



APCO | WILLAMETTE

## **DeZURIK 4" (100mm) & LARGERPEC ECCENTRIC PLUG VALVES**





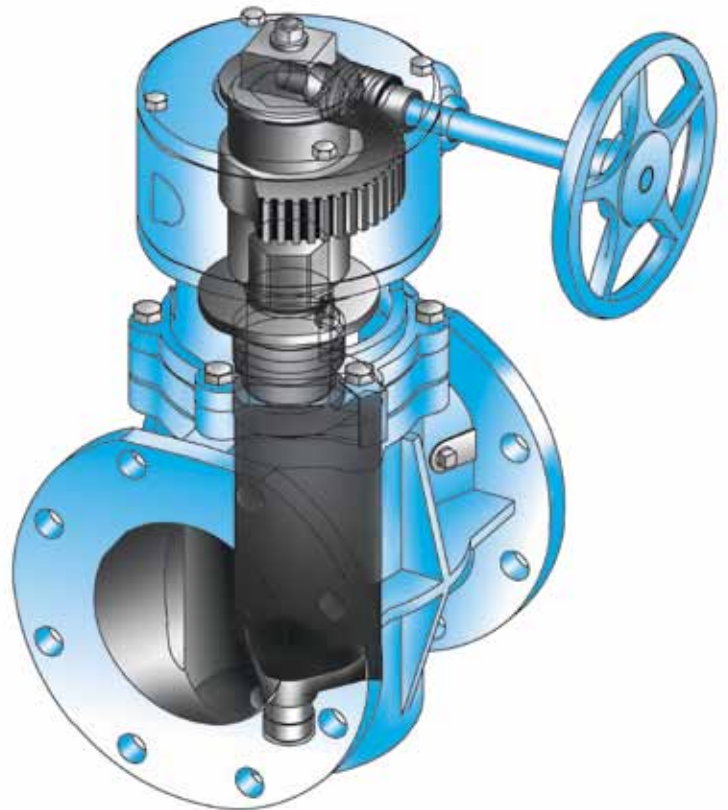
## **Defining the DeZURIK Difference**

Our company's first products were designed to solve problems and increase production capabilities of pulp and paper mills. Over the years, DeZURIK has developed a wide variety of valve styles to meet the application requirements of the water and wastewater treatment industry, pulp and paper, chemical and petrochemical, power, mining and other process industries. Today, our products are recognized worldwide for quality and performance.

In thousands of installations worldwide, DeZURIK Eccentric Plug valves have a proven record of long-term reliability. Originally, the Eccentric Plug valve was developed by Matt DeZurik in 1928. Through our unmatched experience, a wide variety of value-added design features and supreme economy have made it the preferred choice of engineering, operations and maintenance personnel.

## **Certification**

For our latest certifications, please visit our web site. [www.dezurik.com](http://www.dezurik.com)



## **Applications**

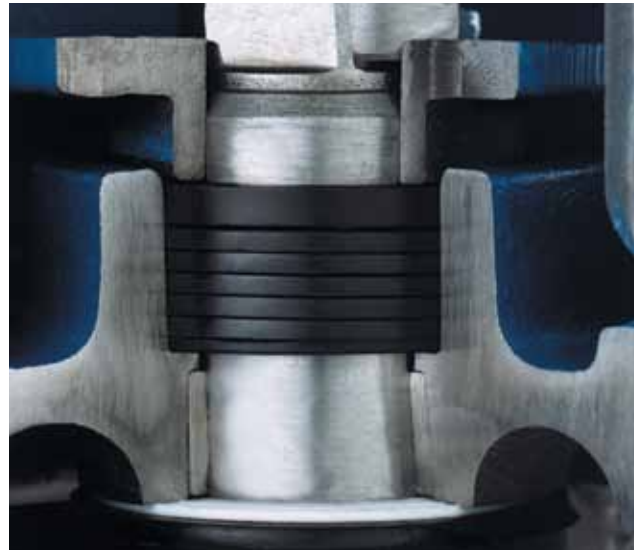
DeZURIK Eccentric Plug valves are designed for applications throughout water and wastewater treatment plants.

## **Corrosion-Resistant Bearings**

Heavy-duty bearings resist corrosion to prevent binding and ensure lasting easy valve operation without lubrication. These rugged stainless steel bearings are furnished in the top and bottom journals of all valves.

## **Long-Life Stem Seals**

A variety of stem seal materials provide maintenance-free sealing that matches valve performance and ensures long life and reliability. Multiple v-ring packing rings in 4–72" (100–800mm) valves provide a reliable seal that rarely requires adjustment or replacement.



## Resilient Plug Facings for Dead-Tight Shutoff

All Eccentric Plug valves are available with a variety of resilient plug facings suitable for temperatures up to 450°F (232°C). Resilient-faced plugs provide dead-tight shutoff without the use of sealing lubricants. Even if small solids are trapped between the plug and seat, the resilient facing provides tight shutoff and prevents seat damage. The resilient plug design provides drip-tight shutoff on wet service applications up to the full pressure rating of the valve with pressure in either direction. Materials available include chloroprene (CR), acrylonitrile-butadiene (NBR), hard natural rubber (NRH), chloro-isobutene isoprene (CIIR), hard rubber with chloroprene overlay (NRCCR), chloro-sulfonyl polyethylene (CSM) and fluoro rubber (FKM). All-metal plugs are also available for high-temperature or throttling applications where dead-tight shutoff is not required.



