WILLIAM E.
WILLIAMS
VALVE CORPORATION

est. 1918
Founded in 1918, the William E. Williams Valve Corporation has continuously produced high quality valves for industrial and commercial applications including: oil & gas, midstream pipeline, terminal storage, chemical processing, power generation, mining, paper, pharmaceutical processes, as well as commercial and military shipbuilding.

Williams’ valves are designed, manufactured and tested to meet and exceed all applicable specifications. Valves are constructed and constant improvements to meet the latest environmental standards are always being implemented. Our goal is to produce high quality valves, with fully traceable quality records, at prices competitive in the global marketplace and deliveries to match the “just in time” requirements of today’s business world. In order to accomplish this goal, we maintain large inventories of finished products to support our distribution network.

We have years of experience working on special requirements: electric, hydraulic or pneumatic automation, gear operators emergency shut-off valves, soft seats and discs, by-pass valve installations and extended bonnets are no challenge for Williams.

We believe that William E. Williams has a record of quality equal to or better than any in the valve industry. We are a privately owned company whose accomplishments have been achieved by the dedication and commitment of our employees to provide a standard of excellence in all our products for you, our present and future customers.

This condensed catalog is intended to provide an overview of our products. Detailed drawings are available in several formats. We appreciate your business and want to be your primary valve source.

Sincerely,

Nicholas Sherman
President
A105N Forged Steel, Bolted and Welded Bonnet Rising Stem, OS&Y

**Gate Valves**

**ANSI Class 150**
- **F15F** (Flanged)
  - Size range: ¼” to 2”

**ANSI Class 300**
- **F30F** (Flanged)
  - Size range: ¼” to 2”

**ANSI Class 800**
- **F80T** (Threaded)
- **F80SW** (Socket Weld)
- **F80TXS** (Socket Weld x Threaded)
  - Size range: ¼” to 2”

**ANSI Class 1500**
- **F150T** (Threaded)
- **F150SW** (Socket Weld)
- **F150TXS** (Socket Weld x Threaded)
  - Size range: ¼” to 2”

**Features / Options**
- Full Port or Standard Port
- Bolted Bonnet with spiral-wound gasket
- Threaded and seal welded bonnet
- Pressure seal bonnet
- Integral backseat
- Integral or welded flanges
- Extended Body and Bonnet design available

A105N Forged Steel, Bolted and Welded Bonnet Rising Stem, OS&Y

**Globe / Y Pattern Globe Valves**

**ANSI Class 150**
- **F152F** (Flanged)
  - Size range: ¼” to 2”

**ANSI Class 800**
- **F802T** / **F802YT** (Threaded)
- **F802T** / **F802YSW** (Socket Weld)
- **F802TXS** / **F802YTXS** (Socket Weld x Threaded)
  - Size range: ¼” to 2”

**ANSI Class 1500**
- **F1502T** / **F1502YT** (Threaded)
- **F1502SW** / **F1502YSW** (Socket Weld)
- **F1502TXS** / **F1502YTXS** (Socket Weld x Threaded)
  - Size range: ¼” to 2”

**Features / Options**
- Bolted Bonnet with spiral-wound gasket
- Threaded and seal welded bonnet
- Pressure seal bonnet
- Y pattern design
- Integral or welded flanges
- Extended Body and Bonnet design available
A182 F316 Stainless Steel, Bolted/Welded Bonnet

Gate Valves

ANSI Class 800

FS80T (Threaded)
FS80SW (Socket Weld)
FS80TXS (Socket Weld x Threaded)
Size range: ¼” to 2”

ANSI Class 1500

FS150T (Threaded)
FS150SW (Socket Weld)
FS150TXS (Socket Weld x Threaded)
Size range: ¼” to 2”

Features / Options

- Bolted bonnet with spiral wound gasket
- Threaded and seal welded bonnet
- Pressure seal bonnet
- Integral or welded flanges

A182 F316 Stainless Steel, Bolted/Welded Bonnet

Rising Stem, OS&Y

Globe / Y Pattern

Globe Valves

ANSI Class 800

FS802T / FS802YT (Threaded)
FS802T / FS802YSW (Socket Weld)
FS802TXS / FS802YTXS (Socket Weld x Threaded)
Size range: ¼” to 2”

