WILLIAM E. WILLIAMS
VALVE CORPORATION

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.

No liability for consequential or incidental damages.

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

Product improvements exceeding the latest environmental standards are constantly being implemented. Recently, we initiated a totally contained bonnet gasket design, which, with our standard stem packing, exceeds most fugitive emission requirements.

Williams' valves are designed, manufactured and tested to meet and exceed all applicable specifications to which they are constructed. Our goal is to produce high quality valves, fully traceable, 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.

All products are completely traceable to chemical, physical and pressure test records. Additional non-destructive testing is offered when specified.

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.

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,

Richard 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
FS800T (Threaded)
FS800SW (Socket Weld)
FS800TXS (Socket Weld x Threaded)
Size range: ¼” to 2”

ANSI Class 1500
FS1500T (Threaded)
FS1500SW (Socket Weld)
FS1500TXS (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”
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
- Butt weld Ends ANSI B16.25
A216 WCB Cast Steel

Globe Valves
(listed by figure number prefix)

ANSI Class 150
152F (Flanged) 152W (Butt Weld)
Size range: 2” to 24”

ANSI Class 300
302F (Flanged) 302W (Butt Weld)
Size range: 2” to 24”

ANSI Class 600
602F (Flanged) 602W (Butt Weld)
Size range: 2” to 16”

ANSI Class 900
902F (Flanged) 902W (Butt Weld)
Size range: 3” to 16”

ANSI Class 1500
1502F (Flanged) 1502W (Butt Weld)
Size range: 2” to 16”

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

A216 WCB Cast Steel

Angle Valves
(listed by figure number prefix)

ANSI Class 150
153F (Flanged) 153W (Butt Weld)
Size range: 2” to 12”

ANSI Class 300
303F (Flanged) 303W (Butt Weld)
Size range: 2” to 12”

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

A216 WCB Cast Steel

Swing Check Valves
(listed by figure number prefix)

ANSI Class 150
151F (Flanged) 151W (Butt Weld)
Size range: 2” to 48”

ANSI Class 300
301F (Flanged) 301W (Butt Weld)
Size range: 2” to 36”

ANSI Class 600
601F (Flanged) 601W (Butt Weld)
Size range: 2” to 36”

ANSI Class 900
901F (Flanged) 901W (Butt Weld)
Size range: 3” to 24”

ANSI Class 1500
1501F (Flanged) 1501W (Butt Weld)
Size range: 2” to 24”

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
- Butt weld Ends ANSI B16.25
A351 CF8M Stainless Steel

Gate Valves
(listed by figure number)

**ANSI Class 150**

**S15F6-316 (Flanged)**
Size range: ¼” to 36”

**ANSI Class 300**

**S30F6-316 (Flanged)**
Size range: ½” to 36”

**ANSI Class 600**

**S60F6-316 (Flanged)**
Size range: 1” to 36”

**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

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
- Angle pattern available

A351 CF8M Stainless Steel

Globe Valves
(listed by figure number)

**ANSI Class 150**

**S15F6-316 (Flanged)**
Size range: 2” to 16”

**ANSI Class 300**

**S30F6-316 (Flanged)**
Size range: 2” to 16”

**ANSI Class 600**

**S60F6-316 (Flanged)**
Size range: 2” to 16”

**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

Features / Options

- Bosses for taps, bypass and drains
- Contained gaskets (teflon or graphite)
- Class 900 and 1500 available
- Suitable for soft seats
- Stop-check optional
- Angle pattern available
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
S25T6316  
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
- S25T6316: 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: ¾” 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 Cover, Flanged End
Size range: 2” to 12”

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

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

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

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
Ball Valves
(listed by figure number)

A216 WCB Cast Steel
316 SS Trim

**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 12”

*Note: For gear operator add suffix code GO

A351 CF8M Stainless Steel
316 SS Trim

**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; CF8/304; 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
A216 WCB Cast Steel, Rising Stem

**API-6D Thru Conduit Expanding Gate Valves**

*listed by figure number prefix*

**ANSI Class 300**

- **39F** (Flanged)
- **39W** (Butt Weld)
- Size range: 2” to 36”

