12 305	18.11 460	24 610	24 610	30 760	30 760
WT(kg)		RF BW	58 44	89 69	126 83	180 128	392 290	793 585	1368 972	2118 1613	2798 2008	3868 2813
Class 2500		BW(L)	in. mm	11 279	13 330	14.5 368	18 457	24 610	30 762	36 914	41 1041	--
	RF(L1)	in. mm	17.75 451	20 508	22.75 578	26.50 673	36 914	40.25 1022	50 1270	56 1422	--	--
	RTJ(L2)	in. mm	17.87 454	20.25 514	23 584	26.88 683	36.50 927	40.87 1038	50.88 1292	56.88 1445	--	--
	Open(H)	in. mm	24 610	25.75 654	29.65 753	33.46 850	49.37 1254	54.09 1374	66.34 1685	74 1873	--	--
	Do	in. mm	19.69 500	19.69 500	23.62 600	23.62 600	18.11 460	18.11 460	24 610	24 610	--	--
	WT(kg)	RF BW	119 86	173 133	193 142	227 156	718 498	1293 890	2248 1548	3091 2330	--	--

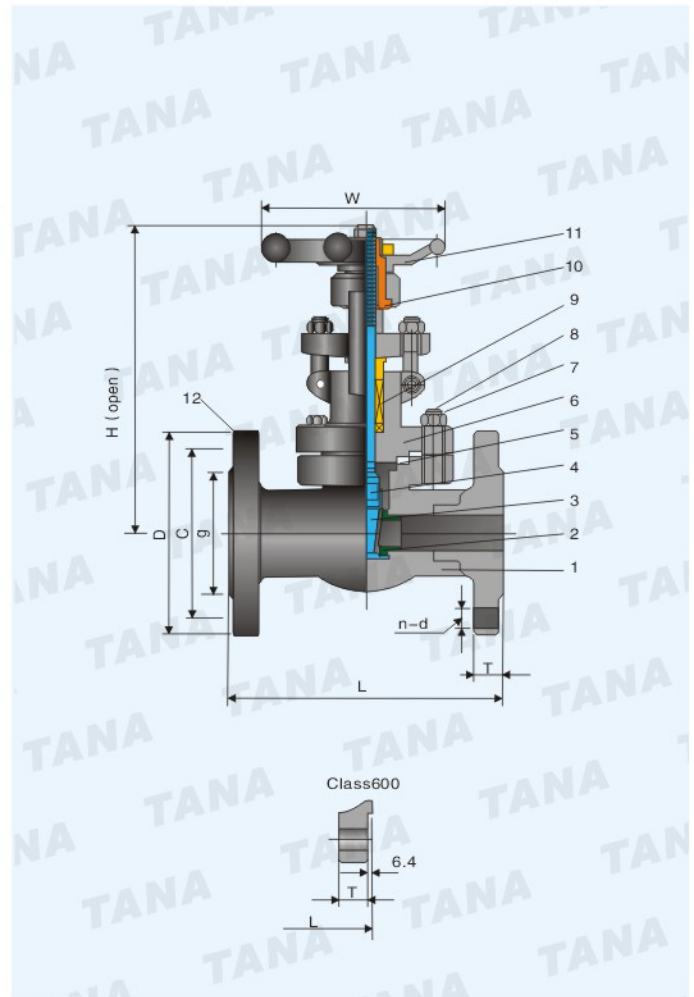


■ **Technical specification**

- 1、 Design and manufacturing: per API 602.
- 2、 Consturction Feature: B.B OS&Y or WB OS&Y
- 3、 Face to face dimensions per ANSI B 16.10.
- 4、 Flanged connection per ANSI B 16.5.
- 5、 Test and inspection per API 598.
- 6、 Body material: A105、 F304、 F316、 F304L、 F316L、 F5、 F11、 F22...

