

# API602/ASME forged steel socket welding gate valve

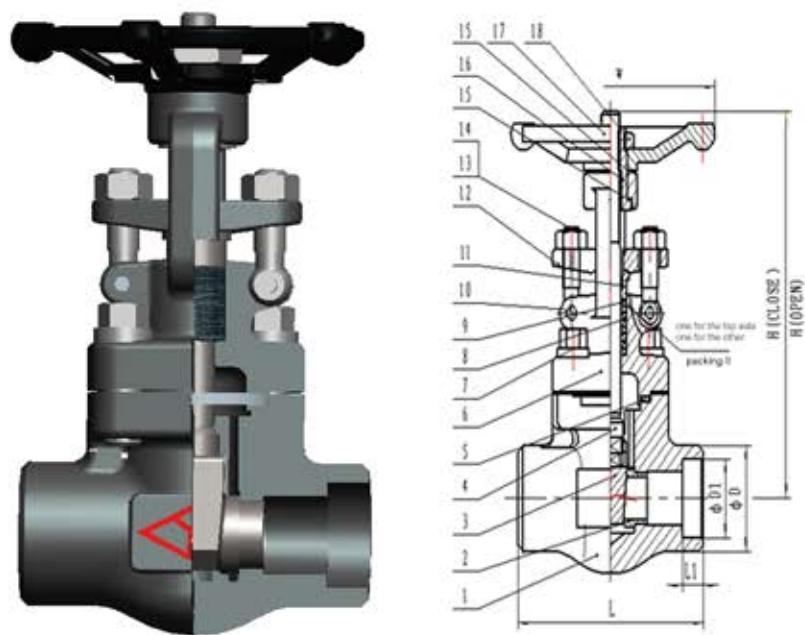


## PRODUCT OVERVIEW

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 150/300/600/800/900/1500
Operating temperature:	-46 ~ 538°C
End connection:	Welded
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 ~ 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 seat	A276 420/STL				A182 F304/STL	A182 F316/STL	A182 F304L/STL	A182 F316L/STL
3	Valve clack	A276 420/STL				A182 F304/STL	A182 F316/STL	A182 F304L/STL	A182 F316L/STL
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							
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	35/1Cr13							
17	Handwheel	Forgeable cast-iron							
18	Lock 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				

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

## TECHNICAL SPECIFICATIONS

Model	NPS	Size(mm)						
		L	D	D <sub>1</sub>	L <sub>1</sub>	H(CLOSE)	H(OPEN)	W
NPS1/2 ~ NPS2、 Class150 ~ Class800	1/2	79	33	21.8	9.5	142	158	100
	3/4	92	39	27.2	12.5	144	159.5	100
	1	111	46	33.9	12.5	170	191	120
	1-1/4	120	56	42.7	12.5	199	255.5	160
	1-1/2	120	63	48.8	12.5	214	248	160
	2	140	76	61.2	16	244.5	286.5	180

Model	NPS	Size(mm)						
		L	D	D <sub>1</sub>	L <sub>1</sub>	H(CLOSE)	H(OPEN)	W
NPS1/2 ~ NPS2、 Class900 ~ Class1500	1/2	111	46	21.8	9.5	168	183	120
	3/4	111	46	27.2	12.5	170	186	120
	1	120	56	33.9	12.5	202	222.5	160
	1-1/4	120	63	42.7	12.5	215	241.5	160
	1-1/2	140	76	48.8	12.5	244.5	278	180
	2	178	-	61.2	16	285	327	200