CALL TOLL FREE 877-742-2878 FOR SALES AND SUPPORT

Return to BurtProcess.com

Sundyne®

ANSIMAG

Fluoropolymer lined magnetically driven chemical process pumps



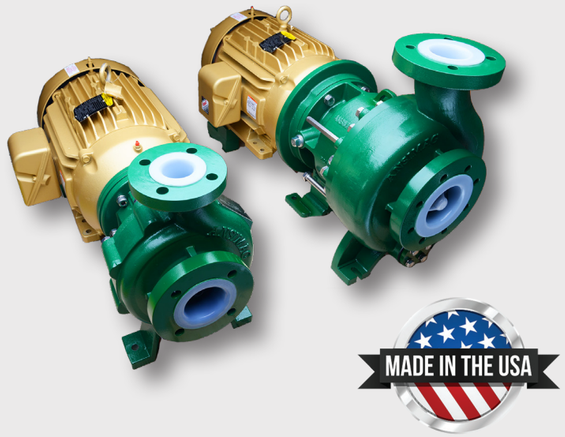


Why Sundyne?

Sundyne is a leading supplier of world-class precision-engineered fluid handling solutions (pumps, compressors and special fit-for-purpose systems) to the chemical, petrochemical, energy, water processing and general industries.

Sundyne's uncompromising reliability is not just a function of superior design. It's also delivered by high-touch services at commissioning, through planned turnarounds, and at every step of the way to ensure reliable day-to-day operation for years.

With world-class manufacturing and service facilities in the United States, England, France, Spain, Saudi Arabia and India, Sundyne is well positioned to solve the challenges facing global customers. Sundyne serves customers in over 117 countries with a factory trained and certified network of representatives and distributors.





Why ANSIMAG?

Leading Supplier of ETFE-lined Process Pumps To The Chemical Process Industry

- Since 1985
- Over 50,000 pumps supplied
- Sealless Mag Drive Technology
- No mechanical seals to leak or fail
- Near universal chemical compatibility

Cost Efficient

- Non metallic (lined) construction
- Simple, low maintenance (close coupled) design

Application Expertise

- Most experienced and trained Sales Engineers in the industry

Quality

- ISO 9001:2008 – Quality Management System

Typical Applications

The ANSIMAG ETFE-lined sealless process pumps are ideal for most corrosive or acidic applications in the Chemical, Power & Industrial, Hydrocarbon and Oil & Gas industries.

Chemical Processing

- **Chlor-alkali**
  Sodium Hypochlorite, Sodium Hydroxide, Sulfuric Acid, Chlorinated Brine
- **Agricultural Chemical**
  Pesticides, Insecticides, Herbicides
- **Fertilizer**
  Nitric Acid, Sulfuric Acid, Urea, UAN
- **Isocyanates**
- **Polycarbanates**

Hydrocarbon Processing

- **Downstream Refining**
  Sour Water, Sulfuric Acid, Sodium Hydroxide
- **Downstream Petrochemicals**
  Benzene, Xylene, Toluene
- **Upstream**
  Produced Water, Crude Oil

Power & Industrial

- **Aquatic & Marine**
  Seawater, Caustic
- **Battery**
  Sulfuric Acid, Potassium Hydroxide
- **Biofuels**
  Bio-diesel, Ethanol
- **Food & Beverages**
  Fragrances
- **Mining**
  Sodium Cyanide, Sulfuric Acid, Hydrochloric Acid
- **Pharmaceutical**
  Silicon Oil (Heat Transfer Fluid)
- **Pulp & Paper**
  Sodium Hydroxide, Bleaching Agents, Sulfuric Acid
- **Semiconductor**
  Hydrofluoric Acid, Sulfuric Acid
- **Steel Finishing, Pickling, Etching, Plating**
  Hydrochloric Acid
- **Water & Wastewater Treatment**
  Sodium Hypochlorite, Sodium Hydroxide, Sulfuric Acid, Ferric Chloride

