

SFZ type /API Forged Steel Gate Valve

Forged steel Gate valves are mainly used for the pipelines on various systems of thermal power station, especially for non-corrosive mediums like water and steam with high temperature and high pressure.



Standard and Scope:

Size: 1 / 4 "to 2"

Pressure: CLASS800, CLASS1500, CLASS 2500, PN16~PN420

Material: Carbon Steel (A105, LF2), Stainless Steel (F304, F304L, F316, F316L), Duplex(F51, F55), Alloy(F1, F5, F5A, F9, F11, F22)

Design and manufacture: API602, ASME B16.34, BS 5352

Pressure Test: API 598

Face to face: Manufacturer standard

Tag: MSS SP-25

Connection: SW Socket welding ends according to ASME B16.11

BW butt wend by ASME B16.25

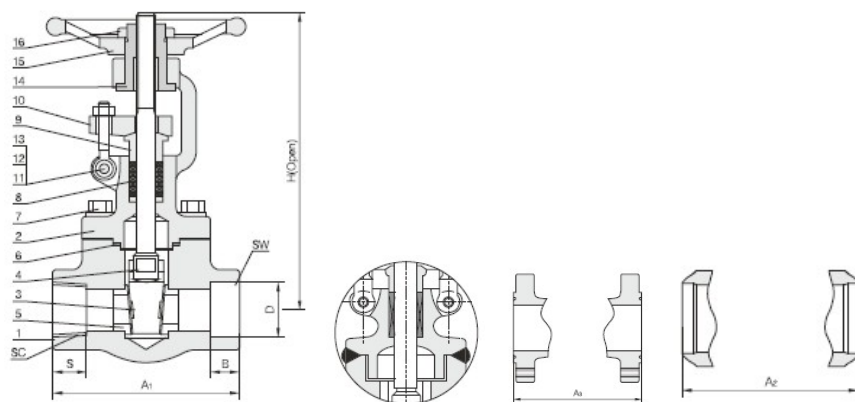
NPT threaded connector according to ASME B1.20.1

Flange according to ANSI B16.5

Design feature

- Outside screw and yoke (OS&Y)
- Single wedge
- Close texture and better physical performance
- Reduce port (Normal), full port (Optional)
- Welded bonnet (Optional)
- Bolted bonnet (Optional)
- Integral flange (Optional)
- Pressure sealing bonnet (Optional)
- Bellow seal (Optional)
- Extended stem (Optional)
- Extended body (Optional)

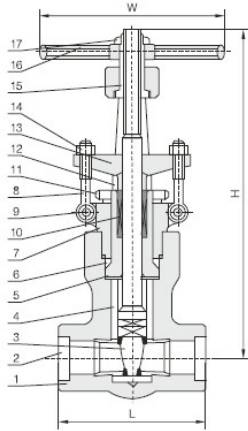
Bolted bonnet, Welded bonnet Forged Steel Gate Valve