ANSI Class 1500

FS1502T / FS1502YT (Threaded)
FS1502SW / FS1502YSW (Socket Weld)
FS1502TXS / FS1502YTXS (Socket Weld x Threaded)
Size range: ¼” to 2”

Forged Steel Valves
A216 Cast Steel, Bolted Bonnet Rising Stem, OS&Y
Gate Valves
(listed by figure number prefix)

ANSI Class 150
15F (Flanged) 15W (Butt Weld)
Size range: 1½” to 60”

ANSI Class 300
30F (Flanged) 30W (Butt Weld)
Size range: 2” to 54”

ANSI Class 600
60F (Flanged) 60W (Butt Weld)
Size range: 2” to 48”

ANSI Class 900
90F (Flanged) 90W (Butt Weld)
Size range: 3” to 24”

ANSI Class 1500
150F (Flanged) 150W (Butt Weld)
Size range: 2” to 24”

Features / Options Rising Stem
- Seal-welded seat ring (threaded available)
- Bosses for taps, bypass and drains
- Graphite packing-standard
- Contained gaskets (150lb and 300lb round bonnet)
- Ring Joint bonnet gasket (600lb-1500lb)
- Fully guided, flexible wedges
- Fugitive emission tested
- Pressure seal available (600lb-1500lb)
- Easily adapted for automation
- NACE trims available

A216 Cast Steel Non-Rising Stem, NRS
Gate Valves
(listed by figure number prefix)

ANSI Class 150
N15F (Flanged) N15W (Butt Weld)
Size range: 2” to 30”

ANSI Class 300
N30F (Flanged) N30W (Butt Weld)
Size range: 2” to 24”

Features / Options NRS
- Seal-welded seat ring (threaded available)
- Bosses for taps, bypass and drains
- Graphite packing-standard
- Contained gaskets (150lb and 300lb round bonnet)
- Fully guided wedges
- Calibrated position indicator
- Standard trim: Bronze or 13% CR/Hard Face
- Adaptable for reach-rod systems

Applicable Standards Rising Stem & NRS
- API 600, API 598
- ANSI B16.34 Std Cl.
- Face to Face, ANSI B16.10
- End Flanges ANSI B16.5 or ANSI B16.47 Cl. B
- Buttweld Ends ANSI B16.25
# A216 WCB Cast Steel

## Globe Valves
(listed by figure number prefix)

<table>
<thead>
<tr>
<th>ANSI Class</th>
<th>Figure Prefix</th>
<th>Size Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>152F (Flanged) 152W (Butt Weld)</td>
<td>Size range: 2” to 24”</td>
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<tr>
<td></td>
<td>302F (Flanged) 302W (Butt Weld)</td>
<td>Size range: 2” to 24”</td>
</tr>
<tr>
<td></td>
<td>602F (Flanged) 602W (Butt Weld)</td>
<td>Size range: 2” to 16”</td>
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<tr>
<td></td>
<td>902F (Flanged) 902W (Butt Weld)</td>
<td>Size range: 3” to 16”</td>
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<tr>
<td></td>
<td>1502F (Flanged) 1502W (Butt Weld)</td>
<td>Size range: 2” to 16”</td>
</tr>
</tbody>
</table>

### Features / Options
- Seal-welded seat ring (threaded available)
- Bolted bonnet (pressure seal available)
- Graphite packing standard & contained bonnet gaskets
- Bosses for taps, bypass and drains

## Angle Valves
(listed by figure number prefix)

<table>
<thead>
<tr>
<th>ANSI Class</th>
<th>Figure Prefix</th>
<th>Size Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>153F (Flanged) 153W (Butt Weld)</td>
<td>Size range: 2” to 12”</td>
</tr>
<tr>
<td></td>
<td>303F (Flanged) 303W (Butt Weld)</td>
<td>Size range: 2” to 12”</td>
</tr>
</tbody>
</table>

### Features / Options
- Seal-welded seat ring (threaded available)
- Bolted cover (pressure seal available)
- Graphite contained bonnet gaskets
- Bosses for taps, bypass and drains

