SEALLESS CANNED MOTOR PUMPS
Your Preference, Our Innovation

Cost Economical | Energy Efficient | Compact Design | Leakage Proof | Short Delivery
INTRODUCTION

We would like to introduce FLOWDYNE ENTERPRISE as a company founded by young technocrats who has continuously engaged in providing solution regarding Pumps, Seals & Valves for industrial applications. Industries served include oil refining, chemical processing, power, shipbuilding, pulp and paper, mining, pharmaceutical & refrigeration Industries. We are a privately owned company whose accomplishments have been achieved by: Dedication and commitment of our employees. Standard of excellence in all our products. Our products are designed, manufactured and tested to meet and exceed all applicable specifications to which they are constructed. Our goal is to furnish high quality products at prices competitive in the market and meet the challenges required in today’s business environment.

COMPANY VISION

Flowdyne, is in the business to provide our customers with fluid handling equipment, ancillary products, and services that achieve superior satisfaction resulting in success for our customers.

COMPANY MISSION

Flowdyne as the best industrial supplier of quality fluid handling products and services that meet and exceed customer expectations while profitably growing our company and meeting the commitments of our employees and suppliers. We understand our customers’ needs and regularly measure our progress in satisfying those needs. We focus to drive out all costs that do not contribute to the pursuit of our vision. We are considered essential to our customer and vendors business success through meeting the commitments made to both. We encourage leadership, initiative, and innovation and train people to develop their full potential. Decision making occurs at the lowest effective level in the organization, and we work individually and in teams to produce exceptional business results.

QUALITY POLICY

Flowdyne work closely with our customers to continuously improve the quality of the product and processes. Every employee of Flowdyne is responsible for maintaining our quality standards. Assuring our best attention and services, we are looking forward to receiving your patronage at all times.

DESIGN REVIEW

Flowdyne, continuously makes effort for improving design of our pumps based on on the site condition, customers requirement & feedback. All our pumps are as per international standard ANSI B 73.3 & API-685 2nd edition.
FEATURES
1. Due to the transmission fluid does not leak to the outside, it applies to harmful liquids, explosive and flammable liquids, corrosive liquids and precious liquids;
2. Due to not breathe the outside air, it applies to the vacuum system operation and contacts with the outside gas liquids can deteriorate;
3. Because no seal, it applies to higher system pressure high-temperature and low-temperature liquid;
4. Since no oil, transmission fluid does not pollute and avoid oiling trouble;
5. Due to coaxial motor and pump assembly, small size, light weight, does not occupy space, easy disassembly inspection;
6. Because no cooling fan motor, low noise operation.

ADVANTAGES

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>FLOWDYN PUMPS</th>
<th>MAG DRIVE PUMPS</th>
<th>MECHANICAL SEALED PUMPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIAGNOSTICS</td>
<td>BEARING WEAR MONITOR</td>
<td>NONE</td>
<td>NONE</td>
</tr>
<tr>
<td>SECONDARY CONTAINMENT</td>
<td>YES</td>
<td>NONE</td>
<td>NO</td>
</tr>
<tr>
<td>SHAFT ALIGNMENT</td>
<td>NOT REQUIRED</td>
<td>REQUIRED ON POWER FRAME UNITS</td>
<td>REQUIRED ON POWER FRAME UNITS</td>
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<tr>
<td>NUMBER OF BEARINGS</td>
<td>4 TO 6</td>
<td>2 TO 4</td>
<td>2 TO 4</td>
</tr>
<tr>
<td>NUMBER OF BALL BEARINGS</td>
<td>4 TO 6</td>
<td>2 TO 4</td>
<td>2 TO 4</td>
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<tr>
<td>NUMBER OF MOVING PARTS</td>
<td>2 TO 3</td>
<td>2 TO 3</td>
<td>2 TO 3</td>
</tr>
<tr>
<td>SIZE (LENGTH) BASED ON DIMENSIONS</td>
<td>29.5 INCHES (CLOSE COUPLED)</td>
<td>29.5 INCHES (LONG COUPLED UNITS)</td>
<td>29.5 INCHES (LONG COUPLED UNITS)</td>
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<tr>
<td>FOUNDATION REQUIREMENTS</td>
<td>NONE</td>
<td>RIGID ON LONG COUPLED UNITS</td>
<td>RIGID ON LONG COUPLED UNITS</td>
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<tr>
<td>SPECIAL TOOLS</td>
<td>NONE</td>
<td>NON FERROUS AREA REQUIRED</td>
<td>NONE</td>
</tr>
<tr>
<td>MAINTENANCE SAFETY REQUIREMENTS</td>
<td>NONE</td>
<td>HIGH RISK OF INJURY TO HANDS DUE TO MAGNET ATTRACTION. MAGNETIC FIELD AFFECTS ELECTRICAL DEVICES SUCH AS FACEMAKERS AND MAGNETIC INFORMATION STORED ON CREDIT CARDS, BANK CARDS AND COMPUTER DISKS.</td>
<td>NONE</td>
</tr>
<tr>
<td>MOUNTING</td>
<td>VERTICAL OR HORIZONTAL</td>
<td>HORIZONTAL</td>
<td>HORIZONTAL</td>
</tr>
</tbody>
</table>

