

Industrial Valves & Automation



SMITH-COOPER®

SERIES 50M 2-PIECE FULL PORT 1000PSI BALL VALVE

Size Range:1/4" - 3"Body Material:316 Stainless SteelSeat Material:RTFEEnds:ThreadedMax Pressure:1000 CWPMax Temp:450° F

- ANSI/ASME B16.11
- ANSI/ASME B16.34
- Bottom Entry, Blowout Proof Stem Design
- Lockable Lever Handle

SERIES 58 1-PIECE UNI-BODY REDUCED PORT BALL VALVE



Size Range:1/4" - 2"Body Material:316 Stainless SteelSeat Material:PTFEEnds:ThreadedMax Pressure:800 CWPMax Temp:400° F

- ANSI/ASME B16.11
- ANSI/ASME B16.34
- Bottom Entry, Blowout Proof Stem Design
- Lockable Lever Handle

SERIES 58B7 1-PIECE UNI-BODY REDUCED PORT BALL VALVE



Size Range:½" - 2"Body Material:Carbon SteelSeat Material:RTFEEnds:ThreadedMax Pressure:2000 CWPMax Temp:450° F

- ANSI/ASME B16.11
 - ANSI/ASME B16.34
 - ASTM A108
 - NACE MR0175: 2002 Compliant
 - Bottom Entry, Blowout Proof Stem Design
 - Lockable Lever Handle

 TFM^{\otimes} is a registered trademark of Dyneon • Delrin^{\otimes} is a registered trademark of Dupont • Kel-F $^{\otimes}$ is a registered trademark of 3M

2-PIECE FULL PORT 2000PSI SEAL WELD BALL VALVE SERIES 50B

Size	Range:	1⁄4″	to	3″	
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- Body Materials: 316 Stainless Steel, Carbon Steel
- Seat Material: RTFE
- Ends: Threaded
- Max Pressure: 2000 CWP (¼" 2")* 1500 CWP (2½" - 3")*
- Max Temp: 450° F*

- ANSI/ASME B16.11
- ANSI/ASME B16.34
- NACE MR0175: 2002 Compliant
- Bottom Entry, Blowout Proof Stem Design
- Lockable Lever Handle



* Dependent on Size, Body, Seat Material & Valve Design.

2-PIECE FULL PORT 3000PSI SEAL WELD BALL VALVE SERIES 50C

Size Range:	¼″ to 3″
Body Materials:	316 Stainless Steel, Carbon Steel
Seat Materials:	Delrin [®] (NPT), PEEK (SW)
Ends:	Threaded & Socket Weld
Max Pressure:	3000 CWP*
Max Temp:	500° F*

- ANSI/ASME B16.11
- ANSI/ASME B16.34
- NACE MR0175: 2002 Compliant
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Lockable Lever Handle



* Dependent on Size, Body, Seat Material & Valve Design.

2-PIECE FULL PORT 6000PSI SEAL WELD BALL VALVE SERIES 50F

Size	Ranae:	1/4″	to	2″
	IZGIIGC:	/		

Body Materials:316 Stainless Steel,
Carbon SteelSeat Materials:Delrin®Ends:ThreadedMax Pressure:6000 CWP*

Max Temp: 180° F*

- ANSI/ASME B16.11
- ANSI/ASME B16.34
- NACE MR0175: 2002 Compliant
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Lockable Lever Handle



SERIES 10

2-PIECE FULL PORT BRASS BALL VALVE

Size Range:1/4 " - 4"Body Material:Forged BrassSeat Material:PTFEEnds:ThreadedMax Pressure:600 CWP*Max Temp:450° F*

- ANSI/ASME B16.11
- Bottom Entry, Blowout Proof Stem Design
- Lockable Lever Handle

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 3903 ECONOMY 3-PIECE FULL PORT BALL VALVE



Size Range:1/4" - 2"Body Materials:316 Stainless Steel,
Carbon SteelSeat Material:RTFEEnds:Threaded, Socket WeldMax Pressure:1000 CWP*Max Temp:450° F*

- ANSI/ASME B16.11
- ANSI/ASME B16.34
- Bottom Entry, Blowout Proof Stem Design
- Lockable Lever Handle

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 5303 ECONOMY 3-PIECE FULL PORT BALL VALVE



Size Range:	1/4″ - 4 ″
Body Materials:	316 Stainless Steel, Carbon Steel
Seat Materials:	PTFE
Ends:	Threaded, Socket Weld, Butt Weld
Max Pressure:	1000 CWP ¼" - 2"* 600 CWP 2½" - 4"*
Max Temp:	450° F*

- ANSI/ASME B16.11
- ANSI/ASME B16.25
- ANSI/ASME B16.34
- Integral Mounting Pad
- Bottom Entry, Blowout Proof Stem Design
- Lockable Lever Handle

* Dependent on Size, Body, Seat Material & Valve Design.