## Swing Check Valves
(listed by figure number prefix)

<table>
<thead>
<tr>
<th>ANSI Class</th>
<th>Figure Prefix</th>
<th>Size Range</th>
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<tbody>
<tr>
<td>150</td>
<td>151F (Flanged) 151W (Butt Weld)</td>
<td>Size range: 2” to 48”</td>
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<tr>
<td></td>
<td>301F (Flanged) 301W (Butt Weld)</td>
<td>Size range: 2” to 36”</td>
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<tr>
<td></td>
<td>601F (Flanged) 601W (Butt Weld)</td>
<td>Size range: 2” to 36”</td>
</tr>
<tr>
<td></td>
<td>901F (Flanged) 901W (Butt Weld)</td>
<td>Size range: 3” to 24”</td>
</tr>
<tr>
<td></td>
<td>1501F (Flanged) 1501W (Butt Weld)</td>
<td>Size range: 2” to 24”</td>
</tr>
</tbody>
</table>

### Features / Options
- Seal-welded seat ring (threaded available)
- Bolted cover (pressure seal available)
- Graphite contained bonnet gaskets
- Bosses for taps, bypass and drains

### Applicable Standards:
Globe, Angle and Swing Check
- ANSI B16.34 Std Cl
- Face to Face, End to End, ANSI B16.10
- End Flanges ANSI B16.5 or ANSI B16.47 Cl. B
- Buttweld Ends ANSI B16.25
**A351 CF8M Stainless Steel**

**Gate Valves**
(listed by figure number)

**Features / Options**
- Contained gaskets (teflon or graphite)
- Fully guided, flexible wedges
- Fugitive emission tested
- Backseat for packing under pressure
- Heavy wall and renewable seats available
- Soft seating available

**Applicable Standards**
- Shell wall thickness API 603, MSS SP42, ANSI B16.34
- Heavy wall (API 600) available
- Face to face, end to end ANSI B16.10
- Flange dimensions ANSI B16.5
- Weld end dimensions ANSI B16.25

**A351 CF8M Stainless Steel**

**Globe Valves**
(listed by figure number)

**Features / Options**
- Bosses for taps, bypass and drains
- Contained gaskets (teflon or graphite)
- Class 900 and 1500 available
- Suitable for soft seats
- Angle pattern available

**Applicable Standards**
- Shell wall thickness MSS SP42, ANSI B16.34
- Face to face, end to end ANSI B16.10
- Flange dimensions ANSI B16.5
- Weld end dimensions ANSI B16.25
A351 CF8M Stainless Steel
Swing Check Valve
(listed by figure number)

ANSI Class 150
S151F6-316 (Flanged)
Size range: 2” to 36”

ANSI Class 300
S301F6-316 (Flanged)
Size range: 2” to 30”

ANSI Class 600
S601F6-316 (Flanged)
Size range: 2” to 24”

ANSI Class 900
S901F6-316 (Flanged)
Size range: 3” to 24”

ANSI Class 1500
S1501F6-316 (Flanged)
Size range: 2” to 24”

Features / Options
- Contained gaskets (teflon or graphite)
- Composition disc available
- Optional lever and weight or spring

Applicable Standards
- Shell wall thickness MSS SP42, ANSI B16.34
- Face to face, end to end ANSI B16.10
- Flange dimensions ANSI B16.5
- Weld end dimensions ANSI B16.25

A351 CF8M Stainless Steel
Threaded Valves
(listed by figure number)

Gate Rising Stem 200lb WOG
S2ST6316
Size range: ½” to 2”

Gate/NRS 200lb WOG
SN20T6316
Size range: ½” to 2”

Globe 200 lb WOG
S202T6316
Size range: ½” to 2”

Swing Check 200 lb WOG
S201T6316
Size range: ½” to 2”

Features / Options
- S2ST6316: Rising stem, threaded bonnet
- SN20T6316: Non-rising stem, threaded bonnet
- S202T6316: Rising handwheel, threaded bonnet
- S201T6316: 45° Y pattern design, threaded cover

Applicable Standards
- Threaded end in accordance with NPT specification
- ANSI B.2.1 200lb WOG Temp. 350°F
B62 Bronze/Bronze Trim
Rising Stem & Non-Rising Stem

Gate Valves
(listed by figure number prefix)

