

FLAP GATE

MODEL F-55D

SIZES 6" TO 108"

HEAVY DUTY DUCTILE IRON

RATED FOR UP TO 55 FEET
OF SEATING HEAD

mcwanepi.com



FLAP GATE MODEL F-55D

F-55D Design Features & Benefits

1. Engineered for Durability

Our frame and cover are precision-crafted from high-strength ductile iron, delivering the rugged durability of steel with the versatility and flexibility of cast iron. Compared to traditional grey iron, ductile iron has increased yield strength and tensile strength to improve cracking resistance and impact absorption, ensuring reliable performance even under extreme stress. Whether you're operating in high cycle applications or corrosive environments this material choice means less downtime, fewer replacements, lower total cost of ownership and long-term peace of mind.

2. Smooth, Silent, and Built to Last

To ensure long-term reliability and quiet operation, the hinge bushing features oil-embedded bearing bronze, a premium material known for its exceptional wear and corrosion resistance. This advanced design minimizes friction, reduces maintenance, and extends the service life of the flap gate, even in the most demanding environments.

3. Bronze Seals: The Superior Solution for Corrosive Environments

Bronze's exceptional resistance to corrosion, especially from saltwater, chemicals, and acidic conditions, ensures that the seal maintains its integrity and functionality over time, even under constant exposure to harsh elements. Unlike rubber or steel alternatives that may degrade, swell, or rust, bronze offers a stable, low-maintenance solution that supports smooth gate operation and tight sealing. This durability translates into reduced downtime, fewer replacements, and lower lifecycle costs, making bronze seals a smart investment for critical water control infrastructure in corrosive settings.

4. Precision That Performs: The 2.5° Seat Angle Advantage

When it comes to water control, every detail matters. This subtle design feature ensures positive closure by harnessing gravity and flow dynamics to guide the gate into a secure, leak-resistant seal every time. Whether facing fluctuating water levels or debris-laden flows, the angled design promotes consistent performance, reducing the need for manual adjustments or costly maintenance. It's a small angle with a big impact, delivering confidence and reliability in every application.

5. Pump Discharge Applications: The Secret Formula

Our pump discharge solution combines a spring bumper, neoprene seal, and 125-pound flange to deliver unmatched reliability. The spring bumper cushions for reduced wear and prevents the flap from over-extending, while the neoprene seal ensures a tight, flexible barrier against backflow. Anchored by a heavy-duty flange to mount directly to a pipe flange, this system is built to handle pressure, vibration, and corrosive conditions maximizing uptime and minimizing maintenance.



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