■ **Main parts and materials**

No	Accessory Name	Material
1	Body	A105
2	Seat	13Cr
3	Wedge	13Cr
4	Stem	A182-F6a
5	Gear box	304S.S. Jacketed Graphite
6	Bonnet	A105
7	Nut	A194-2H
8	Bolt	A193-B7
9	Packing	Graphite
10	Stem nut	13Cr
11	Handwheel	Malleable Iron
12	Flange	A105



■ **Main dimensions and weights**

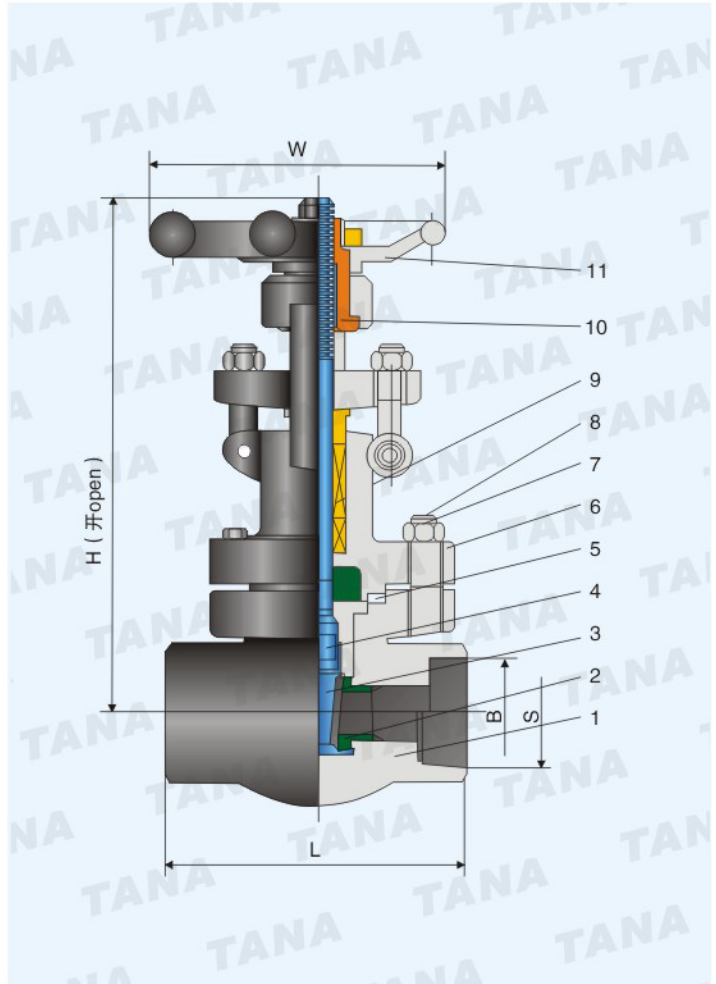
DN		Class	L	D	C	g	T	n-d	H(Open)		W		WT(kg)	
inch	mm								Reduced Bore	Full Bore	Reduced Bore	Full Bore	Reduced Bore	Full Bore
1/2"	15	150	108	90	60.3	35	11.5	4-16	166	169	100	100	4.5	5
		300	140	95	66.5		14.5	4-16					4.8	5.2
		600	165	95	66.5		14.5	4-16					5.9	5.9
3/4"	20	150	117	100	70	43	13	4-16	169	193	100	125	5.2	6.1
		300	152	115	82.5		16	4-19					6.2	6.3
		600	190	115	82.5		16	4-19					7.4	7.5
1"	25	150	127	110	79.5	51	14.5	4-16	193	230	125	160	8.2	8.4
		300	165	125	89		18	4-19					9.3	8.6
		600	216	125	89		18	4-19					10.4	10.2
1 1/4"	32	150	140	115	89	63	16	4-16	230	246	160	160	11.5	14.3
		300	178	135	98.5		19.5	4-19					14	14.5
		600	229	135	98.5		21	4-19					16.2	16.7
1 1/2"	40	150	165	125	98.5	73	18	4-16	246	283	160	180	12.5	15.4
		300	190	155	114.5		21	4-22.5					15.5	15.6
		600	241	155	114.5		22.5	4-22.5					17.5	17.4
2"	50	150	178	150	120.5	92	19.5	4-19	283	330	180	200	20.3	22.7
		300	216	165	127		22.5	8-19					23.4	22.8
		600	292	165	127		26	8-19					28.3	28.7

■ **Technical specification**

- 1、 Design and manufacturing: per API 602.
- 2、 Consturction Feature: B.B OS&Y or WB OS&Y
- 3、 FNPT connection per ANSI B1.20.1  
Socket weld connection per ANSI B16.11
- 4、 Test and inspection per API 598.
- 5、 Body material: A105、 F304、 F316、 F304L、 F316L、 F5、 F11、 F22...

