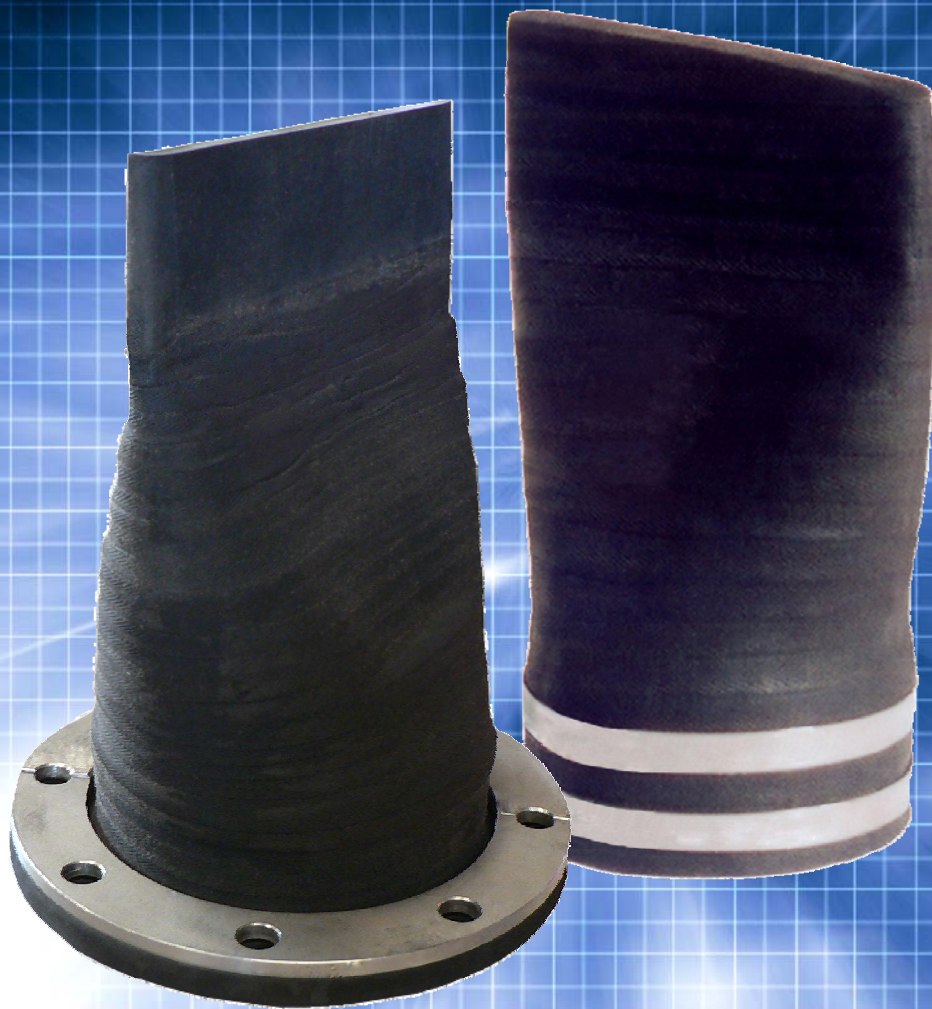


# J & S Valve<sup>®</sup>



**HedFlex Duckbill  
Check Valves**

The J&S VALVE - Duck Bill Rubber Check Valve, is a cost effective way to control back pressures from sewage treatment plants, outfalls and tidal operations. They are a fully passive backflow device requiring neither maintenance, outside sources of power or manual assistance to operate.

The J&S VALVE - HEDFLEX Duckbill Rubber Check Valves, are offered as direct replacements for ineffective and maintenance ridden flap type check valves, which are commonly known to seize, rust and bind in un-wanted positions. Unlike flap type valves, the Duckbill rubber check valves will handle large obstructions without jamming or having swing gates binding open.

Advantages of the J&S VALVE - HEDFLEX DUCKBILL CHECK-VALVE Model DBV-09 Series Duckbill Rubber Check Valves:

- Positive Backflow Prevention
- Manufactured to Your Head Pressure Requirements
- Simple Installation When Replacing Flap Valves
- Zero Water Hammer Problems
- 35-50 Years of Service Life
- All Rubber Construction Resists Abrasive Slurries
- NSF/ANSI Standard 61 Certified Materials
- Very Quiet Operation
- Negligible Maintenance and Energy Costs
- Will Not Warp or Freeze
- Available in Sizes 1" to 96" (Available with special IDs to suit concrete pipe)

Specify, the J&S VALVE - HEDFLEX DUCKBILL CHECK VALVE to provide backflow protection.



Improved design allows the straight bill check valves to be used in any application, from low head pressures to heavy sea water activity. The picture clearly shows the valve washes away the beach sand and debris

Elastomers: All of the J&S VALVE - HEDFLEX DUCKBILL VALVES are available in a various selection of elastomers and back pressure capabilities to suit most applications.