**ANSI Class 600**

- **69F** (Flanged)
- **69W** (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 discs

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
A216 WCB Cast Steel, Pressure Seal Bonnet, Rising Stem
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
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 and adjustable weight
- **PSL-2**- With lever & spring and fusible link
- **CPSP-2**- With pneumatic actuator and fusible link
- **APL-1**- With solenoid (NEMA 7) and fusible link
- **APL-1TS**- With temp. sensor, solenoid and fusible link
- **APL-1HL**- With liquid lever switch, solenoid and fusible link

GOSV-1- With spring loaded diaphragm & pressure reg.
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 and adjustable weight
- **SPSL-6**- With lever & spring and fusible link
- **SCPSL-6**- With pneumatic actuator and fusible link
- **SAPL-6**- With solenoid (NEMA 7) and fusible link
- **SAPL-6TS**- With temp. sensor, solenoid and fusible link
- **SAPL-6HL**- With liquid lever switch, solenoid and fusible link

SGOSV-6- With spring loaded diaphragm & pressure reg.
Size range: 2” to 16”
*300lb RF also available

**Special Products**
- Cryogenic Extensions
- Tilting Disc Check Valves
- Manifold Valves
- Total Actuation Packages
- Non Slam Check Valves
Valve Material Specifications

Pressure Temperature Ratings

(COMPLIES WITH ANSI B16.34 - 1981 - STD CLASS VALVES)

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</table>

NOTES:
(1) PERMISSIBLE, BUT NOT RECOMMENDED FOR PROLONGED USAGE ABOVE 500° F.
(2) NOT TO BE USED OVER 600° F. FLANGED END RATINGS TERMINATE AT 600° F.
(3) NOT TO BE USED OVER 1100° F. FLANGED END RATINGS TERMINATE AT 1100° F.
(4) IPT TO BE USED OVER 650° F.
## Specifications

