



Flygt pressurised sewage systems

FOR HOMEOWNERS, RESIDENTIAL ASSOCIATIONS AND PROFESSIONALS

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No one knows more about pressure

For more than a quarter of a century, Xylem has installed and maintained pressurised sewage systems around the world designed according to the EN1671:1997 and AS/NZS1546.1:2008 standard. These systems provide reliable, effective and cost-optimised connection for a single home or an entire community to the municipal wastewater collection network. Right from the start, we work with you to design, install and maintain the optimal system for your needs.

Moving wastewater can be an uphill battle. Obstacles, such as bedrock and tough topographical conditions, present challenges. For times like these, conventional gravity sewer systems don't make the grade. Pressurised sewage systems do. A pressurised sewage system consists of a collecting tank, a pump and the pipes required to feed wastewater into the sewer main. Several tanks and pumps, or pump stations, and pipes form a pressure sewage network. With stricter environmental regulations calling for smarter wastewater transportation, pressurised sewage systems have proven to be a safe, flexible and reliable way to move wastewater cost-effectively.

Pipe size matters

Consider the task of digging deep wide trenches for gravity feed sewage pipes. These are larger than the small pipes used for pressurised sewage systems. Laid in shallow narrow trenches that follow the natural contour of the ground, these smaller pipes effectively lead wastewater away from each property to the sewer mains, thanks to the use of grinder pumps that effectively reduce solids to slurry.

Customise a standard solution

Selecting your pressurised sewer system is simple.

Let us tailor it to your precise requirements. Because we optimise your system according to specification, you only pay for exactly what you require. No more, no less.

Mix and match

Most likely, your system has a unique set of conditions and requirements. What's perfect for flat terrain differs from what's ideal for areas with a high water table. And what's right for a mountain cabin, golf course or camping ground is far from ideal for a residential community.

At Xylem, we recognise diversity. Which is why every single Flygt component is designed to work together in any combination. So mix and match. Or better yet, let us do that for you. Our engineers help find the ideal arrangement.

	Simplex Package	Duplex Package
NO. OF PUMPS	1	2
PUMP OPTIONS	- Flygt DXG Plus - Flygt MF3068.175 PC	MF3068.175 PC
CONTROL OPTIONS	- Flygt DXG Plus - Xylem Q-Smart - Flygt FGC 400	- Xylem Q-Smart - Flygt FGC 400
WHO	Single homeowners, vacation homeowners, private homeowners associations	Real estate developers, contractors and municipal wastewater professionals
WHAT	- Complete solution with single-phase electrical connection - Single pump	- Single or three phase pumps - Communications with advanced SMS and remote supervision
WHEN	For single-family homes	- For a single-family residence, several households or an entire residential community - High reliability in harsh conditions - Higher availability required
WHY	- Economic - Alarm	- Economic for highest possible availability - Remote control for increased safety and reliability
WHERE	- In hilly or flat areas - For places, such as golf courses and camping grounds, situated outside populated areas - Where bedrock or groundwater present a challenge - Wherever minimum disruption is required or desirable	

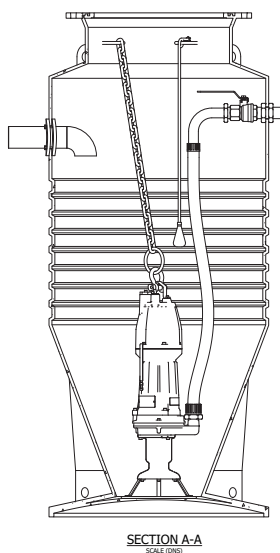
Pump it up

Reliable and cost-effective, the Flygt Solution pumps residential wastewater up to the sewage main.

A simple, yet powerful solution

The Flygt Solution includes a complete fabricated Flygt pump station with pump controller, grinder pump or centrifugal pump, level transducer and visual/audible alarm. Think of it as a plug-and-play solution that's easy to install underground, connect, commission, operate and maintain.

Made of durable HDPE, this self-cleaning pump station provides trouble-free operation. The transducer combined with monitoring features makes the solution convenient and easy-to-use. The audible alarm alerts homeowners when attention is required. But rest assured, longlasting, trouble-free operation is the Flygt norm.