ANSI Class 150
111F-Union Bonnet, Rising Stem
Size range: ¼” to 4”
142F-Bolted Bonnet OS&Y
Size range: 2” to 12”
141F-Bolted Bonnet Non-Rising Stem
Size range: 2” to 12”

Features / Options
• Solid wedge and integral backseat

Applicable Standards
• ANSI B16.24, MSS SP6, MSS SP9, MSS SP25, MSS SP82

B62 Bronze
Globe Valves
(listed by figure number)

ANSI Class 150
1160F-Union Bonnet Globe
Size range: ½” to 3”
B15G-Flanged-Bolted Bonnet Globe
Size range: 2” to 8”

Features / Options
• Rising handwheel  • Swivel disc
• Integral backseat  • Stop check feature optional

Applicable Standards
• ANSI B16.24, MSS SP6, MSS SP9, MSS SP25, MSS SP82

B62 Bronze
Angle Valves
(listed by figure number)

ANSI Class 150
B15A-Flanged-Bolted Bonnet
Size range: 2” to 8”

Features / Options
• Rising handwheel  • Swivel disc
• Integral backseat  • Stop check feature optional

Applicable Standards
• ANSI B16.24, MSS SP6, MSS SP9, MSS SP25, MSS SP82

Optional Materials
• B61
• Aluminum Bronze
• Monel
• Titanium
B62 Bronze/Bronze Trim

**Swing Check Valves**
(listed by figure number)

**Swing Check** Class 150lb
B15SW-Bolted Bonnet, Flanged End
Size range: 2” to 12”

**Features / Options**
- Bolted cover, optional lever & weight or spring

**Applicable Standards**
- ANSI B16.24, MSS SP6, MSS SP9, MSS SP25, MSS SP82

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B62 Bronze

**Hose End Valves**
(listed by figure number)

**Hose End Globe** Class 150lb
115F-Bolted Bonnet OS&Y
Size range: 1½” to 2½”

**Hose End Angle** Class 150lb
215F-Bolted Bonnet OS&Y
Size range: 1½” to 2½”

**Features / Options**
- Bolted bonnet, rising handwheel, integral seat, integral backseat
- 150lb FF Flanged End x NST Conn. with cap and chain
- Optional hose threads
- Special order: IPT: Iron pipe thread; NYFD: NYC Fire Dept.

**Applicable Standards**
- ANSI B16.24, MSS SP6, MSS SP9, MSS SP25, MSS SP82

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A216 Cast Steel/Bronze Trim

**Cast Steel/ Bronze Trim**
(listed by figure number)

15F-4AB Bolted Bonnet, OS&Y Rising Stem Gate
N15F-4AB Bolted Bonnet, NRS Non-Rising Stem Gate
Size range: 2” to 30”

152F-4AB Bolted Bonnet, Globe
153F-4AB Bolted Bonnet, Angle
151F-4AB Bolted Cover, Check
Size range: 2” to 16”

**Applicable Standards** Rising Stem & NRS
- API 600, API 598
- ANSI B16.34 Std Cl
- Face to Face, ANSI B16.10
- End Flanges ANSI B16.5
- Butt weld Ends ANSI B16.25
**A216 WCB Cast Steel**
316 SS Trim

**Ball Valves**
(listed by figure number)

**Ball** Class 150lb
- W16F6RT-Flanged End, Reduced Port
- W17F6RT-Flanged End, Full Port
  Size range: 2” to 12”

**Ball** Class 300lb
- W36F6RT-Flanged End, Reduced Port
- W37F6RT-Flanged End, Full Port
  Size range: 2” to 12”

**Ball** Class 600lb
- W66F6RT-Flanged End, Reduced Port
- W67F6RT-Flanged End, Full Port
  Size range: 2” to 8”

*Note: For gear operator add suffix code GO

**Features / Options**
- Fire-safe design, API 607
- Blowout-proof stem
- Adjustable stem packing, anti-static device
- Integral ISO mounting pad for actuation
- Integral locking device
- Reinforced teflon seats
- 316 SS Ball and Stem is standard on all items
- Other materials available on special order

**Applicable Standards**
- Shell wall thickness API 6D Design
- Face to face API 6D Design
- Flange dimensions ANSI B16.5

