Xylem |'zīləm|

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

We're 12,000 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. 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, backed by a legacy of innovation.

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



Flygt SmartRun®

RELIABILITY, EFFICIENCY AND SIMPLICITY IN WASTEWATER PUMPING



Flygt is a brand of Xylem. For the latest version of this document and more information about Flygt products visit **www.flygt.com**

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Flygt SmartRun® **Optimal reliability. Immediate savings.**

You've already chosen the most reliable wastewater pump on the market. Now it's time to bring out all the strengths it provides - from preconfigured startup to a lifetime of energy and maintenance savings. Because when it comes to unlocking the full potential of your N-pumps, only the most dedicated water and wastewater controls will do.

Introducing SmartRun, a pump controller solution for pump stations with up to three alternating pumps. An integral part of the FlygtExperior® concept, this pump-control unit lets your pump take care of itself, freeing the pump station from debris, setting the optimal speed for energy efficiency and cost savings, as well as communicating with external monitoring equipment for peace of mind.

SmartRun handles pump cleaning, pipe cleaning, sump cleaning, soft starts and stops; getting you to a new level of reliability and efficiency in an easy-to-install solution. The integrated intelligence and variable speed control mean it's the perfect match for Flygt N-pumps - a combination that potentially realizes energy savings up to 50%.

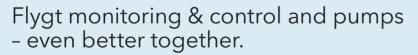
Reliability - reduced downtime with automated cleaning

Unplanned downtime costs money. With SmartRun installed, abnormal blockage triggers a cleaning cycle optimized for the N impeller, rotating it back and forth to release the debris. SmartRun's high starting torque, equivalent to direct online, ensures a reliable start in tough wastewater conditions.

Preprogrammed start and stop ramps enable smoother and more gentle running of the pump, reducing wear and tear of the valves and increasing the lifetime of the pump. It'll even clean your pipes; SmartRun regularly performs one pump down at full speed flushing your pipes properly. Following that, it will carry out sump cleaning, pumping down the water to snoring level, removing floating debris and reducing sedimentation.



SmartRun: an efficient, pre-programmed way to ensure optimal performance for your Flygt N-pumps.



In the water and wastewater business, conditions change fast. And the more your equipment can tell you, the better you can perform. This is why at Flygt, we take a more complete approach to water management. One that combines the world's most advanced pump technologies with fully integrated monitoring and control systems designed and tailored specifically for the demands of water and wastewater professionals like you.

Take SmartRun for example, which has helped the city of Montmorillon in France eliminate 140 maintenance callouts per year, saving the city €14,000 annually. For thousands of other customers throughout the world, it's just one of a range of intelligent solutions that make Flygt monitoring & control and pumps even better together.



A typical SmartRun installation: two pumps, two SmartRuns, one level switch and one pressure sensor; a solution which provides redundancy.

SPECIFIC ENERGY kWh/m ≈ 50% Energy

Specific energy curve; adaptively finding the energy optimal speed

Efficiency

Friction costs energy. SmartRun's energy minimizer adaptively finds the speed that reduces friction losses in the system and maximizes the efficiency of the pump. It does this by measuring the energy consumption of the pump and determining the volume of pumped water. During every pump cycle SmartRun continuously tries to find the smallest amount of energy consumed to pump one cubic meter away, always adapting to the pumpstation conditions.

Technical data

Operation Operating modes

Power supply

Power range

Display Configuration

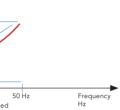
Pump protection

Unique functions

Communication

Alarms

By finding the optimal frequency, SmartRun will automatically reduce your energy costs by up to 50%. By constantly adapting the speed, SmartRun finds the most energy efficient frequency. In this way SmartRun avoids running at too low frequency, where energy consumption actually increases.



- save up to 50% of your energy costs

Simplicity - just press start

Commissioning costs time. With SmartRun you avoid having to set crucial operational parameters manually. All parameters needed for wastewater are preprogrammed. Just press Auto for startup and let SmartRun take care of the operation. Pump leakage, high motor temperature, high level and hardware alarms are all presented in plain text in the display. It couldn't be easier.

Intelligent energy minimizing level control
Hand / Off / Auto
3x200–240V, 3x380–480V, 3x500-600V, 500–600V +/-10%, 50–60Hz
4–90 kW
OLED (monochrome)
Via push buttons, no special software required
Over temperatureLeakage
 Preprogrammed energy minimization (patented) Pump cleaning optimized for Flygt N-pumps Sump cleaning Pipe cleaning
 Modbus RTU (standard) SCADA connection with Flygt MyConnect as gateway
 Volt-free contacts (standard) SMS notification with Flygt MyConnect as gateway