Parts List – API602 Standard

| Parts No. | Part Name | ASTM Materials | | | | |
|-----------|---------------------------------------|--------------------------------|----------------|----------------|-----------------|-----------------|
| | | Carbon steel | 1.25Cr-0.5Mo | 2.25Cr-1Mo | CF8/304(L) | CF8M/316(L) |
| 1 | Body | A105 | A182 F11 | A182 F22 | A182 F304(L) | A182 F316(L) |
| 2 | Bonnet | A106 | A182 F11 | A182 F22 | A182 F304(L) | A182 F316(L) |
| 3 | Wedge | A105+13Cr* a | A182 F11+HF | A105+STL | A182 F304(L) | A182 F316(L) |
| 4 | Stem | A82 F6a | A182 F11 | A182 F22 | A182 F304(L) | A182 F316(L) |
| 5 | Seat ring | A105+13Cr* a | A182 F11+HF | A182 F22+HF | NA | NA |
| 6 | Bonnet gasket | 304+graphite | 304+graphite | 304+graphite | 304(L)+graphite | 316(L)+graphite |
| 7 | Bonnet bolt | A193 B7 | A193 B7 | A193 B16 | A193 B8(M) | A913B8M |
| 8 | Packing | graphite | graphite | graphite | graphite *b | graphite *b |
| 9 | Gland | A276 410 | A276 410 | A276 410 | A276 304(L) | A276 316(L) |
| 10 | Gland flange | A105 | A105 | A105 | A182 F304(L) | A182 F316(L) |
| 11 | Eyebolt | Carbon steel | A193 B7 | A193 B7 | A193 B8 | A193 B8 |
| 12 | Eyebolt nut | Carbon steel | A194 2H | A194 2H | A194 8 | A194 8 |
| 13 | Eyebolt pin | A276 410 | A276 410 | A276 410 | A276 304 | A276 304 |
| 14 | Stem nut | Bronze*c | Bronze*c | Bronze*c | Bronze | Bronze |
| 15 | Hand wheel | Malleable iron | Malleable iron | Malleable iron | Malleable iron | Malleable iron |
| 16 | Wheel nut | Carbon steel, Carbon steel +Zn | | | | |
| *a | ASTM A439 D2 | | | | | |
| *b | Yoke Sleeve Nut | | | | | |
| *c | Ductile iron | | | | | |
| Note | For other material, please contact us | | | | | |

Pressure seal Forged Steel Gate Valve



Parts List – API602 Standard

| Parts No. | Part Name | ASTM Materials | | | |
|-----------|---------------------------------------|------------------|---------------|------------------|------------------|
| | | A105N | F22 | CF8/304(L) | CF8M/316(L) |
| 1 | Body | A105N | A182 F22 | A182 F304(L) | A182 F316(L) |
| 2 | Seat ring | A276 420 | A1276 F304 | A276 304(L) | A276 316(L) |
| 3 | Wedge | A1882/F430+STL | A182 F304+STL | A182 F304(L)+STL | A182 F316(L)+STL |
| 4 | Stem | A82 F6a A276 410 | A182 F22 | A182 F304(L) | A182 F316(L) |
| 5 | Seat face | A105N | A182 F304 | A182 F304(L) | A182 F316(L) |
| 6 | From Packing ring | F182 F304 | A182 F304 F22 | A276 304(L) | A276 316(L) |
| 7 | Bonnet | A105N | A182 F22 | A182 F304(L) | A182 F316(L) |
| 8 | Gland eyebolt | A193 B7 | A193 B16 | A193 B8 | A193 B8M |
| 9 | Cylindrical pin | A276 420 | A276 420 | A182 F304 | A182 F304 |
| 10 | Stem packing | 304+graphite | 304+graphite | 316+graphite | 316+graphite |
| 11 | Nut | A194 2H | A194 4 | A194 8 | A194 8M |
| 12 | Gland | Carbon steel | A276 F420 | A182 F304 | A182 F304 |
| 13 | Gland flange | A105 | F22 | A182 F304 | A182 F304 |
| 14 | Gland nut | A194 2H | A194 4 | A194 8 | A194 8M |
| 15 | Yoke nut | A276 410 | A276 410 | A276 411 | A276 412 |
| 16 | Hand wheel | A197 | | | |
| 17 | Lock nut | A194 2H | A194 4 | A194 8 | A194 8M |
| Note | For other material, please contact us | | | | |

NOTE: The material and data in this catalog is for general information. For specific performance data, proper material selection and special design, consult us freely. Although every attempt has been made to ensure correct information, Sangong reserves the right to change designs, materials or specifications without notice.

Main Outline Dimension and Weight - API 602 Forged steel Gate Valve

Class 800 Bolted bonnet/Welded bonnet

| Nominal Size | | Dimension(mm) | | | | | Weight(kg) | |
|--------------|-------|---------------|-----|-----|------|--------|------------|------|
| R.P | F.P | L | H | W | d | H-W.B. | B.B | W.B. |
| - | 1/4 | 79 | 161 | 100 | 8 | | 2.3 | 1.9 |
| 1/2 | 3/8 | 79 | 161 | 100 | 10.5 | | 2.3 | 1.9 |
| 3/4 | 1/2 | 92 | 163 | 100 | 13.5 | | 2.4 | 2.1 |
| 1 | 3/4 | 111 | 196 | 125 | 18 | | 4.3 | 3.2 |
| 1 1/4 | 1 | 120 | 223 | 160 | 24 | | 5.7 | 5.2 |
| 1 1/2 | 1 1/4 | 120 | 251 | 160 | 29 | | 7.1 | 6.9 |
| 2 | 1 1/2 | 140 | 290 | 180 | 36.5 | | 11 | 10.4 |
| 2 1/2 | 2 | 178 | 333 | 200 | 45 | | 16.8 | 15.8 |

