# **BUTTERFLY VALVES** — Resilient Seated

# General Purpose Butterfly Valves – 141 Series & 145 Series

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ltem	Description	Material	. ed
1	Body	Ductile Iron ASTM A536 (65-45-12)	Certifie F
2	Seat	EPDM* or Buna-N (Nitrile)* or Viton®B*	
3	Shaft	416 Stainless Steel ASTM A564	0
4	Disc	Nickel Plated Ductile Iron ASTM A536 (65-45-12) or Aluminum-Bronze ASTM B148, C95400 or 316 Stainless Steel A STM A351, Type CF8M	
5	Bushing	Glass Reinforced Epoxy	
6	Weather Seal	Buna-N	
7a	Retainer	Steel with Protective Finish	
7b	Retainer	Steel with Protective Finish	
8	Washer	Brass	
9	Set Screws (Flat Point)	Steel with Protective Finish	
10	Set Screws (Cone Point)	Steel with Protective Finish	
11	Nameplate		

**AVAILABLE OPTIONS** 

- 10 Position Handle
- Gear Operator
- Infinite Position Handle
- Locking Handle
   Coar Operatory
- Gear Operator with Chain Wheel
  Locking Gear Operator
- Locking Gear Operator
- with Chain Wheel
- Pneumatic Actuation
- Electric Actuation

Valves

Apollo

 Silicon Free Assembly Option (145 Series)

- Pressure Rating
- 2" to 12": 200 psi
- 14" to 24": 150 psi
- Apollo International<sup>™</sup>
  - WD141: One-piece wafer-style, sizes 2" to 12"
- LD141: Lug valves, sizes 2" to 24" (contact the factory for LD141 sizes greater than 24")

# **Apollo Assembled & Tested in USA**

- WD145: One-piece wafer-style, sizes 2" to 12"
- LD145: Lug valves, sizes 2" to 12"

#### Certification

- Certified to NSF/ANSI 372 Lead Free.
- Registered under Canadian Registration
- Number CRN# 0C12102.8CL.

# **Body Design**

- Ductile Iron ASTM A536
- WD Model: a one-piece wafer design with flange locating holes in larger sizes (8" to 12")
- LD Model: valves are full lug with tapped lugs, to ANSI 125/150 drilling. Face-to-face dimensions meet universal interchangeability standards outlined in MSS SP-67 and API 609.
- Models come equipped with an extended neck providing at least 2" clearance between the valve top plate and pipe flange to allow ease of insulation installation.

# **Blowout Proof Seat with Molded in Stiffener Ring**

- Isolates body from process media.
- Valves are equipped with a stretch-resistant, non-collapsible blowout-proof seat.
- Phenolic Stiffener Ring (2"-12")
- Aluminum Stiffener Ring (14"-24" LD141 only)

# Seat – No Gaskets Required

- Seat design eliminates the need for flange gaskets.
- Installs between standard ANSI 125/150 flanges.

#### **Mounting Flange For Actuator**

 ISO 5211 standard cast-in top plate
 Designed to dimensions for easy mounting of Apollo<sup>®</sup> actuators and manual operators.

#### Through Shaft

Assures positive disc positioning and dependable performance.

#### Weather Seal

- Shaft equipped with weather seal to prevent external media from entering the shaft bore.

### **Square Shaft-to-Disc Connection**

Provides a robust shaft-to-disc connection without pins or bolts. Easy maintenance.

#### **Three Bushings**

Supports shaft at three locations to enhance shaft alignment and absorb actuator side thrusts.

#### **Profiled Disc Design**

 Precision machined disc edge creates bubble tight shutoff, primary seal. Polished disc edge ensures long seat life, minimal torque.

# Shaft Seal

- The shaft diameter is greater than the diameter of the seat's shaft hole creating a robust shaft seal.
- The stiffening ring molded into the seat guards against distortion, a frequent cause of shaft leakage.

# End of Line Service

- All LD Model valves are equipped with retainer screws for dead end service; 2" through 12" to 200 psig

#### Testing: All valves are 100 percent factory tested before shipping

For additional information, submittal sheets and manuals, visit www.apollovalves.com

**Exploded View** 

WD141 - Wafer Design Shown

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