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Not printed with State funds
# PIP PNSMV023
## Stainless Steel Gate Valve Descriptions

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1. **Scope**

This Practice provides the detailed purchase descriptions for stainless steel gate valve tag numbers included in PIP Piping Material Specifications and used along with *PIP PNSM0110* for the procurement of valves. This Practice also provides a cross reference for stainless steel gate valve tag numbers to applicable PIP Piping Material Specifications.

2. **References**

Applicable parts of the following Practices shall be considered an integral part of this Practice. The edition in effect on the date of contract award shall be used, except as otherwise noted. Short titles will be used herein where appropriate.

2.1 **Process Industry Practices (PIP)**

- PIP PNCM0004 - *Valve Commodity Codes Designator System*
- PIP PNC00005 - *Design of ASME B31.3 Metallic Piping Systems*
- PIP PNSM0110 - *Purchasing Requirements for Valves*

3. **Valve Designation System**

3.1 For a full explanation of the format used to structure the valve numbers listed within this Practice, refer to *PIP PNCM0004*. The first two characters in the valve tag numbers are GA.

3.2 The valves listed in Section 5 and Section 6 of this Practice are sorted by the unique valve tag number designation in ascending alphanumeric sequence (e.g., GA01SD301, GA01ST500, GA01ST501, GA01SU200).

4. **Notes**

4.1 Occasionally, valve size ranges listed in this Practice are broader than the size ranges shown for the same valves on a PIP Piping Material Specification. While the “most common practice” has been used to specify valve size ranges on Piping Material Specifications, a purchaser may need to utilize a valve in a size outside this “common practice” choice. Thus, for reference purposes, the full size range for which a given valve is typically manufactured is shown in this Practice.

4.2 Gear operation may be specified in either of the following ways:

   a. Select a valve description that includes a gear operator
   b. Select a valve description that includes a handwheel and use Field 5 (Owner Designation) of the valve tag numbering system described in *PIP PNCM0004*. For guidance, see *PIP PNC00005*, Section 3.5.5.2.

4.3 If fluids can be trapped (e.g., in double-seated valves) and subjected to heating and subsequent expansion, the means of pressure relief shall be considered to avoid excessive pressure build-up.

4.4 Procurement of valves shall include the detailed purchase descriptions given in this Practice, along with the requirements in *PIP PNSM0110* and the purchase order.
## Cross Reference

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6. Valve Descriptions

Description of GATE Valve (GA01SD311):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: Cryogenic -196 to 204 °C (-320 to 400 °F)
Class: ASME 150
Ends: SW
Body: 316/316L SS (ASTM A351-CF8M/CF3M)
Bonnet: 316/316L SS (ASTM A351-CF8M/CF3M)
Trim: API 600 TRIM 12
Wedge Type: Solid with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Bolted
Design (Other): Extended Bonnet for Cryogenic
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316 SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
- DESIGN: ASME B16.34 and MSS SP-134
- ENDS: ASME B16.11
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: MFG STD

Description of GATE Valve (GA01SP200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 150
Ends: SW x FNPT
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: MFG STD
Description of GATE Valve (GA01SP300):

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Class:** ASME 150
- **Ends:** SW
- **Body:** 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
- **Bonnet:** 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
- **Trim:** 2205 Duplex SS
- **Wedge Type:** Solid
- **Bonnet Type:** Bolted
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets:** 2205 Duplex
- **Body-Bonnet Bolting:** Bolts MFG STD
- **Body-Bonnet Nuts:** MFG STD

The standards are:

- DESIGN: ASME B16.34
- ENDS: ASME B16.11
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: MFG STD

Description of GATE Valve (GA01SP500):

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Class:** ASME 150
- **Ends:** Flanged RF
- **Body:** 2205 Duplex SS (ASTM A182-F51)
- **Bonnet:** 2205 Duplex SS (ASTM A182-F51)
- **Trim:** 2205 Duplex SS
- **Wedge Type:** Solid
- **Bonnet Type:** Bolted
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets:** 2205 Duplex
- **Body-Bonnet Bolting:** Bolts API 602
- **Body-Bonnet Nuts:** API 602

The standards are:

- DESIGN: API 602
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA01SP501):

Type: Gate
Valve Size: NPS 2 -to- NPS 24
Class: ASME 150
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Wedge Type: Solid or Flexible (NPS 2 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited

Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA01SP502):

Type: Gate
Valve Size: NPS 8 -to- NPS 24
Class: ASME 150
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited

Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA01ST500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 24
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA01ST501):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 24
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA01ST502):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 12
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 11
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: Alloy 400/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
- CLEANING: Oxygen Cleaning in accordance with CGA C-4.1 and G-4.4/ASTM G-93

Description of GATE Valve (GA01ST503):

Type: Gate
Valve Size: NPS 8 -to- NPS 24
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA01ST504):

Type: Gate
Valve Size: NPS 8 to NPS 24
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA01ST505):

Type: Gate
Valve Size: NPS 8 to NPS 12
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 11
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: Alloy 400/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
CLEANING: Oxygen Cleaning in accordance with CGA C-4.1 and G-4.4/ASTM G-93
Description of GATE Valve (GA01ST510):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 24
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited

Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA01ST511):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 24
Service: Cryogenic -196 to 204 °C (-320 to 400 °F)
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Design (Other): Extended Bonnet for Cryogenic
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-134
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA01ST512):

Type: Gate
Valve Size: NPS 8 -to- NPS 24
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA01ST513):

Type: Gate
Valve Size: NPS 8 -to- NPS 24
Service: Cryogenic -196 to 204 °C (-320 to 400 °F)
Class: ASME 150
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Bolted
Design (Other): Extended Bonnet for Cryogenic
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-134
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA01ST550):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 12
Class: ASME 150
Ends: Flanged RF & Oversized Reducing Flange
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316 SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA01SU200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 150
Ends: SW x FNPT
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: SW: ASME B16.11, THR: ASME B1.20.1
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: MFG STD
Description of GATE Valve (GA01SU201):

Type: Gate
Valve Size: NPS 0.5 to NPS 2
Class: ASME 150
Ends: SW x FNPT
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA01SU210):

Type: Gate
Valve Size: NPS 0.5 to NPS 2
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)
Class: ASME 150
Ends: SW x FNPT
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA01SU300):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 150
Ends: SW
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.11
- TESTING: API 598
- DIMENSIONAL: MFG STD

Description of GATE Valve (GA01SU301):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 150
Ends: SW
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.11
- TESTING: API 598
- DIMENSIONAL: MFG STD
Description of GATE Valve (GA01SU310):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)
Class: ASME 150
Ends: SW
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.11
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA01SU311):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: Cryogenic -196 to 204 °C (-320 to 400 °F)
Class: ASME 150
Ends: SW
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid or Flexible, with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Bolted
Design (Other): Extended Bonnet for Cryogenic
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-134
ENDS: ASME B16.11
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA01SV200):

Type: Gate  
Valve Size: NPS 0.5 -to- NPS 2  
Class: ASME 150  
Ends: SW x FNPT  
Body: 254 SMO Duplex SS (ASTM A351-CK3MCuN)  
Bonnet: 254 SMO Duplex SS (ASTM A351-CK3MCuN)  
Trim: 254 SMO Duplex SS  
Wedge Type: Solid or Flexible  
Bonnet Type: Bolted  
Bore-Port: Standard  
Stem Design: OS&Y  
Operation: Handwheel  
Stem-Packing: PTFE  
Body-Bonnet Gaskets: PTFE  
Body-Bonnet Bolting: Bolts MFG STD  
Body-Bonnet Nuts: MFG STD  
The standards are:  
DESIGN: ASME B16.34  
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1  
RATING: ASME B16.34  
TESTING: API 598  
DIMENSIONAL: MFG STD

Description of GATE Valve (GA01SV300):

