

# SHARPE®

## Industrial Valves & Automation



# SMITH-COOPER®

INTERNATIONAL

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



**Size Range:** ¼" - 3"  
**Body Material:** 316 Stainless Steel  
**Seat Material:** RTFE  
**Ends:** Threaded  
**Max Pressure:** 1000 CWP  
**Max 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:** ¼" - 2"  
**Body Material:** 316 Stainless Steel  
**Seat Material:** PTFE  
**Ends:** Threaded  
**Max Pressure:** 800 CWP  
**Max 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:** ¼" - 2"  
**Body Material:** Carbon Steel  
**Seat Material:** RTFE  
**Ends:** Threaded  
**Max Pressure:** 2000 CWP  
**Max 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

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

**Size Range:** ¼" to 3"  
**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 Range:** ¼" to 2"  
**Body Materials:** 316 Stainless Steel,  
Carbon Steel  
**Seat Materials:** Delrin®  
**Ends:** Threaded  
**Max 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



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

## SERIES 10

### 2-PIECE FULL PORT BRASS BALL VALVE

**Size Range:** 1/4" - 4"  
**Body Material:** Forged Brass  
**Seat Material:** PTFE  
**Ends:** Threaded  
**Max 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 Steel  
**Seat Material:** RTFE  
**Ends:** Threaded, Socket Weld  
**Max 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 1/4" - 2"\*  
600 CWP 2 1/2" - 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.

TFM® is a registered trademark of Dyneon • Delrin® is a registered trademark of Dupont • Kel-F® is a registered trademark of 3M

**Size Range:** 1/4" to 4" (3" Series 89)  
**Body Materials:** 316 Stainless Steel, Carbon Steel, Alloy 20, SMO 254®  
**Seat Materials:** PTFE, TFM®, RTFE, Nova, Super Nova, Delrin®, Virgin Peek  
**Ends:** Threaded, Socket Weld & Butt Weld  
**Max Pressure:** Vacuum to 1970 PSI\*  
**Max Temp:** -50° to 600° F\*

- ANSI/ASME Class 800; 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)
- ANSI/ASME B16.11
- ANSI/ASME B16.25
- ANSI/ASME B16.34
- NACE MR0175/ISO 15156 Compliant
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- 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)  
**Body Materials:** 316 Stainless Steel, Carbon Steel, Alloy 20, Hastelloy C  
**Seat Materials:** PTFE, TFM®, RTFE, Nova, Delrin®, UHMWPE, Virgin Peek  
**Ends:** Threaded, Socket Weld, Butt Weld & Flanged End Options  
**Max Pressure:** Vacuum to 1480 PSI\*  
**Max Temp:** -50° to 600° F\*

- ANSI/ASME Class 600; 84 Series up to 2-1/2", 99 Series up to 2"
- ANSI/ASME Class 300; 84 Series 3" & 4", 99 Series 2-1/2" & 3"
- ANSI/ASME B16.5
- ANSI/ASME B16.11
- ANSI/ASME B16.25
- ANSI/ASME B16.34
- NACE MR0175: 2002 Compliant (Optional)
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Encapsulated Body Bolts & Seals
- 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: 1/4" - 4" (3" C89)  
 Flanged: 1/2" - 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



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

TFM® is a registered trademark of Dyneon • Delrin® is a registered trademark of Dupont • Kel-F® is a registered trademark of 3M

## SERIES V84

## 3-PIECE V-PORT CONTROL VALVE



**Port:** 15° V, 30° V or 60° V  
(Special Configurations Available)

**Size Range:** 1/4" - 4"

**Body Materials:** 316 Stainless Steel,  
Carbon Steel

**Seat Materials:** PTFE, TFM®, RTFE, Nova,  
Delrin®, Virgin PEEK

**Ends:** Threaded, Socket Weld,  
Butt Weld &  
Flanged End Options

**Max Pressure:** Vacuum to 1480 PSI\*

**Max Temp:** -50° to 600° F\*

- ANSI/ASME Class 600 1/4" - 2 1/2"
- ANSI/ASME Class 300 3" - 4"
- ANSI/ASME B16.5
- ANSI/ASME B16.11
- ANSI/ASME B16.25
- ANSI/ASME B16.34
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Encapsulated Body Bolts & Seals
- Weldable in-line without disassembly of ends\*\*
- 15°, 30° & 60° "V" Balls (Special Configurations Optional)
- "No Play" Coupler

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

\*\*Dependent on Seat Material.

