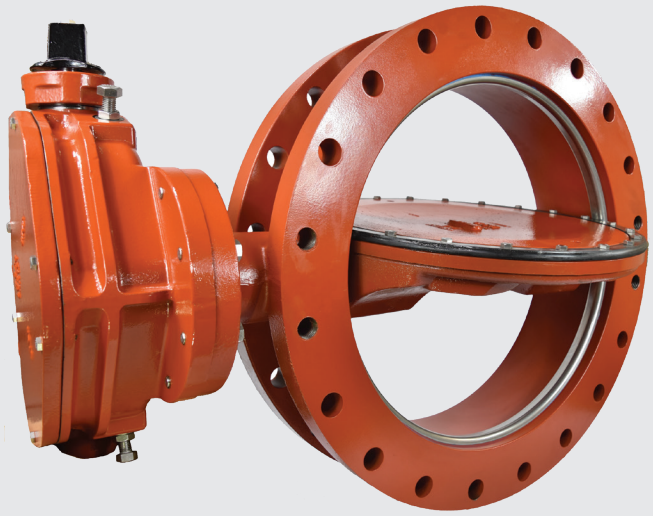
SEAT-ON-DISC
BUTTERFLY VALVES



- AWWA C504
- Series 4600 (3"-60")
- Series 4650 (66"-72")
- NSF/ANSI 61/372 CERTIFIED

MARKETS

WATER/ WASTEWATER

INDUSTRIAL

SPECIFICATIONS

Size Range	3"-72"
Materials	Ductile iron ASTM A536 body and disc, 316SS seat ring, EPDM seat, SS hardware
Pressure Rating	AWWA CL 150B (150psi) or 250B (250psi)
Temperature Range	0ºF-250ºF
Body Style	FLG, MJ or MJxFLG
Actuator Types	Lever, traveling nut, worm gear, electric motor, pneumatic, hydraulic
Standards	AWWA C504, NSF/ANSI 61/372 certified (4"-48")
Install Orientation	Horizontal or vertical
Featured Applications	Treatment plants, pump stations, buried/vault, irrigation, pump isolation, on/off, throttling, modulating
Water Service	Potable water, industrial water, secondary effluent

MPI MCWANE PLANT & INDUSTRIAL

CLOW VALVE CO.

MH VALVE COMPANY

KENNEDY VALVE

Scan for detailed drawings

ENGINEERING FEATURES

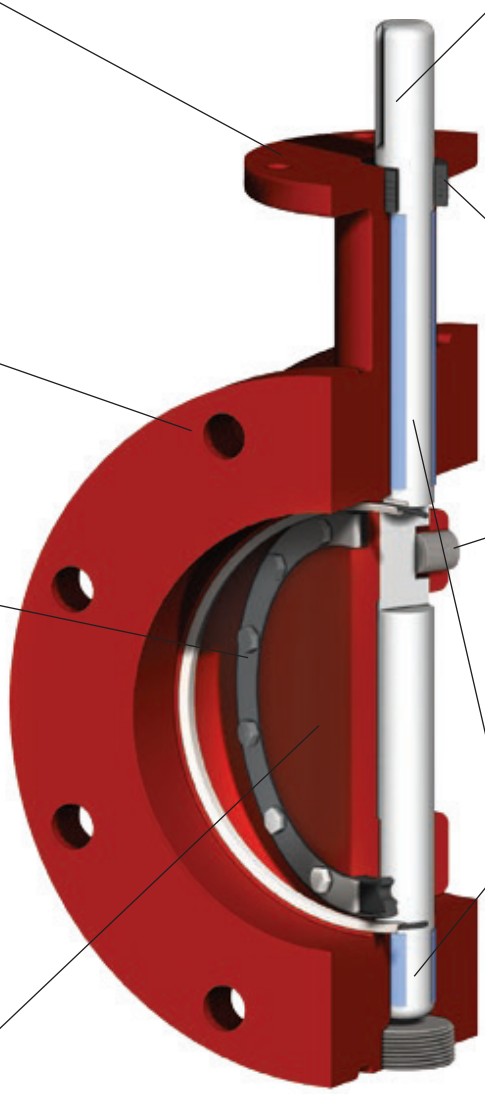
SERIES 4600 • SIZES 3"-24"

ACTUATOR MOUNTING PAD
Butterfly Valves come standard with an integrally cast actuator mounting pad, machined and drilled in accordance with ISO-5211 and MSS SP-101. This allows for direct mounting of manual and automated actuators without the need of additional pieces or adapters, providing a more compact and rigid arrangement.