Type: Gate  
Valve Size: NPS 0.5 -to- NPS 2  
Class: ASME 150  
Ends: SW  
Body: 254 SMO Duplex SS (ASTM A351-CK3MCuN)  
Bonnet: 254 SMO Duplex SS (ASTM A351-CK3MCuN)  
Trim: 254 SMO Duplex SS  
Wedge Type: Solid or Flexible  
Bonnet Type: Bolted  
Bore-Port: Standard  
Stem Design: OS&Y  
Operation: Handwheel  
Stem-Packing: PTFE  
Body-Bonnet Gaskets: PTFE  
Body-Bonnet Bolting: Bolts MFG STD  
Body-Bonnet Nuts: MFG STD  
The standards are:  
DESIGN: ASME B16.34  
ENDS: SW: ASME B16.11  
RATING: ASME B16.34  
TESTING: API 598  
DIMENSIONAL: MFG STD
Description of GATE Valve (GA01SV500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 150
Ends: Flanged RF
Body: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
Bonnet: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
Trim: 254 SMO Duplex SS
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA01SV501):

Type: Gate
Valve Size: NPS 2 -to- NPS 24
Class: ASME 150
Ends: Flanged RF
Body: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
Bonnet: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
Trim: 254 SMO Duplex SS
Wedge Type: Solid or Flexible (NPS 2 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA01SV502):

Type: Gate
Valve Size: NPS 8 -to- NPS 24
Class: ASME 150
Ends: Flanged RF
Body: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
Bonnet: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
Trim: 254 SMO Duplex SS
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA03SC200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 300
Ends: SW x FNPT
Body: 304H SS (ASTM A351-CF10)
Bonnet: 304H SS (ASTM A351-CF10)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Solid or Flexible
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: MFG STD
Description of GATE Valve (GA03SC300):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 300
Ends: SW
Body: 304H SS (ASTM A351-CF10)
Bonnet: 304H SS (ASTM A351-CF10)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Solid or Flexible
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.11
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA03SC500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 300
Ends: Flanged RF
Body: 304H SS (ASTM A182-F304H)
Bonnet: 304H SS (ASTM A182-F304H)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Solid or Flexible
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA03SC501):

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<th>Type:</th>
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<tr>
<td>Service:</td>
<td>High Temperature -29 to 816 °C (-20 to 1500 °F)</td>
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<td>Class:</td>
<td>ASME 300</td>
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<tr>
<td>Ends:</td>
<td>Flanged RF</td>
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<tr>
<td>Body:</td>
<td>304H SS (ASTM A351-CF10)</td>
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<td>Bonnet:</td>
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<td>Stem Design:</td>
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<td>Operation:</td>
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<td>Stem-Packing:</td>
<td>MFG STD</td>
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<td>Body-Bonnet Gaskets:</td>
<td>MFG STD</td>
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<tr>
<td>Body-Bonnet Bolting:</td>
<td>Bolts MFG STD</td>
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<tr>
<td>Nuts:</td>
<td>MFG STD</td>
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The standards are:

- DESIGN: ASME B16.34 or API 600
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA03SC502):

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<td>Class:</td>
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<td>Ends:</td>
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<td>304H SS (ASTM A351-CF10)</td>
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<td>Stem Design:</td>
<td>OS&amp;Y</td>
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<td>Operation:</td>
<td>Gear</td>
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<td>Stem-Packing:</td>
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<td>Body-Bonnet Gaskets:</td>
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<td>Body-Bonnet Bolting:</td>
<td>Bolts MFG STD</td>
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<td>Nuts:</td>
<td>MFG STD</td>
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The standards are:

- DESIGN: ASME B16.34 or API 600
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
**Description of GATE Valve (GA03SD311):**

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Service:** Cryogenic -196 to 204 °C (-320 to 400 °F)
- **Class:** ASME 300
- **Ends:** SW
- **Body:** 316/316L SS (ASTM A351-CF8M/CF3M)
- **Bonnet:** 316/316L SS (ASTM A351-CF8M/CF3M)
- **Trim:** API 602 TRIM 12
- **Wedge Type:** Solid with Cavity Vent to High-Pressure Side (Indicated)
- **Bonnet Type:** Bolted
- **Design (Other):** Extended Bonnet for Cryogenic
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets:** 316 SS/Graphite
- **Body-Bonnet Bolting:** Bolts MFG STD
- **Nuts:** MFG STD

The standards are:

- **DESIGN:** ASME B16.34 and MSS SP-134
- **ENDS:** ASME B16.11
- **RATING:** ASME B16.34
- **TESTING:** API 598
- **DIMENSIONAL:** MFG STD

**Description of GATE Valve (GA03SP200):**

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Class:** ASME 300
- **Ends:** SW x FNPT
- **Body:** 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
- **Bonnet:** 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
- **Trim:** 2205 Duplex SS
- **Wedge Type:** Solid or Flexible
- **Bonnet Type:** Bolted
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets:** 2205 Duplex
- **Body-Bonnet Bolting:** Bolts MFG STD
- **Nuts:** MFG STD

The standards are:

- **DESIGN:** ASME B16.34
- **ENDS:** SW: ASME B16.11, THRD: ASME B1.20.1
- **RATING:** ASME B16.34
- **TESTING:** API 598
- **DIMENSIONAL:** MFG STD
Description of GATE Valve (GA03SP300):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 300
Ends: SW
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.11
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA03SP500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 300
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA03SP501):

Type: Gate
Valve Size: NPS 2 -to- NPS 24
Class: ASME 300
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Wedge Type: Solid or Flexible (NPS 2 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Trim Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Bolting: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA03SP502):

Type: Gate
Valve Size: NPS 4 -to- NPS 24
Class: ASME 300
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Trim Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA03ST500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 24
Class: ASME 300
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA03ST501):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 24
Class: ASME 300
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA03ST502):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 12
Class: ASME 300
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 11
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Standard
Trim Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: Alloy 400/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
- CLEANING: Oxygen Cleaning in accordance with CGA C-4.1 and G-4.4/ASTM G-93

Description of GATE Valve (GA03ST503):

Type: Gate
Valve Size: NPS 4 -to- NPS 24
Class: ASME 300
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Trim Design: OS&Y
Operation: Gear
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA03ST504):

Type: Gate
Valve Size: NPS 4 -to- NPS 24
Class: ASME 300
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA03ST505):

Type: Gate
Valve Size: NPS 4 -to- NPS 12
Class: ASME 300
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 11
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: Alloy 400/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
CLEANING: Oxygen Cleaning in accordance with CGA C-4.1 and G-4.4/ASTM G-93
### Description of GATE Valve (GA03ST510):

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type:</strong> Gate</td>
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<tr>
<td><strong>Valve Size:</strong> NPS 0.5 -to- NPS 24</td>
</tr>
<tr>
<td><strong>Service:</strong> Low Temperature -73 to 204 °C (-99 to 400 °F)</td>
</tr>
<tr>
<td><strong>Class:</strong> ASME 300</td>
</tr>
<tr>
<td><strong>Ends:</strong> Flanged RF</td>
</tr>
<tr>
<td><strong>Body:</strong> 316 SS (ASTM A351-CF8M)</td>
</tr>
<tr>
<td><strong>Bonnet:</strong> 316 SS (ASTM A351-CF8M)</td>
</tr>
<tr>
<td><strong>Trim:</strong> API 600 TRIM 12</td>
</tr>
<tr>
<td><strong>Wedge Type:</strong> Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)</td>
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<tr>
<td><strong>Bonnet Type:</strong> Bolted</td>
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<tr>
<td><strong>Bore-Port:</strong> Full</td>
</tr>
<tr>
<td><strong>Stem Design:</strong> OS&amp;Y</td>
</tr>
<tr>
<td><strong>Operation:</strong> Handwheel</td>
</tr>
<tr>
<td><strong>Stem-Packing:</strong> Flexible Graphite, Corrosion Inhibited</td>
</tr>
<tr>
<td><strong>Body-Bonnet Gaskets:</strong> 316L SS/Graphite</td>
</tr>
<tr>
<td><strong>Body-Bonnet Bolting:</strong> Bolts MFG STD</td>
</tr>
<tr>
<td><strong>Nuts:</strong> MFG STD</td>
</tr>
</tbody>
</table>