Technical data

Installation depth	2 m	Width	900 mm diameter
Effective sump volume	900 litres	Inlet diameter	User selectable
Station weight	92 kg	Inlet depth	260-1400 mm
Access cover	Polyethylene cover	Outlet diameter	32 mm
Cover is rated to carry	510 kg max		

Flygt MF3068 PC

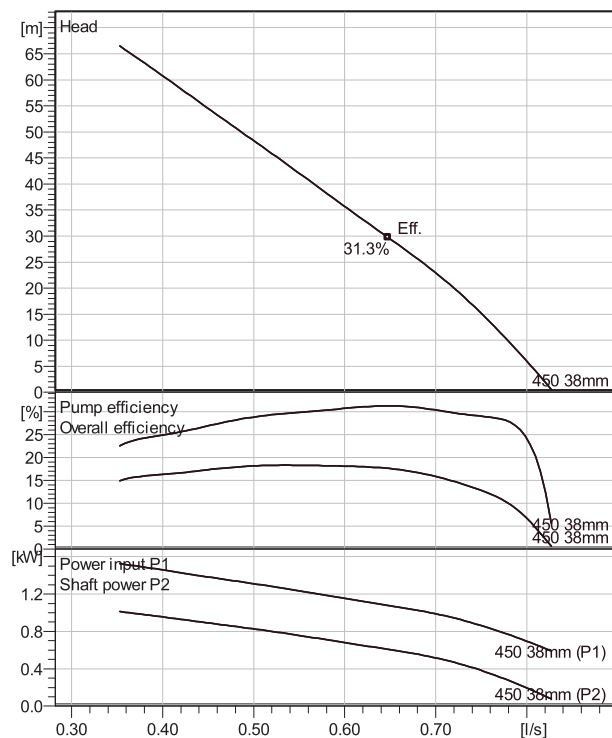
For High head applications.



MF 3068 HT 1~ 450

Duty Analysis

Curves according to: Water, pure [100%], 4 °C, 1 kg/dm³, 1.569 mm²/s



Product features

- High head: Up to 65m
- Flow: Up to 0.8 l/s
- Robust and reliable

Technical specification

Model	MP3068.175HT 450 PC
Voltage	240Vac 50Hz
Power	0.9kW
No. of starts/hour	15
Weight	55kg approximately
Dimensions	328mm x 890mm (Diameter X H)

Flygt DXG Plus

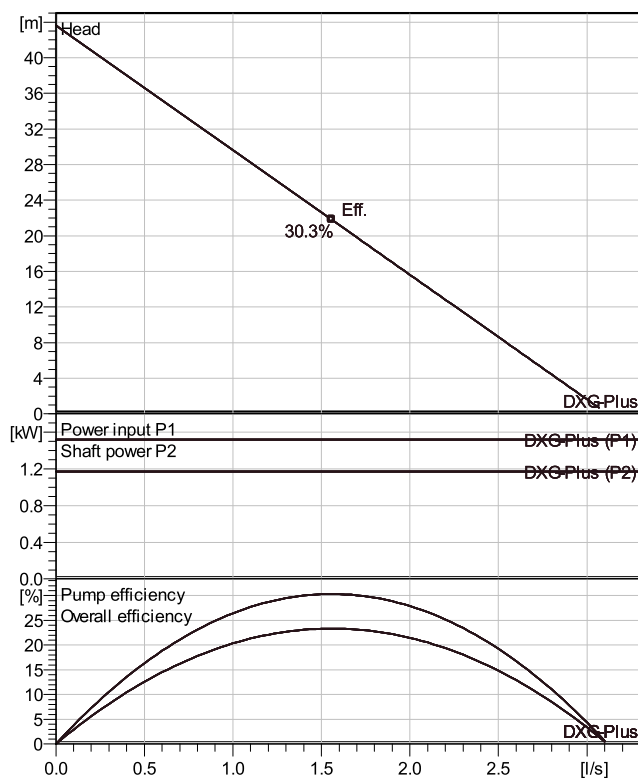
For when a simple solution is needed.



Performance

Curves according to:

Water, pure [100%], 4 °C, 1 kg/dm³, 1.569 mm²/s



Product features

- High head: Up to 45m
- High flow: Up to 3 l/s
- Smart functionality
- Easy selection

Technical specification

Model	DXG PLUS Grinder System
Voltage 1 Phase	240Vac 50Hz 2739RPM
Voltage 3 Phase	400Vac 50 Hz 2700 RPM
Power	1.5kW to 2.4kW
No. of starts/hour	Unlimited starting potential
Weight	31kg approximately
Dimensions	310mm x 490mm (Diameter X H)

Engineered for durability

Versatile, robust and reliable, Flygt pumps are rugged enough to deliver non-stop performance for virtually all application and performance requirements – time and again.

Take our Flygt submersible grinder pumps, for instance. These powerful pumps come with a specially designed impeller to handle the demands of pressurised sewage systems. Made of chromium-alloy and hardened stainless steel, the impeller has a hydraulic design that increases efficiency and reduces wear. The heavy-duty cutting device shreds pumped solids into pieces so small that they easily pass through the narrow pipes of the system.

Pumps you can depend on

Quality Flygt pumps provide reliable trouble-free performance. The double shaft seal system protects the pump motor from leakage. Other features, such as the durable wear-resistant grinder device, patented adjustable heavy-duty cutting device, dry motors for submersible duty and built-in thermal sensors, are hallmarks of quality, reliability and long service life.

All Flygt grinder pumps are designed according to EN 12050-1.

Flygt MF3068.175 PC Grinder

Pump Warranty	12 Months Standard
Level sensor warranty	Flygt LTU 601 level transducer and high level back-up float
Seals	Double mechanical Griploc seal. Waste stream does not touch seal. Same seals as in large Municipal pumps.
Shaft	Increased shaft support by double row bearings and additional bronze wear sleeve.
Grinder Wheel	Commercial grade material and hardened throughout entire component.
Stator	Nitrile Rubber - Grit resistant
Basin	Open wet well, more storage If loss of power.
Control Panel	Interfaces to most makes and models of controllers including Iota panel. Option for retro-fit kit to integrate to competitor panels.
Submersible Pump	Wet well & true submersible pump capable of 20M



Flygt MF3068.175 Progressive Cavity (PC) Grinder Pump

Compact and lightweight, this submersible grinder pump delivers unmatched performance. Solids are reduced to slurry for convenient hassle-free pumping. Cast iron pump body and solid stainless steel progressive cavity rotor make this pump the ideal choice for residential sewage systems.



Flygt DXG Plus

The DXG Plus system consists of a compact and lightweight Flygt DXG pump and a brand new waterproof (IP68), VFD based controller unit. Together, the system increases performance with flow rates up to 3 l/s and facilitates superior pipe cleaning and reduced sedimentation. The VFD also works as a phase convertor making DXG Plus the ideal offer for 1-phase installations, with no need for capacitors.

Technical data

Flygt Submersible Grinder Pumps		
Pump type	DXG PLUS	MF3068.175 Progressive Cavity
Impeller no.	128	450
Discharge size	25mm	25mm
Rated power (kw)	1.1	1.0
No. of phases	220V 3-Phase motor Single phase input	1 or 3
Voltage	230V	230V or 400V
Rated current (a)	4.55	6.7 or 3.2

Know when the pressure is off

Xylem Q-Smart Pump Controller

Controllers providing comprehensive functionality, flexible sensor handling and critical operational data.



Flygt FGC 400 Pump Controller

In addition to the features of the Q-Smart controller, this controller enables a flexible choice of options and communication solutions



With Flygt pressurised sewage systems your wastewater systems are always on. And when they're not, you'll be the first to know.

Total control

For total performance, you need complete control. Look no further. Flygt monitoring and control equipment helps increase the safety and reliability of your system. Based on an open technical platform, you have the flexibility to manage all system components for a single home or an entire community.

Total peace of mind

Investing in Xylem monitoring and control equipment for your pressurised sewage system is an investment in peace of mind. Better yet, these smart devices contribute to reduced operational costs by boosting energy savings and minimising maintenance.

Flygt control solutions you can depend on

To help you optimise operations, there are several options for Flygt monitoring and control equipment.

Component	1-pump	2-pump	SCADA/ Supervisory system
Flygt DXG-Plus	•		
Xylem Q-Smart	•	•	Limited
Flygt FGC 400	•	•	•

Flygt DXG Plus

Ideal as an automated plug and play solution and when no run feedback is needed. Perfect for single house systems.

Xylem Q-Smart Controller

- Basic turn-key solution for controlling either a single or dual pump setup. Comes with flashing light and audible alarm
- Remote monitoring available, however limited in feedback
- Ideal for single sites where minimum run feedback is required

Flygt FGC 400

Our most comprehensive offering which provides full feedback on pump performance. Ideally integrate into a client based SCADA system

• Well Level/range via analogue or digital input	• Pump Auto
• Pump Manual	• Pump Current
• Pump Run Hours	• Total pump starts
• Mains Voltage high/low	• Battery voltage
• Start-up delay	• Modbus over RS232/485
• Alarm Output	• Aquacom over RS232
• Dimensions	• Digital input/output status

Proven in practice



Xylem offers a wide range of Flygt pump stations in different sizes and with different pipe connections to meet your specific requirements. Based on a well-known wastewater transportation technique, Flygt pump stations are widely used around the world.

Rugged and ready to work, our pre-fabricated, wear-resistant pump stations are designed specifically to handle raw wastewater. We recommend the optimal solution for your needs, so you can rest easy.

Challenges, such as odour, clogging, sedimentation and emissions of harmful gases, do not pose a problem. All stations are designed according to en 12050-1.

Always close to you

Our pressurised sewage systems are built for years of care-free operation. However, when you need assistance, you'll always find support nearby. In addition to our own service centers, we have a network of local service partners close to you.



Our services

Our service organisation offers you the assistance you need with everything from installation and inspections to traditional service and repair. Qualified service engineers perform the usual service and repair work on site. However, if mechanical repair is required, we take care of your equipment in one of our nearby workshops. In addition, we provide services to monitor your system and respond to alarms.

Service contracts

To complement whichever Flygt package you choose, we also offer a wide range of service contracts to maximise uptime and minimise downtime. Choose a basic annual inspection or a comprehensive contract that covers everything down to original parts replacement. Or let us tailor a contract that covers troubleshooting onsite and other services. Pay only for what you need - no more, no less.

Reliable, cost-effective operation

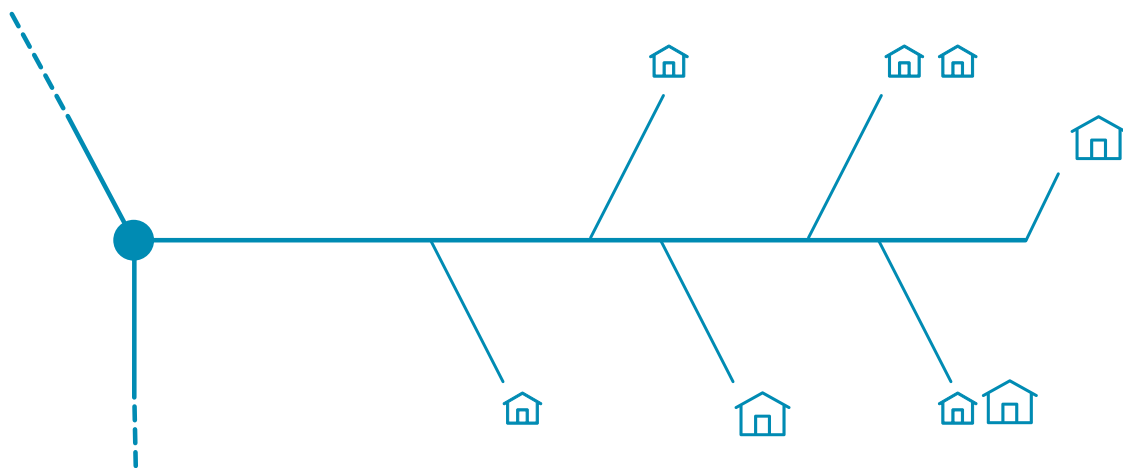
Whether you're a homeowner or a wastewater professional, we always strive to maximise the reliability and efficiency of your systems.

Using the original spare parts from Xylem and service and support from any of our service centres or approved service partners ensures that your system always lives up to your demands.

That means your pressurised sewage systems will continue to run safely, economically and trouble-free, year after year.

Let us optimise and customise your system

- 1 Is house occupancy seasonal or year-round?
- 2 How many households will there be in the system?
- 3 Will there be several households per pump station?
- 4 Please provide pipe levels and distances.



- 5 Which functionality of monitoring and alarm equipment should be used?
- 6 What level of service and maintenance are required?

For Contractors

- ☐ Water table
- ☐ Soil conditions
- ☐ Climatic conditions
(Frost depth, lowest temperature, duration)

Are there any area development sequence scheduled?

NOTES

Xylem |'zīləm|

- 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 settings.

Xylem also provides a leading portfolios of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. 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, please visit xylem.com/au.



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