## SERIES FS

## FIRE SAFE STANDARD/FULL PORT BALL VALVES



**Size Range:** 3-Piece: 1/4" - 4"  
Flanged: 1/2" - 12"

**Body Materials:** 316 Stainless Steel,  
Carbon Steel, Alloy 20, Hastelloy C

**Seat Materials:** PTFE, TFM®, RTFE, Nova

**Ends:** Threaded, Socket Weld,  
Butt Weld &  
150#, 300#, 600# Flanged

**Max Pressure:** 1480 PSI\*

**Max Temp:** -50° to 550° F\*

- Fire Safe API 607 4th Edition (FS84/FS99/FS50/FS54)
- Fire Safe API 607 6th Edition (FS80/FS89/FS70/FS74)
- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Lockable Lever Handle

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

## SERIES W84/ W99

## 3 PIECE STEAM AND THERMAL FLUID BALL VALVES



**Size Range:** 3-Piece: 1/2" - 4" (3" W99)

**Body Materials:** 316 Stainless Steel,  
Carbon Steel

**Seat Materials:** Nova, Virgin Peek,

**Ends:** Threaded, Socket Weld &  
Butt Weld

**Max Pressure:** 500 PSI - Maximum  
Working Steam Pressure\*

**Max Temp:** 600° F for Thermal Fluids\*

- ANSI/ASME Class 600 1/4" - 2 1/2" W84 Series (1/4"-2" W99)
- Class 300 3" - 4" 84 Series (2 1/2"-3" W99)
- 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
- Encapsulated Body Bolts & Graphite Seals
- Weldable in-line without disassembly of ends\*\*
- Lockable Lever Handle

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

\*\*Dependent on Seat Material.

**Size Range:** 3-Piece: ¼" - 4" (3" CL99)

**Body Material:** Carbon Steel

**Seat Materials:** PTFE, TFM®, RTFE, Nova, Super Nova, Delrin®, Virgin PEEK

**Ends:** Threaded, Socket Weld, Butt Weld, 150#, 300#, 600#, Flanged

**Max Pressure:** 1480 PSI\*

**Max Temp:** 550° F\*

- 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
- Encapsulated Body Bolts & Seals
- Weldable in-line without disassembly of ends\*\*
- Degreased and Sealed in a Bag for Chlorine Applications
- Tank Pad Made From Solid Bar
- Lockable 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-Piece: ¼" to 4" (3" M89)  
 Flanged: ½" to 4" (Larger Sizes 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.

TFM® is a registered trademark of Dyneon • Delrin® is a registered trademark of Dupont • Kel-F® is a registered trademark of 3M

## **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:** Threaded, Socket Weld &  
Butt 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"  
**Body Materials:** 316 Stainless Steel,  
Carbon Steel, Alloy 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)
- ANSI/ASME B16.34
- ANSI/ASME B16.5
- ANSI/ASME B16.10
- NACE MR0175/ISO 15156 Compliant
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- ISO 5211 Integral Mounting Pad
- Unique Lockable Lever Handle
- Integrated Fugitive Emission Ports (Optional)

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

## **SERIES 74** FLANGED 1-PIECE STANDARD PORT BALL VALVE **API 608**



**Size Range:** 1" - 4"  
**Body Materials:** 316 Stainless Steel,  
Carbon Steel, Alloy 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)
- 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)