API 608 3-PIECE STANDARD/FULL PORT BALL VALVE SERIES 80/89

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Size Range:	¹ / ₄ " to 4" (3" Series 89)	٠	ANSI/ASME Class 800;	
Body Materials:	316 Stainless Steel, Carbon Steel, Alloy 20, SMO 254®	•	80 Series up to 2-1⁄2″, 89 Series up to 2″ ANSI/ASME Class 300; 80 Series 3″ & 4″, 89 Series 2-1/2″ & 3″ API 608 Compliant (with Stainless Steel Stem)	2
Seat Materials	PTFE, TFM [®] , RTFE, Nova,	•	ANSI/ASME B16.11	6.0
	Virgin Peek	•	ANSI/ASME B10.25 ANSI/ASME B16.34	
Ends:	Threaded, Socket Weld & Butt Weld	•	NACE MR0175/ISO 15156 Compliant ISO 5211 Integral Mounting Pad Blowout Proof Stem Design	
Max Pressure:	Vacuum to 1970 PSI*	•	Live-Loaded Stem Seal	DI
Max Temp:	-50° to 600° F*	•	Encapsulated Body Bolts & Seals Weldable In-Line Without Disassembly of Ends** Unique Lockable Lever Handle	

* Dependent on Size, Body, Seat Material & Valve Design.

**Dependent on Seat Material.

3-PIECE STANDARD/FULL PORT BALL VALVE SERIES 84/99

Size Range:	¹ / ₂ " to 4" (3" Series 99)	٠	ANSI/ASME Class 600; 84 Series up to 2, 1/2", 00 Series up to 2"	2 Sum
Body Materials:	316 Stainless Steel, Carbon Steel, Alloy 20, Hastelloy C	•	ANSI/ASME Class 300; 84 Series 3" & 4", 99 Series 2-1/2" & 3" ANSI/ASME B16.5	
Seat Materials:	PTFE, TFM [®] , RTFE, Nova, Delrin [®] , UHMWPE, Virgin Peek	• •	ANSI/ASME B16.11 ANSI/ASME B16.25 ANSI/ASME B16.34	
Ends:	Threaded, Socket Weld, Butt Weld & Flanged End Options	•	NACE MR0175: 2002 Compliant (Optional) ISO 5211 Integral Mounting Pad Blowout Proof Stem Design Live-Loaded Stem Seal	
Max Pressure:	Vacuum to 1480 PSI*	٠	Encapsulated Body Bolts & Seals	
Max Temp:	-50° to 600° F*	•	Weldable in line without disassembly of ends** Lockable Lever Handle	

* Dependent on Size, Body, Seat Material & Valve Design.

**Dependent on Seat Material.

CRYOGENIC STANDARD/FULL PORT BALL VALVE SERIES C80/C89 C70/C74

Size Range:	3-Piece: ¼" - 4" (3" C89) Flanged: ½" - 4"	•	
Body Material:	316 Stainless Steel	•	
Seat Materials:	PCTFE (Kel-F®), PTFE, TFM [®] , RTFE, Nova	•	
Ends:	Threaded, Socket Weld, Butt Weld, 150# & 300# Flanged	•	
Max Pressure:	1480 PSI*		
Max Temp:	-400° F*		

• ANSI/ASME B16.5

- ANSI/ASME B16.11
- ANSI/ASME B16.25
- ANSI/ASME B16.34
- BS 6364 Test Specification Compliant
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Encapsulated Body Bolts & Seals
- Unique Lockable Lever Handle



SERIES V84

3-PIECE V-PORT CONTROL VALVE

Port:	15° V, 30° V or 60° V (Special Configurations Available)	• •	ANSI/ASME Class 600 1/4" – 21/2" ANSI/ASME Class 300 3"- 4" ANSI/ASME B16.5
Size Range: Body Materials:	¼″ - 4″ 316 Stainless Steel, Carbon Steel	•	ANSI/ASME B16.11 ANSI/ASME B16.25 ANSI/ASME B16.34
Seat Materials:	PTFE, TFM [®] , RTFE, Nova, Delrin [®] , Virgin PEEK	•	Live-Loaded Stem Seal Encapsulated Body Bolts & Seals
Ends:	Threaded, Socket Weld, Butt Weld & Flanged End Options	• •	Weldable in-line without disassembly of ends** 15°, 30° & 60° "V" Balls (Special Configurations Optional) "No Play" Coupler
Max Pressure: Max Temp:	Vacuum to 1480 PSI* -50° to 600° F*		

* Dependent on Size, Body, Seat Material & Valve Design.

