

GRUNDFOS SEG, DP, EF, AND SL  
AUTOADAPT RANGES

# WASTEWATER TRANSFER AS YOU'VE NEVER SEEN IT BEFORE



AUTOADAPT brings innovative and patented solutions to municipal, private and industrial wastewater applications

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GRUNDFOS 

## AUTOADAPT SETS NEW STANDARDS FOR SAFETY AND RELIABILITY

*The world's best sewage pumps have just got even better. Grundfos sewage pumping solutions are already capable of cutting through everything in their path, now this proven performance is optimised beyond belief with the addition of AUTOADAPT.*

AUTOADAPT quite simply removes all external sensors, switches and cables from the pit, combining all sensors in a single pump that adapts automatically to conditions in the pit. This simplifies installation, commissioning and operation, and increases reliability.

### Safeguard your wastewater transfer

When pumping wastewater, you're understandably concerned about safety and reliability. Considering that 75% of errors in pits are caused by float switches or electrodes that fail, taking away cables and float switches removes what has been a weak link in submersible sewage pump installations.

This makes sure your wastewater pumps system operates reliably, reducing your installation and operating costs while maintaining surveillance and necessary alarms.

## IMPRESSIVELY FLEXIBLE WASTEWATER TRANSFER

The Grundfos ranges of sewage grinders, drainage pumps, effluent pumps and sewage pumps with AUTOADAPT are designed for pumping wastewater in a wide range of municipal, private and industrial applications.

These pump ranges are made of cast iron for submerged installation, either on an auto-coupling system or free-standing.

This is a patented solution of which we're very proud.

### Place it in the pit and let it auto-adapt

With AUTOADAPT pumps installed in the pit, complexity is eliminated and many traditional considerations are no longer necessary, such as parallel operation or single unit operation, duty assist, duty standby or automatic operation. Furthermore, internal monitoring is installed as standard, ensuring the pump never runs dry, and timed anti-seize test runs mean the pump is always ready to start operating.



## REVOLUTIONISE YOUR APPROACH TO PUMP PIT MANAGEMENT

### HERE'S WHY:

#### • GENUINELY INTELLIGENT SOLUTION

Sewage transfer solutions with AUTOADAPT pumps eliminate the need for cables, switches and sensors in the pit. Everything is built into the pump, a patented Grundfos solution that removes the need for communication between pumps.

#### • REDUCE YOUR INVESTMENT

Without the need for external sensors, AUTOADAPT is easier to install, commission, and operate, and reduces pit size, saving you money and operational costs.

#### • ADAPTS AUTOMATICALLY

AUTOADAPT pumps will adapt automatically when placed in the pit and can detect the presence of other pumps. Up to four pumps will automatically calibrate their start/stop levels and fall into a pump alternation routine, ensuring optimum performance at all times.

#### • NO EXTERNAL CONTROL REQUIRED

AUTOADAPT pumps have a built-in motor starter, motor protection, and circuits to ensure that the motor cannot run in the wrong direction. No external control is necessary.

#### • SIMPLY PLUG-AND-PUMP

Presenting just one cable and plug for installation, simply place an AUTOADAPT pump in the pit, plug it in and leave it to commence operation, adapting automatically to conditions in the pit.

#### • COMMUNICATION AS REQUIRED

AUTOADAPT pumps are intelligent, standalone solutions that can be easily integrated into SCADA systems or remote monitoring systems for pumps stations. Using Powerline, you can add a Grundfos communication interface box for complete information, or simply use the built-in alarm relay that covers every imaginable event.

#### • INTERNAL MONITORING INSTALLED

Internal monitoring is installed as standard, ensuring a long lifetime. Your AUTOADAPT installation will never run dry, and timed anti-seize test runs mean the pump is always ready to start operating. Additional sensors, alarms and lamps can be installed as desired.

## PROVEN BENEFITS:

- **ERGONOMIC LIFT HANDLE**

The ergonomic lift handle is designed for optimum point-of-balance and, with the motor unit 180° rotatable on the pump housing, will protect the auto-coupling sealing.

- **CARTRIDGE SHAFT SEAL**

The efficient double cartridge shaft seal system ensures longer operation time with less downtime, and is easily accessible.

- **WATERTIGHT CABLE PLUG**

The polyurethane-filled stainless steel cable plug connection ensures a watertight and durable seal around the leads of the cable. Adverse handling and even breakage will not result in water getting to the motor. Simply pull out the plug when servicing the pump, without special tools or risk of compromising the seal, and this will save you money over time.

- **STAINLESS STEEL CLAMP**

This unique clamp assembly system ensures quick and easy disassembly of the pump from the motor unit, where loosening the stainless steel clamp requires no special tools. This means quick and easy service in the field, where you don't need to clean the casing to get to the bolts.

- **MOTOR PROTECTION**

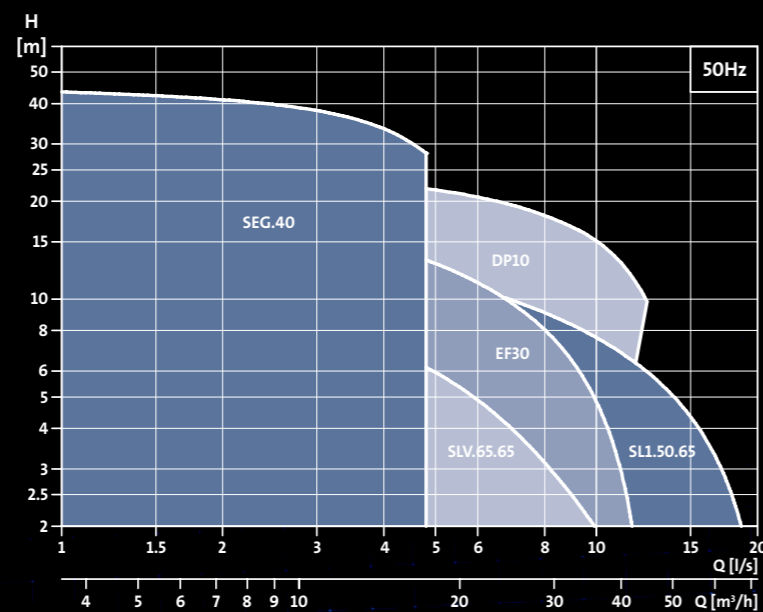
Built-in motor protection and thermal switches in the motor windings provide protection against overheating, and this ensures a long lifetime.

- **PATENTED SMARTTRIM IMPELLER ADJUSTMENT**

Inevitably, the highly efficient impeller will get worn. The patented SmartTrim system enables extremely easy adjustment, service and optimisation of the impeller when necessary to maintain peak performance and this can be done without dismantling the pump. No special tools are required.



## Performance overview



## THE SEG AUTOADAPT RANGE

0.9 KW to 4 KW

## TOUGH AND VERSATILE GRINDER PUMPS FOR PRESSURISED DOMESTIC SEWAGE TRANSFER

*The SEG AUTOADAPT range of grinder pumps from Grundfos is specifically designed for pumping effluent and untreated domestic sewage in small communities or sparsely populated areas with no sewer systems or where gravitation systems are unsuitable.*

Pressurised systems are the perfect choice for transfer of effluent and domestic sewage, and the SEG AUTOADAPT range combines cost-effectiveness with maximum protection for the environment by facilitating the use of smaller pressure pipes for minimal investment costs.

The SEG AUTOADAPT range is designed to reduce energy consumption and to keep downtime costs to a minimum, while maintaining peak performance throughout the lifetime of the system. The foam-drain function utilises random start and stop levels to ensure that the floating layer doesn't accumulate and solidify.

### DESIGNED FOR DEPENDABILITY, EFFICIENCY AND COSTEFFECTIVENESS

The SEG AUTOADAPT range of pumps is designed for the transfer of domestic and municipal wastewater in:

- Sparsely populated areas
- Small villages and farms
- Areas of difficult topography
- Areas with high groundwater

In addition, the SEG AUTOADAPT range of pumps can remove industrial wastewater containing fibres in industrial applications.