■ **Main parts and materials**

No	Accessory Name	Material
1	Body	A105
2	Seat	13Cr
3	Wedge	13Cr
4	Stem	A182-F6a
5	Gasket	304S.S. Jacketed Graphite
6	Bonnet	A105
7	Nut	A194-2H
8	Bolt	A193-B7
9	Packing	Graphite
10	Stem nut	13Cr
11	Handwheel	Malleable Iron



■ **Main dimensions and weights**

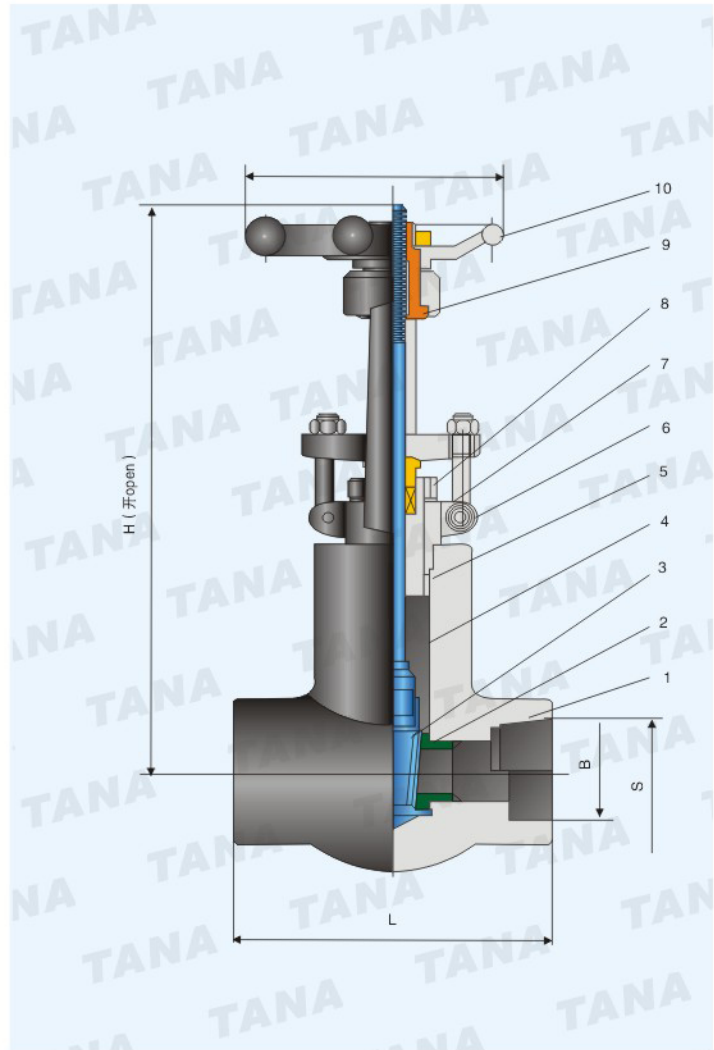
DN		L	B		S			H(Open)	W	WT(kg)
inch	mm		ANSI	JIS	ANSI NPT600	ISO、BS RC560	JIS PT550			
1/2"	15	92	21.8	22.2		1/2"	169	100	2.2	
3/4"	20	111	27.1	27.7		3/4"	193	125	4.3	
1"	25	120	33.8	34.5		1"	230	160	5.9	
1 1/4"	32	120	42.6	43.2		1 1/4"	246	160	6.9	
1 1/2"	40	140	48.7	49.1		1 1/2"	283	180	11.1	
2"	50	178	61.1	61.1		2"	330	200	15.2	

■ **Technical specification**

- 1、 Design and manufacturing: per API 602.
- 2、 Construction Feature: B.B OS&Y or WB OS&Y
- 3、 FNPT connection per ANSI B1.20.1  
Socket weld connection per ANSI B16.11
- 4、 Test and inspection per API 598.
- 5、 Body material: A105、 F304、 F316、 F304L、 F316L、 F5、 F11、 F22...