The standards are:

- **DESIGN:** ASME B16.34
- **ENDS:** ASME B16.5
- **RATING:** ASME B16.34
- **TESTING:** API 598
- **DIMENSIONAL:** ASME B16.10

### Description of GATE Valve (GA03ST511):

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<td><strong>Type:</strong> Gate</td>
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<td><strong>Valve Size:</strong> NPS 0.5 -to- NPS 24</td>
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<tr>
<td><strong>Service:</strong> Cryogenic -196 to 204 °C (-320 to 400 °F)</td>
</tr>
<tr>
<td><strong>Class:</strong> ASME 300</td>
</tr>
<tr>
<td><strong>Ends:</strong> Flanged RF</td>
</tr>
<tr>
<td><strong>Body:</strong> 316 SS (ASTM A351-CF8M)</td>
</tr>
<tr>
<td><strong>Bonnet:</strong> 316 SS (ASTM A351-CF8M)</td>
</tr>
<tr>
<td><strong>Trim:</strong> API 600 TRIM 12</td>
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<tr>
<td><strong>Wedge Type:</strong> Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)</td>
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<tr>
<td><strong>Bonnet Type:</strong> Bolted</td>
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<tr>
<td><strong>Design (Other):</strong> Extended Bonnet for Cryogenic</td>
</tr>
<tr>
<td><strong>Bore-Port:</strong> Full</td>
</tr>
<tr>
<td><strong>Stem Design:</strong> OS&amp;Y</td>
</tr>
<tr>
<td><strong>Operation:</strong> Handwheel</td>
</tr>
<tr>
<td><strong>Stem-Packing:</strong> Flexible Graphite, Corrosion Inhibited</td>
</tr>
<tr>
<td><strong>Body-Bonnet Gaskets:</strong> 316L SS/Graphite</td>
</tr>
<tr>
<td><strong>Body-Bonnet Bolting:</strong> Bolts MFG STD</td>
</tr>
<tr>
<td><strong>Nuts:</strong> MFG STD</td>
</tr>
</tbody>
</table>

The standards are:

- **DESIGN:** ASME B16.34 and MSS SP-134
- **ENDS:** ASME B16.5
- **RATING:** ASME B16.34
- **TESTING:** API 598
- **DIMENSIONAL:** ASME B16.10
Description of GATE Valve (GA03ST512):

Type: Gate
Valve Size: NPS 4 - to - NPS 24
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)
Class: ASME 300
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA03ST513):

Type: Gate
Valve Size: NPS 4 - to - NPS 24
Service: Cryogenic -196 to 204 °C (-320 to 400 °F)
Class: ASME 300
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Bolted
Design (Other): Extended Bonnet for Cryogenic
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-134
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA03ST550):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 12
Class: ASME 300
Ends: Flanged RF & Oversized Reducing Flange
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316 SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA03SU200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 300
Ends: SW x FNPT
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA03SU201):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 300
Ends: SW x FNPT
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA03SU210):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)
Class: ASME 300
Ends: SW x FNPT
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA03SU300):

- **Type**: Gate
- **Valve Size**: NPS 0.5 -to- NPS 2
- **Class**: ASME 300
- **Ends**: SW
- **Body**: 316L SS (ASTM A351-CF3M)
- **Bonnet**: 316L SS (ASTM A351-CF3M)
- **Trim**: API 602 TRIM 12
- **Wedge Type**: Solid or Flexible
- **Bonnet Type**: Bolted
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: PTFE
- **Body-Bonnet Gaskets**: PTFE
- **Body-Bonnet Bolting**: Bolts MFG STD
- **Nuts**: MFG STD

The standards are:
- **DESIGN**: ASME B16.34
- **ENDS**: ASME B16.11
- **RATING**: ASME B16.34
- **TESTING**: API 598
- **DIMENSIONAL**: MFG STD

Description of GATE Valve (GA03SU301):

- **Type**: Gate
- **Valve Size**: NPS 0.5 -to- NPS 2
- **Class**: ASME 300
- **Ends**: SW
- **Body**: 316L SS (ASTM A351-CF3M)
- **Bonnet**: 316L SS (ASTM A351-CF3M)
- **Trim**: API 602 TRIM 12
- **Wedge Type**: Solid or Flexible
- **Bonnet Type**: Bolted
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets**: 316L SS/Graphite
- **Body-Bonnet Bolting**: Bolts MFG STD
- **Nuts**: MFG STD

The standards are:
- **DESIGN**: ASME B16.34
- **ENDS**: ASME B16.11
- **RATING**: ASME B16.34
- **TESTING**: API 598
- **DIMENSIONAL**: MFG STD
Description of GATE Valve (GA03SU310):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)
Class: ASME 300
Ends: SW
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid or Flexible
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
 DESIGN: ASME B16.34
 ENDS: ASME B16.11
 RATING: ASME B16.34
 TESTING: API 598
 DIMENSIONAL: MFG STD

Description of GATE Valve (GA03SU311):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: Cryogenic -196 to 204 °C (-320 to 400 °F)
Class: ASME 300
Ends: SW
Body: 316L SS (ASTM A351-CF3M)
Bonnet: 316L SS (ASTM A351-CF3M)
Trim: API 602 TRIM 12
Wedge Type: Solid or Flexible, with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Bolted
Design (Other): Extended Bonnet for Cryogenic
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
 DESIGN: ASME B16.34 and MSS SP-134
 ENDS: ASME B16.11
 RATING: ASME B16.34
 TESTING: API 598
 DIMENSIONAL: MFG STD
Description of GATE Valve (GA03SV200):

- **Type**: Gate
- **Valve Size**: NPS 0.5-to- NPS 2
- **Class**: ASME 300
- **Ends**: SW x FNPT
- **Body**: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
- **Bonnet**: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
- **Trim**: 254 SMO Duplex SS
- **Wedge Type**: Solid or Flexible
- **Bonnet Type**: Bolted
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: PTFE
- **Body-Bonnet Gaskets**: PTFE
- **Body-Bonnet Bolting**: Bolts MFG STD
- **Nuts**: MFG STD

The standards are:

- **DESIGN**: ASME B16.34
- **ENDS**: SW: ASME B16.11, THRD: ASME B1.20.1
- **RATING**: ASME B16.34
- **TESTING**: API 598
- **DIMENSIONAL**: MFG STD

Description of GATE Valve (GA03SV300):

- **Type**: Gate
- **Valve Size**: NPS 0.5-to- NPS 2
- **Class**: ASME 300
- **Ends**: SW
- **Body**: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
- **Bonnet**: 254 SMO Duplex SS (ASTM A351-CK3MCuN)
- **Trim**: 254 SMO Duplex SS
- **Wedge Type**: Solid or Flexible
- **Bonnet Type**: Bolted
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: PTFE
- **Body-Bonnet Gaskets**: PTFE
- **Body-Bonnet Bolting**: Bolts MFG STD
- **Nuts**: MFG STD

The standards are:

- **DESIGN**: ASME B16.34
- **ENDS**: ASME B16.11
- **RATING**: ASME B16.34
- **TESTING**: API 598
- **DIMENSIONAL**: MFG STD
Description of GATE Valve (GA03SV500):

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<tr>
<th>Type</th>
<th>Gate</th>
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<tbody>
<tr>
<td>Valve Size</td>
<td>NPS 0.5 -to- NPS 2</td>
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<tr>
<td>Class</td>
<td>ASME 300</td>
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<td>Ends</td>
<td>Flanged RF</td>
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<tr>
<td>Body</td>
<td>254 SMO Duplex SS (ASTM A351-CK3MCuN)</td>
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<td>Bonnet</td>
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<td>Trim</td>
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<td>Body-Bonnet Bolting</td>
<td>Bolts MFG STD</td>
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<td>Nuts</td>
<td>MFG STD</td>
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The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA03SV501):

