Family of Products

HIGH PERFORMANCE INDUSTRIAL BALL VALVES
CRYOGENIC BALL VALVES
SANITARY BALL VALVES
ECONOMY VALVES
AUTOMATION
FLOW MEASUREMENT

AN ISO 9001:2015 CERTIFIED COMPANY
MADE IN THE USA
2100 SERIES
Made in USA
CRN Certified
ASME BPE Compliant
3 Piece Sanitary
Full Port Tube OD
Ball Valve
1500 WOG

Size:
1/4" thru 4"

Ends:
Tube OD
Extended Tube OD
Socket Weld Tube OD
Clamp & Vacuum Ends
Flush Bottom Tank Pads
Compression Fittings

Body Materials:
316L Stainless Steel

Ball & Stem Materials:
316L Stainless Steel

Seat Materials:
TFM, PEEK,
UHMWPE,
Cavity Fillers

Service Applications:
Biotech
Clean Steam
Cleaning Solutions
Gas and Air Delivery
High Purity Gases
High Purity Water/Oils
Pharmaceutical
Semiconductor
Vacuum

2500 SERIES
Made in USA
3 Piece Sanitary
Full Port Tube OD
Cryogenic Ball Valve
1500 WOG

Size:
1/4" thru 4"

Ends:
Tube OD
Extended Tube OD
Socket Weld Tube OD
Clamp & Vacuum Ends
Flush Bottom Tank Pads
Compression Fittings

Body Materials:
316L Stainless Steel

Ball & Stem Materials:
316L Stainless Steel

Seat Materials:
25% Carbon Filled Teflon
Teflon
TFM
PCTFE

Service Applications:
Aerospace
Cryogenic Service
Food Processing
Liquid H₂
Liquid N₂
Petro-Chemical

2700 SERIES
Made in USA
CRN Certified
ASME BPE Compliant
3 Way Bottom Entry
Sanitary Full Port Diverter
Tube OD Ball Valve
1500 WOG

Size:
1/4" thru 4"

Ends:
Tube OD
Extended Tube OD
Socket Weld Tube OD
Clamp & Vacuum Ends
Flush Bottom Tank Pads
Compression Fittings

Body Materials:
316L Stainless Steel

Ball & Stem Materials:
316L Stainless Steel

Seat Materials:
TFM, PEEK,
UHMWPE,
Cavity Fillers

Service Applications:
Biotech
Clean Steam
Cleaning Solutions
Gas and Air Delivery
High Purity Gases
High Purity Water/Oils
Pharmaceutical
Semiconductor
Vacuum

2800 SERIES
Made in USA
CRN Certified
ASME BPE Compliant
3 Way Side Entry
Sanitary Full Port Diverter
Tube OD Ball Valve
1500 WOG

Size:
1/4" thru 4"

Ends:
Tube OD
Extended Tube OD
Socket Weld Tube OD
Clamp & Vacuum Ends
Flush Bottom Tank Pads
Compression Fittings

Body Materials:
316L Stainless Steel

Ball & Stem Materials:
316L Stainless Steel

Seat Materials:
TFM, PEEK
UHMWPE,
Cavity Fillers

Service Applications:
Biotech
Clean Steam
Cleaning Solutions
Gas and Air Delivery
High Purity Gases
High Purity Water/Oils
Pharmaceutical
Semiconductor
Vacuum

2900 SERIES
Made in USA
CRN Certified
ASME BPE Compliant
3 Piece Vee Port Control
Sanitary Full Port
Tube OD Ball Valve
1500 WOG

Size:
1/4" thru 4"

Ends:
Tube OD
Extended Tube OD
Socket Weld Tube OD
Clamp & Vacuum Ends
Flush Bottom Tank Pads
Compression Fittings