**Dependent on Seat Material.

SERIES FS FIRE SAFE STANDARD/FULL PORT BALL VALVES

9	Size Range:	3-Piece: ¼" - 4" Flanged: ½" - 12"	•	Fire Safe API 607 4th Edition (FS84/FS99/ FS50/FS54)
	Body Materials Carbon Steel, telloy C	: 316 Stainless Steel, Alloy 20, Has-	•	Fire Sate API 607 6Th Edition (FS80/FS89/ FS70/FS74) ISO 5211 Integral Mounting Pad Blowout Proof Stem Design
9	Seat Materials:	PTFE, TFM [®] , RTFE, Nova	Live-Loaded Stem Seal	Live-Loaded Stem Seal
	Ends:	Threaded, Socket Weld, Butt Weld & 150#, 300#, 600# Flanged	•	Lockable Lever Handle
	Max Pressure:	1480 PSI*		
	Max Temp:	-50° to 550° F*		

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES W84/W99 3 PIECE STEAM AND THERMAL FLUID BALL VALVES

Size Range:	3-Piece: $\frac{1}{2}$ " - 4" (3" W99)	•	ANSI/ASME Class 600 1/4" - 21/2" W84 Series
Body Materials:	316 Stainless Steel, Carbon Steel	•	(¼″-2″ W99) Class 300 3″- 4″ 84 Series (2½″-3″ W99) ANSI/ASME B16.11
Seat Materials:	Nova, Virgin Peek,	•	ANSI/ASME B16.25
Ends:	Threaded, Socket Weld & Butt Weld	•	ANSI/ASME B16.34 ISO 5211 Integral Mounting Pad Blowout Proof Stem Design
Max Pressure:	500 PSI - Maximum Working Steam Pressure*	•	Live-Loaded Stem Seal Encapsulated Body Bolts & Graphite Seals
Max Temp:	600° F for Thermal Fluids*	•	Weldable in-line without disassembly of ends** Lockable Lever Handle

* Dependent on Size, Body, Seat Material & Valve Design.

**Dependent on Seat Material.

3-PIECE CHLORINE STANDARD/FULL PORT BALL VALVE SERIES C

Size Range:	3-Piece: 1/4 " - 4" (3" CL99)	ANSI/ASME B16.5
Body Material:	Carbon Steel	 ANSI/ASME B16.11 ANSI/ASME B16.25
Seat Materials:	PTFE, TFM [®] , RTFE, Nova, Super Nova, Delrin [®] , Virgin PEEK	 ANSI/ASME B16.34 ISO 5211 Integral Mounting Pad Blowout Proof Stem Design
Ends:	Threaded, Socket Weld, Butt Weld, 150#, 300#, 600#, Flanged	 Live-Loaded Stem Seal Encapsulated Body Bolts & Seals Weldable in-line without disassembly of ends* Degreased and Sealed in a Bag for
Max Pressure:	1480 PSI*	Chlorine Applications
Max Temp:	550° F*	Tank Pad Made From Solid BarLockable Lever Handle

* Dependent on Size, Body, Seat Material & Valve Design.

**Dependent on Seat Material.

3-PIECE HIGH PRESSURE BALL VALVE STANDARD PORT SERIES 60

Size Range:	¼″ - 2 ″
Body Materials:	316 Stainless Steel, Carbon Steel,
Seat Materials:	Delrin [®] , PEEK
Ends:	Threaded, Socket Weld, Butt Weld Sch. 160 & Flanged End Options
Max Pressure:	Vacuum to 6000 PSI*
Max Temp:	-50° to 600° F*

ANSI/ASME Class 2500

- ANSI/ASME B16.34
- NACE MR0175: 2002 Compliant (Optional)
- Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Encapsulated Body Bolts & Seals
- Lockable Lever Handle



* Dependent on Size, Body, Seat Material & Valve Design.

METAL SEATED STANDARD/FULL PORT BALL VALVES SERIES M80/89 M70/74

Size Range: 3-Pieco Flange	e: ¼″ to 4″ (3″ M89) ed: ½″ to 4″ (Larger Szes POA)
Body Materials:	316 Stainless Steel, Alloy 20, Carbon Steel
Seat Materials:	Stainless Steel Stellite 6 coated
Ends:	Threaded, Socket Weld, Butt Weld, 150#, 300# Flanged
Max Pressure:	1970 PSI Max
Max Temp:	1000° F Max

- ANSI/ASME FCI 70-2, Class V
- ANSI/ASME B16.5
- ANSI/ASME B16.11
- ANSI/ASME B16.25
- ANSI/ASME B16.34
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Integrated Fugitive Emission Ports (Optional)
- Unique Lockable Lever Handle



* Dependent on Size, Body, Seat Material & Valve Design.

