

VERTIFLO

The Vertical Pump Specialists

PUMPS FOR INDUSTRY

CONTENTS:

Introduction & User List

Product Overview

Vertical Process Pumps Series 600

Vertical Sewage Pumps Series 700

Vertical Sump Pumps Series 800

Vertical Vortex Pumps Series 900

Vertical Cantilever Pumps Series 1100 and 1200

**Horizontal End Suction
Pumps-Centrifugal Series 1300 and 1400**

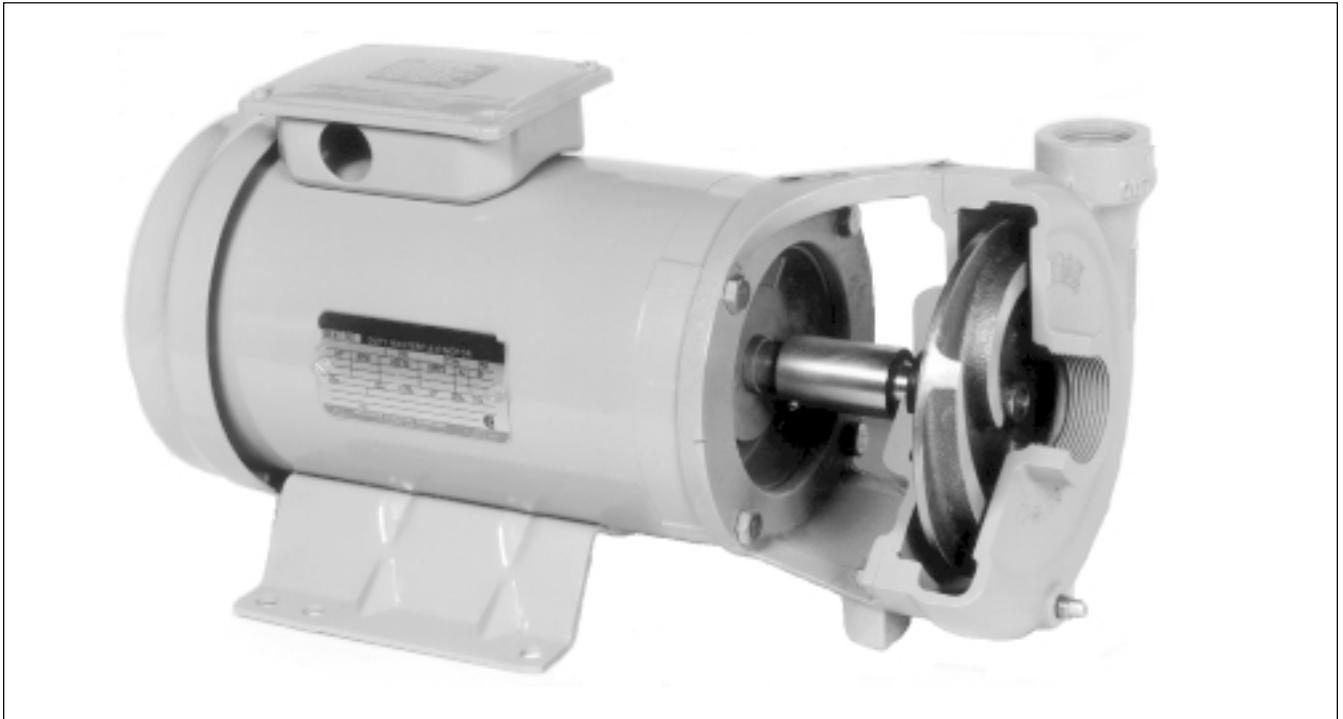
Horizontal End Suction
Pumps-Vortex Series 1500 and 1600

Horizontal Self-priming
Pumps- Centrifugal Series 2100

Engineering Sample Specifications

VERTIFLO SERIES 1300, MODEL 1312

Quality Design Features Assure Long, Trouble-Free Service

**WIDE RANGE OF APPLICATIONS:**

- General Pumping
- Process
- Chemicals
- Deionized Water
- Wash Systems
- OEM

CAPABILITIES:

- Capacities to 240 GPM
- Heads To 160 Feet TDH
- 1750 and 3500 RPM

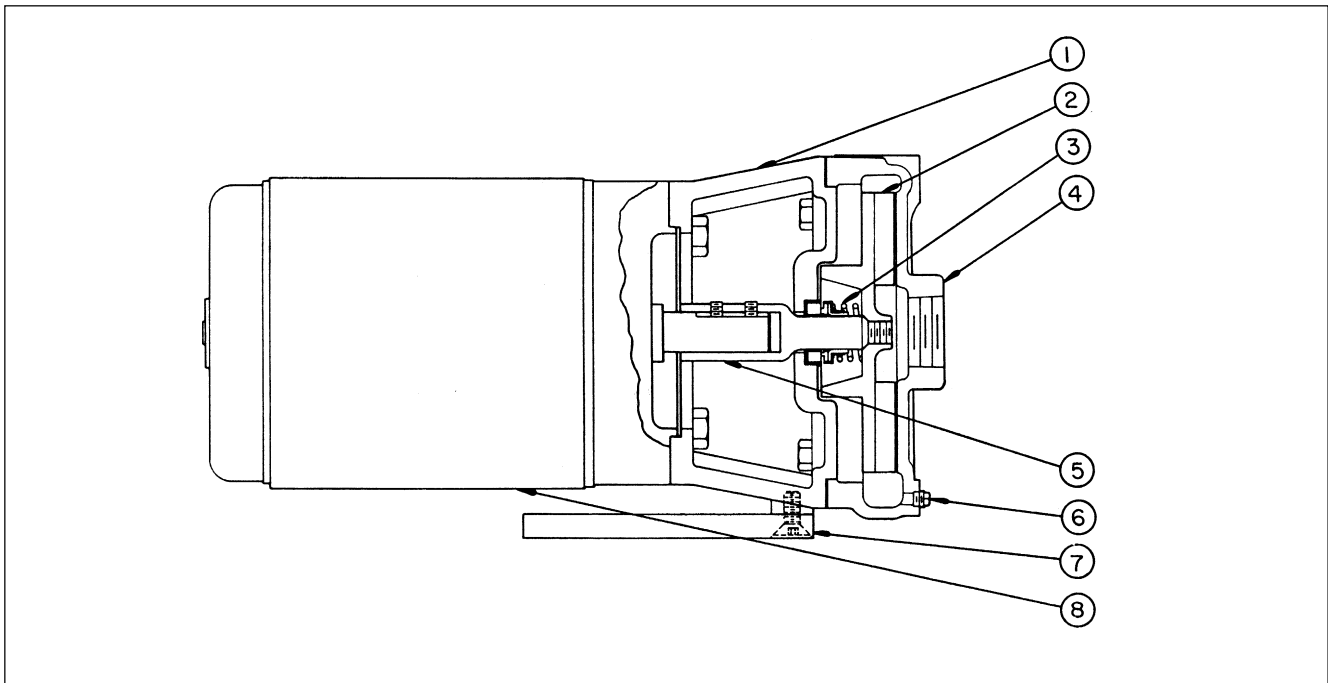
CONSTRUCTION:

- All Iron
- Bronze Fitted
- 316 Stainless Steel Fitted
- All 316 Stainless Steel

FEATURES:

- Close-Coupled Design Saves Installation Space
- Back Pull-Out Design
- Standard NEMA C-Face Motor
- Standard Size Mechanical Seal
- Pump Volute, Impeller and Mounting Bracket are Heavy Cast Metal
- Semi-Open Impeller
- Threaded NPT Suction and Discharge Connections

Model 1312 horizontal motor-mounted end suction pumps are designed for use with NEMA standard C-face electric motors. This rugged and dependable pump will provide many years of dependable service.



CUSTOMER Benefits

1. Motor Support and Seal Housing

one-piece casting

- Assures positive alignment of motor and pump with registered fits

2. Impeller

semi-open design with balance hub. Secured to shaft by taper and threads.