<table>
<thead>
<tr>
<th>Type</th>
<th>Gate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valve Size</td>
<td>NPS 2 -to- NPS 12</td>
</tr>
<tr>
<td>Class</td>
<td>ASME 300</td>
</tr>
<tr>
<td>Ends</td>
<td>Flanged RF</td>
</tr>
<tr>
<td>Body</td>
<td>254 SMO Duplex SS (ASTM A351-CK3MCuN)</td>
</tr>
<tr>
<td>Bonnet</td>
<td>254 SMO Duplex SS (ASTM A351-CK3MCuN)</td>
</tr>
<tr>
<td>Trim</td>
<td>254 SMO Duplex SS</td>
</tr>
<tr>
<td>Wedge Type</td>
<td>Solid or Flexible (NPS 2 -to- NPS 4), Flexible (NPS 6 and Greater)</td>
</tr>
<tr>
<td>Bonnet Type</td>
<td>Bolted</td>
</tr>
<tr>
<td>Bore-Port</td>
<td>Full</td>
</tr>
<tr>
<td>Stem Design</td>
<td>OS&amp;Y</td>
</tr>
<tr>
<td>Operation</td>
<td>Handwheel</td>
</tr>
<tr>
<td>Stem-Packing</td>
<td>PTFE</td>
</tr>
<tr>
<td>Body-Bonnet Gaskets</td>
<td>PTFE</td>
</tr>
<tr>
<td>Body-Bonnet Bolting</td>
<td>Bolts MFG STD</td>
</tr>
<tr>
<td>Nuts</td>
<td>MFG STD</td>
</tr>
</tbody>
</table>

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
**Description of GATE Valve (GA03SV502):**

Type: Gate  
Valve Size: NPS 4 -to- NPS 12  
Class: ASME 300  
Ends: Flanged RF  
Body: 254 SMO Duplex SS (ASTM A351-CK3MCuN)  
Bonnet: 254 SMO Duplex SS (ASTM A351-CK3MCuN)  
Trim: 254 SMO Duplex SS  
Wedge Type: Flexible  
Bonnet Type: Bolted  
Bore-Port: Full  
Trim Design: OS&Y  
Operation: Gear  
Stem Packing: PTFE  
Body-Bonnet Gaskets: PTFE  
Body-Bonnet Bolting: Bolts MFG STD  
Nuts: MFG STD  
The standards are:  
DESIGN: ASME B16.34  
ENDS: ASME B16.5  
RATING: ASME B16.34  
TESTING: API 598  
DIMENSIONAL: ASME B16.10

**Description of GATE Valve (GA06SC500):**

Type: Gate  
Valve Size: NPS 0.5 -to- NPS 2  
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)  
Class: ASME 600  
Ends: Flanged RF  
Body: 304H SS (ASTM A182-F304H)  
Bonnet: 304H SS (ASTM A182-F304H)  
Trim: 304H SS  
Hard Facing: Full  
Wedge Type: Solid  
Bonnet Type: Welded  
Bore-Port: Standard  
Stem Design: OS&Y  
Operation: Handwheel  
Stem Packing: MFG STD  
The standards are:  
DESIGN: API 602  
ENDS: ASME B16.5  
RATING: ASME B16.34  
TESTING: API 598  
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA06SC501):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 600
Ends: Flanged RF
Body: 304H SS (ASTM A351-CF10)
Bonnet: 304H SS (ASTM A351-CF10)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

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Description of GATE Valve (GA06SC502):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 600
Ends: Flanged RF
Body: 304H SS (ASTM A351-CF10)
Bonnet: 304H SS (ASTM A351-CF10)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA06SL500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: ASME 600
Ends: Flanged RF
Body: 347 SS (ASTM A351-CF8C)
Bonnet: 347 SS (ASTM A351-CF8C)
Trim: API 602 TRIM 17
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.11
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA06SL501):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: ASME 600
Ends: Flanged RF
Body: 347 SS (ASTM A351-CF8C)
Bonnet: 347 SS (ASTM A351-CF8C)
Trim: API 600 TRIM 17
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Body-Bonnet Bolting: Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA06SL502):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: ASME 600
Ends: Flanged RF
Body: 347 SS (ASTM A351-CF8C)
Bonnet: 347 SS (ASTM A351-CF8C)
Trim: API 600 TRIM 17
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA06SM500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 600
Ends: Flanged RF
Body: 347H SS (ASTM A351-CF8C)
Bonnet: 347H SS (ASTM A351-CF8C)
Material Remarks: 0.04 Percent Minimum Carbon Content
Trim: 347H SS
Hard Facing: Full
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.11
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA06SM501):

- **Type**: Gate
- **Valve Size**: NPS 3 to NPS 24
- **Service**: High Temperature -29 to 816 °C (-20 to 1500 °F)
- **Class**: ASME 600
- **Ends**: Flanged RF
- **Body**: 347H SS (ASTM A351-CF8C)
- **Bonnet**: 347H SS (ASTM A351-CF8C)
- **Material Remarks**: 0.04 Percent Minimum Carbon Content
- **Trim**: 347H SS
- **Hard Facing**: Full
- **Wedge Type**: Flexible
- **Bonnet Type**: Bolted
- **Bore-Port**: Full
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: MFG STD
- **Body-Bonnet Gaskets**: MFG STD
- **Body-Bonnet Bolting**: Bolts MFG STD
- **Nuts**: MFG STD

The standards are:
- **DESIGN**: ASME B16.34
- **ENDS**: ASME B16.5
- **RATING**: ASME B16.34
- **TESTING**: API 598
- **DIMENSIONAL**: ASME B16.10

Description of GATE Valve (GA06SM502):

- **Type**: Gate
- **Valve Size**: NPS 3 to NPS 24
- **Service**: High Temperature -29 to 816 °C (-20 to 1500 °F)
- **Class**: ASME 600
- **Ends**: Flanged RF
- **Body**: 347H SS (ASTM A351-CF8C)
- **Bonnet**: 347H SS (ASTM A351-CF8C)
- **Material Remarks**: 0.04 Percent Minimum Carbon Content
- **Trim**: 347H SS
- **Hard Facing**: Full
- **Wedge Type**: Flexible
- **Bonnet Type**: Bolted
- **Bore-Port**: Full
- **Stem Design**: OS&Y
- **Operation**: Gear
- **Stem-Packing**: MFG STD
- **Body-Bonnet Gaskets**: MFG STD
- **Body-Bonnet Bolting**: Bolts MFG STD
- **Nuts**: MFG STD

The standards are:
- **DESIGN**: ASME B16.34
- **ENDS**: ASME B16.5
- **RATING**: ASME B16.34
- **TESTING**: API 598
- **DIMENSIONAL**: ASME B16.10
Description of GATE Valve (GA06SP500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 600
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Hard Facing: Half
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA06SP501):

Type: Gate
Valve Size: NPS 2 -to- NPS 24
Class: ASME 600
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Hard Facing: Half
Wedge Type: Solid or Flexible (NPS 2 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA06SP502):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Class: ASME 600
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Hard Facing: Half
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA06ST500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 24
Class: ASME 600
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA06ST501):
Type: Gate
Valve Size: NPS 0.5 -to- NPS 12
Class: ASME 600
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 11
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: Alloy 400/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
CLEANING: Oxygen Cleaning in accordance with CGA C-4.1 and G-4.4/ASTM G-93

Description of GATE Valve (GA06ST502):
Type: Gate
Valve Size: NPS 0.5 -to- NPS 12
Class: ASME 600
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA06ST503):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Class: ASME 600
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA06ST504):

