Flygt Progressing Cavity Grinder Pump

A MUNICIPAL GRADE PUMP FOR THE DOMESTIC USER
Small, competitive and made to last

Homeowners want an affordable, efficient pump that won’t clog. Wastewater consultants want a pump to recommend that is reliable and will last for many years.

The Flygt progressing cavity pump has everything you require for low pressure sewer systems:
- It gives you the high head you need for low pressure sewer pumping.
- It is powered by a small, energy efficient motor that runs from any standard domestic power supply.*
- It has a robust, high-chrome steel grinding mechanism that is used in tens of thousands of municipal pump stations around the world.
- And it is a Flygt pump: a cast iron, quality product that is made to industrial specifications through and through.

* The pump is available in both single- and three-phase versions.

A great package deal
And best of all, you can order the pump as part of an all-in-one package. That’s a pump, plus a pre-fabricated basin, plus a pump controller – in one competitive package. All from a single supplier.

Functions and flexibility
The image above shows a typical low pressure sewer system where each home is equipped with its own grinder station. The network of stations connects to the force main with small diameter pipes. This makes low pressure sewer systems a cost effective alternative to septic systems.
Heads of up to 240 feet

60 Hz - 1.7 HP 230v 1-phase

3068.175 PC Pump Curve
How Flygt pumps are made to last

Class-F quality motor
At Xylem, we manufacture our own motors that are made to operate in submersible pumps. Inside our progressing cavity pump, you’ll find a squirrel cage induction motor, made to Class F specifications. The stator windings are trickle impregnated with resin which eliminates air pockets in the windings allowing the motor to run cooler which in turn extends the motor life. Our motor is rated at 310°F, allowing up to 30 starts per hour.

Double seal system
Our unique dual-tandem, double-mechanical seal system protects the motor from leakage. Working independently of each other, they offer extra security and prolong intervals between services.

Well-balanced drives
Vibration is minimized thanks to a manufacturing process that produces shafts to the most exacting tolerances. A smooth running drive shaft ensures high motor efficiency and lower energy consumption along with longer bearing life. With over 100,000 units in use, the track record speaks for itself.

Long-life bearings
Reliability is further enhanced thanks to a two-row, angular-contact ball-bearings. They are pre-packed with high temperature grease for maintenance-free performance.

Predictable flow
The stainless steel rotor in conjunction with the rubber stator produces a steep performance curve delivering predictable flow over a wide range of system pressures. This helps simplify the hydraulic modeling process, and ensures critical line velocities are met.

Efficient motor cooling
The motor is heat-shrink fitted to ensure full metal-to-metal contact with the outer housing which is cooled by the surrounding liquid. Fins on the outside of the housing also dissipate heat.

Robust grinder
The grinding mechanism has a long and successful track-record having been used in municipal pumps for over 20 years. It is extremely robust and can handle a wide range of different solids. The grinder chops up all solid material into pieces so small that they pass through narrow pipes with ease. Made of high-chrome steel, the grinding mechanism is wear-resistant and durable.
A cable made for use in water
SUBCAB has been developed by Xylem for use in submersible applications. It retains its mechanical and physical properties even after long periods of use.

Cable entry
Separate sealing and strain relief functions reduce the risk of cable damage from improper handling.

Cast iron reliability
Flygt progressing cavity pumps are made of cast iron which offers good wearability and corrosion resistance. The result is a robust pump that will last for many years.

Easy to install
With its standardized connections, you can use Flygt progressing cavity pumps in existing sumps and in Xylem’s prefabricated Flygt pump stations.
A competitive pump in a competitive package

To make life easier for wastewater consultants and installers, we have put together a package that contains a Flygt 3068 progressing cavity pump, prefabricated station and the controller designed for use in low pressure sewer systems. By matching equipment designed for residential applications, we are able to offer this integrated package at a competitive price along with ensuring all of the components are optimized to work together.

A complete pump station, ready-made
Flygt’s LPSS prefabricated pump station for low pressure sewer systems comes complete. Ready for immediate installation and connection to the home.

Flexible design
The Flygt Compit 460 and 570 residential stations are available in simplex configurations. The Compit 460 (75” deep) is a basin that serves southern climates where the frost line does not exceed 30” in depth. The deeper Compit 570 (93”) is an economical solution for northern climates where the frost line can be over 4 ft. deep. There is an extension piece that can increase depth by nearly 4 ft. if the job requires a deeper station.

Both of these unique basins have a convex bottom to direct debris to the pump inlet to promote a clean station and avoid settled solids. The self anchoring design simplifies and reduces the cost of installation by eliminating the need for concrete for ballasting the station.
Reduce Running and Service Costs with Flygt Monitoring & Control Solutions

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Flygt FGC211 Intelligent Control

Advantages

• Motor protection with built-in overload protection and user-defined maximum motor current
• Maintenance runs will exercise for one second every four days to keep seals adequately lubricated
• Automatic reset from the FGC allows the end-user to enter the number of automatic restarts from 1-200. The counter clears after a successful restart
• Starting and power on delay to prevent an overpressure situation, the FGC starts pumps with a delay of 1-120 seconds when starting the pumps after a power interruption

Flygt Phase Conversion Panel

Advantages

• Nearly double the starting torque and up to 30% energy savings when compared to single phase systems
• Additional motor protection will shut pump down in under or over voltage conditions
• Self starting system does not require start and run capacitors to run the pump
• Reduced operating cost and low stress on the motor due to reduced in rush starting current

The pump maker that knows its systems

Designing a low pressure sewer system is simple in theory, but harder in practice. Having been in the pump business for over 60 years, we have learned a thing or two about pump systems. Today, we have a team of system engineers who have the knowledge to provide qualified design recommendations and solutions. They know their theory and have had plenty of practice in the field.
Xylem |ˈzɪləm|

1) The tissue in plants that brings water upward from the roots;  
2) a leading global water technology company.

We’re a global team unified in a common purpose: creating advanced technology solutions to the world’s water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services, and agricultural settings. With its October 2016 acquisition of Sensus, Xylem added smart metering, network technologies and advanced data analytics for water, gas and electric utilities to its portfolio of solutions. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com