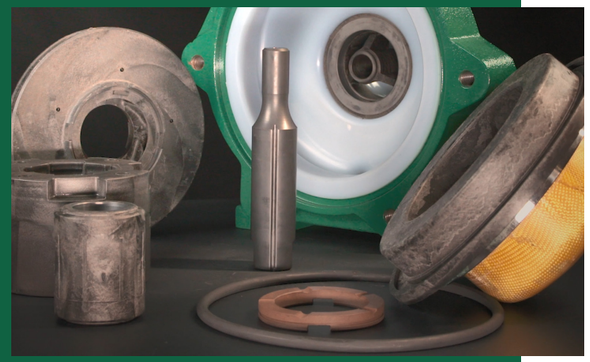
ANSIMAG's unique combination of design features, application expertise, and local support provide our customers with the most reliable sealless process pump solution for keeping their plant up and running.



Features

Simple Sealless Design

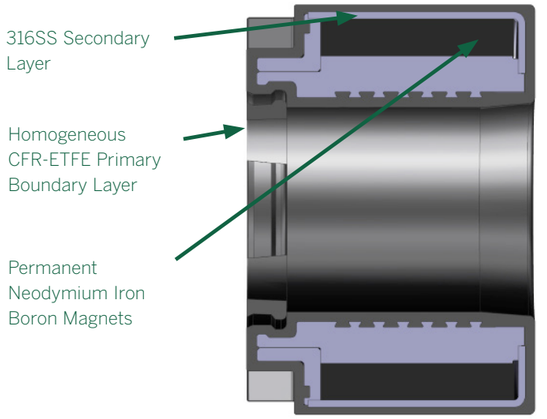
ANSIMAG pumps can be quickly and easily repaired in the field. Unlike the competition, ANSIMAG pumps consist of only 9 wetted parts. Routine maintenance or repairs can be performed in the field with no special training or tools.



Fully Encapsulated Mag Drive

ANSIMAG patented inner drive encapsulation process hermetically seals the inner magnets, isolating them from process fluid, maintaining the integrity and strength of the magnets over the lifetime of the unit

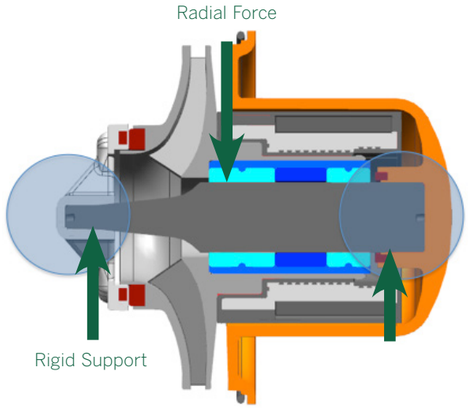
Homogeneous primary boundary layer of CFR-ETFE hermetically seals the magnets. Unlike competitive designs, the chance for permeation is removed by eliminating any post injection molding machining or plastic welding.
A secondary stainless steel layer is provided for increased durability.



Fully Supported Impeller

By rigidly supporting the stationary pump shaft at the pump suction and rear containment shell, ANSIMAG keeps your equipment up and running by providing a fully supported platform for the rotating impeller assembly, preventing any radial deflection when operating at low flow (or off BEP) conditions.

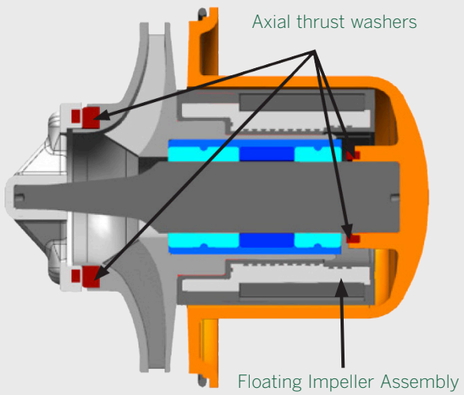
By preventing any radial impeller deflection, ANSIMAG increases the allowable operating range and RELIABILITY of the pump over cantilevered or overhung impeller designs.





