xylem



Active Seal system

Zero leakage with micro-pumping grooves

- Unique patented design
- Ensures zero leakage
- Less downtime
- Lower maintenance costs
- Increased equipment lifetime

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Active Seal Key features

Patented functionality

Unique zero-leakage solution from Xylem. Applied to the inner seal of a double-seal system, Active Seal functionality fully prevents liquid from entering the motor.

Active Seal in a double-seal system

1 Inner seal

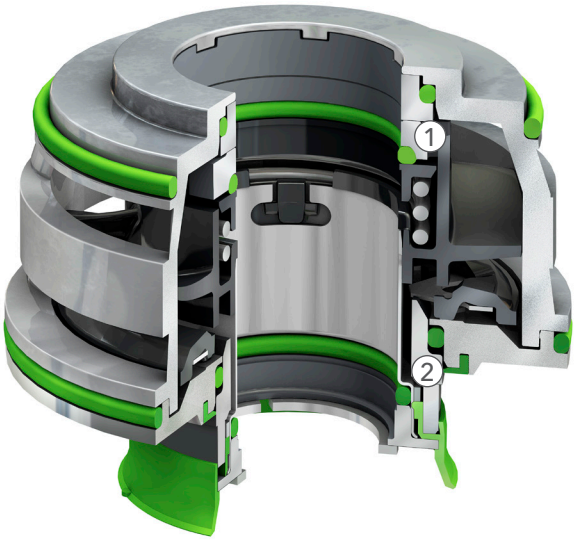
Active Seal spiral grooves are applied to the inner seal, making it act as a micro-pump. Rotation of these laser-cut grooves on the seal face continuously pumps liquid away from the motor cavity.

2 Outer seal

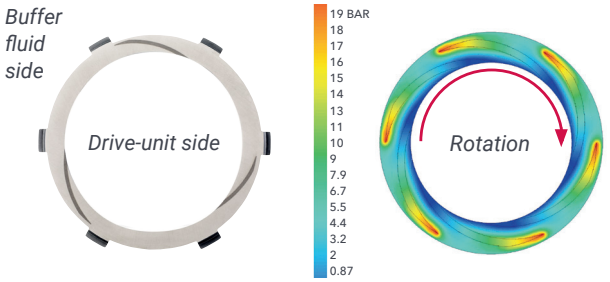
Prevents leakage of the pumped media into the buffer chamber.

Easy to upgrade

The new Plug-in seals with the Active Seal system are completely interchangeable with previous generations of Plug-In Seals. The new inner seal with the Active Seal function is also interchangeable with old inner seals for many Flygt double seal systems with separate single seals.



Plug-in seal with the Active Seal system.



Active Seal technology from Flygt enhances sealing reliability and minimizes downtime. The viscous shear of the fluid in the laser-cut grooves creates a hydrodynamic pumping effect that directs any liquid on the stator side back to the buffer-fluid side of the seal. By minimizing accumulated leakage into the stator housing and/or inspection chamber, Active Seal reduces the risk for bearing and stator failure. The technology is especially beneficial for products in continuous operation, where the demands on the seals' ability to prevent leakage are high. Active Seal functionality is available on a selected range of Flygt Plug-in seals and double seal systems with separate single seals.

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