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



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

**Size Range:** 50 Series: ½" - 8"  
54 Series: 1½" - 8"  
**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

## **SERIES 17**

**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



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

## 2-PIECE STANDARD PORT 2000PSI BALL VALVE **SERIES 5457**

**Size Range:** ¼" - 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



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

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

**Size Range:** ½" - 4"  
**Body Material:** 316 Stainless Steel  
**Seat Materials:** TFM®, PTFE Cavity Fillers  
**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\*

- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Lockable Lever Handle



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

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

**Size Range:** ½" - 4"  
**Body Material:** 316L Stainless Steel  
**Seat Materials:** PTFE, TFM®, RTFE,  
PTFE Cavity Fillers  
**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
- Lockable Lever Handle



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

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

**Size Range:** ¼" - 4"  
**Body Material:** 316L Stainless Steel  
**Seat Materials:** PTFE, TFM®, RTFE, PTFE Cavity  
Fillers  
**Ends:** Clamp,  
Butt Weld Tube Extended,  
Butt Weld Tube Short  
**Max Pressure:** 1480 PSI\*  
**Max Temp:** 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)



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

TFM® is a registered trademark of Dyneon • Delrin® is a registered trademark of Dupont • Kel-F® is a registered trademark of 3M

**Size Range:** ½" to 2", 3"  
**Body Material:** 316 Stainless Steel  
**Seat Materials:** TFM®, TFM® Cavity Fillers  
**Ends:** Clamp  
**Max Pressure:** 1000 CWP ½" - 2"\*  
 800 CWP 3"\*  
**Max Temp:** -50° to 500° F\*

- 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.

**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.

**Size Range:** ¼" - 2"  
**Body Material:** 316 Stainless Steel  
**Seat Materials:** PTFE, TFM®  
**Ends:** Threaded  
**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



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

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



**Size Range:** ½" - 4"

**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:** ¼" - 1"

**Body Material:** 316L Stainless Steel

**Seat Materials:** PTFE, TFM®, RTFE,  
PTFE Cavity Filler

**Ends:** Instrumentation, Threaded

**Max Pressure:** 1480 PSI\*

**Max Temp:** -50° to 500° F\*

- ISO 5211 Integral Mounting Pad
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Encapsulated Body Bolts & Seals
- Lockable Lever Handle
- Purge Ports (Optional)

\* 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.

TFM® is a registered trademark of Dyneon • Delrin® is a registered trademark of Dupont • Kel-F® is a registered trademark of 3M

**Size Range:** 1/4" - 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.

**Size Range:** 1/2" - 2"  
**Body Material:** 316 Stainless Steel  
**Ends:** Threaded, Socket Weld  
**Max Pressure:** 200 CWP\*  
**Max Temp:** 350° F\*

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



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

**Size Range:** 1/4" - 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



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

## SERIES 34

## CLASS 800 FORGED GATE VALVE



**Size Range:** 1/4" - 2"  
**Body Materials:** Forged Stainless Steel (316L),  
Forged Steel

**Trim Material(s):**  
Forged Steel: Trim #8  
Seat: A276-410 + H/F STL  
Disc: A276-410  
Back Seat: A105  
Stem: A276-410  
Forged Stainless Steel: Trim #12  
Seat: A276 316 + STL  
Disc: A276 316  
Back Seat: A182-F316  
Stem: A276 316

**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
- ANSI/ASME B16.11
- ANSI/ASME B1.20.1
- API 598
- API 602
- NACE MR0175: 2002 Compliant
- Bolted Bonnet
- Rising Stem

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

## SERIES 44

## CLASS 800 FORGED GLOBE VALVE



**Size Range:** 1/4" - 2"  
**Body Materials:** Forged Stainless Steel (316L),  
Forged Steel

**Trim Material(s):**  
Forged Steel: Trim #8  
Seat: A105 + H/F STL  
Disc: A276-410  
Back Seat: A105  
Stem: A276-410  
Forged Stainless Steel: Trim #12  
Seat: A182 F316 + STL  
Disc: A276 316  
Back Seat: A182-F316  
Stem: A276 316

