

Analogue sensors provide data for preventive maintenance



The Grundfos SEV and SE1 pumps from 1.1 to 11 kW are designed for handling wastewater, process water and unscreened raw sewage in heavy-duty municipal and industrial applications.

Integrated analogue sensors provide continuous monitoring data on motor temperature and shaft seal condition. You can follow trends in the data and schedule preventive maintenance as required. This is in contrast to a digital monitoring system, which shuts a pump down without notice if a critical point is reached.



The sensors communicate via the motor cable, and the respective signals are converted to 4-20mA for use by any monitoring and control system.

The Grundfos SEV and SE1 series of pumps is available with Super-Vortex or single-channel impellers allowing for free passage of solids up to 100 mm. This greatly reduces the risk of clogging and ensures maximum uptime and low operating costs.

Unique benefits

Non-stop operation

Unique liquidless motor cooling enables round-the-clock operation in dry and wet installations without motor modifications.

Moisture-proof cable entry

The plug is filled with a two-component compound that prevents moisture entering the motor via the cable core.

One pump, three sensors: One cable

A shielded cable (EMC) both powers the motor and returns sensor signals to the signal converter.

Cartridge shaft seal

The primary and secondary mechanical shaft seals are combined into a compact easy-to-replace cartridge unit.

Interchangeable motors

For maximum flexibility, the quick-detachable motor units are interchangeable and fit both channel-impeller and SuperVortex pumps.



GRUNDFOS SEV & SE1 WITH ANALOG SENSORS

Advanced technology – inside out



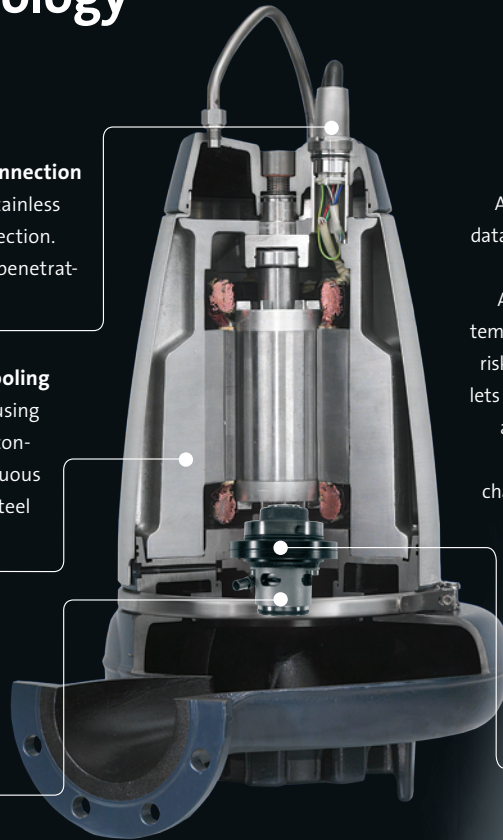
Watertight cable connection
Polyurethane-filled stainless steel cable plug connection. Prevents water from penetrating into the motor.



Liquid-less motor cooling
Solid-block stator housing with built-in cooling conduits allow for continuous operation. Stainless steel motor jacket.



Double mechanical shaft seal
Efficient compact single-unit cartridge shaft-seal system. Easy to replace.

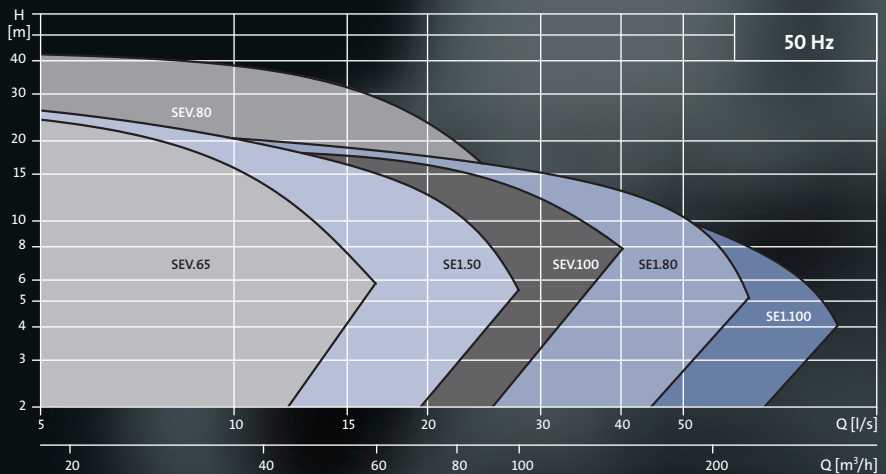


Analogue sensors monitor pump condition
Analogue sensors provide continuous monitoring data so you can plan preventive pump maintenance.

A PT1000 sensor in the windings monitors motor temperature to give early warning of an overheating risk. A unique water-in-oil sensor in the oil chamber lets you monitor wear on the shaft seal. It also sends an alarm signal if the water/oil ratio reaches 20% (or below if you choose) indicating it is time to change the seal. Finally, a moisture sensor registers any water between the stator housing and the stainless steel motor jacket.

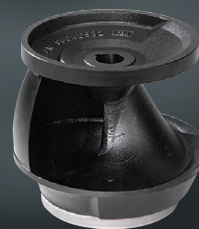


Performance overview



SuperVortex impeller

Ideal for liquids with high content of solids or fibres, or gassy sludge. SuperVortex-impeller pumps are available in three size ranges for free passage of solids of 65 mm, 80 mm or 100 mm, respectively.



Channel impeller

Ideal for large flows of raw sewage. Channel-impeller pumps are available in three size ranges for free passage of solids of 50 mm, 80 mm or 100 mm, respectively.