

PF-25 FLAP GATE

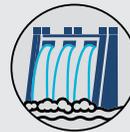


- SIZES 4" TO 24"
- CAST IRON BODY WITH NEOPRENE SEAT
- RATED FOR UP TO 25 FEET OF SEATING HEAD

MARKETS



AGRICULTURE



CIVIL



WATER/
WASTEWATER

SPECIFICATIONS

Size Range	4"-24"
Seat Angle	7.5°
Mounting	125# flange mount, optional for 4"-12": compression type mount
Flange Drilling	ANSI/AWWA C110, C111 (125# standard), optional for 4"-12": compression gasket seal
Assembly Hardware	Stainless steel ASTM F-593 & F-594, Type 304 or Type 316
Seating Head	Up to 25 feet
Frame & Cover Materials	Cast iron ASTM A-126 Class B
Seat Materials	Neoprene ASTM D-2000
Hinge Pin & Hinge Link	Stainless steel ASTM A-276, Type 304 standard or Type 316
Hinge Bushings	Not applicable



FEATURES AND BENEFITS

1. Strong, Reliable Frame & Cover

The PF-25 features a rugged Cast Iron frame and cover designed to handle everyday drainage and outfall conditions with confidence. Its solid construction provides excellent stability, strength, and durability in typical drainage conditions, making it ideal for low to moderate head applications. The PF-25 is available with an ANSI 125# flanged connection, offering a secure and standardized mounting. The cover is also engineered for smooth, low-friction operation, allowing the flap to open easily under light upstream pressure while providing a tight closure during reverse flow.

Optional Frame Mounting: For sizes 4"-12", the PF-25 can also be supplied with a compression-type (W-Version) mounting option that has a compression gasket that seals the flap gate frame directly onto PVC pipe and provides a secure, leak-resistant seal.



2. Hinge Assembly Specifically Designed for Pump Discharge Applications

Designed for tough pump discharge service, the PF-25 features a heavy-duty hinge assembly that ensures smooth, reliable flap movement. The assembly includes a stainless-steel hinge pin and link system, supported by a low-friction washer and secured with a spring pin. This design helps prevent sticking, jamming, and metal-to-metal contact, even in debris-filled flows. Most importantly, this hinge design is made to handle the harsh effects of volatile pipeline pressures and water hammer, helping ensure long service life with minimal maintenance.

3. Tight Sealing for Reliable Backflow Protection

The PF-25 uses a resilient neoprene seat that provides consistent, dependable, and a long-term sealing performance. Resistant to wear, weathering, and water exposure, neoprene remains flexible over time, allowing the flap to conform tightly to the frame for improved shutoff. This resilient seating surface reduces leakage, absorbs closing impact, and minimizes maintenance needs, for dependable backflow protection, in typical drainage, outfall, and pump-discharge environments.



4. Optimized 7.5° Seat Angle

When it comes to flap gate performance, even small design choices make a big difference. The PF-25's 7.5° seat angle creates a natural closing force that uses gravity and flow dynamics to guide the cover into a secure, leak-resistant seal. This subtle angle helps the gate close quickly and consistently, even with fluctuating water levels or light debris in the flow.

Optional Accessory: Counterweight for Improved Closing Performance

A counterweight is available for the PF-25 when the gate is mounted vertically with the cover facing downward. In this position, the counterweight assists the cover in closing properly and maintaining a reliable seal. It is especially helpful in low upstream head conditions where hydrostatic pressure alone may not be sufficient to achieve full closure, ensuring dependable backflow protection in this installation orientation.

