



Sundyne **ANSIMAG** Non-Metallic, Magnet Drive Sealless Pumps

PUMPS

COMPRESSORS

GENUINE PARTS

SERVICE



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SIMPLE BY DESIGN™



*Reliable,
Safe, Simple,
Leak-proof*

Sundyne Sealless Pumps

What makes Sundyne sealless pumps a better, more **reliable**, choice for your process? It's simple:

No Leaky Mechanical Seals

- Insures the safety of your employees
- Provides a clean working environment
- Requires no mechanical seal support systems
- Cost-effective alternative to mechanically sealed pumps

Zero Emissions

- Environmentally safe and responsible
- Compliant with the EPA regulations

Cost Efficient Designs

- Operating efficiencies similar to mechanically sealed pumps
- Built to international standards for low initial installation cost

Application Experience and Product Support

- Assures proper pump selection for greater operating reliability
- Comprehensive PlusONE product support from Sundyne and our global network of Authorized Service Centers, giving you peace of mind with UPTIME ASSURANCE™

World class engineering and manufacturing

- Quality that delivers highly reliable products
- Most extensive line of sealless pumps available
- ISO 9001 certified

Ansimag K Series - Simple By Design™

Simple By Design is more than a slogan for us. It's what we practice every day. As the pioneer in non-metallic magnetic drive pumps, we continue to lead the way in providing the most advanced, most reliable sealless pumps available.

Simplicity = Reliability

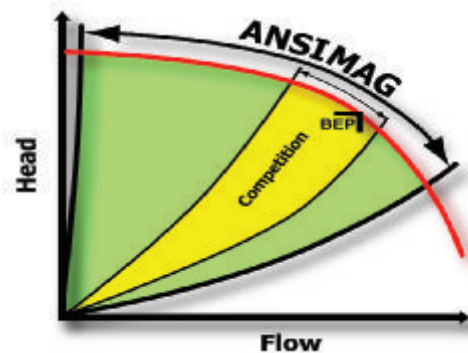
- Fewer parts means fewer problems

Simplicity = Quick, Easy Maintenance

- Quick Change Cartridge with one rotating assembly allows easy replacement of pump internals.

Simplicity = Durable, System Tolerant Design

- Stationary Shaft supported at both ends increases reliability by eliminating deflection associated with ever changing system conditions.



Unlike competitive pump designs, the Ansimag stationary shaft design tolerates greater changes in operating system conditions.

SundGuard Power Monitors – Protecting Your Pump Investment

Power monitoring represents one of the best values available today to protect your pump from system upset damage and avoid costly shutdowns, unexpected repair costs, and premature equipment failures. SundGuard Power Monitors are easy to install and operate, and designed to protect your pump from:

- Dry-Running Conditions
- Low Flow / "Back-on-Curve" Operation
- Increased Viscosity / Precipitation
- Deadhead / Closed Discharge Valve
- High Flow / "End-of-Curve Operation
- Jammed Impeller
- Severe Cavitation
- Decoupled Magnetic Drive



Optional Configurations for Optimum Application Flexibility



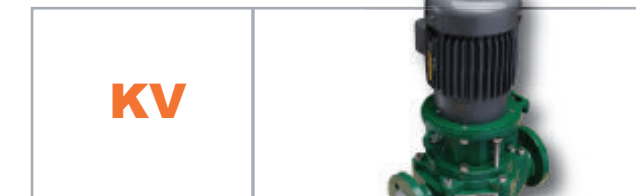
Self-Priming Pump

Features and Benefits

- Large priming chamber and solid volute for maximum priming lift
- Solid check valve for reduced back flow velocity and accelerated priming speed
- Built in 1/2" NPT thermal plug for additional pump protection monitoring
- Internal wear parts interchangeable with Ansimag K+ pumps for minimal inventory requirements
- Optional gooseneck for maintaining prime during intermittent operation

Specifications

- Flow: to 300 GPM (68 m³/h)
- Head: to 150 feet (45.7 m)
- Temperature: -20°F to 250°F (-30°C to 121°C)
- Pressures: to 285 psi (19.3 Bar)
- Suction Lift: to 20 feet (6.5 m)



Vertical In-Line Pump

Features and Benefits

- Meets ANSI B73.2 dimensional standards for easy, economical installation
- Internal wear parts interchangeable with Ansimag K+ pumps for minimal inventory requirements