**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
- ANSI/ASME B16.11
- ANSI/ASME B1.20.1
- API 598
- API 602
- NACE MR0175: 2002 Compliant
- Bolted Bonnet
- Rising Stem

\* Dependent 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

**Trim Material(s):**  
Forged Steel: Trim #8  
Seat: A105 + H/F STL  
Disc: A276-410  
Forged Stainless Steel: Trim #12  
Seat: A182 F316 + STL  
Disc: A276 316

**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
- ANSI/ASME B16.11
- ANSI/ASME B1.20.1
- API 598
- API 602
- NACE MR0175: 2002 Compliant
- Bolted Bonnet

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

**Size Range:** 1/2" - 24"  
**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  
**Ends:** 150#, 300#, 600# Flanged  
**Max Pressure:** 1480 PSI\*  
**Max Temp:** 1000° F\*

- ANSI/ASME B16.5
- 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



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

**FLANGED GLOBE VALVE**

**SERIES 45**

**Size Range:** 1/2" to 16" (12" 45614)  
**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  
**Ends:** 150#, 300#, 600# Flanged  
**Max Pressure:** 1480 PSI\*  
**Max Temp:** 1000° F\*

- 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



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

**FLANGED SWING CHECK VALVE**

**SERIES 25**

**Size Range:** 1/2" to 24"  
**Body Materials:** 316 Stainless Steel, Carbon Steel  
**Trim Material(s):**  
 Stainless Steel: Trim #10  
 Seat: A351 CF8M  
 Disc: A351 CF8M  
 Cast Steel: Trim #8  
 Seat: A105 + H/F STL  
 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\*  
**Max Temp:** 1000° F\*

- 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



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

TFM® is a registered trademark of Dyneon • Delrin® is a registered trademark of Dupont • Kel-F® is a registered trademark of 3M

## SERIES 11 2-PIECE FULL PORT DIRECT MOUNT BALL VALVE



Pictured with SPNII Actuator

**Size Range:** 1/4" - 2"  
**Body Material:** 316 Stainless Steel  
**Seat Material:** TFM®  
**Ends:** Threading  
**Max Pressure:** 1000 CWP - 1/4" - 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
- Low Profile, Space Saving, Dependable Automated Assemblies

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

## SERIES 12 DIR-ACT™ 2-PIECE FULL PORT DIRECT MOUNT BALL VALVE



Pictured with SPNII Actuator

**Size Range:** 1/4" - 2"  
**Body Materials:** 316 Stainless Steel, Carbon Steel  
**Seat Material:** TFM®  
**Ends:** Threaded  
**Max Pressure:** 1500 CWP\*  
**Max Temp:** 500° F\*

- 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. 6,446,935 B1)
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Low Profile, Space Saving, Dependable Automated Assemblies
- Lockable Lever Handle

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

## SERIES 13 DIR-ACT™ 3-PIECE FULL PORT DIRECT MOUNT BALL VALVE



Pictured with SPNII Actuator

**Size Range:** 1/4" - 4"  
**Material:** 316 Stainless Steel  
**Seat Materials:** TFM®, RTFE  
**Ends:** Threaded, Socket Weld, Butt Weld  
**Max Pressure:** 1000 CWP 1/4" - 2"\*  
600 CWP 2 1/2" - 4"\*  
**Max Temp:** 450° F\*

- ANSI/ASME B16.11
- ANSI/ASME B16.25
- 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. 6,446,935 B1)
- Blowout Proof Stem Design
- Live-Loaded Stem Seal
- Low Profile, Space Saving, Dependable Automated Assemblies
- Lockable Lever Handle

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

## SERIES SG GEAR OPERATOR



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

TFM® is a registered trademark of Dyneon • Delrin® is a registered trademark of Dupont • Kel-F® is a registered trademark of 3M