<table>
<thead>
<tr>
<th>Williams Material</th>
<th>Common Designation</th>
<th>ASTM Casting Specification</th>
<th>Service Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCB</td>
<td>Carbon Steel</td>
<td>ASTM A216 Grade WCB</td>
<td>Non-corrosive applications including water, oil and gases at temperatures between -20°F (-30°C) and +800°F (+425°C)</td>
</tr>
<tr>
<td>LCB</td>
<td>Low Temp Carbon Steel</td>
<td>ASTM A352 Grade LCB</td>
<td>Low temperature applications to -50°F (-46°C). Not for use above +650°F (+340°C).</td>
</tr>
<tr>
<td>LCC</td>
<td>Low Temp Carbon Steel</td>
<td>ASTM A352 Grade LCC</td>
<td>Low temperature applications to -50°F (-46°C). Not for use above +650°F (+340°C).</td>
</tr>
<tr>
<td>LC1</td>
<td>Low Temp Carbon Steel</td>
<td>ASTM A352 Grade LC1</td>
<td>Low temperature applications to -75°F (-59°C). Not for use above +650°F (+340°C).</td>
</tr>
<tr>
<td>LC2</td>
<td>Low Temp Carbon Steel</td>
<td>ASTM A352 Grade LC2</td>
<td>Low temperature applications to -100°F (-73°C). Not for use above +650°F (+340°C).</td>
</tr>
<tr>
<td>LC3</td>
<td>3%/% Nickel Steel</td>
<td>ASTM A352 Grade LC3</td>
<td>Low temperature applications to -150°F (-101°C). Not for use above +650°F (+340°C).</td>
</tr>
<tr>
<td>WC6</td>
<td>1%/Chrome 1%/ Moly Steel</td>
<td>ASTM A217 Grade WC6</td>
<td>Non-corrosive applications including water, oil and gases at temperatures between -20°F (-30°C) and +1100°F (+593°C).</td>
</tr>
<tr>
<td>WC9</td>
<td>2%/Chrome</td>
<td>ASTM A217 Grade C9</td>
<td>Non-corrosive applications including water, oil and gases at temperatures between -20°F (-30°C) and +1100°F (+593°C).</td>
</tr>
<tr>
<td>C5</td>
<td>5%/Chrome 1%/ Moly</td>
<td>ASTM A217 Grade C5</td>
<td>Mild corrosive or erosive applications as well as non-corrosive applications at temperatures between -20°F (-30°C) and +1200°F (+649°F).</td>
</tr>
<tr>
<td>C12</td>
<td>9%/Chrome 1% Moly</td>
<td>ASTM A217 Grade C12</td>
<td>Mild corrosive or erosive applications as well as non-corrosive applications at temperatures between -20°F (-30°C) and +1200°F (+649°F).</td>
</tr>
<tr>
<td>CA6NM</td>
<td>12% Chrome Steel</td>
<td>ASTM A487 Grade CA6NM</td>
<td>Corrosive application at temperatures between -20°F (-30°C) and +900°F (+482°C).</td>
</tr>
<tr>
<td>CA15</td>
<td>12% Chrome</td>
<td>ASTM A217 Grade CA15</td>
<td>Corrosive application at temperatures up to +1300°F (+704°C).</td>
</tr>
<tr>
<td>CF8M</td>
<td>316SS</td>
<td>ASTM A351 Grade CF8M</td>
<td>Corrosive or either extremely low or high temperature non-corrosive services between -450°F (-268°C) and +1200°F (+649°C). Above +800°F (+425°C) specify carbon content of 0.04% or greater.</td>
</tr>
<tr>
<td>CF8C</td>
<td>347SS</td>
<td>ASTM 351 Grade CF8C</td>
<td>Primarily for high temperature, corrosive applications between -450°F (-268°C) and +1200°F (+649°C). Above +1000°F (+540°C) specify carbon content of 0.04% or greater.</td>
</tr>
<tr>
<td>CF8</td>
<td>304SS</td>
<td>ASTM A351 Grade CF8</td>
<td>Corrosive or extremely high temperatures non-corrosive services between -450°F (-268°C) and +1200°F (+649°C). Above +800°F (+425°C) specify carbon content of 0.04% or greater.</td>
</tr>
<tr>
<td>CF3</td>
<td>304L SS</td>
<td>ASTM A351 Grade CF3</td>
<td>Corrosive or non-corrosive services to +800°F (+425°C).</td>
</tr>
<tr>
<td>CF3M</td>
<td>316L SS</td>
<td>ASTM A351 Grade CF3M</td>
<td>Corrosive or non-corrosive services to +800°F (+425°C).</td>
</tr>
<tr>
<td>CN7M</td>
<td>Alloy-20</td>
<td>ASTM A351 Grade CN7M</td>
<td>Good resistance to hot sulfuric acid to +800°F (+425°C).</td>
</tr>
<tr>
<td>M-35</td>
<td>Monel</td>
<td>ASTM 743 Grade M3-35-1</td>
<td>Weldable grade. Good resistance to corrosion by all common organic acids and salt water. Also highly resistant to most alkaline solutions to +750°F (+400°C).</td>
</tr>
<tr>
<td>N-12M</td>
<td>Hastelloy B</td>
<td>ASTM A743 Grade N-12M</td>
<td>Is well suited for handling hydrofluoric acid at all concentrations and temperatures. Good resistance to sulphuric and phosphoric acids to +1200°F (+649°C).</td>
</tr>
<tr>
<td>CW12M</td>
<td>Hastelloy C</td>
<td>ASTM A743 Grade CW-12M</td>
<td>Good resistance to strong oxidation conditions. Good properties at high temperatures. Good resistance to sulphuric and phosphoric acids to +1200°F (+649°C).</td>
</tr>
<tr>
<td>CY-40</td>
<td>Inconel</td>
<td>ASTM A743 Grade CY-40</td>
<td>Very good for high temperature service. Good resistance to strongly corrosive media and atmosphere to +800°F (+425°C).</td>
</tr>
<tr>
<td>B62</td>
<td>Bronze</td>
<td>ASTM B62</td>
<td>Water, oil or gas: up to 400°F. Excellent for brine and seawater service.</td>
</tr>
</tbody>
</table>
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.