■ **Main parts and materials**

No	Accessory Name	Material
1	Body	A105
2	Seat	13Cr
3	Wedge	13Cr
4	Stem	A182-F6a
5	Sealed ring	304
6	Yoke	A105
7	Bonnet	A105
8	Packing	Graphite
9	Stem nut	13Cr
10	Handwheel	Malleable Iron



■ **Main dimensions and weights**

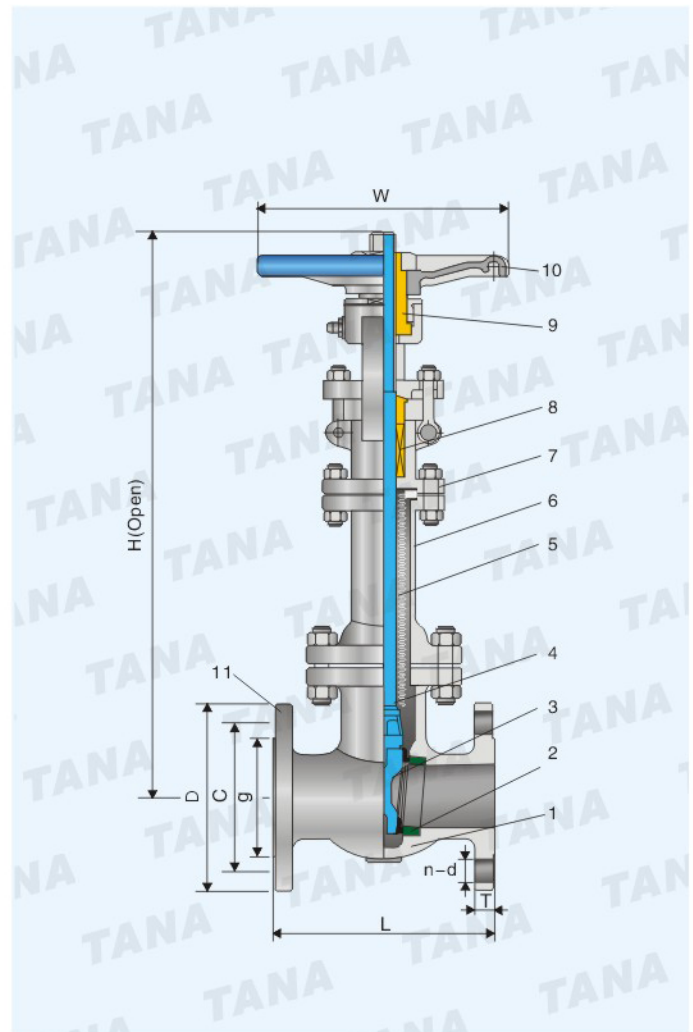
DN		L		B		S			H(Open)	W	WT(kg)
inch	mm	Class 900 Class 1500	Class 2500	ANSI	JIS	ANSI NPT600	ISO、BS RC560	JIS PT550			
1/2"	15	140	186	21.8	22.2		1/2"		321	125	12.3
3/4"	20	140	186	27.1	27.7		3/4"		321	125	11.6
1"	25	140	186	33.8	34.5		1"		321	160	10.8
1 1/4"	32	178	232	42.6	43.2		1 1/4"		380	160	26
1 1/2"	40	178	232	48.7	49.1		1 1/2"		414	180	28.4
2"	50	216	279	61.1	61.1		2"		502	200	60

■ **Technical specification**

- 1、 Design and manufacturing per API 602.
- 2、 Face to face dimensions per ANSI B 16.10.
- 3、 Flanged connection per ANSI B16.5.
- 4、 Test and inspection per API 598.
- 5、 Body material:A105、 F304、 F304L、 F316、 F316L...