BUILDING BLOCK ASSEMBLY

- Terminal Ass’y
- Front Bearing Housing
- Rear Bearing Housing
- Stator Ass’y
- Impeller
- Casing
- Rotor Ass’y
- Stand
1. **Basic Pump (BS)**

- Chemical service pumps for a wide range of non-slurry liquids. Available in 304 SS, 316 SS and other high alloys.
- Available with optional heating or cooling jackets for both motor and pump. Available with Explosion Proof motors.
- Standard performance range:
  - Qmax : 150m³/hr.
  - TDH max : 160 m
  - kW max : 90 kW

2. **High Melting Pump (HM)**

- This series are developed to cater for liquids with nature of high-melting point.
- Type HM is jacketed and suitable for liquids with relatively low melting point such as Oleic acid, Fatty acid, Acetic acid, Amines, Phenol, Maleic anhydride, Caustic soda, p-Xylene, etc.
- Type HMS is heavily jacketed for liquids with relatively high melting point such as Maleic acid, Bisphenol, Caprolactam, Phthalic Anhydride Phthalic acid and Naphtalene.

3. **Reverse Circulation Pump (RC)**

- Self-venting and low NPSHr for volatile liquids, liquified gases and refrigerants such as Ammonia and synthetic fluoro and chloride hydro carbons.
- Available both in horizontal and vertical designs. Extreme low temperature to high temperature services.
- Qmax : 150m³/hr.
  - TDH max : 160 m
  - kW max : 90 kW

4. **High Temperature Pump (HT)**

- Zero leakage service for hot oils, hot water and for any other high temperature chemicals.
- Available either in horizontal or vertical designs with cooling jacket on motor and an integral heat exchanger.
- Liquid temp. up to 450°C.
- Qmax : 150m³/hr.
  - TDH max : 160 m
  - kW max : 90 kW
  - Temp : 450°C

5. **Multi-Stage Pump (MS)**

- Barrel type casing, low flow, high TDH for general CPI applications, reverse osmosis in electronics, pharmaceutical and semiconductor manufacturing. All canned pump features like extremely low noise and high reliability are maintained.
- Qmax : 50m³/hr.
  - TDH max : 400 m
  - kW max : 90 kW

6. **Slurry Pump (SR)**

- Slurry pump has horizontal design for relatively small amount of fine slurry. Pump features a self-circulating sealing liquid but requires no gas-chamber.
- Qmax : 150m³/hr.
  - TDH max : 160 m
  - kW max : 90 kW
  - Allowable max slurry Content : 3-5wt%
7. **Verticle Inline Pump (VI)**

Vertical reverse circulation models are designed for high vapor pressure, volatile hydrocarbons. Vertical configuration and reverse circulation offers easier venting and assures stable long life operation in systems with low NPSH available. Canned motor pump design eliminates seal maintenance and associated down time.

Vertical Pumps are space saving, self venting hollow shaft design. The small and space saving mounting footprint of these models make them very applicable.

8. **Heat Resistant Pump (HX)**

HX Pumps are best featured in handling high temperature liquids such as Heat Transfer Oils, Hot Water and High Melting Temperature Chemicals with un-comparable easefulness. HX Pumps need no cooling providing customers with considerable energy and utility savings in high temperature pumping. Liquid temp. up to 350°C.

