

## **Submersible dirty water pumps**

### **Clean or very dirty liquids**

The use of submersible dirty water pumps is recommended when heavily contaminated liquids have to be pumped. Typical applications include drainage of garden ponds and construction trenches or emergency drainage in the event of flooding.

Submersible dirty water pumps can be used to move very heavily contaminated water. The “maximum particle size” stated in the technical information for each pump is the key consideration: this refers to the maximum permissible diameter of dirt particles in the pumped liquid. T.I.P. submersible dirty water pump starter models already boast an impressive 20 mm maximum particle size. Our top-of-the range models transport liquids with very large diameter particles – up to 40 mm – without any problem.

### **Wide variety of applications for submersible dirty water pumps**

T.I.P. submersible dirty water pumps have a broad spectrum of applications. These include typical applications such as emptying garden ponds, pools or cisterns. With their high-quality technology, they are also ideal for drainage tasks under difficult and extreme conditions – e.g. pumping out construction- and dirty water trenches – as well as emergency drainage following flooding. Naturally, submersible dirty water pumps are also suitable for transporting clear or slightly contaminated water.

### **Tried and tested technology: The VORTEX impeller system**

Submersible dirty water pumps transport water containing larger and smaller contaminant particles. However, sludge, sand, leaves, other plant debris and similar particles can block the pump, impair its functioning or cause it to stop working entirely. To avoid this, T.I.P. submersible dirty water pumps are equipped with the VORTEX impeller system as standard. This effectively prevents pump blockages, as debris is swirled around and broken down, allowing it to pass through the hydraulic system unimpeded. This technology has been repeatedly tried and tested over many years of practical use – for example when pumping out ponds and construction trenches. The VORTEX impeller system ensures trouble-free operation even during emergency drainage, when water with coarse particles has to be very quickly removed, and pumps have to work with maximum efficiency and reliability.

*All T.I.P. submersible dirty water pumps comply with strict TÜV safety regulations for outdoor use.*

### **Choosing the right submersible dirty water pump**

Our extensive range of submersible dirty water pumps allows us to offer you the right product for every application. The T.I.P. guide will help you find exactly the right pump for your requirements. Our range of submersible dirty water pumps is carefully graded. This allows you to find the right pump for every area of application and all individual requirements – from solid starter models to absolutely top-class products.

## **TVX Series - classic models in every performance class**

Our TVX series submersible dirty water pumps offer classic design and cutting-edge technology. These products can be used to pump both clear and very dirty liquids without any problems. All TVX series models feature an impact-resistant plastic pump housing and are ideal for the whole spectrum of possible submersible dirty water pump applications – for example drainage of garden ponds and pools, and even emergency drainage.

The TVX 7000 is recommended as a solid starter model for this series, featuring a maximum flow rate of 7,000 litres per hour and maximum particle size of 20 mm. With a significantly higher capacity of 10,800 litres per hour, the TVX 12000 was developed for transporting large amounts of liquid in a short time-frame. In addition to all other typical submersible dirty water pump applications, this model is especially suitable for emergency drainage. The higher flow rate proves itself a major advantage in practice, when water that has penetrated into premises or construction trenches has to be pumped out quickly to minimise damage from flooding.

## **DTX series - special models for non-stop operation**

The DTX series was specially developed for non-stop operation. This means that these robust submersible dirty water pumps can be used not only for all conventional tasks for this product type, but also for applications requiring uninterrupted running. This broader area of application includes, for example, pond water circulation or water circulation to create an artificial stream.

DTX series models are available in two performance classes. With its energy-saving 320 watt motor and maximum flow rate of 7,500 litres per hour, the DTX 7500 proves itself efficient and reliable in all applications. This pump is also available as special-feature model DTX 7500 T. This comes with a protective grille specifically for use in ponds to prevent fish and other pond inhabitants from being sucked into the pump. Other accessories for this model include the TPT 20 multi-functional mounting system. This enables the pump to be positioned both vertically and horizontally, allowing more flexibility in installation. When a pump is mounted on the edge of a well or cistern, the system provides greater stability. Alternatively, when wall-mounted (for example in a garage or basement), TPT 20 system also serves as a practical storage fixture for the pump. For pumping larger amounts of liquid, we recommend the DTX 15000, which, with a maximum flow rate of 14,000 litres per hour, features significantly higher pulling power.

## **Maxima series - extra-high quality pumps for challenging uses**

The Maxima series models have been developed for uses requiring exceptionally robust and resistant materials. This is why all pumps in this series feature a high-quality stainless steel pump housing. Thermal overload protection and built-in automatic on/off switch reliably protect these appliances from damage due to overheating. With their robust construction and excellent technology, these pumps are ideal for use in highly challenging applications. These include, for example, emptying construction- and dirty water trenches, which usually contain very heavily contaminated liquids. These models will also handle all other typical submersible dirty water pump applications – such as pumping out garden ponds, pools or cisterns – quickly and reliably.

The Maxima 180 SX is an impressive starter model for this series, with a maximum particle size of 25 mm, a maximum flow rate of 10,500 litres per hour and an economical 500 watts power consumption.

The Maxima 250 SX and Maxima 300 SX meet the highest standards. With maximum particle sizes of 25 mm and 30 mm respectively, both models are suitable for transporting very dirty water containing very coarse contaminant particles.



With a high maximum flow rate of 18,000 litres per hour, the Maxima 300 SX is the more high-powered model of the two; but its 14,500 litres per hour flow rate still enables the Maxima 250 SX to remove large amounts of liquid quickly. A further difference between the two models is the extra-high quality all-stainless steel construction of the Maxima 300 SX.

The Maxima 250 SX is available as a convenient complete solution for immediate use. The Maxima 250 SX with hose package includes a 10-m-long drain hose and a hose connection bend. Once this accessory has been connected, no further parts are needed to use this high-quality pump for its broad range of applications.

The Maxima 400 SX has been specifically designed for use under the most extreme conditions. No task puts pumps under more stress than emptying construction- and dirty water trenches does. This is why the hydraulic housing and the almost indestructible impeller are manufactured from robust cast iron. A powerful 900 watt motor provides an unusually high flow rate of 24,000 litres per hour. The maximum particle size of 35 mm is another indication of the outstanding quality and capacity of this absolutely top-class submersible dirty water pump.

**High-quality materials and no compromise on the technology: the keys to the high quality of our submersible dirty water pumps.**

- Housing made of impact-resistant plastic or high-quality stainless steel.
- Maintenance-free capacitor motor with high-quality copper coil and thermal overload protection.
- Motor also enclosed in stainless steel housing.
- High-quality ceramic-reinforced stainless steel precision motor shaft.
- Precision ball bearings.
- VORTEX impeller system.
- Float switch for automatic operation.
- 10 m connection cable.
- All models equipped with connectors.

The VORTEX impeller system effectively prevents pump blockages. Debris is swirled around and broken down, allowing it to pass through the hydraulic system unimpeded.

*T.I.P. submersible dirty water pumps are not suitable for pumping salt water or flammable, corrosive, explosive or other hazardous liquids.*