Body Materials:
316L Stainless Steel

Ball & Stem Materials:
316L Stainless Steel

Seat Materials:
TFM, PEEK
UHMWPE,
Cavity Fillers

Service Applications:
Biotech
Clean Steam
Cleaning Solutions
Gas and Air Delivery
High Purity Gases
High Purity Water/Oils
Pharmaceutical
Semiconductor
Vacuum
100 SERIES
Economy 1 Piece
Reduced Port
Ball Valve
1000 WOG

Size:
1/4" thru 2"

Ends:
NPT

Body Materials:
316 Stainless Steel

Ball & Stem Materials:
316 Stainless Steel

Seat Materials:
Teflon

Service Applications:
Chemical
Food Processing
Hydraulic
Steam
Thermal Fluids
Vacuum
Water/Oil/Gas

200 SERIES
Economy 2 Piece
Full Port
Ball Valve
1000 WOG

Size:
1/4" thru 3"

Ends:
NPT

Body Materials:
316 Stainless Steel

Ball & Stem Materials:
316 Stainless Steel

Seat Materials:
15% Glass Filled Teflon

Service Applications:
Chemical
Food Processing
Hydraulic
Steam
Thermal Fluids
Vacuum
Water/Oil/Gas

300 SERIES
Economy 3 Way
Direct Mount Reduced Port
Diverter Ball Valve
1000 WOG

Size:
1/4" thru 2"

Ends:
NPT

Body Materials:
316 Stainless Steel

Ball & Stem Materials:
316 Stainless Steel

Seat Materials:
15% Glass Filled Teflon

Service Applications:
Chemical
Food Processing
Hydraulic
Steam
Thermal Fluids
Vacuum
Water/Oil/Gas

500 SERIES
Economy 3 Piece
Industrial Ball Valve
with No Mount or
Direct Mount Pad
1000 WOG

Size:
1/4" thru 4"

Ends:
NPT, Butt Weld, Socket Weld

Body Materials:
316 Stainless Steel

Ball & Stem Materials:
316 Stainless Steel

Seat Materials:
15% Glass Filled Teflon

Service Applications:
Chemical
Food Processing
Hydraulic
Steam
Thermal Fluids
Vacuum
Water/Oil/Gas

500 SERIES
Economy 3 Piece
Sanitary Ball Valve
with No Mount or
Direct Mount Pad
1000 WOG

Size:
1/2" thru 4"

Ends:
Tube OD, Extended Tube OD, Clamp End

Body Materials:
316 Stainless Steel

Ball & Stem Materials:
316 Stainless Steel

Seat Materials:
Teflon, TFM, Cavity Fillers

Service Applications:
Biotech
Clean Steam
Cleaning Solutions
Chemical
Dairy
Gas and Air Delivery
Food processing
Pharmaceutical
Process Cooling Water
Semiconductor
Vacuum
Waxes
**900 SERIES**  
ASME B16.34 Compliant  
Economy 2 Piece Direct Mount  
Full Port Flanged  
Ball Valve  
ANSI Class 150  “PN16”

**Service Applications:**  
- Chemical  
- Food Processing  
- Oxygen  
- Steam  
- Thermal Fluids  
- Vacuum  
- Water/Oil/Gas

**7100 SERIES**  
ASME B16.34 Compliant  
3 Way/4 Way Multi-Port  
Full Port Flanged  
Ball Valve  
ANSI Class 150

**Service Applications:**  
- Chemical  
- Food Processing  
- Oxygen  
- Steam  
- Thermal Fluids  
- Vacuum  
- Water/Oil/Gas

**Flow Pattern:**  
- L-Port  
- T-Port  
- X-Port  
- I-Port

**7100 SERIES**  
3 Way/4 Way Multi-Port  
Full Port Tube OD  
Sanitary Ball Valve

**Service Applications:**  
- Biotech  
- Clean Steam  
- Cleaning Solutions  
- Detergents  
- Gas and Air Delivery  
- High Purity Gases  
- High Purity Waters/Oils  
- Pharmaceutical  
- Vacuum  
- Waxes