- 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  $\pm 5^\circ$  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  $\pm 5^\circ$  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



**LIMIT SWITCH**

**SERIES SL**

- 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

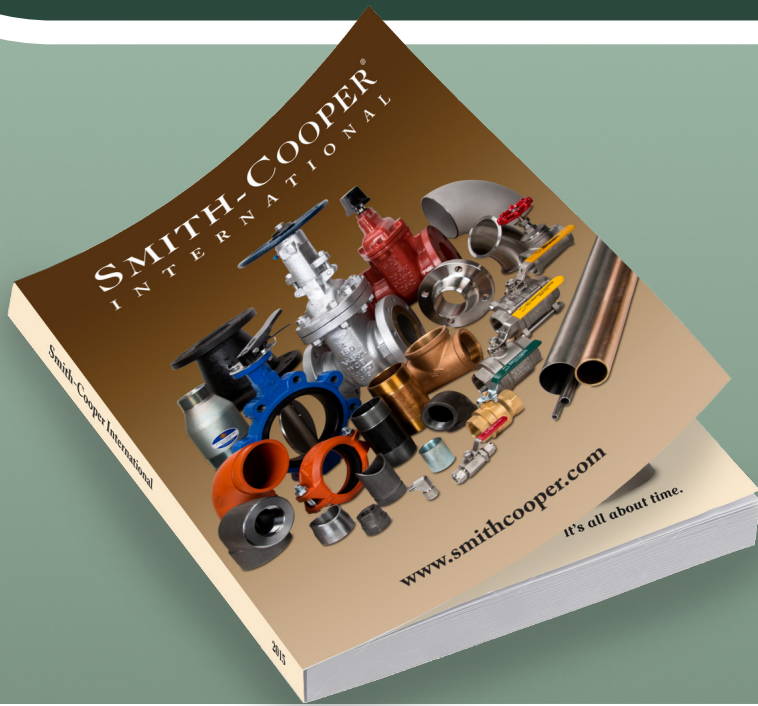


**SOLENOIDS**

**SERIES SX**

- 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





Be sure to get our complete  
catalog at:  
[www.SmithCooper.com](http://www.SmithCooper.com)

For complete specs on our  
valves please visit:  
[www.SmithCooper.com](http://www.SmithCooper.com)



SMITH-COOPER<sup>®</sup>  
INTERNATIONAL

(800) 766-0076 • [www.smithcooper.com](http://www.smithcooper.com)

Los Angeles, CA • Atlanta, GA • Vancouver, WA • Chicago, IL • Houston, TX

## Terms & Conditions

**Pricing:** Orders shall be subject to approval and acceptance by Smith-Cooper International (SCI). All pricing, terms, and conditions contained in any of SCI's price sheets are subject to change without notice. The company may, at its discretion, discontinue, modify, or otherwise change any product listed in its price sheets without prior notice. Offer to sell is not implied by possession of SCI's catalogs or price sheets. A service charge of 1-1/2% per month will be added to any past due balance.

**Freight Terms:** SCI's product offering is divided into different freight categories. All items in the same category can be combined to achieve freight prepaid. Once prepaid status is achieved in any product category, material from other categories can be added and the entire order will ship prepaid. Please refer to the SCI website for the current Freight Policy. SCI reserves the right to specify freight terms on specially quoted, net priced orders. On prepaid orders, the choice of shipper will be at SCI's discretion.

**Shortages:** Claims for any shortages must be filed within 10 business days of the shipping date.

**Damages:** Claims for damaged products or lost in transit should be directed to the appropriate carrier by the consignee. SCI's responsibility ceases and title passes on delivery to the carrier.

**Returns:** Returns of material are not allowed without prior, written authorization from SCI. A copy of the RGA Authorization must accompany any material return. Goods which are returned for any other reason than a defect must be in original unbroken cartons, unless originally sold loose, and will be subject to inspection to ensure the items are in "resaleable" condition.