VALVE BODY
Heavy duty ASTM A536 ductile iron construction meets and exceeds AWWA C504 requirements.

SEALING SYSTEM
EPDM rubber is vulcanized to a 304 stainless steel ring and attached to the vane utilizing self-locking, stainless steel cap screws. The disc seat assembly mates with a 316SS body seat ring, forming an uninterrupted 360-degree seal. The disc seat is easily replaceable in the field without the need for special tools.

OFFSET DISC DESIGN
Heavy duty A536 ductile iron meets or exceeds AWWA C504.



STAINLESS STEEL SHAFT
Our butterfly valves utilize stainless steel shafts to resist corrosion and ensure long valve, bearing, and packing life. 304SS is the standard shaft material for CL 150B, while 630SS (17-4) stainless steel is utilized for CL 250B.

SELF-ADJUSTING PACKING
Self-adjusting V-type packing that increases the sealing force with the increase in line pressure. Accessible without dismantling the valve, per AWWA C504.

TORQUE PLUG
Stainless steel torque plug securely locks valve disc to shaft.

LONG LIFE BEARINGS
Nylon bearings are sized to meet or exceed the AWWA C504 specification for axial pressure loads. The bearings are self-lubricating and require no maintenance.

ENGINEERING FEATURES

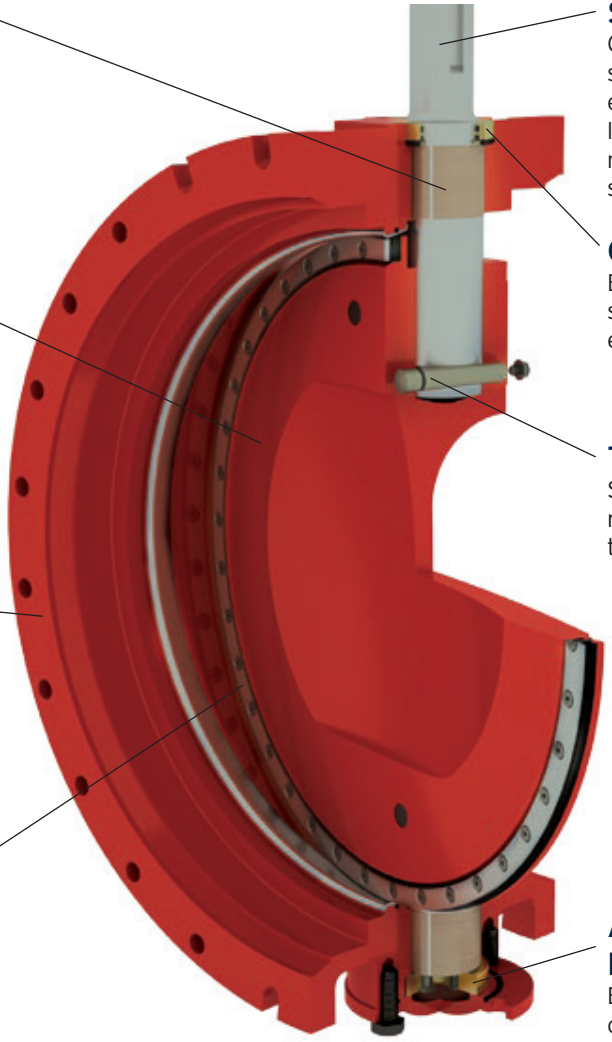
SERIES 4600 • SIZES 30"-54"

LONG LIFE BEARINGS
Stainless steel backed, Teflon bearings are self-lubricating, providing low friction support for the life of the valve. No maintenance is required.

OFFSET DISC DESIGN
Newly engineered ASTM A536 ductile iron disc provides improved headloss characteristics without sacrificing strength.