The Grundfos patented grinder system ensures the reliable and efficient grinding of solids to even smaller pieces. In addition to extremely effective and reliable operation, service is easy, with quick dismantling for replacement of wear parts requiring no special tools.

SEG Cutter System



## THE DP AUTOADAPT RANGE

0.9 KW to 2.6 KW

### PUMPING OF DRAIN WATER AND GROUNDWATER WHEREVER NEEDED

The DP AUTOADAPT pumps are fitted with a suction strainer on which the pump stands. The suction strainer allows for the passage of solid particles of up to 10 mm size – the maximum free passage through the DP AUTOADAPT pumps.

The strainer is easy to dismantle for cleaning or inspection of the pump hydraulics.

#### IDEAL AS A UTILITY PUMP

The DP AUTOADAPT pumps are designed for portable and free-standing use, and can be installed on an auto-coupling system.

The Grundfos DP AUTOADAPT range of pumps is designed for pumping drainage and surface water, groundwater, and industrial process water without solids and fibres from

- Farms
- Private housing
- Small industry.



DP:  
Semi-open multi-vane  
impeller



## THE EF AUTOADAPT RANGE

0.6 KW to 1.5 KW

### PUMPING OF DRAIN OR EFFLUENT WATER

The EF AUTOADAPT range of pumps is designed for use free-standing or for installation on an auto-coupling system. The pumps are fitted with an integrated three-leg stand that keeps the suction inlet well clear of the pit bottom.

The EF pumps are capable of handling solids of up to 30 mm size, and a rigid or flexible discharge pipe can be mounted on the discharge port.

#### EXCELLENT SOLIDS HANDLING CAPABILITIES

The EF AUTOADAPT range of pumps is suitable for pumping effluent and other liquids such as

- Drainage and surface water with small impurities
- Wastewater with fibres, for example from laundries
- Wastewater without discharge from toilets



EF:  
Open single-vane  
impeller



## THE SL AUTOADAPT RANGE

0.9 KW to 1.5 KW

### LONG-LASTING, SERVICE-FRIENDLY SUBMERSIBLE WASTEWATER PUMPS

The SL AUTOADAPT range is industrial design at its best. Created to optimise performance in your system, these pumps minimise risk factors, reduce maintenance requirements, and last longer.

Like any Grundfos product, the SL AUTOADAPT range of pumps is remarkably durable. They employ innovative features – several of them unique to Grundfos – to minimise known risk factors.

#### DESIGNED FOR OPTIMUM WASTEWATER TRANSFER

The SL AUTOADAPT range is designed for the transfer of domestic, municipal and industrial wastewater, drainage and groundwater, and process water.

These pumps are designed for submerged use in

- Small pumping stations
- Surface water containing abrasives
- Municipal waste water
- Sewage from commercial buildings
- Sludge and fibre-containing industrial wastewater

The SLV pumps range has a SuperVortex impeller and is ideal for liquids with a high concentration of solids, fibres, or gassy sludge, while the SL1 pumps range has a single-channel impeller and is ideal for large flows of raw sewage.



SLV:  
SuperVortex  
impeller



SL1:  
Single-channel  
impeller



## SEE THE BIGGER PICTURE

Grundfos is a global leader within water handling technology. Our passion is to bring you all the products you require to create and operate pump systems that combine reliability, cost-efficiency – and innovation. Our products are for use in water supply and wastewater infrastructure on any scale.

Grundfos has a full line of products and systems for the intake, treatment and distribution of drinking water and for the transport and treatment of wastewater. We also offer expertise and industry insight that can increase reliability and reduce lifecycle costs for water utilities.

Key product areas include:

-  Submersible pumps
-  Surface pumps
-  Sewage pumps
-  Mixers, flowmakers & recirculation pumps
-  Pumping stations
-  Monitoring & controls
-  Dosing & disinfection
-  Aeration equipment

Our products are the result of decades of engineering expertise. Supported by a worldwide service network. Visit [grundfos.com/water-utility](http://grundfos.com/water-utility) for more.

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