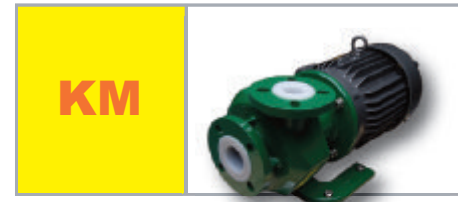
Specifications

- Flow: to 300 GPM (68 m³/h)
- Head: to 325 feet (99 m)
- Temperature: -20°F to 250°F (-30°C to 121°C)
- Pressures: to 285 psi (19.3 Bar)



Ansimag Pumps have the fewest wear parts of any magnetic drive pump on the market today.

Ansimag K Series



"Sub-ANSI" pumps for lower flow requirements

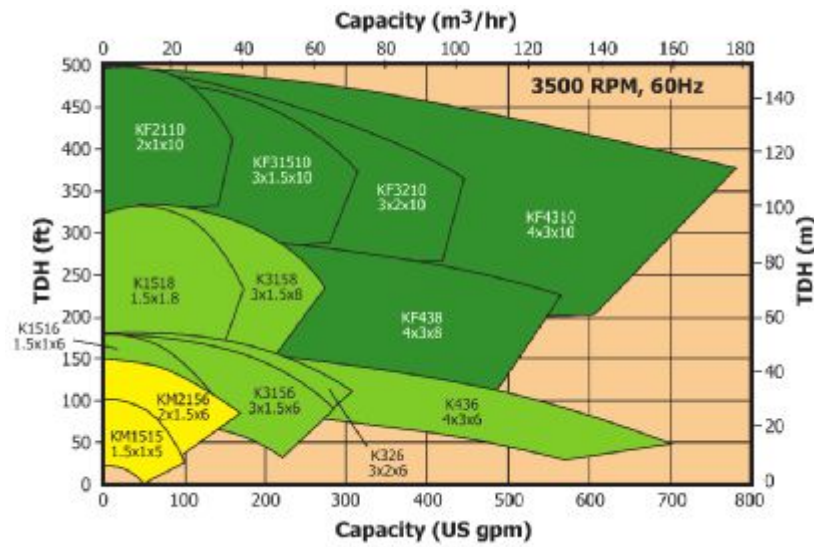


ANSI dimensioned pumps for chemical process applications



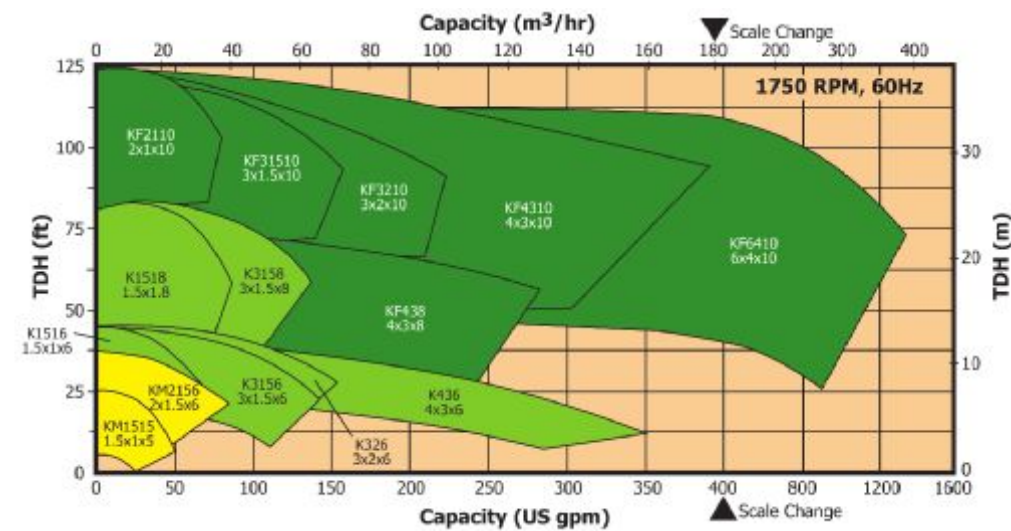
Large ANSI dimensioned pumps for higher flow and head requirements