Replaceable Impeller

ANSIMAG pumps feature a single piece closed impeller that is separate from the inner magnet drive. The impeller is attached to the inner magnet drive with ANSIMAG patented tongue and groove system. Unlike competitive designs, the single piece replaceable impeller enables a cost effective approach to both warehouse spares management and re-rating operation conditions for the unit.



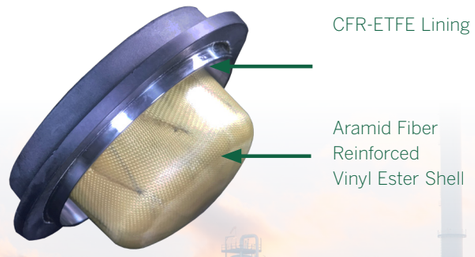
Axial Thrust Washers

By using axial thrust washers, ANSIMAG increases the allowable operating range over "thrust balanced" methods.

Unlike competitive designs, ANSIMAG axial thrust balancing design provides a positive thrust surface that is unaffected by cavitation, solids or transient suction conditions and effective over the complete operating range of the unit for increased pump RELIABILITY.

Non-Metallic Containment Shell

ANSIMAG pumps are as energy efficient as mechanically sealed pumps. The non-metallic CFR-ETFE lined containment shell generates no hysteresis losses during operation. No hysteresis loss means no heat generation and no power loss. With a burst pressure of 6X MAWP of the pump, the Aramid fiber reinforced vinyl ester shell provides ANSIMAG pumps with industry leading RELIABILITY.





Features & Benefits

Simple By Design

With only 9 wetted parts, ANSIMAG pumps are the simplest, most reliable pumps to own, operate and maintain.

Run for Life Bushing

Silicone Carbide bushings provides near maintenance free operation for the life of the pump.

Replaceable Impeller

Single piece closed impeller, separate from the Inner Drive, can be easily changed out if process conditions change.

Axial Thrust

Robust "Thrust Forward" design provides reliable operation even under the most difficult suction conditions