VALVE BODY
Heavy duty ASTM A536 ductile iron construction meets and exceeds AWWA C504 requirements.

SEALING SYSTEM
EPDM rubber seat is held in place with a 304SS retaining ring and self-locking 304SS cap screws. The disc seat assembly mates with a 316SS body seat ring, forming an uninterrupted 360-degree seal. The disc seat is easily replaceable in the field without the need for special tools.



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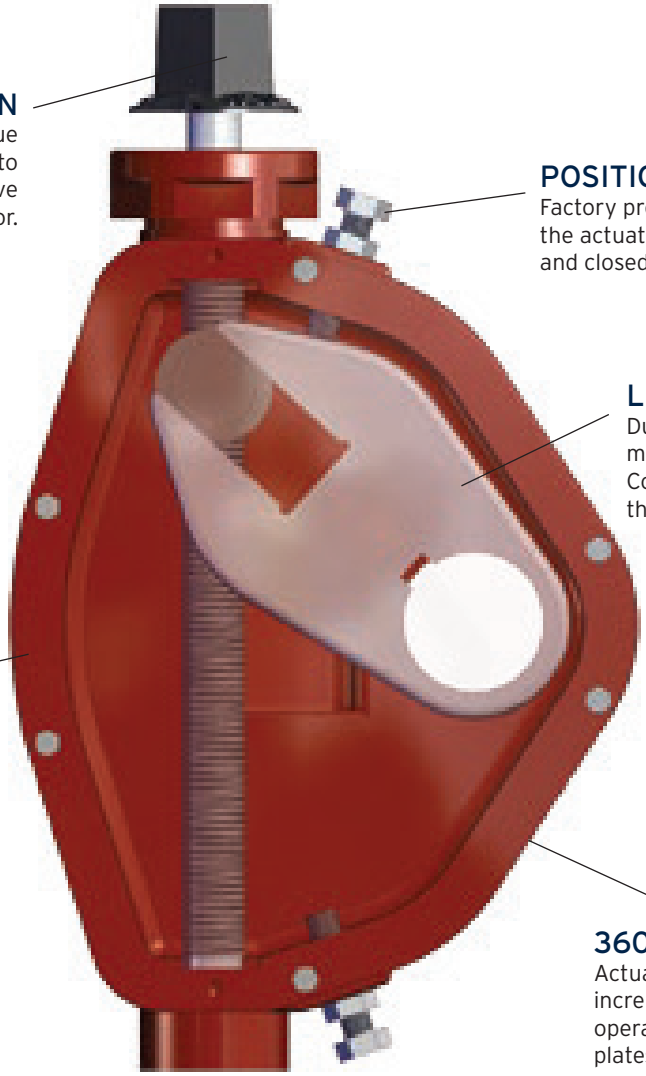
O-RING CARTRIDGE
Bronze cartridge with double O-ring seal provides maximum sealing efficiency.

TAPER PINS
Stainless steel taper pins and lock nuts securely lock the valve disc to the shaft.

ADJUSTABLE THRUST BEARING
Bronze thrust bearing accurately centers disc in valve body.

TRAVELING NUT ACTUATORS

MPI style 4600 seat-on-body butterfly valves use slotted-lever traveling nut actuators on valve sizes 30" and smaller for smooth operation. Traveling nut actuators were developed to match the valve torque characteristics, providing greater mechanical advantage near the valve open and close positions where it is needed most. The actuator slows down near the close position to help seat the disc, and the slower opening/closure reduces shocks to the connected piping system.



OVERLOAD PROTECTION
Up to 450 ft-lbs of input torque against the stops (open/close) to prevent damage to the valve and actuator.

POSITION STOP
Factory preset internal adjusters prevent the actuator from going beyond the open and closed positions of the valve.

LEVER & TRAVELING NUT
Ductile Iron construction, precision machined to transmit torque seamlessly. Contains multiple keyways to change the opening direction.

DUCTILE IRON HOUSING
Proven strength, permanently lubricated and sealed to protect from the elements and groundwater.

360° ROTATION
Actuator can be mounted in 90-degree increments for easy installation and operation without the need of adapter plates and additional parts.

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