Performance Envelopes



Specifications

- Flow: to 1400 GPM (318 m³/h)
- Head: to 500 feet (152 m)
- Temp: -120°F to 250°F (-84°C to 121°C)
- Pressure: to 350 psi (24 Bar)
- Design Standard: ANSI B73.3 (K+ and KF)



Typical Industries and Applications

- Chemical Processing
 - Transfer
 - Unloading
 - Bulk Storage
- Hydrocarbon Processing/Refining
 - Sour Water
 - Neutralization
 - Boiler House
- General Industrial
 - Steel Finishing, Pickling, Etching
 - Electroplating
 - High Purity Processes
 - Filtration
- Municipal
 - Wastewater/Wastechemical Treatment
 - Scrubber Systems
- Mining
 - Leaching
- BioFuels
 - Distillation
 - Transesterification
 - Neutralization
- Pulp & Paper
 - Bleaching
 - Waste Treatment
- Pharmaceutical

Industry Leadership
Engineering expertise delivering complete UPTIME ASSURANCE™

Experience and Reliability
Experience you can count on to handle the toughest applications



Typical Services

- Acid
 - Acetic
 - Chlorosulphonic
 - Chromic
 - Hydrochloric
 - Hydrofluoric
 - Nitric
 - Oleum
 - Phosphoric
 - Sulfuric
- Benzene
- Caustic Soda
- Bleach Solution
- Ferric Chloride
- Ferrous Chloride
- Hydrogen Peroxide
- Methanol
- Methyl Ethyl Ketone
- Sodium Hydroxide
- Sodium Hypochlorite
- Sodium Sulfate
- Sour Water
- Acetone
- Aluminum Chloride
- Ammonia

SIMPLE BY DESIGN (Model K+ Shown)

Impeller

- Locking mechanism permits impeller to be used with multiple magnet drive sizes for maximum parts interchangeability.
- Fully enclosed design minimizes axial thrust over wide operating range.

Inner Magnet Drive

- Advance molding process fully encapsulates magnets, eliminating all plastic welding that often leads to chemical attack.
- Locking mechanism permits magnet drive to be used with multiple impeller sizes for maximum parts interchangeability.



Rugged Inside and Out

Powder Coating makes our pump exterior more chemically resistant and durable than Epoxy paints. Keeps your pump operating and looking good in the most corrosive environments.

Casing Drain

Casing

Shaft Support

O-Ring

Shaft

- Fully supported, oversized shaft eliminates deflection for maximum durability.
- Patented groove enables unexpected particles to pass through the pump without disturbing flow or damaging the bushings.
- Solid, non-rotating design eliminates need for internal fasteners or o-rings.

Rear Casing

Rear Casing Support

Outer Magnet Drive

- Neodymium Iron Boron magnets for hard-start, synchronous operation.
- Magnets are fully encapsulated for protection against corrosion and physical damage.

Housing

Materials of Construction

- **Casing**
 - ETFE Lined Ductile Iron
- **Impeller**
 - Carbon Fiber Reinforced ETFE
- **Inner Magnet Drive**
 - Carbon Fiber Reinforced ETFE / Neodymium Iron Boron
- **Shaft**
 - Silicon Carbide
- **Bushing**
 - Silicon Carbide
- **Shaft Support**
 - Reinforced ETFE / Silicon Carbide
- **Mouth Ring**
 - Standard: Carbon Fiber Reinforced PTFE
 - Optional: Silicon Carbide
- **O-Ring**
 - Standard: Viton
 - Optional: EPDM, PTFE Encapsulated Viton
- **Rear Casing**
 - Carbon Fiber Reinforced ETFE and Kevlar Reinforced Vinyl Ester
- **Outer Magnet Drive**
 - Ductile Iron / Neodymium Iron Boron
- **Rear Casing Support**
 - Powder Coated Ductile Iron
- **Housing**
 - Powder Coated Ductile Iron

Options

- PFA Construction (in select sizes) for maximum corrosion resistance
- Frame Mounted Pumps for direct sealed pump replacement
- ANSI/ASME B16.5 Class 300 flanges for higher operating pressure capability
- ISO 2858 and JIS B8313 dimensional pumps for worldwide installation capability
- 316 Stainless Steel Casings (in select sizes) for cryogenic applications to -120°F