SERIES D84 3-PIECE STANDARD PORT DIVERTER BALL VALVE

	Size Range:	½″ - 4 ″	•
•	Body Materials:	316 Stainless Steel, Carbon Steel	•
	Seat Materials:	PTFE, TFM [®] , RTFE, Nova, Delrin [®] , PEEK	•
	Ends: Butt Weld	Threaded, Socket Weld &	•
	Max Pressure:	1480 PSI*	
	Max Temp:	600° F*	

- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Encapsulated Body Bolts & Seals
- Weldable in-line without disassembly of ends**
- Bottom or Side Port Entry
- Lockable Lever Handle

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 70 FLANGED 2-PIECE FULL PORT BALL VALVE API 608

Size Range: ½" - 4"	API 608 Compliant (with Stainless Steel Stem)
Body Materials: 316 Stainless Steel, Carbon Steel, Alloy 20	 ANSI/ASME B16.34 ANSI/ASME B16.5 ANSI/ASME B16.10
Seat Materials: PTFE, TFM [®] , RTFE, Nova, Super Nova, Virgin PEEK	 NACE MR0175/ISO 15156 Compliant Blowout Proof Stem Design
Ends: 150#, 300# Flanged	 Live-Loaded Stem Seal ISO 5211 Integral Mounting Pad
Max Pressure: 740 PSI*	Unique Lockable Lever Handle
Max Temp: 600° F*	 Integrated Fugitive Emission Ports (Optional)

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 74 FLANGED 1-PIECE STANDARD PORT BALL VALVE



Size Range:	1″ - 4″	
Body Materials:	316 Stainless Ste Carbon Steel, All	el, oy 20

Seat Materials: PTFE, TFM[®], RTFE, Nova, Super Nova, Virgin PEEK Ends: 150#, 300# Flanged

Max Pressure: 740 PSI* Max Temp: 600° F* API 608 Compliant (with Stainless Steel Stem)

API 608

- ANSI/ASME B16.34
- ANSI/ASME B16.5
- ANSI/ASME B16.10
- NACE MR0175/ISO 15156 Compliant
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Unique Lockable Lever Handle
- Integrated Fugitive Emission Ports (Optional)



FLANGED 2-PIECE FULL PORT / 1-PIECE STANDARD PORT BALL VALVE SERIES 50/54

54 Jeries: 1 72 • 0
Body Materials: 316 Stainless Steel, Carbon Steel
Seat Materials: TFM [®] , RTFE
Ends: 150# Flanged
Max Pressure: 285PSI*
Max Temp: 500° F*

- ANSI/ASME B16.34
- ANSI/ASME B16.5
- ANSI/ASME B16.10
- NACE MR0175: 2002 Compliant
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Lockable Lever Handle



* Dependent on Size, Body, Seat Material & Valve Design.

BUTTERFLY VALVE

- Size Range: 2"-48"
- **Body Materials: Ductile Iron**
- Disc Materials: 316 Stainless Steel
- Seat Materials: Buna-N, EPDM
- **Connections:** Lug or Wafer
- Max Pressure: 2" 12" rated to 200 PSI* 14" - 48" rated to 150 PSI*
- Max Temp: 275° F*

- API 609 Compliant
- MSS SP-67 Compliant
- MSS SP-25 Markings
- ISO 5211 Integral Mounting Pad
- Pinless Disc & Stem Design
- One Piece, Epoxy Painted Wafer & Lug Body
- Bidirectional
 - Lug is Suitable for Dead-End Service



2-PIECE STANDARD PORT 2000PSI BALL VALVE SERIES 54-

Size Range:	¼4″ - 2 ″
Body Materials:	316 Stainless Steel, Carbon Steel
Seat Materials:	RTFE, Nova

- Ends: Threaded
- Max Pressure: 2000 CWP ¼" 1"* 1500 CWP 1¼" - 2"*
- Max Temp: 500° F*

- ANSI/ASME B16.11
- ANSI/ASME B16.34
- Bottom Entry, Blowout Proof Stem Design
- Lockable Lever Handle





SERIES N66 3-PIECE ECONOMY 3-PIECE FULL PORT TUBE BALL VALVE

	Size Range:	1⁄2″ - 4 ″	٠	ISO 5211 Integral Mounting Pad
	Body Material: Seat Materials:	316 Stainless Steel TFM [®] , PTFE Cavity Fillers	• • •	Blowout Proot Stem Design Live-Loaded Stem Seal Lockable Lever Handle
979	Ends:	Clamp, Butt Weld Tube Extended, Butt Weld Tube Short		
	Max Pressure:	1000 CWP ½" - 2"* 600 CWP 2 ½" - 4"*		
	Max Temp:	500° F*		

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 66 3-PIECE HIGH PURITY FULL PORT TUBE BALL VALVE

Size Range:	½ ″ - 4″	٠	ISO 5211 Integral Mounting Pad
Body Material: Seat Materials:	316L Stainless Steel PTFE, TFM [®] , RTFE, PTFE Cavity Fillers	•	Blowout Proof Stem Design Live-Loaded Stem Seal Encapsulated Body Bolts & Seals Lockable Lever Handle
Ends:	Clamp, Butt Weld Tube Extended, Butt Weld Tube Short		
Max Pressure:	1480 PSI*		
Max Temp:	500° F*		

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 88 3-PIECE HIGH PURITY BPE COMPLIANT FULL PORT TUBE BALL VALVE

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¹ / ₄ " - 4"
316L Stainless Steel
PTFE, TFM [®] , RTFE, PTFE Cavity
Clamp, Butt Weld Tube Extended, Butt Weld Tube Short
1480 PSI*
500° F*