NOTE: Gear operators recommended for 8” and larger

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**A351 CF8M Stainless Steel**
316 SS Trim

**Ball Valves**
(listed by figure number)

**Ball** Class 150lb
- W16F66RT-Flanged End, Reduced Port
- W17F66RT-Flanged End, Full Port
  Size range: 2” to 12”

**Ball** Class 300lb
- W36F66RT-Flanged End, Reduced Port
- W37F66RT-Flanged End, Full Port
  Size range: 2” to 12”

**Ball** Class 600lb
- W66F66RT-Flanged End, Reduced Port
- W67F66RT-Flanged End, Full Port
  Size range: 2” to 8”

*Note: For gear operator add suffix code GO

**Features / Options**
- Fire-safe design, API 607
- Blowout-proof stem
- Adjustable stem packing, anti-static device
- Integral ISO mounting pad for actuation
- Integral locking device
- Reinforced teflon seats
- 316 SS Ball and Stem is standard on all items
- Other materials available on special order

**Applicable Standards**
- Shell wall thickness API 6D Design
- Face to face API 6D Design
- Flange dimensions ANSI B16.5

NOTE: Gear operators recommended for 8” and larger
Trunnion Mounted Ball Valves

Two Piece Design: Body: A216 Gr WCB; Ball: A105+ENP; Seats: Reinforced Teflon

ANSI Class 150
T16F1RT - Flanged End, Reduced Port
T17F1RT - Flanged End, Full Port

ANSI Class 300
T36F1RT - Flanged End, Reduced Port
T37F1RT - Flanged End, Full Port

ANSI Class 600
T66F1RT - Flanged End, Reduced Port
T67F1RT - Flanged End, Full Port

Two Piece Design: Body: A216 Gr WCB; Ball: A182 F316; Seats: Reinforced Teflon

ANSI Class 150
T16F6RT - Flanged End, Reduced Port
T17F6RT - Flanged End, Full Port

ANSI Class 300
T36F6RT - Flanged End, Reduced Port
T37F6RT - Flanged End, Full Port

ANSI Class 600
T66F6RT - Flanged End, Reduced Port
T67F6RT - Flanged End, Full Port

Two Piece Design: Body: A351 CF8M; Ball: A182 F316; Seats: Reinforced Teflon

ANSI Class 150
T16F66RT - Flanged End, Reduced Port
T17F66RT - Flanged End, Full Port

ANSI Class 300
T36F66RT - Flanged End, Reduced Port
T37F66RT - Flanged End, Full Port

ANSI Class 600
T66F66RT - Flanged End, Reduced Port
T67F66RT - Flanged End, Full Port

Features / Options:
• API 6D design
• NACE to MR0175
• Double Block and Bleed
• Fire Safe to API 607
• Sizes 2” to 36”

Available:
• Pressure classes: 150, 300, 600, 900, 1500 and 2500
• Body Design: Two Piece, Three Piece, Top Entry.
• End Connections: Raised Face Flanged, RTJ, Butt Weld
• Body Materials: WCB/A105; LCB/LF2; CF8/F304; CF8M/F316
• Ball Materials: LF2/316/304 A105+ENP
• Seat Materials: Reinforced Teflon; Virgin Teflon; Viton; Devlon; Nylon; Peek.
• Accessories: Gear Operator, Motor Operator, Bare Stem.
A216 WCC Cast Steel, Rising Stem
API-6D Thru Conduit Slab Gate Valves
(listed by figure number prefix)

ANSI Class 150
18F (Flanged) 18W (Butt Weld)
Size range: 2” to 36”

ANSI Class 300
38F (Flanged) 38W (Butt Weld)
Size range: 2” to 36”

ANSI Class 600
68F (Flanged) 68W (Butt Weld)
Size range: 2” to 36”

ANSI Class 900
98F (Flanged) 98W (Butt Weld)
Size range: 2” to 36”

ANSI Class 1500
158F (Flanged) 158W (Butt Weld)
Size range: 2” to 24”

Features / Options
• Full bore allows for pigs & scrapers
• Continual low turbulent flow
• Block & bleed capable
• Long lasting protected seat faces
• Self relieving floating seats
• Bosses for taps & bypass
• Ring joint bonnet gasket (600lb-4500lb)
• Fugitive emission tested
• NACE MR-01-75

