

SERIES 200 ANGLE-DISC • SERIES 285 ANGLE-DISC • SERIES NS HIGH-PERFORMANCE • T-SERIES TEFLON-LINED • DIAPHRAGM ACTUATORS



# AN OVERVIEW OF NORRIS BUTTERFLY VALVE SOLUTIONS



*Engineered Performance*



# WHY YOU GET MORE FROM NORRIS BUTTERFLY VALVES

In both value and performance, Norris butterfly valves stand above the rest. Unique design features and rigorous quality standards in manufacturing give you the best combination of durability, economy and ease of maintenance.

Our versatile designs can be adapted for specialty applications, such as dry bulk service, abrasive services, food-grade applications and severe service chemical flow streams. Unique features, such as the angle-disc in our Series 200 and Series 285 valves, assure you of bubble-tight shutoff with high flow efficiency and low operating torque. For lasting value, all types and sizes of Norris butterfly valves are field-repairable using only a wrench and screwdriver.



*Angle-disc design provides a 360° uninterrupted seal to ensure positive shutoff.*

## Quality Construction, Superior Technical Support

- ISO 9001-certified manufacturing
- Every valve is pressure tested (both differentially and shell)
- Three-year warranty
- In-house engineering and technical support
- Responsive service and prompt delivery
- Field support worldwide

## Series 200

Unique, angle-disc butterfly valves available in both resilient-seated and metal-lined designs. Feature bi-directional positive shutoff to 200 psig working pressure. Angle disc provides 360° uninterrupted differential sealing surface.



**SERIES R200 VALVES**

- Double-shaft seals and body bushings assure smooth low-torque operation
- Independent flange seals
- Rigid-backed rubber seat easily field-replaced
- Non-wetted body available in lug or wafer designs
- Rigid drive, precision disc-to-shaft connection
- Resilient-seated design (R200) offered in a wide variety of elastomeric seals and metallic materials
- Metal-lined design (M200) provides positive shutoff with minimum sealing material
- Available with a variety of pneumatic, electric and hydraulic actuation

## Series M200 Valves

Available in a wide range of materials, including Hastelloy®, titanium and other unique alloys.



## TYPICAL APPLICATIONS

- Cooling tower water control and isolation
- Ethylene glycol chiller systems
- Steel mill quench water control
- Freon-based refrigeration systems
- Filtration equipment isolation and flow control
- Chemical plating or coating
- Lubricating oil service
- Gasoline, kerosene, aviation fuel isolation and control
- Dry bulk cement
- Vacuum lines
- Ethanol for gasohol mixing
- Abrasive slurry applications
- Specialty chemicals requiring special alloys

## Series 285

Exclusive, angle-disc butterfly valves provide bi-directional, positive shutoff to ANSI 150 standards (285 psig). Uses a rigid-drive, precision disc-to-shaft connection without load-bearing fasteners in the flowstream. Available in both resilient-seated and metal-lined configurations.



**SERIES R285 VALVES**

- Angle disc with 360° uninterrupted differential sealing surface
- Double-shaft seals and shaft bushings assure smooth, low-torque operation
- Non-wetted body available in lug or wafer designs
- Offered with a variety of pneumatic, electric and hydraulic actuation

### *Series M285 Valves*

Offered in several grades of bronze, SST and high alloys such as Monel®, Inconel® and titanium.



## Series NS High-Performance

Firesafe, non-firesafe and metal-seated designs in 2-inch through 60-inch sizes. ANSI classes 150, 300 and 600 available.

- Lug and wafer designs in carbon steel or SST
- 100% pressure tested
- Nickel aluminum bronze material in firesafe and non-firesafe designs
- Temperature ranges from -40°F to 1,100°F (-40°C to 593°C)
- Reinforced Teflon® seats standard



## T-Series Teflon®-Lined

Teflon-lined valves available in 2-inch through 12-inch sizes. Available with duplex stainless disc and shaft with Teflon seats or fully Teflon-encapsulated disc with Teflon seat.



- Teflon is molded through the shaft bore in the seat for extra Teflon sealing at top and bottom of seat
- Teflon O-seals behind Teflon seat for secondary seal member
- Teflon seat extends to face of valve for positive flange seal
- Teflon over Buna, Teflon over EPDM or Teflon over Viton seat options
- Meets sanitary standards

## Diaphragm Actuators

Designed for on/off or throttling service (when used with a positioner). Available in four size ranges with torque output to 17,000 in./lbs.

- Spring-return or double-acting
- Spring Rotation from clockwise to counter-clockwise is field-reversible
- Easily adapted to various mounting styles and shaft types
- Can be actuated with as little as 10 psig supply air
- Adaptable to water or oil as the supply source
- Wide range of switches, positioners and other accessories can be mounted



**OTHER NORRISEAL PRODUCTS:**

LIQUID LEVEL CONTROLLERS

LIQUID LEVEL SWITCHES

PRESSURE CONTROLLERS

TEMPERATURE CONTROLLERS

CONTROL VALVES

CHECK VALVES

REGULATORS



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LEVEL CONTROLLERS • LIQUID LEVEL SWITCHES • PRESSURE CONTROLLERS • CONTROL VALVES • CHECK VALVES • BUTTERFLY VALVES