Type: Gate
Valve Size: NPS 3 -to- NPS 12
Class: ASME 600
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 11
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: Alloy 400/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
CLEANING: Oxygen Cleaning in accordance with CGA C-4.1 and G-4.4/ASTM G-93
Description of GATE Valve (GA06ST505):

Type: Gate
Valve Size: NPS 3 -to- NPS 12
Class: ASME 600
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Trim: OS&Y
Operation: Gear
Stem-Packing: PTFE
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA06ST510):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 24
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)
Class: ASME 600
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Trim: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA06ST511):

Type: Gate  
Valve Size: NPS 0.5 -to- NPS 24  
Service: Cryogenic -196 to 204 °C (-320 to 400 °F)  
Class: ASME 600  
Ends: Flanged RF  
Body: 316 SS (ASTM A351-CF8M)  
Bonnet: 316 SS (ASTM A351-CF8M)  
Trim: API 600 TRIM 12  
Wedge Type: Solid or Flexible (NPS 0.5 -to- NPS 4), Flexible (NPS 6 and Greater  
Bonnet Type: Bolted  
Design (Other): Extended Bonnet for Cryogenic  
Bore-Port: Full  
Stem Design: OS&Y  
Operation: Handwheel  
Stem-Packing: Flexible Graphite, Corrosion Inhibited  
Body-Bonnet Gaskets: 316L SS/Graphite  
Body-Bonnet Bolting: Bolts MFG STD  
Nuts: MFG STD  
The standards are:  
DESIGN: ASME B16.34 and MSS SP-134  
ENDS: ASME B16.5  
RATING: ASME B16.34  
TESTING: API 598  
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA06ST512):

Type: Gate  
Valve Size: NPS 3 -to- NPS 24  
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)  
Class: ASME 600  
Ends: Flanged RF  
Body: 316 SS (ASTM A351-CF8M)  
Bonnet: 316 SS (ASTM A351-CF8M)  
Trim: API 600 TRIM 12  
Wedge Type: Flexible  
Bonnet Type: Bolted  
Bore-Port: Full  
Stem Design: OS&Y  
Operation: Gear  
Stem-Packing: Flexible Graphite, Corrosion Inhibited  
Body-Bonnet Gaskets: 316L SS/Graphite  
Body-Bonnet Bolting: Bolts MFG STD  
Nuts: MFG STD  
The standards are:  
DESIGN: ASME B16.34  
ENDS: ASME B16.5  
RATING: ASME B16.34  
TESTING: API 598  
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA06ST513):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: Cryogenic -196 to 204 °C (-320 to 400 °F)
Class: ASME 600
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Bolted
Design (Other): Extended Bonnet for Cryogenic
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-134
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA08SC200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: API 800
Ends: SW x FNPT
Body: 304H SS (ASTM A182-F304H)
Bonnet: 304H SS (ASTM A182-F304H)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA08SC300):

- **Type**: Gate
- **Valve Size**: NPS 0.5 -to- NPS 2
- **Service**: High Temperature -29 to 816 °C (-20 to 1500 °F)
- **Class**: API 800
- **Ends**: SW
- **Body**: 304H SS (ASTM A182-F304H)
- **Bonnet**: 304H SS (ASTM A182-F304H)
- **Trim**: 304H SS
- **Hard Facing**: Full
- **Wedge Type**: Solid
- **Bonnet Type**: Welded
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: MFG STD

The standards are:
- **DESIGN**: API 602
- **ENDS**: ASME B16.11
- **RATING**: API 602
- **TESTING**: API 598
- **DIMENSIONAL**: MFG STD

Description of GATE Valve (GA08SD210):

- **Type**: Gate
- **Valve Size**: NPS 0.5 -to- NPS 2
- **Service**: Low Temperature -73 to 204 °C (-99 to 400 °F)
- **Class**: API 800
- **Ends**: SW x FNPT
- **Body**: 316/316L SS (ASTM A182-F316/316L)
- **Bonnet**: 316/316L SS (ASTM A182-F316/316L)
- **Trim**: API 602 TRIM 12
- **Wedge Type**: Solid
- **Bonnet Type**: Bolted
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets**: 316L SS/Graphite
- **Body-Bonnet Bolting**: Bolts MFG STD
- **Nuts**: MFG STD

The standards are:
- **DESIGN**: API 602
- **ENDS**: SW: ASME B16.11, THRD: ASME B1.20.1
- **RATING**: API 602
- **TESTING**: API 598
- **DIMENSIONAL**: MFG STD
Description of GATE Valve (GA08SD310):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: Low Temperature -73 to 204 °C (-99 to 400 °F)
Class: API 800
Ends: SW
Body: 316/316L SS (ASTM A182-F316/316L)
Bonnet: 316/316L SS (ASTM A182-F316/316L)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: API 602
ENDS: ASME B16.11
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA08SD311):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: Cryogenic -196 to 204 °C (-320 to 400 °F)
Class: API 800
Ends: SW
Body: 316/316L SS (ASTM A182-F316/316L)
Bonnet: 316/316L SS (ASTM A182-F316/316L)
Trim: API 602 TRIM 12
Wedge Type: Solid with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Bolted
Design (Other): Extended Bonnet for Cryogenic
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-134
ENDS: ASME B16.11
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA08SJ200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: API 800
Ends: SW x FNPT
Body: 321 SS (ASTM A182-F321)
Bonnet: 321 SS (ASTM A182-F321)
Trim: 321 SS
Hard Facing: Full
Wedge Type: Solid
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA08SJ300):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: API 800
Ends: SW
Body: 321 SS (ASTM A182-F321)
Bonnet: 321 SS (ASTM A182-F321)
Trim: 321 SS
Hard Facing: Full
Wedge Type: Solid
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: ASME B16.11
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA08SK200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: API 800
Ends: SW x FNPT
Body: 321H SS (ASTM A182-F321H)
Bonnet: 321H SS (ASTM A182-F321H)
Trim: 321H SS
Hard Facing: Full
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA08SK300):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: API 800
Ends: SW
Body: 321H SS (ASTM A182-F321H)
Bonnet: 321H SS (ASTM A182-F321H)
Trim: 321H SS
Hard Facing: Full
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: ASME B16.11
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA08SL200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: API 800
Ends: SW x FNPT
Body: 347 SS (ASTM A182-F347)
Bonnet: 347 SS (ASTM A182-F347)
Trim: API 602 TRIM 17
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA08SL300):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: API 800
Ends: SW
Body: 347 SS (ASTM A182-F347)
Bonnet: 347 SS (ASTM A182-F347)
Trim: API 602 TRIM 17
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA08SM200):

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Service:** High Temperature -29 to 816 °C (-20 to 1500 °F)
- **Class:** API 800
- **Ends:** SW x FNPT
- **Body:** 347H SS (ASTM A182-F347H)
- **Bonnet:** 347H SS (ASTM A182-F347H)
- **Trim:** 347H SS
- **Hard Facing:** Full
- **Wedge Type:** Solid
- **Bonnet Type:** Welded
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** MFG STD

The standards are:

- **DESIGN:** API 602
- **ENDS:** SW: ASME B16.11, THRD: ASME B1.20.1
- **RATING:** API 602
- **TESTING:** API 598
- **DIMENSIONAL:** MFG STD

Description of GATE Valve (GA08SM300):

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Service:** High Temperature -29 to 816 °C (-20 to 1500 °F)
- **Class:** API 800
- **Ends:** SW
- **Body:** 347H SS (ASTM A182-F347H)
- **Bonnet:** 347H SS (ASTM A182-F347H)
- **Trim:** 347H SS
- **Hard Facing:** Full
- **Wedge Type:** Solid
- **Bonnet Type:** Welded
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** MFG STD

The standards are:

- **DESIGN:** API 602
- **ENDS:** SW: ASME B16.11
- **RATING:** API 602
- **TESTING:** API 598
- **DIMENSIONAL:** MFG STD
Description of GATE Valve (GA08SP200):