- ASME/BPE 2009 Compliant
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Encapsulated Body Bolts & Seals
- All Wetted Parts Polished to 14-18 Ra
- Lockable Lever Handle
- 8-10 Ra Electropolish (Optional)
- Purge Ports (Optional)

3 & 4 WAY SANITARY FULL PORT TUBE BALL VALVE	
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1/2" to 2", 3" Size Range:

Body Material: 316 Stainless Steel

Seat Materials: TFM[®], TFM[®] Cavity Fillers

Ends: Clamp

- Max Pressure: 1000 CWP 1/2" 2"* 800 CWP 3"*
- -50° to 500° F* Max Temp:

- **4 Seat Design**
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- **12 Different Flow Configurations** .
- "L", or "T" Port Solid Ball .
- Ball & Ends Polished to 20 Ra
- Lockable Lever Handle



* Dependent on Size, Body, Seat Material & Valve Design.

3-WAY AND 4-WAY FULL PORT BALL VALVE

Size Range:	¼″ - 4 ″
Body Material:	316 Stainless Steel
Seat Materials:	TFM [®] , TFM [®] Cavity Filler
Ends:	Threaded, Socket Weld, Butt Weld, 150#, 300# Flanged
Max Pressure:	600 CWP*
Max Temp:	500° F*

- ANSI/ASME B16.5
- ANSI/ASME B16.11
- ANSI/ASME B16.25 •
- 4 Seat Design
- ISO 5211 Direct Mount Pad •
- **Blowout Proof Stem Design** •
- Live-Loaded Stem Seal •
- 14 Different Flow Configurations • "L", "T" or "LL" Port Solid Ball
- Lockable Lever Handle



* Dependent on Size, Body, Seat Material & Valve Design.

3-WAY FULL PORT BALL VALVE

- Size Range: 1/4" - 2"
- **Body Material: 316 Stainless Steel** Seat Materials: PTFE, TFM® Threaded Ends: Max Pressure: 1000 CWP* Max Temp: 500° F*
- ANSI/ASME B16.11
- **4 Seat Design**
- ISO 5211 Direct Mount Pad •
- **Blowout Proof Stem Design**
- . Live-Loaded Stem Seal
- **10 Different Flow Configurations**
- "L", or "T" Port Solid Ball
- Lockable Lever Handle



SERIES D88 3-PIECE HIGH PURITY FULL PORT TUBE DIVERTER BALL VALVE

Size Range:	½″ - 4 ″	٠
Body Material:	316L Stainless Steel	•
Seat Materials:	PTFE, TFM [®] , RTFE, PTFE Cavity Filler	•
Ends:	Clamp, Butt Weld Tube Extended, Butt Weld Tube Short	•
Max Pressure:	1480 PSI*	
Max Temp:	500° F*	

ISO 5211 Integral Mounting Pad

- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Encapsulated Body Bolts & Seals
- Bottom or Side Port Entry
- All Wetted Parts Polished to 14-18 Ra
- Lockable Lever Handle
- Purge Ports (Optional)

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 86 3-PIECE INSTRUMENTATION BALL VALVE

Size Range:	1/4″ - 1″	٠	ISO 5211 Integral Mounting Pad
Body Material:	316L Stainless Steel	•	Blowout Proof Stem Design Live-Loaded Stem Seal
Seat Materials:	PTFE, TFM [®] , RTFE,	٠	Encapsulated Body Bolts & Seals
	PTFE Cavity Filler	٠	Lockable Lever Handle
Ends:	Instrumentation, Threaded	•	Purge Ports (Optional)
Max Pressure:	1480 PSI*		
Max Temp:	-50° to 500° F*		

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES FB Flush bottom tank standard/full port ball valves

Size Range: ¼" - 4" (3" 99/89 Series)

Body Materials: 316L Stainless Steel

Ends:

Threaded, Socket Weld & Butt Weld, Clamp, Extended Butt Weld, 150#, 300# Flanged

Max Pressure: 1480 PSI*

Max Temp: -50° to 600° F*

- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Encapsulated Body Bolts & Seals
- Weldable in-line without disassembly of ends**
- Tank Pad Made From Solid Bar
- Lockable Lever Handle

* Dependent on Size, Body, Seat Material & Valve Design.

**Dependent on Seat Material.

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200 PSI GATE VALVE

SERIES 302

Size Range: ¼" - 3" Body Material: 316 Stainless Steel Ends: Threaded, Socket Weld Max Pressure: 200 CWP* Max Temperature: 350° F*

- Hydrostatic Shell Test at 300 PSI
- Inside Screw
- Threaded in Bonnet
- Non-Rising Stem
- Solid Wedge Disc
- Integral Seat



* Dependent on Size, Body, Seat Material & Valve Design.

