



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



Simple by Design™



*Reliable,
Safe, Simple,
Leak-proof*

Sundyne Sealless Pumps; from Sealed to Sealless™

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

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 simply lead the way in providing the simplest, most reliable sealless pumps available.

• Simplicity = Reliability

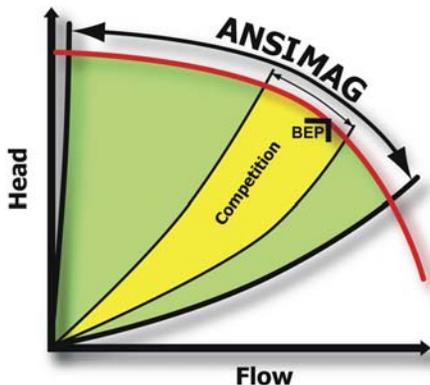
- Fewer parts means fewer problems.... Period.

• Simplicity = Quick, Easy Maintenance

- Quick Change Cartridge with 1 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 changing system conditions.



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

• 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 "Plus 1" product support from Sundyne and its local authorized channel partners to keep you "Up and Running"

• World class engineering and manufacturing

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



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

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 that keeps you "up and running".



Typical Services

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



Experience and Reliability

Experience you can count on to handle the toughest applications .

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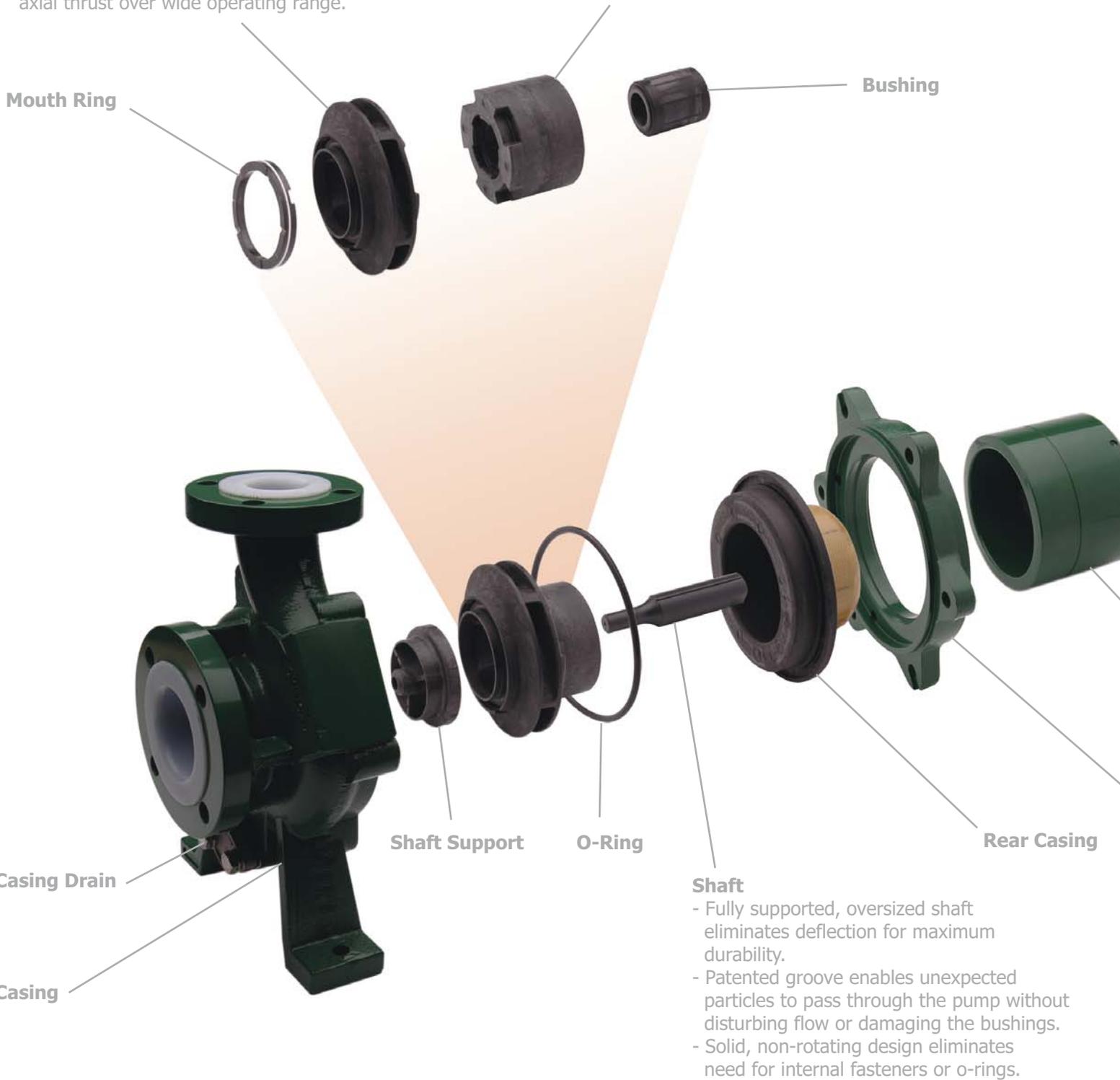
(Model K-

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.



