

API602/ASME forged steel flanged gate valve

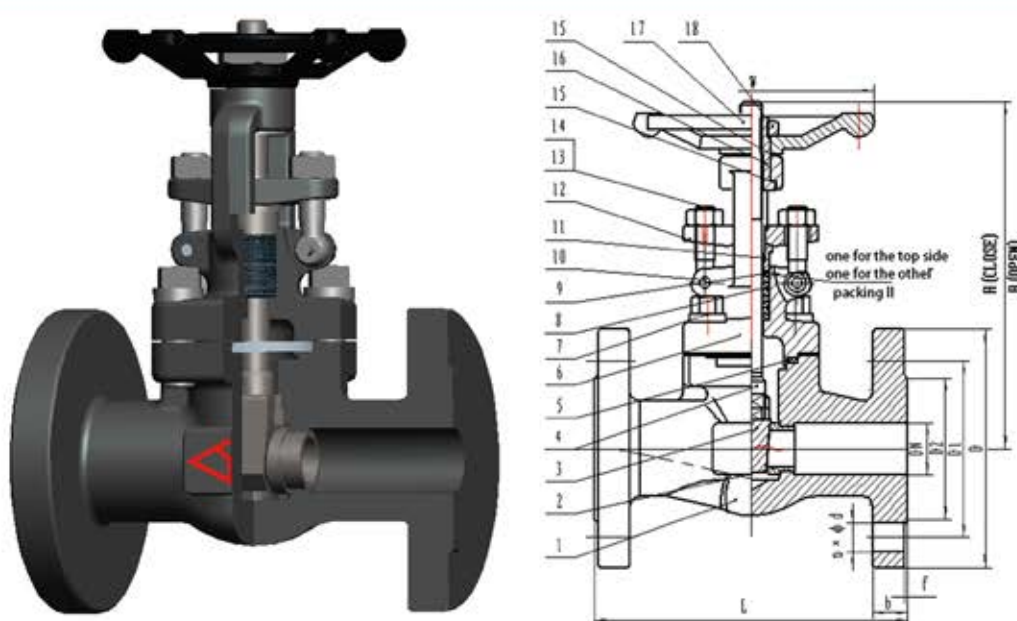


PRODUCT OVERVIEW

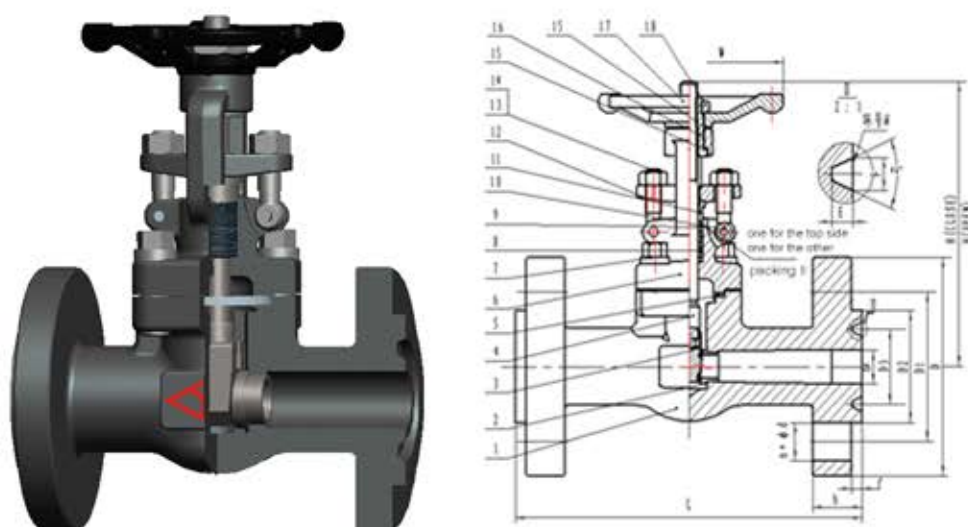
Body material:	A105N/A350 LF2/A182 F11/A182 F22/A182 F304/A182 F316/A182 F304L/A182 F316L
Size range:	1/2 " ~ 2 "
Pressure rating:	Class 150lb ~ 1500lb
Operating temperature:	-46 ~ 538°C
End connection:	Flanged
Applicable medium:	Water, Steam, Oil, Gas, etc
Mode of operation:	Manual or other modes
Applicable industry:	Chemical & Petrochemical, Oil & Gas, Mining & Minerals, Power generation, Water & Water Treatment, Pulp & Paper, Municipal, Heating & Ventilation
Design & Manufacture:	API, ASME, ASTM, ANSI, BS, DIN, JIS, ISO, GB

DESIGN FEATURES

1. The stem is designed to have double sealing function, i.e., packing and upper sealing.
2. The valve stem is in T-shaped groove connection with the gate plate, which is easy to install. In addition, the head of the valve stem is designed in spherical shape to realize the point contact between the valve stem and the gate plate when the valve is closed, which has a self-centering function.
3. The valve body is provided with a slot where the gate plate is positioned, which can ensure the movement direction of the gate plate and reduce the friction between the gate plate and the valve seat sealing ring during the opening and closing process.
4. The valve body and the bonnet are connected through a tongue and groove joint, which can reduce the extension and overpressure deformation of the metal spiral wound gasket under the action of preload.
5. The valve seat is in expansion joint structure to ensure the compact and effective fit.
6. The movable joint is connected by swing bolts, nuts and pin shafts, which are easy to install, simple in structure, strong in stability and long in service life.