- **Type**: Gate
- **Valve Size**: NPS 0.5 -to- NPS 2
- **Class**: API 800
- **Ends**: SW x FNPT
- **Body**: 2205 Duplex SS (ASTM A182-F51)
- **Bonnet**: 2205 Duplex SS (ASTM A182-F51)
- **Trim**: 2205 Duplex SS
- **Hard Facing**: Half
- **Wedge Type**: Solid
- **Bonnet Type**: Bolted
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets**: 2205 Duplex
- **Body-Bonnet Bolting**: Bolts API 602
- **Nuts**: API 602

The standards are:
- **DESIGN**: API 602
- **ENDS**: SW: ASME B16.11, THRD: ASME B1.20.1
- **RATING**: API 602
- **TESTING**: API 598
- **DIMENSIONAL**: MFG STD

Description of GATE Valve (GA08SP300):

- **Type**: Gate
- **Valve Size**: NPS 0.5 -to- NPS 2
- **Class**: API 800
- **Ends**: SW
- **Body**: 2205 Duplex SS (ASTM A182-F51)
- **Bonnet**: 2205 Duplex SS (ASTM A182-F51)
- **Trim**: 2205 Duplex SS
- **Hard Facing**: Half
- **Wedge Type**: Solid
- **Bonnet Type**: Bolted
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets**: 2205 Duplex
- **Body-Bonnet Bolting**: Bolts API 602
- **Nuts**: API 602

The standards are:
- **DESIGN**: API 602
- **ENDS**: ASME B16.11
- **RATING**: API 602
- **TESTING**: API 598
- **DIMENSIONAL**: MFG STD
### Description of GATE Valve (GA08SU000):

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<thead>
<tr>
<th>Specification</th>
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<tbody>
<tr>
<td>Type</td>
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<td>Bonnet</td>
<td>316L SS (ASTM A182-F316L)</td>
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<td>Operation</td>
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<tr>
<td>Stem-Packing</td>
<td>Flexible Graphite, Corrosion Inhibited</td>
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<tr>
<td>Body-Bonnet Gaskets</td>
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<td>Body-Bonnet Bolting</td>
<td>Bolts API 602</td>
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<tr>
<td></td>
<td>Nuts: API 602</td>
</tr>
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</table>

The standards are:
- DESIGN: API 602
- ENDS: ASME B1.20.1
- RATING: API 602
- TESTING: API 598
- DIMENSIONAL: MFG STD

### Description of GATE Valve (GA08SU001):

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<tbody>
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<td>Body-Bonnet Gaskets</td>
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The standards are:
- DESIGN: API 602
- ENDS: ASME B1.20.1
- RATING: API 602
- TESTING: API 598
- DIMENSIONAL: MFG STD
Description of GATE Valve (GA08SU200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: API 800
Ends: PE X FNPT
Body: 316L SS (ASTM A182-F316L)
Bonnet: 316L SS (ASTM A182-F316L)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Design (Other): Extended Body
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts API 602
Nuts: API 602

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA08SU201):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: API 800
Ends: PE X FNPT
Body: 316L SS (ASTM A182-F316L)
Bonnet: 316L SS (ASTM A182-F316L)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Design (Other): Extended Body
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: PTFE
Body-Bonnet Bolting: Bolts API 602
Nuts: API 602

The standards are:
DESIGN: API 602
ENDS: SW: API 602, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA08SU202):

Type: Gate
Valve Size: NPS 0.5 - to- NPS 2
Class: API 800
Ends: SW x FNPT
Body: 316L SS (ASTM A182-F316L)
Bonnet: 316L SS (ASTM A182-F316L)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts API 602
Nuts: API 602

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA08SU203):

Type: Gate
Valve Size: NPS 0.5 - to- NPS 2
Class: API 800
Ends: SW x FNPT
Body: 316L SS (ASTM A182-F316L)
Bonnet: 316L SS (ASTM A182-F316L)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: PTFE
Body-Bonnet Gaskets: 316 SS/PTFE
Body-Bonnet Bolting: Bolts API 602
Nuts: API 602

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
### Description of GATE Valve (GA08SU300):

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Class:** API 800
- **Ends:** SW
- **Body:** 316L SS (ASTM A182-F316L)
- **Bonnet:** 316L SS (ASTM A182-F316L)
- **Trim:** API 602 TRIM 12
- **Wedge Type:** Solid
- **Bonnet Type:** Bolted
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets:** 316L SS/Graphite
- **Body-Bonnet Bolting:** Bolts API 602
- **Nuts:** API 602

The standards are:
- **DESIGN:** API 602
- **ENDS:** ASME B16.11
- **RATING:** API 602
- **TESTING:** API 598
- **DIMENSIONAL:** MFG STD

### Description of GATE Valve (GA08SU301):

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Class:** API 800
- **Ends:** SW
- **Body:** 316L SS (ASTM A182-F316L)
- **Bonnet:** 316L SS (ASTM A182-F316L)
- **Trim:** API 602 TRIM 12
- **Wedge Type:** Solid
- **Bonnet Type:** Bolted
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** PTFE
- **Body-Bonnet Gaskets:** PTFE
- **Body-Bonnet Bolting:** Bolts API 602
- **Nuts:** API 602

The standards are:
- **DESIGN:** API 602
- **ENDS:** ASME B16.11
- **RATING:** API 602
- **TESTING:** API 598
- **DIMENSIONAL:** MFG STD
Description of GATE Valve (GA09SC501):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 900
Ends: Flanged RF
Body: 304H SS (ASTM A351-CF10)
Bonnet: 304H SS (ASTM A351-CF10)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA09SC502):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 900
Ends: Flanged RF
Body: 304H SS (ASTM A351-CF10)
Bonnet: 304H SS (ASTM A351-CF10)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA09SL500):

Type: Gate
Valve Size: NPS 3 - to - NPS 24
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: ASME 900
Ends: Flanged RF
Body: 347 SS (ASTM A351-CF8C)
Bonnet: 347 SS (ASTM A351-CF8C)
Trim: API 600 TRIM 17
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA09SL501):

Type: Gate
Valve Size: NPS 3 - to - NPS 24
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: ASME 900
Ends: Flanged RF
Body: 347 SS (ASTM A351-CF8C)
Bonnet: 347 SS (ASTM A351-CF8C)
Trim: API 600 TRIM 17
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA09SM500):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 900
Ends: Flanged RF
Body: 347H SS (ASTM A351-CF8C)
Bonnet: 347H SS (ASTM A351-CF8C)
Material Remarks: 0.04 Percent Minimum Carbon Content
Trim: 347H SS
Hard Facing: Full
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA09SM501):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 900
Ends: Flanged RF
Body: 347H SS (ASTM A351-CF8C)
Bonnet: 347H SS (ASTM A351-CF8C)
Material Remarks: 0.04 Percent Minimum Carbon Content
Trim: 347H SS
Hard Facing: Full
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA09SP500):

Type: Gate
Valve Size: NPS 3 - to- NPS 24
Class: ASME 900
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Hard Facing: Half
Wedge Type: Solid or Flexible (NPS 3 - to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
       Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA09SP501):

Type: Gate
Valve Size: NPS 3 - to- NPS 24
Class: ASME 900
Ends: Flanged RF
Body: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Bonnet: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
Trim: 2205 Duplex SS
Hard Facing: Half
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts MFG STD
       Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA09ST500):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Class: ASME 900
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 3 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA09ST501):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Class: ASME 900
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
- DESIGN: ASME B16.34
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA15SC200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: SW x FNPT
Body: 304H SS (ASTM A182-F304H)
Bonnet: 304H SS (ASTM A182-F304H)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA15SC300):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: SW
Body: 304H SS (ASTM A182-F304H)
Bonnet: 304H SS (ASTM A182-F304H)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA15SC500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: Flanged RF
Body: 304H SS (ASTM A182-F304H)
Bonnet: 304H SS (ASTM A182-F304H)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
- DESIGN: API 602
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10 - Globe Pattern (NPS 0.5 -to- NPS 0.75) ASME B16.10 (NPS 1 -to- NPS 2)