200 PSI GLOBE VALVE SERI

Size Range:½" - 2"Body Material:316 Stainless SteelEnds:Threaded, Socket WeldMax Pressure:200 CWP*Max Temp:350° F*

- Hydrostatic Shell Test at 300 PSI
- Inside Screw
- Threaded in Bonnet
- Non-Rising Stem



<u>ES 402</u>

* Dependent on Size, Body, Seat Material & Valve Design.

200 PSI SWING CHECK VALVE

Size Range: ¼" - 3" Body Material: 316 Stainless Steel Ends: Threaded, Socket Weld Max Pressure: 200 CWP* Max Temperature: 350° F*

- Hydrostatic Shell Test at 300 PSI
- Threaded in Cap



SERIES 202

* Dependent on Size, Body, Seat Material & Valve Design.

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CLASS 800 FORGED GATE VALVE

	Size Range: Body Materials: Trim Material(s): Forged Steel: Trim Seat: Disc: Back Seat: Stem: Forged Stainless Seat: Disc: Back Seat: Stem: Gasket Material(s Forged Stainless Forged Steel: Ends: Max Pressure:	1/4" - 2" Forged Stainless Steel (316L), Forged Steel 1 #8 A276-410 + H/F STL A276-410 A105 A276-410 Steel: Trim #12 A276 316 + STL A276 316 A182-F316 A276 316): Steel: 316 + Graphite 304 + Graphite Threaded, Socket Weld 1975 PSI*		ANSI/ASME Class 800 ANSI/ASME B16.11 ANSI/ASME B1.20.1 API 598 API 602 NACE MR0175: 2002 Compliant Bolted Bonnet Rising Stem
	Max Temp:	850° F*	* D(enendent on Size Body Seat Material & Valve Design
SERIES 4	.4	CLASS 800 FORGED GL	.OBE	VALVE
	Size Range: Body Materials: Trim Material(s): Forged Steel: Trim Seat: Disc: Back Seat: Stem: Forged Stainless Seat: Disc: Back Seat: Stem: Gasket Material(s Forged Stainless Forged Steel: Ends: Max Pressure:	1/4" - 2" Forged Stainless Steel (316L), Forged Steel 1 #8 A105 + H/F STL A276-410 A105 A276-410 Steel: Trim #12 A182 F316 + STL A276 316 A182-F316 A276 316): Steel: 316 + Graphite 304 + Graphite Threaded, Socket Weld 1975 PSI*	* Dr	ANSI/ASME Class 800 ANSI/ASME B16.11 ANSI/ASME B1.20.1 API 598 API 602 NACE MR0175: 2002 Compliant Bolted Bonnet Rising Stem
	Max Temp:	850° F*	* De	ependent on Size, Body, Seat Material & Valve Design.

SERIES 24, 24-SC CLASS 800 FORGED PISTON CHECK & SWING CHECK VALVES



Size Range:

1⁄4″ - **2″**

Body Materials	: Forged Stainless Steel (316L), Forged Steel	•	ANSI/ASME BI ANSI/ASME BI
Trim Material(s) Forged Steel: Tri Seat: Disc: Forged Stainless Seat: Disc:	: m #8 A105 + H/F STL A276-410 Steel: Trim #12 A182 F316 + STL A276 316	• • •	API 598 API 602 NACE MR0175 Bolted Bonnet
Gasket Material(s): Forged Stainless Steel: 316 + Graphite Forged Steel: 304 + Graphite			
Ends:	Threaded, Socket Weld		
Max Pressure:	1975 PSI*		
Max Temp:	850° F*		

- ANSI/ASME Class 800 •
- 6.11
- .20.1
- 5: 2002 Compliant

FLANGED GATE VALVE

Jize Kulige. 72 - 24	ANJI/AJML DIO.J	
Body Materials: 316 Stainless Steel, Carbon Steel Trim Material(s): Stainless Steel: Trim #10 Seat: A351 CF8M Disc: A351 CF8M Back Seat: A351 CF8M Stem: A182 F316 Cast Steel: Trim #8 Seat: A105 + H/F STL Disc: WCB + H/F 410 Back Seat: A276-410 Stem: A182-F6a Gasket Material(s): Stainless Steel: 316 + Graphite Cast Steel: 304 + Graphite	 ANSI/ASME B16.10 ANSI/ASME B16.34 API 598 API 600 (Cast Steel) API 603 (Stainless Steel) NACE MR0175: 2002 Compliant (Cast Steel Only) Outside Screw and Yoke Bolted Bonnet Rising Stem and Non-Rising Handwheel Flexible Wedge, Fully Guided Integral Seat 	
Ends: 150#, 300#, 600# Flanged		
Max Pressure: 1480 PSI*		
Max Temp: 1000° F*	* Dependent on Size, Body, Seat Material & Valve Design	n.