**9100 SERIES**  
CRN Certified  
ASME B16.34 Compliant  
2 Piece Full Port  
Fire Safe (as Standard)  
Flanged Ball Valve  
ANSI Class 150 & 300

**Service Applications:**  
- Chemical  
- Food Processing  
- Oxygen  
- Steam  
- Thermal Fluids  
- Vacuum  
- Water/Oil/Gas

**9500 SERIES**  
Made in USA  
2 Piece Full Port  
Fire Safe Cryogenic  
Flanged Ball Valve  
ANSI Class 150 & 300

**Service Applications:**  
- Aerospace  
- Cryogenic Service  
- Food Processing  
- Liquid O₂  
- Liquid N₂  
- LNG  
- Petro-Chemical
9900 SERIES
Made in USA
CRN Certified
ASME B16.34 Compliant
2 Piece Vee Port
Fire Safe (as Standard)
Flanged Ball Valve
ANSI Class 150 & 300

1200 SERIES
ASME B16.34 Compliant
Meets API 6D
3 Piece Full Port
Fire Safe
Trunnion Ball Valve

9200 SERIES
ASME B16.34 Compliant
Meets API 6D
2 Piece Full Port
Fire Safe
Trunnion Ball Valve

HP1100 SERIES
Made in USA
3 Piece High Pressure
Standard Port
Fire Safe Ball Valve
Up to ANSI Class 2500
6000 WOG

METAL SEATED
Made in USA
CRN Certified
3 Piece Full Port 2 Way
Fire Safe Ball Valve
ANSI Class 600
2000 WOG
Up to Class VI Shut-Off
CHLORINE VALVES
Made in USA
ASME B16.34 Compliant
3 Piece Full Port 2 Way
Fire Safe Ball Valve
ANSI Class 300
Meets Chlorine Institute Pamphlet 6

CHLORINE VALVES
Made in USA
ASME B16.34 Compliant
3 Piece Full Port 2 Way
Fire Safe Ball Valve
ANSI Class 300
Meets Chlorine Institute Pamphlet 6

EMISSION BONNETS
Made in USA
Contained Leak Detection System for Industrial & Sanitary Ball Valves where Tough EPA Regulations Apply

1116/1226 SERIES
Gate Valve
ANSI Class 150

2116/2226 SERIES
Globe Valve
ANSI Class 150

CFOS VALVES
Made in USA
Individual Valves
Manifold Assemblies
ASME BPE Compliant
1000 WOG
**3116/3226 SERIES**
Check Valve
ANSI Class 150

- **Size:**
  - 3116: 1/2” thru 10”
  - 3226: 1/2” thru 2”
- **Ends:**
  - 3116: 150# Flanged
  - 3226: NPT
- **Body Materials:** 316 Stainless Steel
- **Disc & Bonnet Materials:** 316 Stainless Steel
- **Seat Materials:** Metal
- **Service Applications:**
  - Chemical
  - Dry/Liquid Chlorine
  - Food Processing
  - Hydraulic
  - Water/Oil/Gas
  - Oxygen
  - Steam
  - Thermal Fluids

**6100 SERIES**
Knife Gate Valve
ANSI Class 150

- **Size:** 2” thru 24”
- **Ends:**
  - 150# Lug
- **Port Type:**
  - Standard
  - V-Port
  - Deflector Cone
- **Body & Shim Materials:** 316 Stainless Steel
- **Seat Materials:** Metal
- **Service Applications:**
  - Chemical
  - Food & Beverage
  - Mining
  - Power Plants
  - Paper & Pulp
  - Waste Water

**AUTOMATION**
Quarter Turn
Pneumatic Actuator
Double Acting & Spring Return

- **Size:**
  - 24 thru 1”
- **Ends:**
  - 1/8” Lug
- **Port Type:**
  - Standard
  - V-Port
  - Deflector Cone
- **Body & Shim Materials:** 316 Stainless Steel
- **Seat Materials:** Metal
- **Service Applications:**
  - Chemical
  - Dry/Liquid Chlorine
  - Food Processing
  - Hydraulic
  - Water/Oil/Gas
  - Oxygen
  - Steam
  - Thermal Fluids