Description of GATE Valve (GA15SC501):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: Flanged RF
Body: 304H SS (ASTM A351-CF10)
Bonnet: 304H SS (ASTM A351-CF10)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Full
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD

The standards are:
- DESIGN: ASME B16.34 and MSS SP-144
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA15SC502):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: Flanged RF
Body: 304H SS (ASTM A351-CF10)
Bonnet: 304H SS (ASTM A351-CF10)
Trim: 304H SS
Hard Facing: Full
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA15SD200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 1500
Ends: SW x FNPT
Body: 316/316L SS (ASTM A182-F316/316L)
Bonnet: 316/316L SS (ASTM A182-F316/316L)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts API 602
Nuts: API 602

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA15SD300):

- **Type**: Gate
- **Valve Size**: NPS 0.5 -to- NPS 2
- **Class**: ASME 1500
- **Ends**: SW
- **Body**: 316/316L SS (ASTM A182-F316/316L)
- **Bonnet**: 316/316L SS (ASTM A182-F316/316L)
- **Trim**: API 602 TRIM 12
- **Wedge Type**: Solid
- **Bonnet Type**: Bolted
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets**: 316L SS/Graphite
- **Body-Bonnet Bolting**: Bolts API 602
  - **Nuts**: API 602
- **The standards are:**
  - **DESIGN**: API 602
  - **ENDS**: ASME B16.11
  - **RATING**: API 602
  - **TESTING**: API 598
  - **DIMENSIONAL**: MFG STD

Description of GATE Valve (GA15SJ200):

- **Type**: Gate
- **Valve Size**: NPS 0.5 -to- NPS 2
- **Service**: High Temperature -29 to 538 °C (-20 to 1000 °F)
- **Class**: ASME 1500
- **Ends**: SW x FNPT
- **Body**: 321 SS (ASTM A182-F321)
- **Bonnet**: 321 SS (ASTM A182-F321)
- **Trim**: 321 SS
- **Hard Facing**: Full
- **Wedge Type**: Solid
- **Bonnet Type**: Welded
- **Bore-Port**: Standard
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: MFG STD
- **The standards are:**
  - **DESIGN**: API 602
  - **ENDS**: SW: ASME B16.11, THR: ASME B1.20.1
  - **RATING**: API 602
  - **TESTING**: API 598
  - **DIMENSIONAL**: MFG STD
Description of GATE Valve (GA15SJ300):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: ASME 1500
Ends: SW
Body: 321 SS (ASTM A182-F321)
Bonnet: 321 SS (ASTM A182-F321)
Trim: 321 SS
Hard Facing: Full
Wedge Type: Solid
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: ASME B16.11
RATING: API 602
TESTING: API 598
DIMENSIONAL: ASME B16.10 - Globe Pattern (NPS 0.5 -to- NPS 0.75)

Description of GATE Valve (GA15SK200):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: SW x FNPT
Body: 321H SS (ASTM A182-F321H)
Bonnet: 321H SS (ASTM A182-F321H)
Trim: 321H SS
Hard Facing: Full
Wedge Type: Solid
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
**Description of GATE Valve (GA15SK300):**

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Service:** High Temperature -29 to 816 °C (-20 to 1500 °F)
- **Class:** ASME 1500
- **ends:** SW
- **Body:** 321H SS (ASTM A182-F321H)
- **Bonnet:** 321H SS (ASTM A182-F321H)
- **Trim:** 321H SS
- **Hard Facing:** Full
- **Wedge Type:** Solid
- **Bonnet Type:** Welded
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** MFG STD

The standards are:
- **DESIGN:** API 602
- **ENDS:** ASME B16.11
- **RATING:** API 602
- **TESTING:** API 598
- **DIMENSIONAL:** MFG STD

**Description of GATE Valve (GA15SL200):**

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Service:** High Temperature -29 to 538 °C (-20 to 1000 °F)
- **Class:** ASME 1500
- **Ends:** SW x FNPT
- **Body:** 347 SS (ASTM A182-F347)
- **Bonnet:** 347 SS (ASTM A182-F347)
- **Trim:** API 602 TRIM 17
- **Wedge Type:** Solid
- **Bonnet Type:** Welded
- **Bore-Port:** Standard
- **Stem Design:** OS&Y
- **Operation:** Handwheel
- **Stem-Packing:** MFG STD

The standards are:
- **DESIGN:** API 602
- **ENDS:** SW: ASME B16.11, THR: ASME B1.20.1
- **RATING:** API 602
- **TESTING:** API 598
- **DIMENSIONAL:** MFG STD
**Description of GATE Valve (GA15SL300):**

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Service:** High Temperature -29 to 538 °C (-20 to 1000 °F)
- **Class:** ASME 1500
- **Ends:** SW
- **Body:** 347 SS (ASTM A182-F347)
- **Bonnet:** 347 SS (ASTM A182-F347)
- **Trim:** API 602 TRIM 17
- **Wedge Type:** Solid
- **Bonnet Type:** Welded
- **Bore-Port:** Standard
- **Operation:** Handwheel
- **Stem-Packing:** MFG STD

The standards are:
- **DESIGN:** API 602
- **ENDS:** ASME B16.11
- **RATING:** API 602
- **TESTING:** API 598
- **DIMENSIONAL:** ASME B16.10 - Globe Pattern (NPS 0.5 -to- NPS 0.75)
  ASME B16.10 (NPS 1 -to- NPS 2)

**Description of GATE Valve (GA15SL500):**

- **Type:** Gate
- **Valve Size:** NPS 0.5 -to- NPS 2
- **Service:** High Temperature -29 to 538 °C (-20 to 1000 °F)
- **Class:** ASME 1500
- **Ends:** Flanged RF
- **Body:** 347 SS (ASTM A351-CF8C)
- **Bonnet:** 347 SS (ASTM A351-CF8C)
- **Trim:** API 602 TRIM 17
- **Wedge Type:** Solid
- **Bonnet Type:** Welded
- **Bore-Port:** Standard
- **Operation:** Handwheel
- **Stem-Packing:** MFG STD

The standards are:
- **DESIGN:** ASME B16.34
- **ENDS:** ASME B16.5
- **RATING:** API 602
- **TESTING:** API 598
- **DIMENSIONAL:** ASME B16.10 - Globe Pattern (NPS 0.5 -to- NPS 0.75)
  ASME B16.10 (NPS 1 -to- NPS 2)
Description of GATE Valve (GA15SL501):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: ASME 1500
Ends: Flanged RF
Body: 347 SS (ASTM A351-CF8C)
Bonnet: 347 SS (ASTM A351-CF8C)
Trim: API 600 TRIM 17
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA15SL502):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 538 °C (-20 to 1000 °F)
Class: ASME 1500
Ends: Flanged RF
Body: 347 SS (ASTM A351-CF8C)
Bonnet: 347 SS (ASTM A351-CF8C)
Trim: API 600 TRIM 17
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA15SM200):
Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: SW x FNPT
Body: 347H SS (ASTM A182-F347H)
Bonnet: 347H SS (ASTM A182-F347H)
Trim: 347H SS
Hard Facing: Full
Bonnet Type: Welded
Wedge Type: Solid
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD
The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THR: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD

Description of GATE Valve (GA15SM300):
Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: SW
Body: 347H SS (ASTM A182-F347H)
Bonnet: 347H SS (ASTM A182-F347H)
Trim: 347H SS
Hard Facing: Full
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD
The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11
RATING: API 602
TESTING: API 598
DIMENSIONAL: ASME B16.10 - Globe Pattern (NPS 0.5 -to- NPS 0.75)
Description of GATE Valve (GA15SM500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: Flanged RF
Body: 347H SS (ASTM A182-F347H)
Bonnet: 347H SS (ASTM A182-F347H)
Trim: 347H SS
Hard Facing: Full
Wedge Type: Solid
Bonnet Type: Welded
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD

The standards are:

- DESIGN: API 602
- ENDS: ASME B16.5
- RATING: API 602
- TESTING: API 598
- DIMENSIONAL: ASME B16.10 - Globe Pattern (NPS 0.5 -to- NPS 0.75) ASME B16.10 (NPS 1 -to- NPS 2)

Description of GATE Valve (GA15SM501):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: Flanged RF
Body: 347H SS (ASTM A351-CF8C)
Bonnet: 347H SS (ASTM A351-CF8C)
Material Remarks: 0.04 Percent Minimum Carbon Content
Trim: 347H SS
Hard Facing: Full
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:

- DESIGN: ASME B16.34 and MSS SP-144
- ENDS: ASME B16.5
- RATING: ASME B16.34
- TESTING: API 598
- DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA15SM502):

Type: Gate
Valve Size: NPS 3 to NPS 24
Service: High Temperature -29 to 816 °C (-20 to 1500 °F)
Class: ASME 1500
Ends: Flanged RF
Body: 347H SS (ASTM A351-CF8C)
Bonnet: 347H SS (ASTM A351-CF8C)
Material Remarks: 0.04 Percent Minimum Carbon Content
Trim: 347H SS
Hard Facing: Full
Wedge Type: Flexible with Cavity Vent to High-Pressure Side (Indicated)
Bonnet Type: Pressure Seal
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: MFG STD
Body-Bonnet Gaskets: MFG STD
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34 and MSS SP-144
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10

Description of GATE Valve (GA15SP200):

Type: Gate
Valve Size: NPS 0.5 to NPS 2
Class: ASME 1500
Ends: SW x FNPT
Body: 2205 Duplex SS (ASTM A182-F51)
Bonnet: 2205 Duplex SS (ASTM A182-F51)
Trim: 2205 Duplex SS
Hard Facing: Half
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 2205 Duplex
Body-Bonnet Bolting: Bolts API 602
Nuts: API 602

The standards are:
DESIGN: API 602
ENDS: SW: ASME B16.11, THRD: ASME B1.20.1
RATING: API 602
TESTING: API 598
DIMENSIONAL: MFG STD
Description of GATE Valve (GA15SP300):  
Type: Gate  
Valve Size: NPS 0.5 -to- NPS 2  
Class: ASME 1500  
Ends: SW  
Body: 2205 Duplex SS (ASTM A182-F51)  
Bonnet: 2205 Duplex SS (ASTM A182-F51)  
Trim: 2205 Duplex SS  
Hard Facing: Half  
Wedge Type: Solid  
Bonnet Type: Bolted  
Bore-Port: Standard  
Stem Design: OS&Y  
Operation: Handwheel  
Stem-Packing: Flexible Graphite, Corrosion Inhibited  
Body-Bonnet Gaskets: 2205 Duplex  
Body-Bonnet Bolting: Bolts API 602  
Nuts: API 602  
The standards are:  
DESIGN: API 602  
ENDS: ASME B16.11  
RATING: API 602  
TESTING: API 598  
DIMENSIONAL: MFG STD  

Description of GATE Valve (GA15SP500):  
Type: Gate  
Valve Size: NPS 0.5 -to- NPS 2  
Class: ASME 1500  
Ends: Flanged RF  
Body: 2205 Duplex SS (ASTM A182-F51)  
Bonnet: 2205 Duplex SS (ASTM A182-F51)  
Trim: 2205 Duplex SS  
Hard Facing: Half  
Wedge Type: Solid  
Bonnet Type: Bolted  
Bore-Port: Standard  
Stem Design: OS&Y  
Operation: Handwheel  
Stem-Packing: Flexible Graphite, Corrosion Inhibited  
Body-Bonnet Gaskets: 2205 Duplex  
Body-Bonnet Bolting: Bolts API 602  
Nuts: API 602  
The standards are:  
DESIGN: API 602  
ENDS: ASME B16.5  
RATING: ASME B16.34  
TESTING: API 598  
DIMENSIONAL: ASME B16.10 - Globe Pattern (NPS 0.5 -to- NPS 0.75)  
ASME B16.10 (NPS 1 -to- NPS 2)
### Description of GATE Valve (GA15SP501):

- **Type**: Gate
- **Valve Size**: NPS 3 -to- NPS 24
- **Class**: ASME 1500
- **Ends**: Flanged RF
- **Body**: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
- **Bonnet**: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
- **Trim**: 2205 Duplex SS
- **Hard Facing**: Half
- **Wedge Type**: Solid or Flexible (NPS 2 -to- NPS 4), Flexible (NPS 6 and Greater)
- **Bonnet Type**: Bolted
- **Bore-Port**: Full
- **Stem Design**: OS&Y
- **Operation**: Handwheel
- **Stem-Packing**: Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets**: 2205 Duplex
- **Body-Bonnet Bolting**: Bolts MFG STD
- **Nuts**: MFG STD

The standards are:
- **DESIGN**: ASME B16.34
- **ENDS**: ASME B16.5
- **RATING**: ASME B16.34
- **TESTING**: API 598
- **DIMENSIONAL**: ASME B16.10

### Description of GATE Valve (GA15SP502):

- **Type**: Gate
- **Valve Size**: NPS 3 -to- NPS 24
- **Class**: ASME 1500
- **Ends**: Flanged RF
- **Body**: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
- **Bonnet**: 2205 Duplex SS (ASTM A995-4A (ACI CD3MN))
- **Trim**: 2205 Duplex SS
- **Hard Facing**: Half
- **Wedge Type**: Flexible
- **Bonnet Type**: Bolted
- **Bore-Port**: Full
- **Stem Design**: OS&Y
- **Operation**: Gear
- **Stem-Packing**: Flexible Graphite, Corrosion Inhibited
- **Body-Bonnet Gaskets**: 2205 Duplex
- **Body-Bonnet Bolting**: Bolts MFG STD
- **Nuts**: MFG STD

The standards are:
- **DESIGN**: ASME B16.34
- **ENDS**: ASME B16.5
- **RATING**: ASME B16.34
- **TESTING**: API 598
- **DIMENSIONAL**: ASME B16.10
Description of GATE Valve (GA15ST500):

Type: Gate
Valve Size: NPS 0.5 -to- NPS 2
Class: ASME 1500
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 602 TRIM 12
Wedge Type: Solid
Bonnet Type: Bolted
Bore-Port: Standard
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10 - Globe Pattern (NPS 0.5 -to- NPS 0.75)

Description of GATE Valve (GA15ST501):

Type: Gate
Valve Size: NPS 2 -to- NPS 24
Class: ASME 1500
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Solid or Flexible (NPS 2 -to- NPS 4), Flexible (NPS 6 and Greater)
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Handwheel
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10
Description of GATE Valve (GA15ST502):

Type: Gate
Valve Size: NPS 3 -to- NPS 24
Class: ASME 1500
Ends: Flanged RF
Body: 316 SS (ASTM A351-CF8M)
Bonnet: 316 SS (ASTM A351-CF8M)
Trim: API 600 TRIM 12
Wedge Type: Flexible
Bonnet Type: Bolted
Bore-Port: Full
Stem Design: OS&Y
Operation: Gear
Stem-Packing: Flexible Graphite, Corrosion Inhibited
Body-Bonnet Gaskets: 316L SS/Graphite
Body-Bonnet Bolting: Bolts MFG STD
Nuts: MFG STD

The standards are:
DESIGN: ASME B16.34
ENDS: ASME B16.5
RATING: ASME B16.34
TESTING: API 598
DIMENSIONAL: ASME B16.10