■ **Main parts and materials**

No	Accessory Name	Material
1	Body	A105
2	Seat	13Cr+STL
3	Wedge	13Cr+STL
4	Stem	A182-F6a
5	Bellow	304L
6	Bonnet	A105
7	Yoke	A105
8	Packing	Graphite
9	Stem nut	Copper alloy
10	Handwheel	Malleable Iron
11	Flange	A105



■ **Main dimensions and weights**

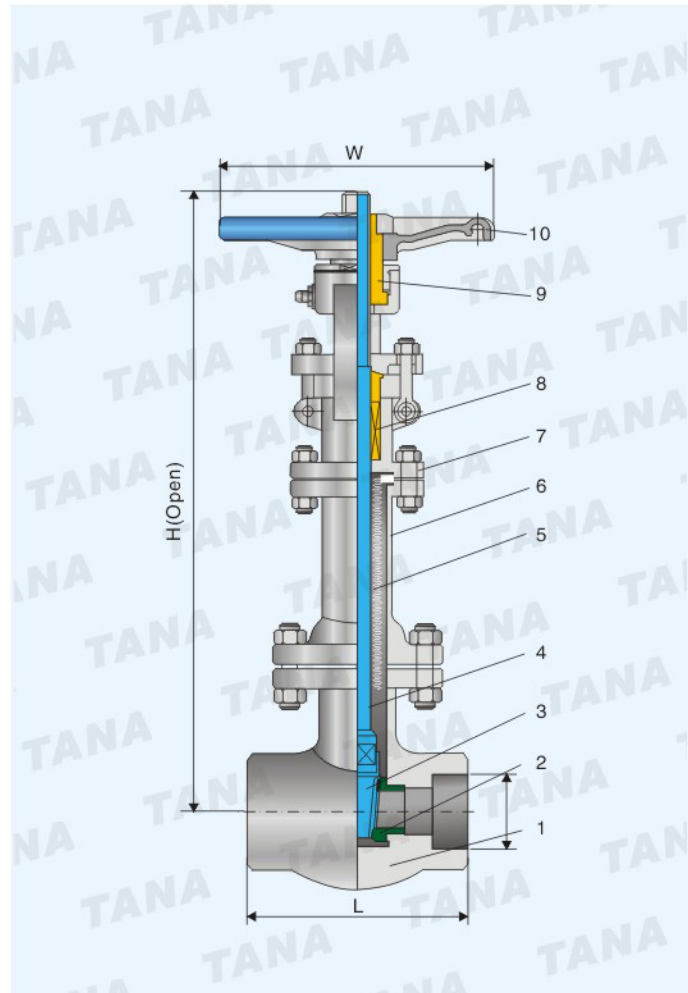
Pressure (LB)	DN		L	D	C	g	T	n-d	H(Open)	W	KT (kg)
	inch	mm									
Class 150	1/2"	15	108	90	60.5	35	11.5	4-16	253	100	15
	3/4"	20	117	100	70	43	13	4-16	292	125	19
	1"	25	127	110	79.5	51	14.5	4-16	335	160	23
	1 1/2"	40	165	125	98.5	73	18	4-16	442	180	35
	2"	50	178	150	120.5	92	19.5	4-19	536	200	38
Class 300	1 1/2"	15	140	95	66.5	35	14.5	4-16	265	100	17
	3/4"	20	152	115	82.5	43	16	4-19	310	125	21
	1"	25	165	125	89	51	18	4-19	345	160	25
	1 1/2"	40	190	155	114.5	73	21	4-22	350	180	37
	2"	50	216	165	127	92	22.5	8-19	548	200	40

■ **Technical specification**

- 1、 Design and manufacturing per API 602.
- 2、 Socket Weld connection per ANSI B16.11
- 3、 Test and inspection per API 598.
- 4、 Body material:A105、 F304、 F304L、 F316、 F316L...

■ **Main parts and materials**

No	Accessory Name	Material
1	Body	A105
2	Seat	13Cr+STL
3	Wedge	13Cr+STL
4	Stem	A182-F6a
5	Bellow	304L
6	Bonnet	A105
7	Yoke	A105
8	Packing	Graphite
9	Stem nut	Copper alloy
10	Handwheel	Malleable Iron



■ **Main dimensions and weights**

DN		L	B	H(Open)	W	KT(kg)
inch	mm					
1/2"	15	92	21.8	253	100	15
3/4"	20	111	27.1	292	125	19
1"	25	120	33.8	335	160	23
1 1/2"	40	140	48.7	442	180	35
2"	50	178	61.1	536	200	38