- High quality - smooth performance
- Easily removed

3. Mechanical Seal

Self-aligning design

- No adjustment required

4. Casing

Back pull-out design. Discharge orientation options.

- Rotating element easily removed - casing remains in piping
- Casing may be rotated in 90° increments to accommodate various piping requirements

5. Shaft

316 stainless steel material. Standard with taper and threads.

- Long lasting and replaceable

6. Support Foot Adaptor (optional)

- Bolt-on type design for versatility

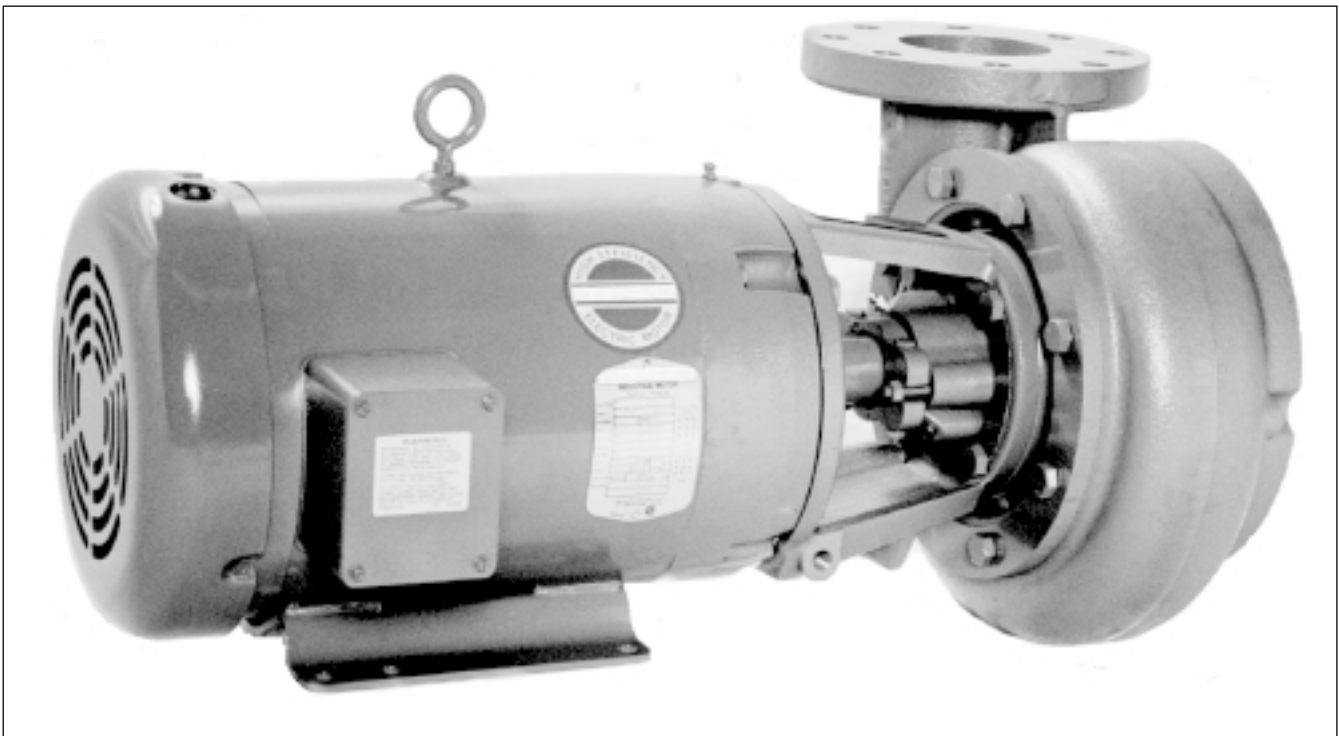
7. C-Face Motor

Standard

- Readily available

VERTIFLO SERIES 1300

Quality Design Features Assure Long, Trouble-Free Service

**WIDE RANGE OF APPLICATIONS:**

- Industrial Process
- Pollution Control
- General Pumping
- Spray Systems
- Deionized Water
- Waste Water
- Clear Liquids
- Corrosive Liquids
- Chemicals
- Acids