FLANGED GLOBE VALVE

Size Range: Body Materials: Trim Material(s): Stainless Steel: Tr Disc: Back Seat: Stem: Cast Steel: Trim # Seat: Disc: Back Seat: Stem: Gasket Material(s Stainless Steel: Cast Steel: Ends: Max Pressure:	<pre>1/2" to 16" (12" 45614) 316 Stainless Steel, Carbon Steel im #10</pre>	 ANSI/ASME B16.5 ANSI/ASME B16.10 ANSI/ASME B16.34 API 598 NACE MR0175: 2002 Compliant (Cast Steel Only) Outside Screw and Yoke Yoke Integrated with Bonnet Bolted Bonnet Rising Stem and Non-Rising Handwheel Loose Disc Welded Seat 		
Max Temp:	1000° F*	* Dependent on Size, Body, Seat Material & Valve Desi	gn	
ELANGED SWING CHECK VALVE SERIES 25				

FLANGED SWING CHECK VALV

Body Materials: 316 Stainless Steel, Carbon Steel Trim Material(s): Stainless Steel: Trim #10 A351 CF8M Seat: Disc: A351 CF8M Cast Steel: Trim #8 A105 + H/F STL Seat: Disc: A105 + H/F 410 (2"-14") WCB + H/F 410 (16" & Larger) Gasket Material(s): **Stainless Steel:** 316 + Graphite Cast Steel: 304 + Graphite Ends: 150#, 300#, 600# Flanged Max Pressure: 1480 PSI*

1000° F*

1/2" to 24"

Size Range:

Max Temp:

- ANSI/ASME B16.5
 ANSI/ASME B16.10
- ANSI/ASME B16.34
 - API 598
 - NACE MR0175: 2002 Compliant (Cast Steel Only)
 - Swing Type
- Bolted Cover
 - Integral Seat

SERIES 45

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 11 2-PIECE FULL PORT DIRECT MOUNT BALL VALVE



Size Range:½" - 2"Body Material:316 Stainless SteelSeat Material:TFM®Ends:ThreadeMax Pressure:1000 CWP - ¼" - 2"*Max Temp:500° F*

- ANSI/ASME B16.11
- ANSI/ASME B16.34
- ISO 5211 Direct Mount Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal

ANSI/ASME B16.11 ANSI/ASME B16.34 ISO 5211 Direct Mount Pad

Patented System Allows Adjustment of Stem Packing Nut with Actuator in Place

(U.S. Patent No. 6,446935 B1) Blowout Proof Stem Design Live-Loaded Stem Seal Low Profile, Space Saving,

Dependable Automated Assemblies

Patented System Allows Adjustment of Stem Packing Nut with Actuator in Place

(U.S. Patent No. 6,446935 B1) Blowout Proof Stem Design Live-Loaded Stem Seal Low Profile, Space Saving,

Dependable Automated Assemblies

Lockable Lever Handle

Lockable Lever Handle

ANSI/ASME B16.11 ANSI/ASME B16.25 ANSI/ASME B16.34 ISO 5211 Direct Mount Pad

 Low Profile, Space Saving, Dependable Automated Assemblies

Pictured with SPNII Actuator

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 12 DIR-ACTTM 2-PIECE FULL PORT DIRECT MOUNT BALL VALVE



Size Range:	¼″ - 2 ″
Body Materials:	316 Stainless Steel, Carbon Steel
Seat Material:	TFM®
Ends:	Threaded
Max Pressure:	1500 CWP*
Max Temp:	500° F*

Pictured with SPNII Actuator

* Dependent on Size, Body, Seat Material & Valve Design.

SERIES 13 DIR-ACT^{IM} 3-PIECE FULL PORT DIRECT MOUNT BALL VALVE



Size Range:	¼″ - 4 ″	•
Material:	316 Stainless Steel	•
Seat Materials:	TFM [®] , RTFE	•
Ends:	Threaded, Socket Weld, Butt Weld	•
Max Pressure:	1000 CWP ¼" - 2"* 600 CWP 2½" - 4"*	•
Max Temp:	450° F*	•

Pictured with SPNII Actuator

* Dependent on Size, Body, Seat Material & Valve Design.

GEAR OPERATOR

- Nine Sizes
- From 1,500 35,400 In/ lb.
- ISO 5211 Bolt Circle
- Cast Iron Body
- Visual Position Indicator



PNEUMATIC ACTUATOR

- Traditional Two-piston rack and pinion design
- Available in Double Acting and Spring Return configurations
- Anode Hardening & Epoxy Coated Body and Epoxy Coated End Caps, Optional Nickel Infused Coating for Sanitary Applications.
- Standard Temperature Range with Buna O-Rings: -4°F to 180°F
- EPDM Kits for Temperatures from -40°F to 300°F
- Industry Standard ISO 5211 drilling and NAMUR patterns
- Bi-Directional Travel Stops for ±5° adjustment for precise control
- Pinion is specially designed with inserts that allows for Direct Mounting capabilities to Butterfly Valves that have Square, Double D, or Keyed shaft designs
- Adapter plates available, allows for mounting to different industry standard bolt circles

