

AXIAL AND MIXED FLOW PUMPS FOR HIGH VOLUME WATER HANDLING



POWERFUL PUMPING; EFFICIENT OPERATION

The range of KPL submersible axial-flow propeller pumps represents strength and durability and is ideal for flood control and other heavy-duty pumping applications. These pumps include innovative features such as the Turbulence Optimiser™ that increases efficiency by up to two percentage points.



The market-leading high-efficient and compact design, makes it possible to reduce the physical size of the pumping station, and hereby cost for civil construction work. Built from cast iron or stainless steel, a wide range of variants using different materials, sensors, surface coatings and shaft seal materials are available, ensuring reliability in corrosive environments.

The range of KPL axial-flow propeller pumps offers:

- **Best-in-class hydraulic efficiency of up to 85%**
- **Market-leading compact and lightweight design**
- **Backswept self-cleaning hydraulic design that provides great non-clogging performance**

The turbulence optimiser (patent pending) is an innovative solution for reducing turbulence in the gap between the pump volute and the column pipe. A further positive effect is that misalignment and production tolerances of the column no longer affect efficiency.

HARD WORKING AND EFFECTIVE

These axial-flow propeller pumps are designed for high flow – up to 700 m³/min – at low head of 9 m. Built to handle large quantities of water, the pumps are ideal for a wide range of applications such as

- **flood and storm water control**
- **large volume drainage and irrigation**
- **raw water intake**
- **transfer of liquids in large-scale municipal sewage treatment plants**
- **circulation of large quantities of water**
- **water level control in coastal and low-lying areas**
- **filling and emptying of dry docks and harbour installations**
- **filling or emptying of reservoirs**

KPL submersible axial-flow propeller pumps range from 11 kW to 800 kW and are available in 11 frame sizes with 6-, 8-, 10-, 12-, 14-, 16- or 18-pole motors.



Download engineering guides, case stories, films and learn more at www.grundfos.com/flood-control

BENEFITS FOR YOUR WATER TRANSFER REQUIREMENTS

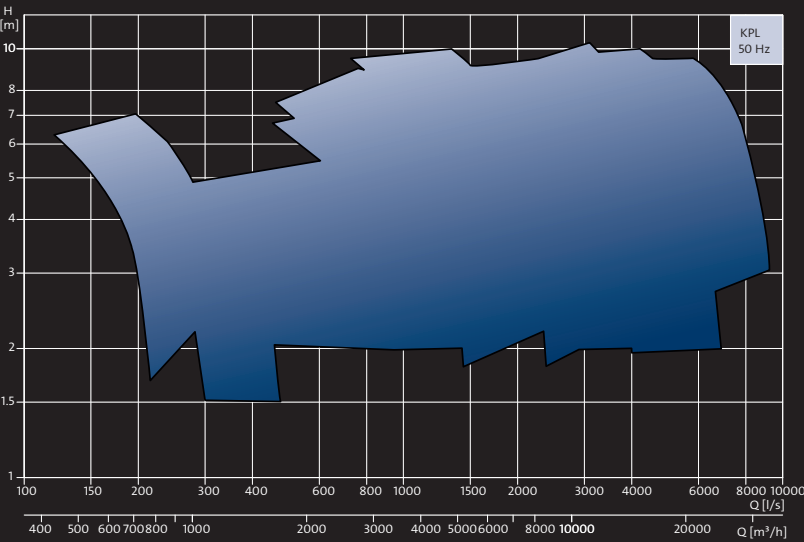
KPL axial-flow propeller pumps are built with a range of innovative features that offer cost and efficiency benefits when moving large volumes of water.

- **Reduced footprint of building and civil construction cost by up to 20%**
Following ANSI/Hydraulic Institute recommendations, the KPL range allows for reduced pump size and therefore reduced building size and cost
- **Sealed cable entry**
Patented cable entry with special sealing system to prevent water entering motor compartment
- **Backswept self-cleaning stainless steel propellers in one piece**
High-precision one piece propeller resolves the potential malfunctions from blade adjustment, and the smooth design means rags and solids slide off the propeller, resulting in less clogging

- **Balanced lifting handle with built-in cable support**
Lifting handle ensures perfect balance when lifting the pump without the risk of damage during installation and has a built-in cable support to prevent damage of the cable during operation.
- **Cable compartment inspection hole**
Quick and easy inspection of the pump cable compartment, without disassembling a big part of the pump. This feature avoids handling of big, rigid cables and the risk of leakages when accessing the terminal boards.
- **Turbulence Optimiser™**
This innovative solution is an expandable rubber ring mounted on the perimeter of the pump volute that expands and adapts to the pipe as water flow and pressure increases, reducing turbulence and the efficiency losses this causes
- **Cartridge seal**
The double mechanical cartridge shaft seal has a long life and is easily replaced during maintenance

PERFORMANCE OVERVIEW

KPL 50Hz performance curve



Grundfos Water Utility – optimised water solutions

Grundfos Water Utility is a full-range supplier of intelligent pumps

and systems for all water supply and wastewater applications.

We optimise pumping solutions to provide maximum reliability and resource efficiency for our customers. Our solutions are made with tried and tested technology and our expertise is part of any delivery.

We offer solutions and expertise within the following applications:

- Raw Water Intake
- Drinking Water Treatment
- Water Distribution
- Wastewater Transport and Flood Control
- Wastewater Treatment

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