

BERKELEY® FAIRBANKS NIJHUIS GLOBAL IRRIGATION

www.BerkeleyPumps.com www.FairbanksNijhuis.com

Our Vision

To be a diversified industrial growth company...a global enterprise and responsible citizen known for operational excellence, innovation, top talent and growth through serving customers well...



293 WRIGHT STREET, DELAVAN, WI 53115 www.BerkeleyPumps.com Tel: 888-957-8677 Orders Fax: 800-426-9446

3601 FAIRBANKS AVENUE, KANSAS CITY, KANSAS 66106 www.FairbanksNijhuis.com Tel: 913-371-5000 Orders Fax: 913-784-4025

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.

Where we began...

Our history assures you a trouble-free future.

After three quarters of a century, the Berkeley tradition of engineering excellence and superior product is still in full force.

Since 1937, when Berkeley pumps were first used to irrigate the fertile fields of the San Joaquin Valley of Central California, through today's most challenging water transfer projects across the globe, our distinctive orange pumps have come to stand for uncompromised quality, proven reliability and limitless support.

You drive our success. We strive to increase yours.

Berkeley's reputation for rugged construction and dependable performance in the most demanding situations wouldn't have happened without you. Our state-of-the-art engineering, sophisticated manufacturing operations and rigorous quality-control testing combine to meet your ever-changing needs. Berkeley listens, and focuses on what's most important to your success.

Berkelev

Pumps . Water Syste



Not only do we make pumps that work hard for all our hardworking customers, we make your job easier by offering valuable user benefits:

BEC² Online Catalog

Our complete online catalog uses your specifications to provide product suggestions with detailed configurations, performance curves, capacities and design tolerances. www.bec2.net

Global Availability

Wherever you are, our network of providers maintains an exhaustive inventory of Berkeley products in stock and ready for delivery.

Technical Experts

Our trained pump experts are easily accessible through our toll-free number, or you may access our Berkeley Training Institute online for quick answers and in-depth knowledge.

Rich history of brand strength & product support

Submersible Turbines

Berkeley[®] Cast Iron Series Pumps

For maximum abrasion resistance are proven performers for a wide range of applications from clean municipal wells to the harshest agricultural wells. Abrasion resistant features include: Investment Cast 304 Stainless Steel Impellers and Neoprene Rubber Bearings for maximum life and performance.



Features

Sizes 6" (15.2 cm) , 7" (17.8 cm) 8" (20.3 cm) , 10" (25.4 cm)

Flows Up to 2200 GPM (10 m³/min)

Pressures Up to 1740 FT (530 m)

HP Range: Up to 200 (149 kw)

Heavy-Duty Discharge Adapter is ductile iron, threaded with large wrench flats sized for the pump's flow range.

Factory Pre-set Upthrust Washers balance rotor loading in all operating conditions.

Heavy-Walled Class 30 Cast Iron Bowls incorporate precise hydraulic design for maximum efficiency and performance.

Stainless Steel Impellers are designed, machined and balanced to optimize efficiency and performance.

Unique Neoprene Bearing Design channels abrasives away from stainless steel bearing journal.

416 Stainless Steel Pump Shaft is precision ground and polished for reduced running friction and increased service life.

Heavy-Duty Stainless Steel Suction Strainer is non-collapsible and corrosion-resistant.

Heavy-Duty Cast Iron Suction Bracket assures perfect pump-to-motor alignment with NEMA standard motors.

Low Profile, Full-Length Stainless Steel Cable Guard (Not Shown) protects motor leads.

Centrifugal Pumps

Berkeley Type-B

Berkeley delivers high-performance pumps for irrigation, turf, agriculture, dewatering, construction, municipal and industrial applications. Our professionally engineered, high-quality Type-B centrifugal pumps are specifically designed to provide you years of trouble-free, efficient operation.



SAE Engine Mount

Available as pump ends for mounting engines with SAE standard flywheel housings, this design is ideal for applications where electricity is not readily available.

Features

An oversized shaft/bearing system with a double volute design on SAE and Frame Mount versions provides bearing life in excess of 20,000 hours.

Open Drip-Proof, 3-Phase, 230/460V is standard for Closed-Coupled Motor Drive configurations with TEFC, Premium efficient and 575V options are also available.

Each pump is offered with a packaged box design or carbon-ceramic/Buna mechanical seals. Silicon-carbide/Viton seals are also available.

All models have a back pullout design to significantly reduce maintenance downtime.



Closed-Coupled Motor Drive

The unique back pullout design allows access to the impeller without disturbing the piping. These pumps are ideal for applications requiring high performance and easy maintenance.



Frame Mount

Designed for the user who has a separate power source suitable for driving through couplings or belts, these pumps deliver quality construction and performance that your application demands.

Centrifugal Pumps

Volute Case

Precise geometric design allows for increased hydraulic efficiency. Thick-walled, close-grained cast iron handles the stress of everyday use. Back pullout design allows easy removal and repair without disturbing piping connections and completely exposes the impeller for flushing or service.

Enclosed Impeller

Constructed to optimize performance and operating efficiency. Mechanically balanced to reduce bearing loads and increase life. Keyed and locked to motor shaft. Available on some models in silicon bronze.

Discharge

Able to rotate to four positions for piping convenience. Larger models available with standard ANSI 125# flat-face flange. Smaller models equipped with tapped suction and discharge.

Special Alloy Steel Shaft

Shafts are precisely machined to tight tolerance for proper fit and extended service life. Shaft extensions are keyed to receive coupling and/or pulley or belts. (SAE and frame mount models)

Self-Lubricating Mechanical Shaft Seal

Superior corrosion-resistant metal parts require no maintenance and provide maximum abrasion resistance without leaking. Optional seals available for special applications.

Multiple laps

Supplied for easy priming and draining.

Lead-Free, Chromate-Free Primer and Paint

Provides high-quality, durable finish.

Graphite-Impregnated PTFE Packing

Eases break-in and accommodates a wide pH and temperature operating range.

Heavy-Duty Anti-Friction Bearings Sized for extended service life. (SAE and frame mount models)

Cast Iron Bearing Bracket

Houses pump shaft in anti-friction bearings. Enables pumps to be motoror engine-driven through coupling or belts. Belt-drive pulley designed to maximize performance and extend service life. (SAE and frame mount models)

Replaceable Stainless Steel Shaft Sleeve

Provides maximum corrosion resistance and protects shaft from wear. Shaft extension keyed to receive coupling and/or pulley or belts.

Replaceable Bronze Wear Ring

Available on some models.

Features

Flows Up to 6500 GPM (25 m³/minute)

Pressures Up to 660 FT (201 m)

Discharges Sizes 1" -10" (2.54 cm to 25.4 cm)

Impeller Diameters 6" - 18" (15.24 cm to 45.72 cm)

Cast Iron Construction w/(Cast Iron & Bronze Impellers)

Suction/Discharge NPT, Flanged, Victaulic

Sealing Options Packing & Mechanical Seal

Motor Options ODP, TEFC, PE-TEFC

Vertical Turbine and Propeller Pumps

Turbine Series

Fairbanks Nijhuis[™] line shaft turbine pumps are proven performers and are found in a multitude of applications including Irrigation and Dairy.

Propeller Series

Axial flow propeller pumps are designed for high volume fluid movement at low discharge pressures.

Vertical mixed flow pumps are used where a moderate volume of liquid needs to be pumped upward at moderate pressure.

Turbine Pump Features

Flows to 7000 GPM (1590 m³/h)	Flows to 30,000 GPM (6814 m³/h)
Heads to 1200 FT (365 m)	Heads to 60' FT (18 m)
Bowls 6" to 17" (152 mm – 432 m)	Bowls 8" – 36" (203 mm – 914 mm)

Propeller Pump

Features

High efficiencies mean lower horsepower requirements

Heavy-duty, high quality cast iron bowl castings feature a minimum 30,000 PSI tensile strength, with smooth passages designed for efficient operation.

Precision-cast enclosed impellers are matched to the pump bowls, dynamically balanced to avoid vibration.

To ensure long life, the suction bearing is grease-packed and fitted with a sand collar to keep grit and abrasives from entering the bearing.

Cast iron suction bell and its integrally-cast guide vanes provide a smooth flow into the first stage impeller.



Vertical Multi-Stage

Vertical Multi-Stage (BVM) Series

Berkeley[®] Vertical Multi-Stage Pumps deliver outstanding reliability and performance in the most demanding operating environments. A selection of construction materials are available to maximize process dependability, versatility and performance.