Applicable Standards
• API-6D Design
• Face to face API-6D Design
• End Flanged ANSI B16.5 or ANSI B16.47
• Buttweld Ends ANSI B16.25
NOTE: Gear operators recommended for 6” and larger
Slab & Expanding Pipeline Gate Valves

ANSI Class 600
69F (Flanged) 69W (Butt Weld)
Size range: 2” to 36”

ANSI Class 300
39F (Flanged) 39W (Butt Weld)
Size range: 2” to 36”

ANSI Class 900
99F (Flanged) 99W (Butt Weld)
Size range: 2” to 36”

ANSI Class 1500
159F (Flanged) 159W (Butt Weld)
Size range: 2” to 24”

Features / Options
• Full bore allows for pigs & scrapers
• Low torque mechanical seal
• Continual low turbulent flow
• Block & bleed capable
• Long lasting protected seat faces
• Self relieving floating seats
• Bosses for taps & bypass
• Ring joint bonnet gasket (600lb-4500lb)
• Fugitive emission tested
• NACE MR-01-75

Applicable Standards
• API-6D Design
• Face to face API-6D Design
• End Flanged ANSI B16.5 or ANSI B16.47
• Buttweld Ends ANSI B16.25
• Fire safe API-6FA / API-607

NOTE: Gear operators recommended for 6” and larger
A216 WCB Cast Steel, Pressure Seal Bonnet, Rising Stem

**Gate Valves**
(listed by figure number prefix)

**ANSI Class 600**

- **60W3 PS (Butt Weld)**
  Size range: 2” to 24”

**ANSI Class 900**

- **90W3 PS (Butt Weld)**
  Size range: 2” to 24”

**ANSI Class 1500**

- **150W3 PS (Butt Weld)**
  Size range: 2” to 24”

**ANSI Class 2500**

- **250W3 PS (Butt Weld)**
  Size range: 2” to 24”

**Features / Options**
- Seal-welded seat ring
- Bosses for taps & bypass
- Pressure seal bonnet
- Fully guided, wedges

A216 WCB Cast Steel, Pressure Seal Bonnet, Rising Stem

**Globe Valves**
(listed by figure number prefix)

**ANSI Class 600**

- **602W3 PS (Butt Weld)**
  Size range: 2” to 12”

**ANSI Class 900**

- **902W3 PS (Butt Weld)**
  Size range: 2” to 12”

**ANSI Class 1500**

- **1502W3 PS (Butt Weld)**
  Size range: 2” to 12”

**ANSI Class 2500**

- **2502W3 PS (Butt Weld)**
  Size range: 2” to 12”

**Features / Options**
- Seal-welded seat ring
- Bosses for taps & bypass
- Pressure seal bonnet
- Fully guided disc
Pressure Seal Valves

ANSI Class 900
902YW3 PS (Butt Weld)
Size range: 2” to 12”

ANSI Class 1500
1502YW3 PS (Butt Weld)
Size range: 2” to 12”

ANSI Class 2500
2502YW3 PS (Butt Weld)
Size range: 2” to 12”

Features / Options
• Seal-welded seat ring
• Bosses for taps & bypass
• Pressure seal bonnet
• Fully guided, disc

A216 WCB Cast Steel, Pressure Seal Bonnet, Rising Stem
\textbf{Y Pattern Globe}
(listed by figure number prefix)

ANSI Class 600
602YW3 PS (Butt Weld)
Size range: 2” to 12”

ANSI Class 900
902YW3 PS (Butt Weld)
Size range: 2” to 12”

ANSI Class 1500
1502YW3 PS (Butt Weld)
Size range: 2” to 12”

ANSI Class 2500
2502YW3 PS (Butt Weld)
Size range: 2” to 12”

Features / Options
• Seal-welded seat ring
• Bosses for taps & bypass
• Pressure seal bonnet
• Fully guided, disc

A216 WCB Cast Steel, Pressure Seal Cap
\textbf{Swing Check}
(listed by figure number prefix)

ANSI Class 600
601W3 PS (Butt Weld)
Size range: 2” to 12”

ANSI Class 900
901W3 PS (Butt Weld)
Size range: 2” to 12”