Fully Encapsulated Drive

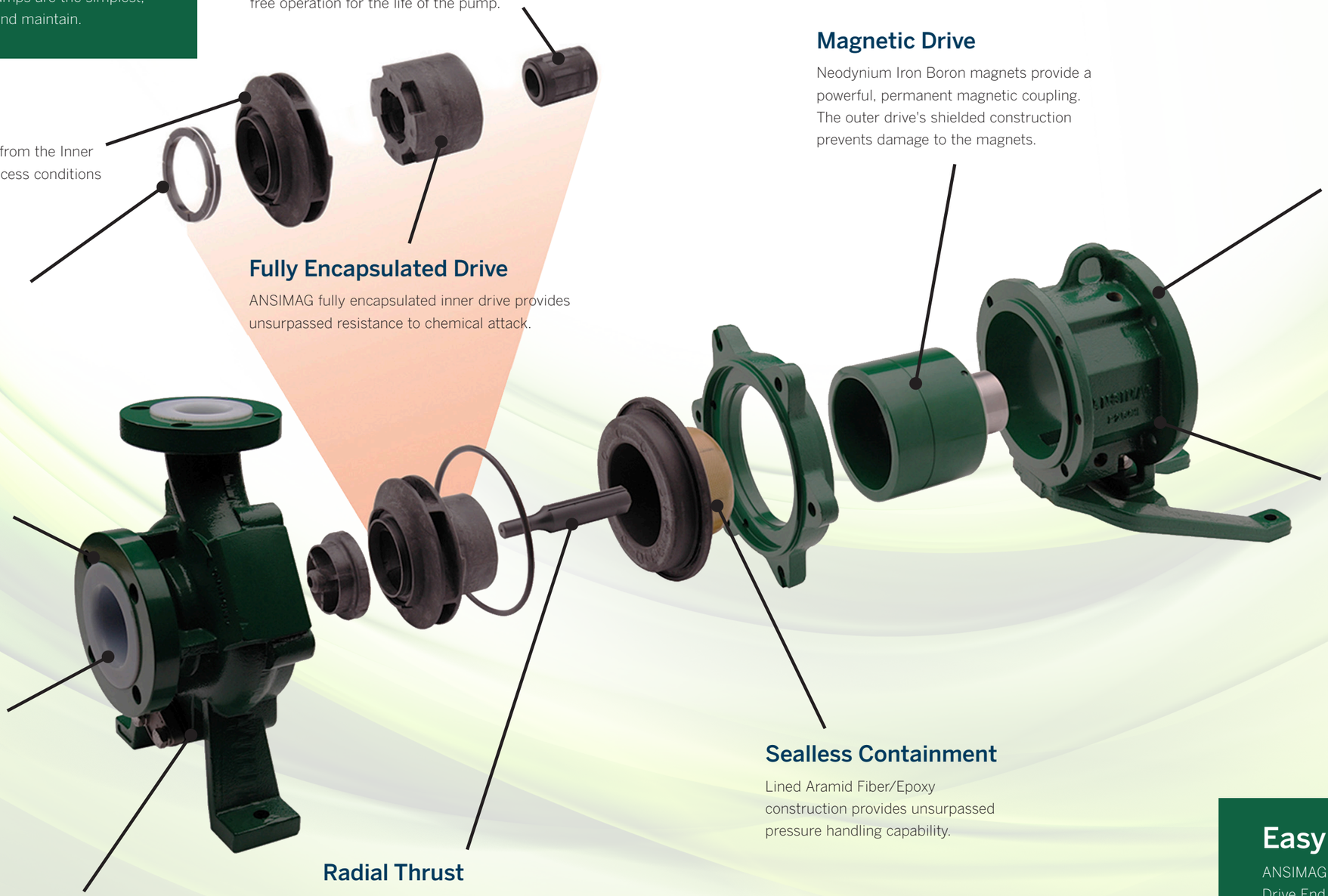
ANSIMAG fully encapsulated inner drive provides unsurpassed resistance to chemical attack.

Magnetic Drive

Neodynium Iron Boron magnets provide a powerful, permanent magnetic coupling. The outer drive's shielded construction prevents damage to the magnets.

Close Coupled

With it's small footprint, quiet operation and low maintenance, ANSIMAG pumps utilize standard, off the shelf, NEMA C Face or IEC B5 flange motors.



Durable Construction

Ductile iron exterior is designed for heavy-duty chemical applications.

Corrosion Protection

Powder Coat exterior is more durable and chemically resistant than Epoxy based paints.

Chemically Resistant Lining

Carbon Fiber reinforced ETFE is chemically resistant to most chemicals.

Sealless Containment

Lined Aramid Fiber/Epoxy construction provides unsurpassed pressure handling capability.

Zero Leakage

All ANSIMAG pumps feature a single, fully confined, O-ring to eliminate possible leakage.

Radial Thrust

All ANSIMAG pumps feature a fully supported shaft to eliminate radial shaft deflection at a low flow operating conditions.

Easy Service

ANSIMAG Back Pull Out design enables the Drive End to be serviced without breaking into the Wet End.

ANSIMAG and ESG

ESG (Environmental Social & Corporate Governance) practices are vital to the Chemical Processing Industries – as everyone understands the need for safety, sustainability and the responsibility that comes with being an environmental steward. ANSIMAG pumps play a central role in hundreds of applications that impact the environment on a daily basis, and Sundyne's ESG commitment is stronger than ever.