**AUTOMATION**
Quarter Turn
Electric Actuator
Non Spring & Spring Return

- **Size:**
  - 1/2” thru 10”
- **Ends:**
  - 150# NPT
- **Body Materials:**
  - 316 Stainless Steel
- **Disc & Bonnet Materials:**
  - 316 Stainless Steel
- **Service Applications:**
  - Chemical
  - Food & Beverage
  - Mining
  - Power Plants
  - Paper & Pulp
  - Waste Water

**AUTOMATION**
Quarter Turn
Gear Operator
Rugged Worm Drive
ISO 5211 Direct Mount

- **Size:**
  - 2” thru 24”
- **Ends:**
  - 1/8” Lug
- **Body Material:**
  - Cast Iron
  - Stainless Steel (Optional)
**AUTOMATION**

**Positioner**
- **Features/Options:**
  - Mechanical Switches or Reed switches
  - 4-20mA Feedback
  - Pneumatic
  - Electro-Pneumatic
  - Fail Freeze
  - Explosion Proof
  - Gas Approved
  - Intrinsically Safe
  - Dome Indicator
  - Standard NEMA 4X
  - External Zero/Span Adjust
- **Material:** Aluminum
- **Temperature Range:** -40 thru 185 °F
- **Service Applications:** Chemical, Food Processing, Hydraulic, Water/Oil/Gas, Pharmaceutical, Steam

**Limit Switch**
- **Style:**
  - Mechanical Switches
  - Proximity Sensor
  - 4-20mA Feedback
- **Temperature Range:** -4 thru 185 °F
- **Features:**
  - Explosion Proof
  - Weather Proof
  - Position Indicator
  - NAMUR Shaft
  - Dual Cable Entries
  - Captive Cover Bolts
- **Material:** Aluminum
- **Service Applications:** Chemical, Food Processing, Hydraulic, Water/Oil/Gas, Pharmaceutical, Steam

**Declutchable Gear Override with Integral ISO 5211 Mount Pad**
- **Torque Rating:** 2655 thru 195600 in.lbs
- **Features:**
  - Integral Actuator Mount
  - Weatherproof to IP65
  - Coupler Included
  - ISO 5211 Compatible
  - Compact
- **Body Material:** Cast Iron
- **Handle Material:** Cast Iron
- **Service Applications:** Chemical, Food Processing, Hydraulic, Water/Oil/Gas, Pharmaceutical, Steam

**Solenoid Valve**
- **Operating Pressure:** Vacuum thru 150 psig
- **Temperature Range:** 0 thru 180 °F
- **Supply Voltage:** 12v AC/DC thru 230v AC
- **Valve Operation:**
  - 3 Way, 2 Position N.C
  - 4 Way, 2 Position Single
  - 4 Way, 2 Position Double
- **Electrical Connections:**
  - NEMA 4x with DIN 43650
  - NEMA 4x 1/2" NPT Conduit
  - Explosion Proof
  - Intrinsically Safe
- **Service Applications:** Chemical, Food Processing, Hydraulic, Water/Oil/Gas, Pharmaceutical, Steam

**Filter Regulator**
- **Maximum Pressure:** Up to 250 psig
- **Temperature Range:** 40 thru 175 °F
- **Features:**
  - 3 thru 40 micron filters
  - Tamper Proof Cap
  - Low Pressure Option
  - Instrument Pressure Option
  - Panel Mount Option
  - Lockout Option
  - Overnight Drain Option
- **Bowl Materials:** Polycarbonate, Metal
- **Service Applications:** Chemical, Food Processing, Hydraulic, Water/Oil/Gas, Pharmaceutical, Steam
### AUTOMATION