Features

Flows to 200 GPM (45 m³/h)

Pressure to 400 PSI (27.5 bar)

Five (5) flow series: 2, 4, 8, 16, 32

NPT, victaulic, and flanged connections

High-pressure tungsten-carbide seal with EPDM elastomers

Continuous-duty, high efficiency designs

Heavy-duty cast motor bracket insures proper motor alignment

High-thrust ODP and TEFC motor options

BVMI and BVMX models include gauge tabs for installation of diagnostic equipment

Versatility in performance and design

Retrofits easily in existing and new installations, reducing valuable downtime

Lower operating costs



Specialty



SSCX

Dependable high head performance and quiet operation

Flows to 85 GPM (322 l/min) Pressures up to 55 PSI (3.8 bar) HP to 2.5 HP (1.9 kw) 304 SS Housing & impeller High-Temp rating: to 250F (121 C)

SSHM-2

High pressure performance without priming delays

Flows to 55 GPM (208 l/min) Heads up to 225 FT (69m) 3 and 4 stage models available Self priming 2HP (1.5kw) ODP Motor suitable for continuous duty operations Polished 304 stainless steel outer shell Heavy duty durable cast iron suction bracket Cast iron motor bracket and integral pedestal Ideal for irrigation systems, water supply systems and fountains High-Temp rating: to 250F (121 C)



Gas Engine Pumps

Portable design perfect for de-watering applications

Type B Cast Iron End Suction Type B Cast Iron Self Prime Pumper Composite Self Prime Pumper Aluminum Self Prime Flows to 600 GPM (2271 L/min) Heads to 735 Feet (224 m) Robin, Briggs & Stratton and Power Pro Engines

Solids Handling Series



Solids Handling

Features

B-AG Sewage Pumps

3 & 5 HP (2.2 & 3.7 kw) models (1 PH, 230V) Up to 500 GPM (1892 l/min), 50 FT TDH (15.2m) 3" Solids (7.6cm)

BSW Submersible Solids Handling

4" (10.1 cm) flanged discharge Flows up to 1,100 TDH (4163 l/min) Pressures up to 90' TDH (27.4m) Continuous duty motor Stainless Steel Wear Ring 100,000 hour bearing life

BS Self Priming Trash Pumps

4", 6" and 8" (10.1, 15.2 & 20.3 cm) discharges Flows to 2800 GPM (10.6 m3/min), heads to 150' (45.7m) Re-prime lifts up to 25 FT (7.6m) 3 to 3-1/2" (7.6 to 8.9 cm) solids handling

BSD Frame Mounts Solids Handling

4", 5", 6" and 8" discharges Flows to 5300 GPM (20 m3/min) Pressures to 350 FT (107 m) 3" solids handling Dry run standard Double mechanical seal impeller adjustment standard to maintain performance



Accessories



Submersible Motors

are designed for long service life and years of dependable operation. Innovative design and robust characteristics make this the perfect motor for many pumping applications.



AquaMatic® K520 Series Control Valves

with Viton seals for use with caustic materials. 150°F maximum temperature, 125 PSI maximum pressure. Full range of connector kits available.



AquaMatic Commercial Control Valves

These cast iron or composite diaphragm valves offer low cost of operation and excellent flow rates at low pressure drops.



PENTEK[®] Pump Controllers

Designed for centrifugal motor-driven pumps in a wide range of applications, state-of-the-art Pentek PPC3 and PPC5 Controllers optimize pump functionality and reduce operating energy costs.



NEMA Pump Panels

Pentek PPX[™] Pump Panels are designed for agricultural and commercial above-ground pumping applications and provide full-voltage control of AC motors. PPX panels are offered in NEMA 3R (outdoor rated) enclosures with a door gasket to protect electrical components from harsh environments.



PENTEK INTELLIDRIVE

The Pentek Intellidrive Water Pressure Control Center automatically adjusts motor speeds to meet changes in water demand. Instantaneous feedback from an electronic pressure transducer instructs the drive to change the submersible well pump motor speed to maintain constant pressure throughout the system.

Make Berkeley[®] your One-For-All pump solution

One brand, one call, one stop to take care of your pump requirements. We offer a wide range of pumps, motors, controls and accessories, all with quality that's number one in the industry. When you need help, make one call to our Technical Support team. And your nearest Berkeley dealer is part of a nationwide network of skilled professionals, committed to making your needs their number one priority. CENTRIFUGALS SUBMERSIBLE TURBINES VERTICAL MULTISTAGE WASTEWATER LINE SHAFT TURBINES & PROPELLER PUMPS MOTORS & CONTROLS GAS ENGINE PUMPS ACCESSORIES