4 PISTON PNEUMATIC ACTUATOR SERIES 4X4

- Unique Four-piston rack and pinion design
- Anodized Interior and Exterior aluminum body with Epoxy Coated End Caps
- Industry Standard ISO 5211 drilling and NAMUR patterns
- Multi-Function Visual Indicator can be used for Three-Way indication
- Bi-Directional Travel Stops for ±5° adjustment for precise control
- Available in Double Acting and Spring Return configurations
- Nested spring sets, with appropriate centering rings on piston face and end caps
- Four Pistons allow for shorter travel and faster response times
- Reduced size means less air consumption, reducing costs with quicker response
- Generates more torque for reduced cost, size and air consumption
- Pinion is supported by four pistons; as a result, piston side load is minimized
- Rugged powder coated aluminum enclosure
- UL / CE rated enclosure
- UL / CSA / CE rated switch elements
- NEMA 4 / 4X and NEMA 7/9 enclosures
- Shatterproof dome
- Various NAMUR brackets available
- Cams and bearings on shaft are splined to allow quick adjustment and protect against the effects of vibration
- Mechanical or proximity switch elements available
- Printed circuit board allows for quick, safe and easy wiring
- Solenoid terminations inside enclosure eliminates extra cost

SOLENOIDS

LIMIT SWITCH

- Aluminum Body
- NBR Seats
- Manual Override
- High Flow: 1.8 CV
- 1/2" Conduit Connection to Coil
- 1/4" Port Size
- Changeable between Double Acting and Spring Return
- Coils are rated by CSA / UL
- Same Body accepts NEMA 4, NEMA 7, and ATEX Coils
- Voltage Options Available Upon Request









SERIES SPN



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Should any failure to conform to this warranty be discovered within the Warranty Period (defined below) and written notice of such nonconformity is provided to Supplier promptly after such discovery and within the Warranty Period, upon return of the defective product to Supplier in accordance with the Supplier's instructions and the reasonable determination by Supplier that the product (a) does not conform to the warranty and (b) has been stored, installed, used, maintained and operated in accordance with recognized engineering and piping practices, industry standards and the installation and operating manuals supplied by Supplier, Supplier will correct such defects by suitable repair or replacement of the product at Supplier's own expense or refund the portion of the price applicable to the nonconforming portion of the product (which alternative shall be at the sole discretion of Supplier). If any portion of the product so replaced fails to conform to the foregoing warranty, and written notice of such nonconformity is provided to Supplier promptly after discovery and within the original Warranty Period applicable to such product or 30 days from completion of such repair or replacement, whichever is later, Supplier will repair or replace such nonconforming product. The original Warranty Period shall not otherwise be extended.

The "Warranty Period" shall mean a period of five years from the date of delivery to its initial purchaser; provided however, with respect to Sharpe® Valves products, the "Warranty Period" shall mean a period that is the shorter of (i) twenty-four (24) months from the date of delivery to its initial purchaser or (ii) twelve (12) months after installation. In the event that Supplier elects to replace or repair the defective product. Supplier shall pay up to \$50 per defective product for total cost of installation, in addition to repairing or replacing such product in accordance with the terms contained herein. In the event of multiple claims, such payment shall be no greater than \$1,000 for each installation project. Except as set forth in the foregoing sentence, Supplier shall not be responsible for the cost of providing working access to the nonconforming products, including disassembly and re-assembly of non-Supplier supplied equipment, or for transportation to or from any repair facility, all of which shall be at the initial purchaser's risk and expense.

This warranty applies only during normal, intended and proper use that meets the above referenced conditions of storage, installation, usage, maintenance and operation and is absolutely void if the product has been damaged after purchase, or if it has been repaired (except if such repair was expressly authorized by Supplier and performed by Supplier), misused, altered or modified in any manner whatsoever. Without limiting the generality of the foregoing, this warranty is void if any portion of the product, including without limitation, any component, gasket, housing or bolt, has been misused, modified, altered, repaired (except if such repair was expressly authorized by Supplier), remanufactured or replaced (except if such replacement was expressly authorized by Supplier) in any manner by the initial purchaser, customer, user of the product or third party. COOPLOKTM Grooved products must be used with Smith Cooper International (SCI) branded bolts, gaskets and housings for this warranty to be valid. Rubber gaskets for Smith Cooper International (SCI) Grooved products must be stored or installed in an environment which preserves their elasticity for full functionality for the warranty to be valid. Supplier does not warrant or cover damages arising from a disaster such as a fire, flood, wind, earthquake, or lightning. The warranty set forth herein also does not cover normal and customary wear and tear. The limitations contained herein on the validity of the warranty shall govern not only the express warranted only to the extent of the manufacturer's warranty which, contrary to the terms herein, is deemed or implied by law to be in effect. Products supplied by Supplier but manufactured by others are warranted only to the extent of the manufacturer's warranty, and only the remedies, if any, provided by the manufacturer will be allowed.

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