**Handles**

Options:
- Lever
- Locking Lever
- Oval
- Locking Oval
- Spring Return
- Fusible Link
- Tee Handles
- Locking Infinity Handle
- Panel Mount
- AWWA Stem Nut
- Custom Sleeve Colors

Service Applications:
- Chemical
- Food Processing
- Hydraulic
- Water/Oil/Gas
- Pharmaceutical
- Steam

### AUTOMATION

**Made in USA**

**Handle Extension Brackets**

Size:
- 1/4" thru 4"

Features & Options:
- Economy Open Style
- Enclosed Style
- Custom Heights
- Locking Mechanism
- Improved Accessibility
- Operator Protection
- High Temp Applications
- Cryogenic Applications

Material:
- Aluminum
- Stainless Steel

Valve Compatibility:
- 1100 Series
- 1700 Series
- 1800 Series
- 1900 Series
- 2100 Series
- 2700 Series
- 2800 Series
- 2900 Series

### FLOW MEASUREMENT

**Made in USA**

**Orifice Plates**

Size:
- 1/2" thru 4"

Features & Options:
- Paddle
- Universal
- Standard Concentric
- Counter Bored
- Eccentric
- Quadrant
- Segmental
- Restriction
- Choked Flow

Class:
- 150# thru 1500#

Materials:
- 304 Stainless Steel
- 316 Stainless Steel
- Carbon Steel
- Alloy 20
- Hastelloy
- Monel

Options:
- 125 RMA Finish
- Integral RTJ

### FLOW MEASUREMENT

**Made in USA**

**Universal Orifice Plates**

Associated Sealing Units

Size:
- 1/2" thru 36"

Seal Types:
- Elastomer
- Teflon
- Metal

Materials:
- 304 Stainless Steel
- 316 Stainless Steel
- Carbon Steel
- Alloy 20
- Hastelloy
- Monel

Face Types:
- Raised Face
- Ring Type Joint

### FLOW MEASUREMENT

**Made in USA**

**Orifice Flange Set**

Size:
- 1/2" thru 24"

Class:
- 150# thru 1500#

Included in Set:
- Flanges
- Orifice Plate
- Gaskets
- Jack Screws
- Nuts
- Pipe Plugs
- Location Dowel (if req.)

Materials:
- 316 Stainless Steel
- Carbon Steel
- Alloy 20
- Hastelloy
- Monel
**ENGINEERING ASSISTANCE**

AVCO is pleased to offer design assistance with all our products utilizing our in-house designers.

Please feel free to contact us with any specific requirements and we will be happy to oblige.

**Examples:**
- Flow Calculations
- Orifice Sizing
- Vee Port Sizing
- Customized Valve Ends
- Skid Layouts
- Panel Layouts
- 3D CAD Models
- 2D CAD Models
- Submittal Drawings
- Approval Drawings
- MTRs
- ISA Datasheets

**ADDITIONAL CAPABILITIES**

The product specifications, materials and options listed in this brochure are indicative of AVCO products and not exhaustive. Please contact AVCO for any material, end style or specification not listed as it is likely we have it covered.

As a manufacturer we can adapt our products to customer requirements and many of our products can be custom built to meet your piping installations.

**ISO 9001:2015 QUALITY POLICY**

AVCO is committed to meeting requirements and increasing customer satisfaction through continually improving the effectiveness of our Quality Management System. AVCO's mission is to design, manufacture and integrate superior products to better serve our customers’ demands and provide engineered solutions for some of the world’s harshest operating conditions in piping.

**COMPANY PROFILE**

Alloy Valves and Control, Inc. (AVCO) is a global leader in innovative engineered valves and instrumentation devices for all types of fluid flow conditions in the piping process market. We were established in 2000 and are proud to be recognized as a ‘Made in California’ and ‘Women Owned’ business. We supply standard and custom products with full control over our design and manufacturing processes.

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