(NPS1/2 ~ NPS2、Class150 ~ Class600)



(NPS1/2 ~ NPS2、Class900 ~ Class1500)

VALVE MATERIAL LIST

S/N	Part name	Material							
1	Valve body	A105N	A350 LF2	A182 F11	A182 F22	A182 F304	A182 F316	A182 F304L	A182 F316L
2	Valve stem	A276 420/STL				A182 F304/STL	A182 F316/STL	A182 F304L/STL	A182 F316L/STL
3	Valve clack	A276 420/STL				A276 304	A276 316	A276 304L	A276 316L
4	Valve stem	A276 410				A276 304	A276 316	A276 304L	A276 316L
5	Medium-caliber gasket	201+ flexible graphite /304+ flexible graphite							
6	Bonnet	A105N	A350 LF2	A182 F11	A182 F22	A182 F304	A182 F316	A182 F304L	A182 F316L
7	Medium-caliber bolt	A193 B7	A193 B7	A193 B16	A193 B16	A193 B8	A193 B8M	A193 B8M	A193 B8M
8	Packing I	flexible graphite							
9	Packing II	Steel wire packing (304+ flexible graphite)							
10	Lateral pin	45							

S/N	Part name	Material							
11	Packing sleeve	A276 420	A276 420	A276 420	A276 420	A276 304	A276 316	A276 304L	A276 316L
12	Packing plate	A105N	A350 LF2	A182 F11	A182 F22	A182 F304	A182 F316	A182 F304L	A182 F316L
13	Nut	A194 2H	A194 2H	A194 2H	A194 2H	A194 8M	A194 8M	A194 8M	A194 8M
14	Swing bolt	A193 B7	A193 B7	A193 B7	A193 B7	A193 B8	A193 B8M	A193 B8M	A193 B8M
15	Gasket	65Mn							
16	Stem nut	35/ A276 410							
17	Handwheel	Forgeable cast-iron							
18	Cap nut	A194 2H				A194 8M			

Applicable Medium and Temperature Range of Shell Material

Shell material	A105N	A350 LF2	A182 F11/F22	A182 F304/F316	A182 F304L	A182 F316L
Applicable temperature (°C)	-29 ~ 425	-46 ~ 345	-29 ~ 538	-29 ~ 538	-29 ~ 425	-29 ~ 450
Applicable medium	Water, steam, oil	Water, steam, oil, gas	Water, steam, oil, gas	Water, steam, oil, gas	Water, steam, oil, gas	Water, steam, oil, gas

Note: If the medium is flammable and explosive, the working temperature of the pipeline system must be restricted.

TECHNICAL SPECIFICATIONS

Model	DN	Size(mm)									
		L	D	D ₁	D ₂	b	f	n-φd	H(CLOSE)	H(OPEN)	W
NPS1/2 ~ NPS2、 Class150	15	108	90	60.3	34.9	12	2	4-φ 15.9	142	158	100
	20	117	100	69.9	42.9	13.2	2	4-φ 15.9	144	159.5	100
	25	127	110	79.4	50.8	14.7	2	4-φ 15.9	170	191	120
	32	140	115	88.9	63.5	16.3	2	4-φ 15.9	199	255.5	160
	40	165	125	98.4	73	17.9	2	4-φ 15.9	214	248	160
	50	178	150	120.7	92.1	19.5	2	4-φ 19.1	244.5	286.5	180

Model	NPS	Size(mm)									
		L	D	D ₁	D ₂	b	f	n-φd	H(CLOSE)	H(OPEN)	W
NPS1/2 ~ NPS2、 Class300	1/2	140	95	66.7	34.9	14.7	2	4-φ 15.9	142	158	100
	3/4	152	115	82.6	42.9	16.3	2	4-φ 19.1	144	159.5	100
	1	165	125	88.9	50.8	17.9	2	4-φ 19.1	170	191	120
	1-1/4	178	135	98.4	63.5	19.5	2	4-φ 19.1	199	255.5	160
	1-1/2	190	155	114.3	73	21.2	2	4-φ 22.4	214	248	160
	2	216	165	127	92.1	22.7	2	8-φ 19.1	244.5	286.5	180

Model	NPS	Size(mm)									
		L	D	D ₁	D ₂	b	f	n-φd	H(CLOSE)	H(OPEN)	W
NPS1/2 ~ NPS2、 Class600	1/2	165	95	66.7	34.9	21.3	7	4-φ 15.9	142	158	100
	3/4	190	115	82.6	42.9	22.9	7	4-φ 19.1	144	159.5	100
	1	216	125	88.9	50.8	24.5	7	4-φ 19.1	170	191	120
	1-1/4	229	135	98.4	63.5	27.7	7	4-φ 19.1	199	255.5	160
	1-1/2	241	155	114.3	73	29.3	7	4-φ 22.4	214	248	160
	2	292	165	127	92.1	32.4	7	8-φ 19.1	244.5	286.5	180

Model	NPS	Size(mm)													
		L	D	D ₁	D ₂	D ₃	b	f	n-φd	E	F	M	H (CLOSE)	H (OPEN)	W
NPS1/2 ~ NPS2、 Class900/ 1500	1/2	216	120	82.6	60.5	39.67	28.65	6.35	4-φ22.4	6.35	8.74	12	168	183	120
	3/4	229	130	88.9	66.5	44.45	31.75	6.35	4-φ22.4	6.35	8.74	14	170	186	120
	1	254	150	101.6	71.5	50.8	34.95	6.35	4-φ25.4	6.35	8.74	16	202	222.5	160
	1-1/4	279	160	111.1	81	60.33	34.95	6.35	4-φ25.4	6.35	8.74	18	215	241.5	160
	1-1/2	305	180	123.8	92	68.27	38.15	6.35	4-φ28.6	6.35	8.74	20	244.5	275	180
	2	371	215	165.1	124	95.25	46.02	7.92	8-φ25.5	7.92	11.91	24	285	327	200