R.P.: reduce port; F.P.: full port; B.B.: bolted bonnet; W.B.: welded bonnet;

Class900/1500 Bolted bonnet/Welded bonnet

| Nominal Size | | Dimension(mm) | | | | | Weight(kg) | |
|--------------|-------|---------------|-----|-----|------|--------|------------|------|
| R.P | F.P | L | H | W | d | H-W.B. | B.B | W.B. |
| - | 1/4 | 92 | 191 | 100 | 8 | 171 | 2.4 | 2.3 |
| 1/2 | 3/8 | 111 | 191 | 125 | 10.5 | 207 | 4.4 | 4 |
| 3/4 | 1/2 | 111 | 192 | 125 | 13.5 | 207 | 4.4 | 4 |
| 1 | 3/4 | 120 | 219 | 160 | 18 | 240 | 6 | 4.8 |
| 1 1/4 | 1 | 120 | 243 | 160 | 24 | 258 | 7.2 | 7.1 |
| 1 1/2 | 1 1/4 | 140 | 296 | 180 | 29 | 330 | 11.4 | 11 |
| 2 | 1 1/2 | 178 | 316 | 200 | 36.5 | 355 | 16 | 15.8 |
| 2 1/2 | 2 | 180 | 370 | 220 | 45 | 370 | 23 | 22.7 |

R.P.: reduce port; F.P.: full port; B.B.: bolted bonnet; W.B.: welded bonnet;

Class2500 Welded bonnet

| Nominal Size | | Dimension(mm) | | | | Weight(kg) | |
|--------------|-----|---------------|-----|-----|----|------------|--|
| R.P | F.P | L | H | W | d | W2 | |
| 3/8 | - | 111 | 215 | 125 | 14 | 22.7 | |
| 1/2 | 3/8 | 120 | 218 | 160 | 14 | 4 | |
| 3/4 | 1/2 | 120 | 220 | 160 | 14 | 4 | |
| 1 | 3/4 | 120 | 238 | 180 | 19 | 4.8 | |
| 1 1/4 | 1 | 140 | 281 | 200 | 25 | 7.1 | |

R.P.: reduce port; F.P.: full port

Class900/1500/2500 Pressure seal bonnet

| Nominal Size | | Dimension(mm) | | | | | | Weight(kg) | |
|--------------|-------|---------------|-----|-----|-----|-----|------|------------|------|
| R.P | F.P | L1 | L2 | H1 | H2 | W | d | W1 | W2 |
| 3/8 | 1/4 | 140 | 186 | 318 | 325 | 200 | 14 | 11.5 | 12.3 |
| 1/2 | 3/8 | 140 | 186 | 318 | 325 | 200 | 14 | 11.5 | 12.3 |
| 3/4 | 1/2 | 140 | 186 | 318 | 325 | 200 | 14 | 12.5 | 13 |
| 1 | 3/4 | 140 | 186 | 322 | 327 | 200 | 19 | 12.5 | 13 |
| 1 1/4 | 1 | 178 | 232 | 467 | 467 | 280 | 25 | 19.6 | 26 |
| 1 1/2 | 1 1/4 | 178 | 232 | 467 | 467 | 280 | 30 | 21 | 28.4 |
| 2 | 1 1/2 | 216 | 279 | 540 | 540 | 300 | 36.5 | 55.4 | 60 |

R.P.: reduce port; F.P.: full port; L1, H1, W1 is for 900lb; 1500lb, L2, H2, W2 is for 2500lb