Qmax : 80 m³/hr.
TDH max : 90 m
KW max : 45 kW
Temp : 350°C

9. **Vapour Absorption Pump (VA)**

Compact, light weight, extremely low NPSHr, fabricated sealless / leak-free canned motor pumps for operation under high vacuum. Installation is either flange mount or weld in place.

Qmax : 50 m³/hr.
TDH max : 35 m
KW max : 37 kW

10. **API-685 Pump**

Horizontal Centrelne mount canned motor pump per API-685 (API specification for sealless pumps) for higher liquid temperatures. API-685 specifications for pumping high temperature hydrocarbons under elevated system pressure in a refinery application. API-685 pumps are available to 90 Kw and 35 MPa/5000psi system pressure.

11. **Regenerative Pump (RX)**

Designed for efficient, low flow high head, leak-free pumping or circulation of volatile and expensive fluid such as cleaning agents and thermal control fluids. Applications are met in both General Industrial and OEM machine applications. RX regenerative turbines pumps are also available with Explosion Proof motors for use in the Chemical Process Industries or any process application where leak-free pumping is preferred or required.

Capacity : 5m³/hr.
Head : Max. 125 m
Motor kw : 0.75 - 3.7


Horizontal center line supported pump featuring a high temperature & high pressure service canned motor and supplied with an integral heat exchanger for accurate temperature control of the internal, self-circulated lubrication flow. All canned motor pump advantages are inherent in HTP designs for the most difficult pumping applications in refineries and petrochemical process plants. Unlike conventional API pumps, HTP pumps never require external lubrication, seal flush, couplings or mechanical component alignment.

Capacity : 60 m³/hr.
Head : Max. 125 m
Motor kw : 0.75 - 60
Ultimately Ecological, Pollution-free, Zero Emission Canned Motor Pump & System

FLOWDYNE presents the most edge-cutting canned motor pumps in double containment, leak-free, robust & user-friendly design to the users in desperate need to live up to 21st Century industrial standards on the planet!

**FAMILY CURVE ENVELOPE**

**SPECIFICATION**

<table>
<thead>
<tr>
<th></th>
<th>Standard</th>
<th>Semi-Standard</th>
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<tbody>
<tr>
<td>Capacity</td>
<td>100 m³/hr</td>
<td>400 m³/hr</td>
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<tr>
<td>TDH</td>
<td>400 m</td>
<td>400 m</td>
</tr>
<tr>
<td>Temperature</td>
<td>-40 to 350°C</td>
<td>-80 to 450°C</td>
</tr>
<tr>
<td>Viscosity</td>
<td>100 cSt</td>
<td>350 cSt</td>
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<tr>
<td>Design Pressure</td>
<td>30 bars</td>
<td>400 bars</td>
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<tr>
<td>Motor Rating</td>
<td>90 Kw</td>
<td>200 Kw</td>
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<tr>
<td>Major Materials</td>
<td>SS304, SS316, SS316L</td>
<td>Hastelloy, Monel, Alloy 20</td>
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<tr>
<td>of Wetted Parts</td>
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</table>

**FLOWDYNE** products will prove their hermetic-sealing power in the following fluid-handling segments;

Oil & Gas Refining, Petrochemistry, Chemistry, Food-Processing, Pharmaceutical, Textile, Cosmetics, Airconditioning & Refrigeration, Semiconductor Manufacturing, Thermal or Nuclear Power Plants and more to come....
TESTING

All our pumps are 100% performance tested at our own workshop, as per duty parameters of pumps, which enable us to meet the client outmost satisfaction.

LIST OF TEST

1. Performance Test.
2. Stripdown Test.
4. Insulation Resistance Test.
5. Helium Leak Test.
6. Hydro Static Test.
7. Locked Rotor Test
8. High Voltage Test.
10. Dye Penetration Test.
Drop-in Replacement

Flowdyne retrofit pumps are ideal replacement candidates for existing Imported & Others Indian make Canned Motor Pumps.

FLOWDYNE ENTERPRISES

Regd. Address:
103, Aisha Manzil, Behrambaug Road,
Jogeshwari (West), Mumbai - 400102.

Works/office:
C-3, National Welfare Compound,
Off New Link Rd., Laljipada,
Kandivali (West), Mumbai-400067
Tel.No. : +91 22 65501001
Mobile No. : +91 97735 34159
+91 97024 97034

Email : info@flowdyneindia.com
Website : www.flowdyneindia.com

Dealer / Agent: