



Water & Responsibility

The VDL/VDF pump range is the dry motor version of our vertical turbine pump program. The hydraulic design includes a suction bell, single or multiple pump stages with closed or open mixed flow impellers, column pipes with integrated line-shafts and a discharge elbow that can be located either above or below the foundation level.

The type VDF is the vertical turbine pump, used in the Fairbanks Nijhuis fire-fighting units for negative suction applications in, for instance, the offshore industry. This pump, driven by either a diesel or electric motor, moves seawater into the (containerized) fire fighting system to

Features and Benefits

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The shapes of impeller and pump casings are optimized to achieve the highest possible efficiency for the specific design flow rate and pressure head. Also, off-design characteristics are optimized to give each pump a wide operating range, ensuring that cavitation limits are not exceeded.

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By constructing the vertical turbine pump using the materials and shaft seals appropriate for the application, maintenance requirements are kept to a minimum.

Additionally, our service department offers service and maintenance contracts for ongoing support to assure minimal downtim. By selecting the correct combination of materials for each application to ensure against corrosion, Pentair provides a durable solution with this pump.

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To meet the demands of multiple applications, especially considering the type of liquid pumped, the vertical turbine pump can be constructed in a wide range of materials, e.g.:

- Castiron
- Aumin mbronze
- Ductile cast iron
- Stainless steel
- Branze
- (Super) duplex stainless steel

Single or multiple pump stages





Shaft Seals & Bearings

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Shaft seal configurations for the vertical turbine pump range from packed stuffing-boxes to various types of mechanical seals. The selection of shaft seals and bottom and intermediate bearings depends on the operating conditions and composition of the medium being pumped. Pentair can advise on the appropriate configuration for your application, ensuring safe and reliable operation with minimal maintenance requirements.

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As standard, the vertical turbine
pump has oil lubricated antifriction thrust bearings. The
bearings are integrated into the
pump casing, making the choice
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Pentair's Fairbanks Nijhuis pump line delivers high-quality products and services based on more than 100 years experience in the design, production and application of centrifugal pumps and pumping systems according to customers' specifications. In our facilities (Winterswijk, The Netherlands and Kansas, USA) our dedicated staff continuously sets the standard for product improvement based on the latest developments in the market. Using advanced computer-aided technology, we develop tailor-made pumps with the highest achievable efficiencies. After-sales service is offered, supported by a global network of service centers, staffed by experts in state-of-the-art pump technology. Customers who ordered pumps from Fairbanks Nijhuis decades ago are still regular customers, which indicate they trust and rely on our pumps and related services. The quality assurance program is certified by Lloyd's according to ISO 9001 and guarantees that products and services meet all international standards. The Fairbanks Nijhuis line embraces the values of sustainability, openness, reliability, and social responsibility within the company and especially in cooperation with customers, suppliers and the world around us.

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Global Solutions Areas

FILTRATION & PROCESSING SOLUTIONS

Our advanced filtration, separation, treatment and quality control of water and other fluids provides solutions for restaurants and breweries, local municipalities and corporate office buildings.

FLOW MANAGEMENT SOLUTIONS

We enable the control, isolation and movements of fluids, gases and other media – solutions that help maintain crucial operations in industries as diverse as refineries, agriculture and municipal infrastructure.

EQUIPMENT PROTECTION SOLUTIONS

We create solutions that enclose, protect and cool essential electrical and electronic equipment to help keep vital systems running.

THERMAL MANAGEMENT SOLUTIONS

We help our customers manage heat requirements to maintain critical processes and provide greater control over a full array of thermal management demands.