ANSI Class 1500
1501W3 PS (Butt Weld)
Size range: 2” to 12”

ANSI Class 2500
2501W3 PS (Butt Weld)
Size range: 2” to 12”

Features / Options
• Seal-welded seat ring
• Bosses for taps & bypass
• Pressure seal cap
A216 WCB Cast Steel
13% CR/Hard Face
Emergency Shut Off Valves
(listed by figure number)

Emergency Shut Off Class 150lb RF
PL-2–With lever, adjustable weight and fusible link
PSL-2–With lever, spring and fusible link
CPL-2–With lever, pneumatic actuator, adjustable weight and fusible link
CPSL-2–With lever, pneumatic actuator, spring and fusible link
MPL-2–With lever, electro-magnet, adjustable weight and fusible link
MPSL-2–With lever, electro-magnet, spring and fusible link
Size Range: 2” to 16”
*300lb RF also available

A351 CF8M Stainless Steel
316 SS Trim
Emergency Shut Off Valves
(listed by figure number)

Emergency Shut Off Class 150lb RF
SPL-6–With lever, adjustable weight and fusible link
SPSL-6–With lever, spring and fusible link
SCPL-6–With lever, pneumatic actuator, adjustable weight and fusible link
SPSL-6–With lever, pneumatic actuator, spring and fusible link
SMPL-6–With lever, electro-magnet, adjustable weight and fusible link
SMPSL-6–With lever, electro-magnet, spring and fusible link
Size Range: 2” to 16”
*300lb RF also available
# A351 CF8M Stainless Steel Cryogenic Gate Valves

**(listed by figure number prefix)**

**ANSI Class 150 thru 600**

S15F6-316 EB *(flanged)*

S30F6-316 EB *(flanged)*

S60F6-316 EB *(flanged)*

**Size Range:** 2” to 16”

**Features / Options**

- Extended Bonnets
- Bosses for taps & bypass
- Contained gaskets (Teflon or graphite)
- Seal-welded or Threaded seat rings
- Fully guided, flexible wedges
- Alternate Trims available
- Fugitive emission tested
- Soft seating available
- Backseat for packing under pressure
- Mounting Pads for Actuation
- Heavy wall and renewable seats available
- Butt weld Ends available

**Applicable Standards.**

- Shell wall thickness API 603, MSS SP42, ANSI B16.34
- Face to face, end to end ANSI B16.10
- Flange dimensions ANSI B16.5
- Weld end dimensions ANSI B16.25

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# A351 CF8M Stainless Steel Cryogenic Globe Valves

**(listed by figure number prefix)**

**ANSI Class 150 thru 600**

S152F6-316 EB *(flanged)*

S302F6-316 EB *(flanged)*

S602F6-316 EB *(flanged)*

**Size Range:** 2” to 16”

**Features / Options**

- Extended Bonnets
- Bosses for taps & bypass
- Contained gaskets (Teflon or graphite)
- Seal-welded or Threaded seat rings
- Fully guided, flexible wedges
- Alternate Trims available
- Fugitive emission tested
- Soft seating available
- Backseat for packing under pressure
- Mounting Pads for Actuation
- Heavy wall and renewable seats available
- Butt weld Ends available
- Angle pattern available

**Applicable Standards.**

- Shell wall thickness MSS SP42, ANSI B16.34
- Face to face, end to end ANSI B16.10
- Flange dimensions ANSI B16.5
- Weld end dimensions ANSI B16.25
### Pressure Temperature Ratings

**Valve Material Specifications**

**Working Pressure (PSIG)**

<table>
<thead>
<tr>
<th>Class</th>
<th>Working Pressure (PSIG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>700</td>
</tr>
<tr>
<td>900</td>
<td>1115</td>
</tr>
<tr>
<td>1200</td>
<td>1595</td>
</tr>
<tr>
<td>1500</td>
<td>2445</td>
</tr>
</tbody>
</table>

**Working Pressure (PSIG)**

<table>
<thead>
<tr>
<th>Class</th>
<th>Working Pressure (PSIG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500</td>
<td>2445</td>
</tr>
</tbody>
</table>

**NOTES:**

1. PERMISSIBLE, BUT NOT RECOMMENDED FOR PROLONGED USAGE ABOVE ABOUT 800°F.
2. NOT TO BE USED OVER 1050°F. FLANGED END RATINGS TERMINATE AT 1000°F.
3. NOT TO BE USED OVER 1100°F. FLANGED END RATINGS TERMINATE AT 1000°F.
4. MPT TO BE USED OVER 650°F.