### Eccentric Action

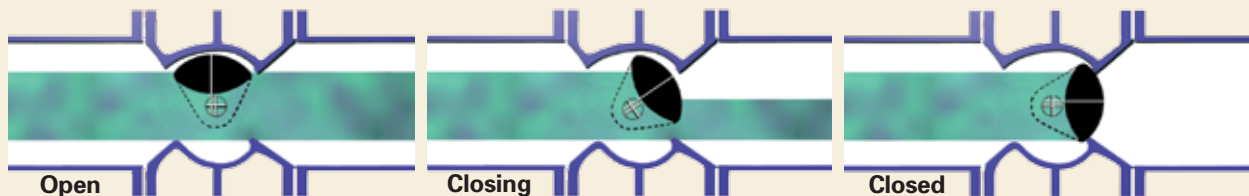
DeZURIK Eccentric Action and Resilient Plug facings ensure lasting dead-tight shutoff. As the eccentric plug rotates 90° from open to closed, it moves into a raised eccentric seat.

In the open position, the segmented plug is out of the flow path. Flow is straight through, flow capacity is high.

As the plug closes, it moves toward the seat without scraping the seat or body walls so there is no plug binding or wear.

Flow is still straight through, making the throttling characteristic of this valve ideal for gases, liquids and slurries.

In the closed position, the plug makes contact with the seat. When furnished with resilient facing, the plug is pressed firmly into the seat for dead-tight shutoff. Eccentric plug and seat design ensures lasting shutoff because the plug continues to be pressed against the seat until firm contact is made.



**Note:** The cross-section view shows an installation for clean water and gas. Refer to installation instruction for sewage application.



### **One-Piece Cast Plug**

Eccentric Plug valves feature a plug with upper and lower shaft in a one-piece casting. The straight plug face allows for inherent linear flow characteristic. Because the plug can rotate out of flow, it allows for increased plug life in abrasive applications.

### **Bolted Bonnet**

All valves have a rugged, one-piece bolted bonnet for maximum strength. It houses upper bearing and shaft seals to increase cycle life. If maintenance is ever required, the bonnet's design allows for easy disassembly and access to internal components.

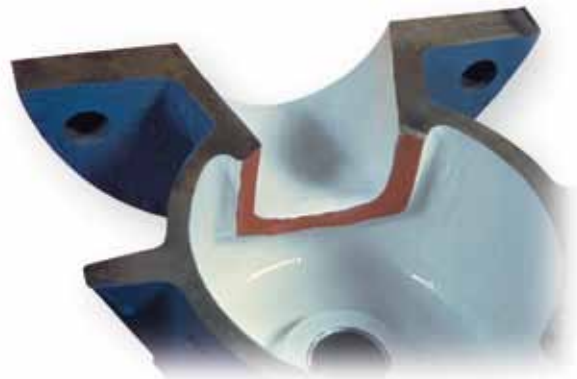
### **Tight Shutoff with Pressure in Either Direction**

Eccentric Plug valves constructed of cast iron, ductile iron, carbon steel and stainless steel with resilient-faced plugs provide drip-tight shutoff on wet service applications at pressure differentials up to the full valve rating.

Valves constructed of aluminum or acid resistant bronze with resilient-faced plugs provide dead-tight shutoff on wet or gas service at pressures up to the full valve rating with pressure against the back of the plug pushing it into the seat.

### **Corrosion-Resistant Nickel Seat**

Welded-in nickel seats are standard in all cast iron valves, 4–72" (100–1800mm) and in 4–36" (100–900mm) carbon steel valves. Unlike iron or nickel alloy iron seats, the thick welded nickel overlay provides excellent resistance to corrosion and damage. The raised seat ensures the plug only contacts the nickel, and prolongs the life of resilient plug facings.



### **Wide Size Range**

DeZURIK offers the broadest Eccentric Plug line with 26 standard sizes from .5–72" (25–1800mm).

### **Wide Choice of Body Materials**

DeZURIK offers the most complete line of eccentric body materials to meet the requirements of a broad range of applications up to 285 psi (1965 kPa). Materials available include cast iron, ductile iron, acid-resistant bronze, aluminum, carbon steel, stainless steel, Alloy 20, Monel and Hastelloy C.

Clean interior design and straight-through flow allow high maximum capacity with minimum pressure drop.





### **Actuators**

DeZURIK manual actuators are constructed for quality and performance. Handwheel actuators feature enclosed and sealed construction, protecting moving parts from damage or corrosion. Continual lubrication is not required for operation ease. Heavy-duty, corrosion-resistant actuator bearings provide lasting, easy valve operation and overall reliability.

Rugged actuator castings, gears and shafts also add to reliability by ensuring permanent alignment of moving parts for smooth operation.

Cylinder actuators provide long life and reliability to meet the requirements of a wide range of control applications. They feature heavy-duty construction of gears, pistons and piston rods, ensuring smooth operation for better throttling. Enclosed and sealed construction protects internal actuator parts from dirt and corrosion. Lubrication is not required, even on continuous throttling applications. Cylinder actuators are available as double-acting or spring-return.



### **Accessories**

DeZURIK offers a full line of extensions and accessories, including enclosed neck extensions, extended operating nuts, floorstands, valve boxes, floor boxes, solenoid valves, switches, speed control valves, positioners and motor operators.

## **Sales and Service**

For information about our worldwide locations, approvals, certifications and local representative:

Web Site: [www.dezurik.com](http://www.dezurik.com) E-Mail: [info@dezurik.com](mailto:info@dezurik.com)



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