ANSIMAG pumps are used in sustainable applications that help the environment, such as:

Electrolyzers and Hydrogen Power:

- Pump water into electrolyzers
- Pump caustic chemicals that increase pH in electrolyzers

Electric Vehicle Batteries:

- Pump the polymers used to coat the electrodes on Lithium Ion Battery cells

Vaccines & Biologics:

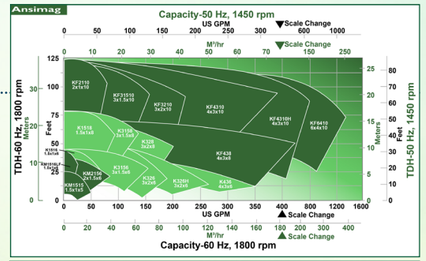
- Handle the chemical catalysts used in thousands of pharmaceutical processes
- Pump coolants to freeze driers that store COVID-19 vaccines

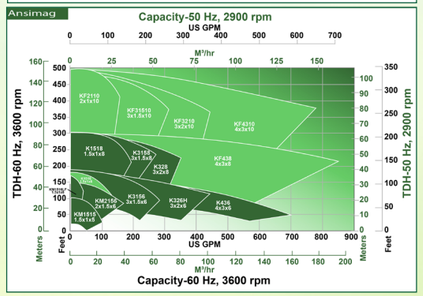
ANSIMAG's ESG support extends far beyond these high-profile examples, to include every-day items such as:

- **Energy Efficiency** – ANSIMAG pumps deliver unprecedented energy savings.
- **Chemical Securit**y – ANSIMAG pumps eliminate leaks and resist corrosion from chemical attack
- **Employee Health & Safety** – ANSIMAG's track record for handling harsh chemicals in a safe manner dates back decades.
- **Uncompromising reliability** – ANSIMAG pumps prevent unplanned downtime, and are designed to run for years in a safe & reliable manner.

Family Performance

ANSIMAG pumps provide affordable replacement options for aging ASME/ANSI B73.3 and ISO 2858 sized pumps, because the line covers a wide range of sizes and standard external dimensions to facilitate sealless or sealed pump replacement without changing piping or baseplates. Use these curves to find a pump model that meets your needs. For detailed sizing refer to the individual product pages with curves and specifications.





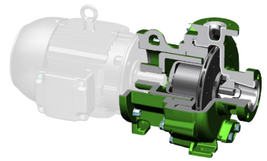
ANSIMAG Pumps

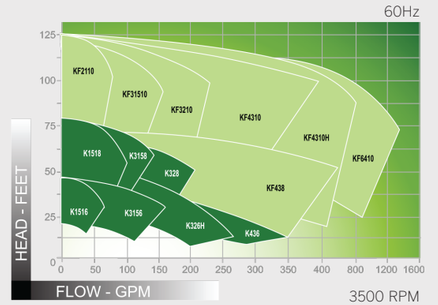
ANSI Pumps

K-Plus Series

ASME B73.3 – 2015 compliant

Flow: up to 675 gpm (153 m³/hr)
Head: up to 320 ft (97 m)
Temp: -20 to 250°F (-29 to 121°C)
Pressure: to 285 psi (19.6 bar)

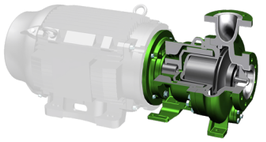


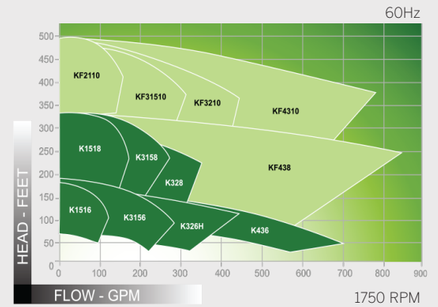


KF Series

ASME B73.3 – 2015 compliant

Flow: up to 1,470 gpm (334 m³/hr)
Head: up to 520 ft (110 m)
Temp: -20 to 250°F (-29 to 121°C)
Pressure: to 350 psi (24 bar)