### Carbon Steel

<table>
<thead>
<tr>
<th>Material</th>
<th>Casting Code</th>
<th>Short Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 Cr 12 Mo</td>
<td>A216</td>
<td>WCB</td>
</tr>
<tr>
<td>30 Cr 15 Mo</td>
<td>A182</td>
<td>F12</td>
</tr>
<tr>
<td>35 Cr 20 Mo</td>
<td>A182</td>
<td>F22</td>
</tr>
</tbody>
</table>

### Low Temperature Steel

<table>
<thead>
<tr>
<th>Material</th>
<th>Casting Code</th>
<th>Short Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 Mo</td>
<td>A352</td>
<td>LCA</td>
</tr>
<tr>
<td>0.6 Cr 0.5 Mo</td>
<td>A487</td>
<td>BC0</td>
</tr>
<tr>
<td>0.75 Cr 0.75 Ni</td>
<td>A182</td>
<td>F39</td>
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</table>

### Alloy Steel

<table>
<thead>
<tr>
<th>Material</th>
<th>Casting Code</th>
<th>Short Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 Cr 9 Ni</td>
<td>A351</td>
<td>CA6NM</td>
</tr>
<tr>
<td>19 Cr 10 Ni</td>
<td>A351</td>
<td>CF8M</td>
</tr>
</tbody>
</table>

### Stainess Steel

<table>
<thead>
<tr>
<th>Material</th>
<th>Casting Code</th>
<th>Short Code</th>
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</thead>
<tbody>
<tr>
<td>18 Cr 8 Ni</td>
<td>A351</td>
<td>CG8M</td>
</tr>
<tr>
<td>19 Cr 10 Ni</td>
<td>A351</td>
<td>CF8</td>
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</tbody>
</table>

### Duplex Steel

<table>
<thead>
<tr>
<th>Material</th>
<th>Casting Code</th>
<th>Short Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 Cr 10 Ni</td>
<td>A351</td>
<td>CF3</td>
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</tbody>
</table>

### Pressure Temperature Ratings (Complies with ANSI B16.34 - STD Class Valves)

<table>
<thead>
<tr>
<th>Pressure (PSIG)</th>
<th>Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 300</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>300</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>400</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>500</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>600</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>700</td>
<td>120 to 1050</td>
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<tr>
<td>800</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>900</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>1000</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>1100</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>1200</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>1300</td>
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<tr>
<td>1400</td>
<td>120 to 1050</td>
</tr>
<tr>
<td>1500</td>
<td>120 to 1050</td>
</tr>
</tbody>
</table>

### Key Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Cast</th>
<th>Forged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Steel</td>
<td>A31M</td>
<td>A31M</td>
</tr>
<tr>
<td>Low Temperature Steel</td>
<td>A352-LCA</td>
<td>A352-LCA</td>
</tr>
<tr>
<td>Alloy Steel</td>
<td>A217-WC</td>
<td>A217-WC</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>A217-CA15</td>
<td>A217-CA15</td>
</tr>
<tr>
<td>Duplex Steel</td>
<td>A351-CN7M</td>
<td>A351-CN7M</td>
</tr>
</tbody>
</table>

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4. MPT TO BE USED OVER 650°F.
**Sales Agent:**

**Warranty**

Seller warrants the material to be free of defects in material and workmanship, under normal use and proper operation, for a period of one year from date of delivery to a common carrier for shipment to buyer. Seller’s obligation is limited to: (1) Repair of the material, or (2) replacement of any part or parts proven defective in material or workmanship, or (3) refund of the purchase price. The choice of said remedies shall be determined by seller in its sole discretion.

All implied warranties, including the implied warranties of merchantability and fitness for a particular purpose, are hereby disclaimed and excluded. The within limited warranty is exclusive and in lieu of all other warranties, guarantees, agreements and similar obligations of seller be liable for consequential or incidental damages.