



PRODUCT NEWS

How to maximise pump performance and save on energy bills

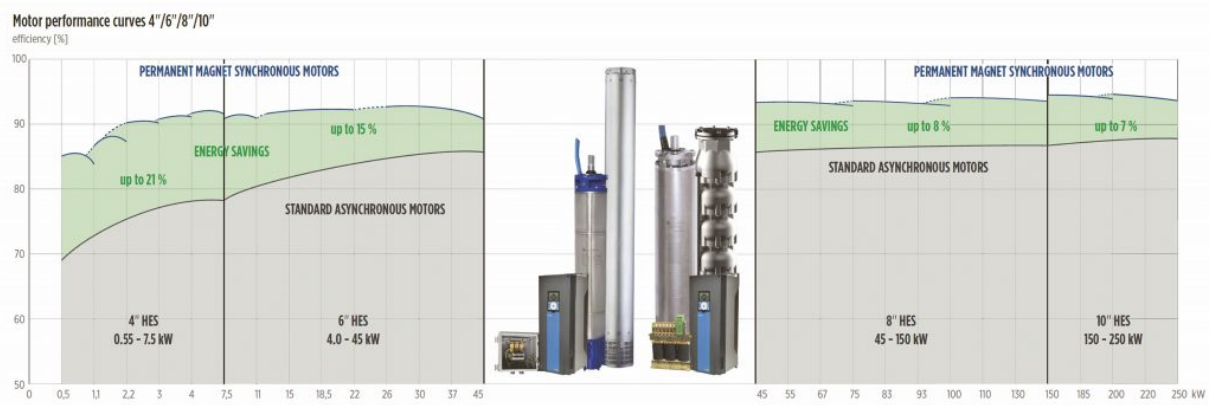
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With energy prices rising faster than ever, efficient performance is critical when it comes to pumps and pumping systems. Energy consumption accounts for nearly 90% of the lifecycle of a pumping system, so ensuring you have the best equipment in place can make a real difference to monthly bills.

The Franklin Electric High Efficiency System (HES) claim they are capable of cutting energy costs by up to 21% and according to them the secret lies in its synchronous submersible NEMA permanent magnet (PM) high efficiency motor.

The team at Geoquip Water Solutions, Franklin Electric's UK strategic partner for groundwater products, says the PM Motor sets it apart from current asynchronous technology as it means the windings are permanently magnetised. The system therefore uses less energy when starting and running, delivers a smoother and faster solution, and improves motor efficiency. In addition, because the permanent magnet motor has less temperature heat rise and requires lower amps to run at the same pump load, energy efficiency is increased still further.

Available in 4", 6", 8" and 10" sizes for a range of installations – both commercial and domestic – the HES starts at 0.55kW, which is effectively a domestic unit, right up to 250KW for large commercial projects, making it suitable for a variety of applications. To help installers select the most appropriate size of pump to achieve the greatest savings, Franklin has produced this diagram below and suggests partnering this with a PM Motor and variable speed drive inverter.



The HES includes a submersible E-Tech pump and a frequency converter, as well as a matching output filter for systems higher than 230V. It uses pre-written software to ensure greater efficiency with higher power density. Bespoke remote monitoring and telemetry systems make it easy to monitor pump performance, check usage and data and identify any issues (such as reduced water pressure), while triggers and alarm points raise an alert when faults or a particular combination of problems arise.

Having full remote access and round-the-clock checks in place means once a problem is identified, the monitoring team can then decide on the best approach and the system includes access to the Franklin Electric support team. With an eye on costs, customers can estimate their likely financial savings and see how long the payback period on their investment is likely to be by using Franklin's [online calculator](#).

For increased sustainability and savings, the solar-powered Franklin Electric E-Tech SOLAR system is also available. It uses sophisticated algorithms to carefully calculate how much energy can be provided by each day's sunlight and can maximise motor and pump performance based on the number of solar panels in place. A clever advanced voltage boost function makes it possible to size systems up to 2.2kW based on power rather than voltage, saving up to 50% on solar panels compared to a standard system.

As a strategic partner, the Geoquip team works closely with Franklin Electric and has direct access to its European manufacturing facilities, enabling Geoquip's experts to provide tailored solutions to meet customer requirements.

For more information, visit www.geoquipwatersolutions.com or call 01473 462046.