Mouth Ring

Bushing

Casing Drain

Casing

Shaft Support

O-Ring

Shaft

Rear Casing

- 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.

y Design

(+ Shown)



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.



Housing

Outer Magnet Drive

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

Rear Casing Support

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

The Ansimag K Series



"Sub-ANSI" pumps for lower flow requirements

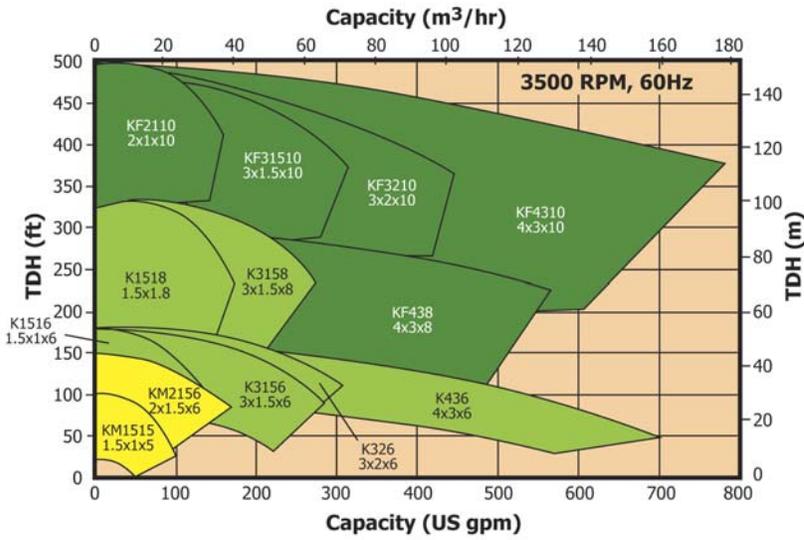


ANSI dimensioned pumps for chemical process applications



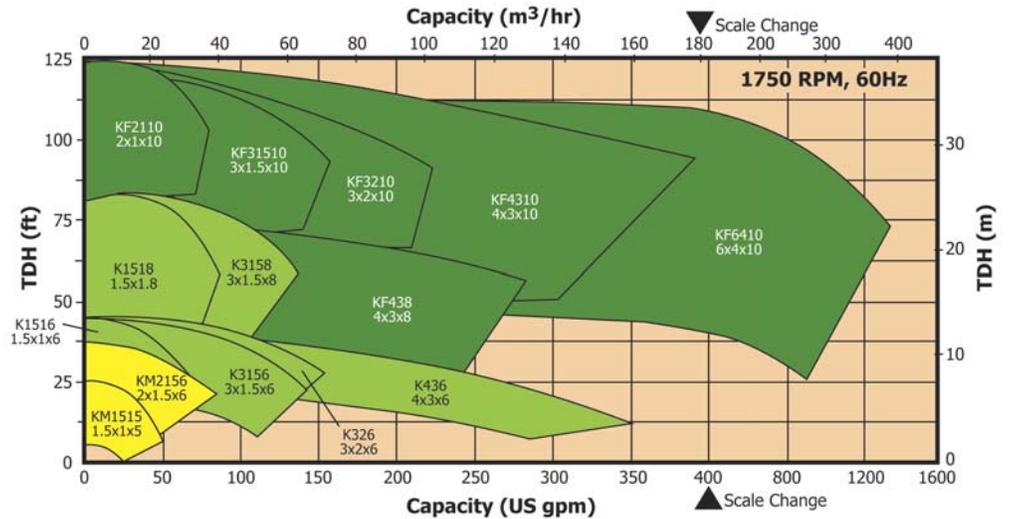
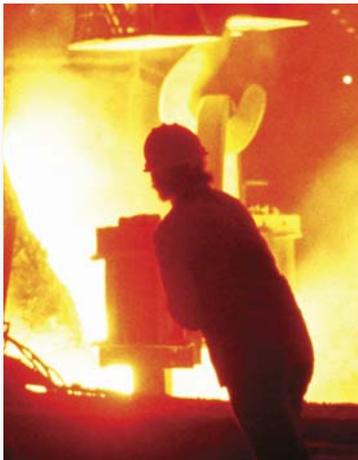
Large ANSI dimensioned pumps for higher flow and head requirements

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)



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)



Sundyne's Application Success Defines Our Vision:

...we ARE the world class leader in powering the production of life's basic needs.



PUMPS

COMPRESSORS

ELECTROMAGNETICS

SOLUTIONS PACKAGING

SERVICE

GENUINE PARTS

Dealer Label:

Sundyne Corporation
14845 West 64th Avenue
Arvada, Colorado 80007
USA

Phone: 1.303.425.0800
Fax: 1.303.425.0896
www.sundyne.com

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