**Special Order/  
Fabricated Items:** Special Order and/or Fabricated Items are non-returnable. Please refer to the SCI website for Material Return Policy.

## Warranty and Limitations of Liability

As used herein, "Supplier" shall mean SMITH-COOPER INTERNATIONAL, INC. or any of its affiliates (for clarity, as used herein, Supplier shall only refer to such entity which actually sold the product being warranted to the initial purchaser). Supplier warrants to its initial purchaser only, that the products which are delivered to this initial purchaser will be of the kind described in the order or price list and will be delivered free of defects in workmanship or material.

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 repaired or 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 and performed 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. COOPLOK™ 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 warranty made by the Supplier herein, but also any other 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.

No returns will be allowed unless prior written permission of Supplier is first obtained. Purchasers shall be responsible for all costs of transportation as well as restocking charge. All causes of action against Supplier arising out of or relating to this warranty or the performance or breach hereof shall expire unless brought within one year of the time of accrual thereof.

**THIS WARRANTY IS EXCLUSIVELY FOR THE BENEFIT OF THE INITIAL PURCHASER OF THIS PRODUCT FROM SUPPLIER, AND, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, THE FOREGOING WARRANTY IS IN LIEU OF, AND SUPPLIER DOES NOT MAKE, AND EXPRESSLY DISCLAIMS, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WRITTEN OR ORAL, ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE, LAW, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE REMEDIES STATED HEREIN CONSTITUTE PURCHASER'S EXCLUSIVE REMEDIES AND SUPPLIER'S ENTIRE LIABILITY FOR ANY BREACH OF WARRANTY.**

**LIMITATIONS OF LIABILITY: NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY, IN NO EVENT SHALL SUPPLIER BE LIABLE TO ITS INITIAL PURCHASER OR ANYONE ELSE FOR ANY SPECIAL, PUNITIVE, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUE, LOSS OF USE OF THE PRODUCTS OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF SUBSTITUTE PRODUCTS, FACILITIES OR SERVICES, DOWNTIME COSTS, DELAYS, AND CLAIMS OF CUSTOMERS OF THE INITIAL PURCHASER OR OTHER THIRD PARTIES FOR ANY DAMAGES., EVEN IF SUPPLIER HAS BEEN ADVISED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES. IN NO EVENT, REGARDLESS OF CAUSE, SHALL SUPPLIER BE LIABLE FOR PENALTIES OR PENALTY CLAUSES OF ANY DESCRIPTION OR FOR INDEMNIFICATION OF INITIAL PURCHASER OR OTHERS FOR COSTS, DAMAGES, OR EXPENSES ARISING OUT OF OR RELATED TO THE PRODUCTS.**

No warranty of any kind, whether express or implied shall pass through our initial purchaser to any other person, organization, entity or the like. Except as expressly provided herein, in no event shall any liability or responsibility of Supplier which may arise in any circumstances whatsoever exceed the price to the initial purchaser of the Supplier's product on which such liability is based.

**Disclaimer:** Supplier shall not be liable or responsible for omissions or errors in its catalog. Please refer to [www.smithcooper.com](http://www.smithcooper.com) for current information.

# SHARPE<sup>®</sup>

## Valves, Automation & Controls

### SHARPE<sup>®</sup>

Automation & Control



SMITH-COOPER<sup>®</sup>  
INTERNATIONAL

### SHARPE<sup>®</sup>

Engineered Valves & Automation



HIGH PERFORMANCE  
Engineered VALVES

SMITH-COOPER<sup>®</sup>  
INTERNATIONAL



## SMITH-COOPER<sup>®</sup>

INTERNATIONAL

Toll Free 877-774-2773 Fax 708-562-9250

[www.smithcooper.com](http://www.smithcooper.com) • [www.sharpevalves.com](http://www.sharpevalves.com)

### SHARPE<sup>®</sup>

Los Angeles, CA • Chicago, IL • Atlanta, GA • Vancouver, WA • Houston, TX