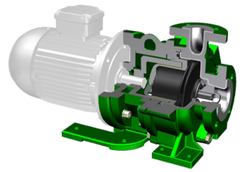


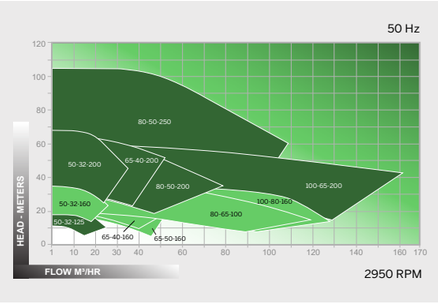
ISO Pumps

ALI Series

Casing/Flange Dimensions to ISO 2858

Flow: up to 105 m³/hr (660 gpm)
Head: up to 150 m (500 ft)
Temp: -29 to 121°C (-20 to 250°F)
Pressure: to 19 bar (275 psi)

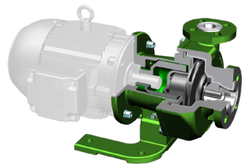




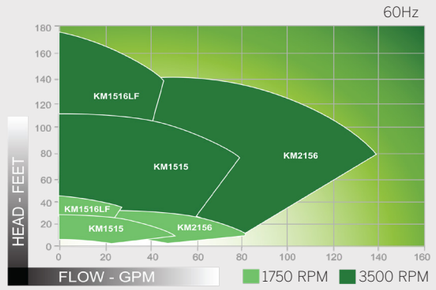
ANSIMAG Pumps

General Industry Pumps

KM Series



Flow: up to 147 gpm (33 m³/hr)
Head: up to 140 ft (30 m)
Temp: -20 to 250°F (-29 to 121°C)
Pressure: to 150 psi (10.3 bar)



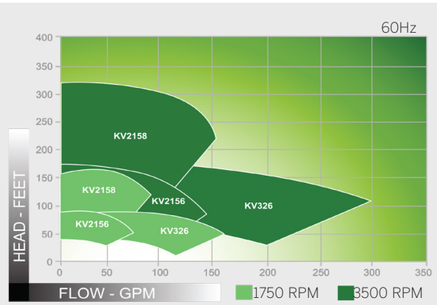
Vertical Inline Pumps

KV Series

Casing / Flange Dimensions to ASME B73.2

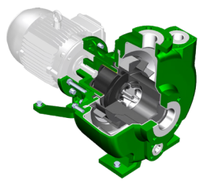


Flow: up to 325 gpm (74 m³/hr)
Head: up to 325 ft (69 m)
Temp: -20 to 250°F (-29 to 121°C)
Pressure: to 285 psi (19.6 bar)

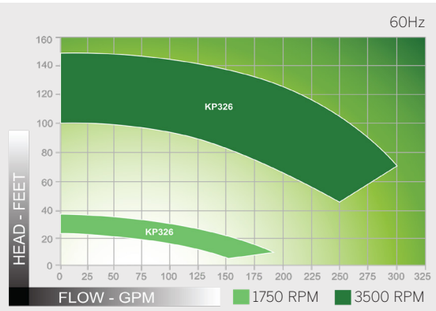


Self Priming Pumps

KP Series



Flow: up to 285 gpm (65 m³/hr)
Head: up to 150 ft (32 m)
Temp: -20 to 250°F (-29 to 121°C)
Pressure: to 285 psi (19.6 bar)
Suction Life: 20 ft (6.5m) Water



Options & Accessories



Power Monitor

Installed in the Motor Control Center (MCC), a power monitor measures the power required to operate the pump. By setting High and Low trip points, the power monitor is the perfect solution for protecting your pump from:

- Dry running
- Low flow Operation
- High flow Operation
- Severe Cavitation
- Magnetic De-coupling

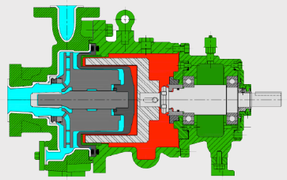
Long Coupled

Long coupled configurations conform to ANSI B73.3-2015 dimensions for easy replacement of mechanically sealed pumps (utilizing same baseplate, coupling, guard and motor).