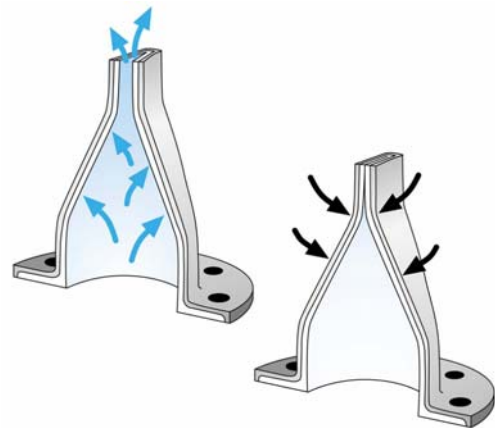
The J&S VALVE - HEDFLEX DUCKBILL CHECK VALVES will not freeze or deform and function solely on inlet and back pressures which will be Present in most applications

Each valve is carefully constructed using the finest of engineered materials and built by the most experienced rubber technicians in the industry.

#### APPLICATIONS:

- Wastewater Treatment Plant
- Sewer Systems
- Potable Water Holding Tanks
- Airport Runways
- Parking Lots
- Residential Areas
- Commercial Centers
- Storm Water Discharge
- Flood Control Prevention
- Effluent Diffusers
- Marine Effluent Diffusers Outfalls
- Flap Valve Replacement
- Aeration Systems
- Blow-Off Connections
- Lift Station Drain Valves
- Salt Water Barriers
- Tidal Walls
- Filter Drains
- Detention Ponds

When an engineered solution is needed to solve a piping or backflow problem, call J&S VALVE



The Specified Back Pressure Forces the HedFlex In-Line Rubber Check Valve to Close Preventing Back Flow.

**NOTE:** Dimensional Drawing are Available at [www.JandSValve.com](http://www.JandSValve.com)

## **Straight Bill Check Valves Versus Curved Bill Check Valves**

The Straight Bill Design offers full flow without curve bill restrictions.

### **Straight Bill Designs Offer:**

- Full Flow Without Curved Bill Restrictions
- Low Head Pressure to Open
- Not Affected by Flows or Current
- Can be Installed without Large Protective Headwalls
- Flow even Under Marginal Head Pressure
- Washes Sand and Other Matter away from the Bill
- Provides Full Flushing from the Lip Area
- Not a Patented Design

### **Curved Billed Design Offers:**

- Partial Flow Caused by Curved Bill Restrictions
- Higher Head Pressure to Open
- Not Affective in Dual Flow Applications; Rivers and Tide Change
- No Continual Flow Under Low Cracking Pressure
- Fails if Valve Lips are Blocked with Sand and Ocean Debris
- Requires Regular Maintenance to Prevent Clogging by Debris
- Patented Design to Eliminate Competition



In the photo on the left, the straight bill design on the left and the curved bill design is on the right. Notice that the straight bill design is operating under low-flow conditions while the curved bill is not. In the photo on the right, The curve bill has failed in many application where trapped debris prevents the back pressure from sealing the valve. The curve bill collapses under the water weight causing the bill to remain open even when back pressure applies

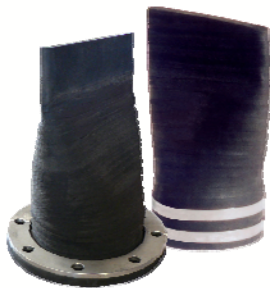
# J & S Valve®

## Improving the Industry Standard!

**J&S HedFlex Check Valves** are constructed with superior high grade rubber and superior polyester reinforcement to improve performance, operation, and life expectancy. There are many grades of rubber with varying chemical make-ups. The rubber's chemical make-up "the recipe" determines the cost, characteristics, durometer (hardness and stiffness), and quality of the rubber parts used to construct HedFlex Check Valves.

The HedFlex product line must have the proper durometer, memory, and strength to allow it to operate under specific flow conditions and to be strong enough to withstand the weight of water and the specified back pressures. The exterior of the HedFlex check valves are coated to prevent damage from the ultra violet rays of the sun. HedFlex is treated so animals will not eat it and sea life will not adhere to it. HedFlex is also fire retardant.

The reinforcement plies also are a key factor in the construction of HedFlex, hence the tire rated for 80,000 miles of service has a more expensive superior rubber compound and reinforcement than a tire rated for 40,000 miles of service. HedFlex check valves versus the competition is the same way. HedFlex uses a much higher grade of rubber than the leading competitors. J&S uses polyester fabric reinforcement not less expensive nylon. The HedFlex polyester fabric reinforcement will not wick and polyester offers added strength to the product. Nylon Fabric is not as strong of a material as polyester, and nylon will wick when exposed to liquids. This wicking will cause the rubber to delaminate and in-turn cause the valve to fail.



**J&S HedFlex Duckbill  
Check Valve  
Flange & Slip-on**



**J&S HedFlex Duckbill  
Inline Check Valve  
Flanged & Slip-In**

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