# The new Flygt 3069 - available with clog-free Adaptive-N™ technology

COMPACT PUMP WITH A BROAD SELECTION FOR ANY WASTEWATER APPLICATION

The new Flygt 3069 is the most complete compact pump ever developed by our wastewater experts. Now available with clog-free Adaptive-N™, Vortex or Grinder hydraulics, the 3069 covers all of your wastewater pumping needs.

Whether you're handling wastewater for a municipal building or commercial sewage application, you want a pump that just keeps on working. That's the whole idea behind the Flygt 3069, an all-round workhorse in our small range family.

## Adaptive-N<sup>™</sup> technology

The 3069 comes with Flygt's innovative and patented Adaptive-N technology. This state-of-the-art technology not only prevents clogging and reduces stress on the shaft, seals and bearings, but enables a sustainable low use of energy. With thousands of Adaptive-N installations around the world it is proven in reducing costly unplanned maintenance call-outs. In short, the complete pump for your application.

The Adaptive-N version is available in three different hydraulic materials: cast iron, Hard-Iron $^{\text{m}}$  or stainless steel. Together with our flexible new installation concept, this means you can easily select and configure the pump to suit all wastewater installations.

## A solution for every need

We offer a range of impellers for all applications. Complementing the reliable Adaptive-N, Flygt also offers the powerful Vortex model. The Vortex pump has an open recessed impeller design, which provides free flow-through passage of solids and liquids.

When it comes to superior shredding and cutting, the Grinder impeller is optimal. It reduces solids to fine slurry, which can then be pumped through small-diameter pipes across various problematic terrains.

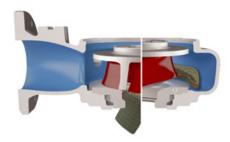
## **Key benefits**

Unique pump in its class, available with Adaptive-N technology that allows for:

- Reduced unscheduled maintenance due to its self-cleaning design, which provides reliable clog-free operation.
- Energy reduction of up to 25%

Flexible and easy to configure with four installation kits to meet every wastewater installation requirement.





## Self-cleaning design with Adaptive-N<sup>™</sup> technology

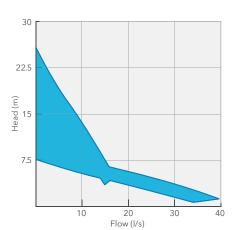
The Adaptive-N impeller moves axially upward when needed, allowing bulky fibrous material and debris to pass through smoothly, resulting in clog-free operations and reduced energy costs.





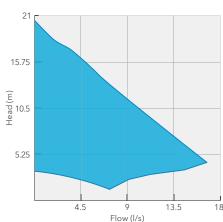
Flygt 3069 Adaptive N™





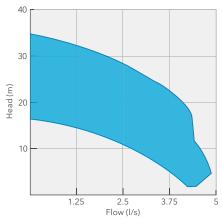
Flygt 3069 Vortex





Flygt 3069 Grinder





The 3069 model is now available with our patented Adaptive N technology, well tested in thousands of installations. Normally available on larger N pumps, this state-of-the-art technology not only prevents clogging and reduces stress on the shaft, seals and bearings, but it enables up to 25% sustained lower energy usage. You can also choose from different impeller material options: Hard-Iron, grey iron or stainless steel.

Robust and highly reliable, our powerful Vortex model has an open recessed impeller design to allow free flow-through passage of solids and liquids. It is capable of handling sludge concentration with up to 4% of dry solids.

When it comes to superior shredding and cutting, our enhanced designed grinder model is often used when high efficiency is a must in uneven terrain. This pump type is excellent in reducing solids to a fine slurry that can then be pumped through small-diameter pipes. The beauty of the grinder is that it adjusts to the actual system conditions without producing a very high pressure. It also requires very low maintenance.

| Flygt 3069 Series Range    |            |            |           |
|----------------------------|------------|------------|-----------|
|                            | Adaptive N | Vortex     | Grinder   |
| Power rating, kW           | 1.5 - 2.4  | 1.5 - 2.4  | 1.5 - 2.4 |
| Discharge size, mm         | 50, 65, 80 | 50, 65, 80 | 50        |
| Flexible installation      | Χ          | X          | -         |
| Hydraulic material options |            |            |           |
| Grey iron                  | Χ          | X          | Χ         |
| Hard-Iron™                 | Χ          | X          | -         |
| Stainless steel            | Χ          | -          | -         |



## Adaptive N<sup>™</sup>- the groundbreaking clog-free technology for small pumps

Smaller pumps are often susceptible to clogging when pumping fluids high in solids and fibrous content. The main problem generally lies in the hydraulic design of the impeller - an area where we've been innovating for years in our more advanced municipal pumps and are now embedding these technologies in all our smaller pumps as well.

As shown below, the key innovation is our Adaptive N impeller and Adaptive N hydraulic technologies, which combine a unique geometry, dual-blade impeller and other patented features to give you sustained high efficiency and smooth operations. The self-cleaning design

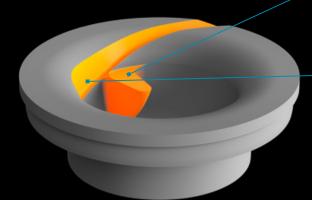
allows for up to 25% lower energy consumption, independent of impeller speed or duty point. The unique geometry is also designed to minimize vibrations, resulting in a longer life span of the mechanical components.

#### 1. Backswept leading edges ensures no sticking

When solids enter the pump, they are met by our dual-blade N impeller. The optimized blade geometry, with its horizontal machined backswept leading edges, ensures that no material sticks to the impeller.

## 2. Integrated guide pin - clears the center

Integrated into the insert ring, a guide pin clears the center of the impeller by pushing solids along the leading edges towards the periphery of the impeller for removal.



## 3. Relief groove - facilitates transport

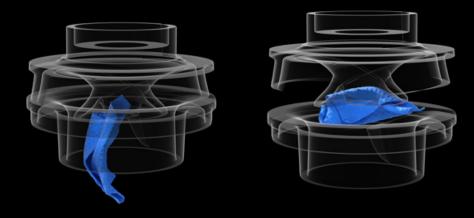
When solids arrive at the perimeter of the inlet, they are transported inside the relief groove, guided along the edge of the impeller vane, through the volute and out of the pump.





#### The symbol of self-cleaning efficiency

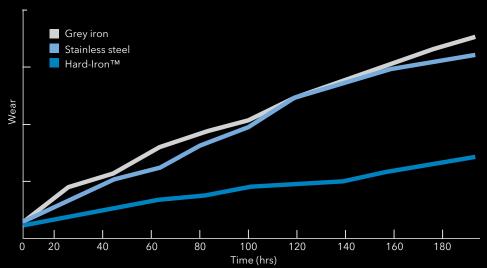
The ① (Eta) symbol is the seventh letter of the Ancient Greek alphabet symbolizing efficiency. It was introduced by Flygt engineers in 1999 to signify the sustained efficiency of self-cleaning in N-Technology impellers. Today, the logo encompasses our innovative Adaptive N™ technology, introduced in 2009.



## 4. Adaptive N - lifts up for large objects

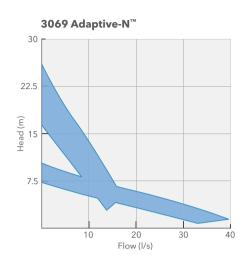
When larger objects enter the pump, the impeller lifts up due to the forces from these solid objects passing through. This avoids clogging and assures continuous, energy-efficient pumping.

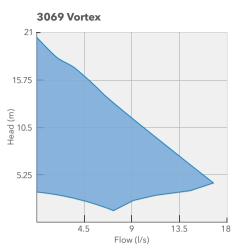
### Adaptive N™ hydraulic materials - accelerated wear test

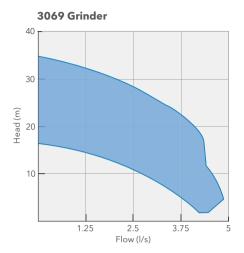


After 200 hours, the Hard-Iron impeller proved to be five times more wear resistant than the grey iron version. The stainless steel impeller showed wear comparable to the standard grey iron material.

## Flygt 3069 COMPACT PUMP WITH A BROAD SELECTION FOR ANY WASTEWATER APPLICATION







| 3069 product range overview |              |              |              |  |  |
|-----------------------------|--------------|--------------|--------------|--|--|
|                             | Adaptive-N™  | Vortex       | Grinder      |  |  |
| Rating                      | 1.5 - 2.4 kW | 1.5 - 2.4 kW | 1.5 - 2.4 kW |  |  |
| Discharge mm                | 50, 65, 80   | 50, 65, 80   | 50           |  |  |
| Flexible installation       | X            | Χ            | -            |  |  |
| Hydraulic material options  |              |              |              |  |  |
| Cast iron                   | X            | Χ            | X            |  |  |
| Hard-Iron™                  | X            | Χ            | -            |  |  |
| Stainless steel, Duplex     | X            | -            | -            |  |  |

## Easy to order. Easy to install.

With our flexible installation concept, you can also customize the installation to fit your needs exactly. The bare pump is always your starting point. Then simply choose from among our four predefined installation kits (F, H, P or S). Designed to cover every model and outlet size, the kits are carefully prechecked to ensure nothing is missing.

#### Flygt flexible installation



**F-installation**Free standing, the pump is equipped with supporting legs. Can be connected to hose or pipe.



Stationary wet installation suspended from the discharge pipe. The quick connection joint has an integrated non-return valve applicable for Flygt Compit pump stations.

H-installation



P-installation
For semi-permanent
wet well installations.
The pump is installed
between guide bars on
a discharge connection.



**S-installation**Semi-permanent freestanding installation.
Easy to transport with its pipe or hose connection.