Secondary Containment

A secondary containment option is available in the unlikely event of primary containment failure. Full system pressure is maintained until the system can be safely shutdown.



Liquid Monitoring

In the highly unlikely event of a breach of primary containment, a liquid monitoring system is available providing an extra layer of protection.



Optional PFA Materials

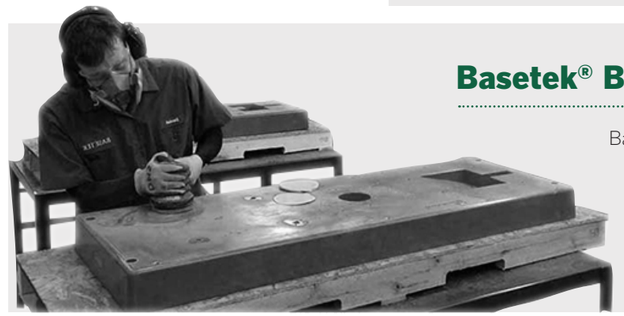
Models can be offered in glass fiber reinforced PFA for specific chemical applications.





Dry Run Resistant Bearings

Fitting an ANSIMAG pump with Carbon radial bushings reduces the coefficient of friction with the pump shaft extending the life of pump during process upset or dry run operating conditions.



Basetek® Baseplates

Baseplates pre-engineered, chemically resistant polymer concrete bases provide a superior foundation to channel steel alternatives.

Backed By Global Support

Sundyne is more than just a manufacturer of high quality compressors and pumps. We offer some of the fastest delivery times in the industry, and we back each product shipped with a full range of aftermarket support services, extending the value of our highly engineered machines well beyond the point of sale.

And with our engineered solutions, worldwide presence and compact designs, installation and maintenance has never been more efficient.

The Sundyne service team is here to help protect your investment and provide a trouble-free customer experience at every turn. That's **RELIABILITY REALIZED**.

Our Aftermarket Programs Include:

- Gearbox Exchanges & Upgrades
- Maintenance Kits
- Conversion Programs
- On-Site SundSCHOOL
- Field Service Support
- Overhaul and Repair Services
- Site Surveys
- Emergency Expedite Services

Sundyne: An OSHA VPP Star Site

At Sundyne, Environmental Health and Safety (EH&S) is integral to our culture of excellence, and providing a 100% safe work environment through the manufacturing and installation phases of a project is a core priority.

To learn more about our extended service offerings and specific application references, visit www.sundyne.com or contact us toll free at 1-866-SUNDYNE.



For more information please visit www.sundyne.com and fill out the Contact Me form. A Sundyne representative will contact you.

Sundyne Headquarters:
Sundyne, LLC
14845 West 64th Avenue
Arvada, Colorado 80007 USA
Toll Free: 1-866-Sundyne
Phone: +1-303-425-0800

HMD Kontro Sealless Pumps*
Marshall Road
Hampden Park Industrial Estate
Eastbourne, East Sussex BN22 9AN UK
Phone: +44 (0)1323 452 000

Marelli Bombas
Ctra. Madrid-Toledo, Km.30.8
45200 Illescas
Toledo, Spain
Phone: +34 925 53 45 00

Sundyne International S.A.
13-15 Bldg. Eiffel - B.P. 30
21604 Longvic Cedex France
Phone: +33 380 383300

Sundyne Asia Japan Co., Ltd.
Odakyu Dai-Ichi Seimei Bldg. 6F
2-7-1, Nishi-Shinjuku Shinjuku-Ku
Tokyo, 163-0706 Japan
Phone: +81-3-3344-0911

Sundyne India
4 + 5, L-Square, Near Parihar Chowk
Pune, 411 007 India
Phone: +91 99870 76165

ANSIMAG Brochure_041022: U.S. (v.2) POD