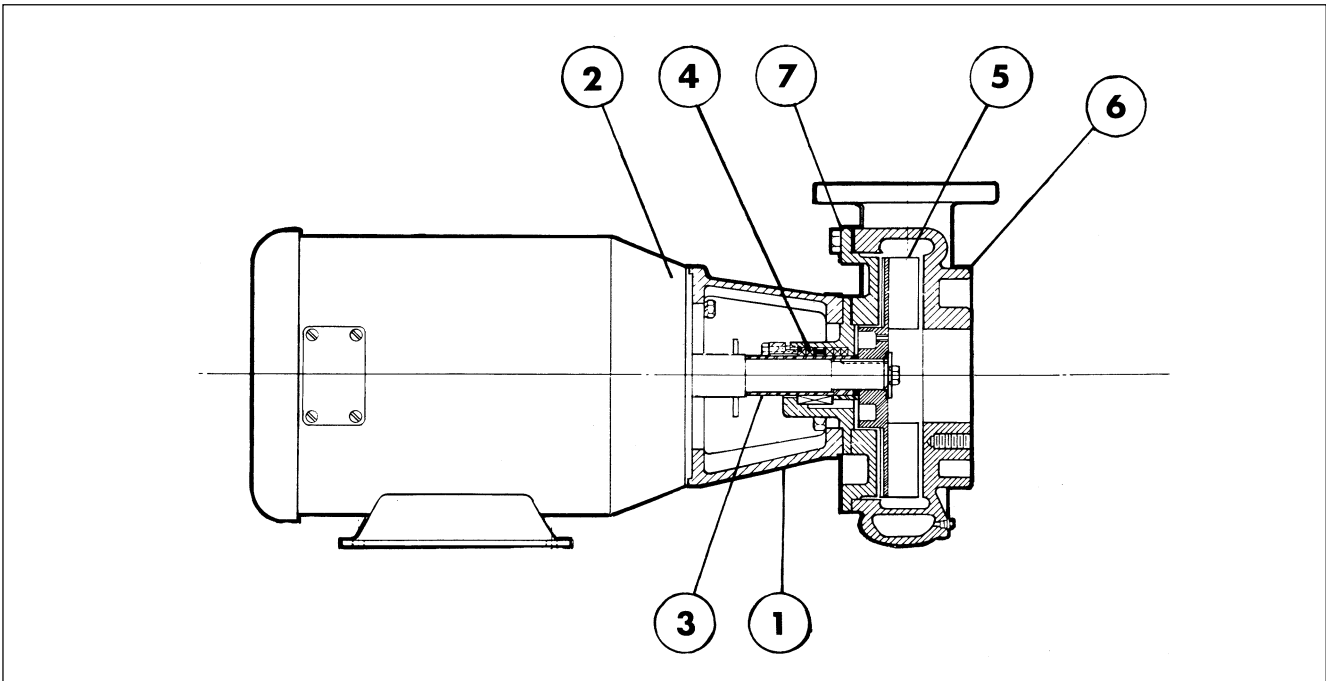
CAPABILITIES

- Capacities to 3600 GPM
- Heads To 275 Feet TDH
- Temperature to 250° F
- Back Pull-Out Construction
- Semi-Open Impeller
- Packing or Mechanical Seal

CONSTRUCTION:

- Cast Iron
- 316 Stainless Steel Fitted
- All 316 Stainless Steel
- Alloy 20
- CD4MC_u

Series 1300 horizontal close-coupled end suction pumps are designed for use with any NEMA Standard JP Shaft Motor. VERTIFLO's close-coupled pumps are designed with back pull-out feature. This important feature allows for easy inspection or service/ maintenance (if ever needed) without disturbing the piping to the pump: An important cost saving feature. Packing or various mechanical seal arrangements are available as standard options of this rugged, dependable product.



1. Mounting Bracket

Rugged cast iron design which assures a solid, dependable pump installation and operation. Three brackets fit all pump sizes.

2. Motor

NEMA standard JP shaft extension allows for easy interchangeability to packing, standard mechanical seal or optional single or double mechanical seals of various designs and materials of construction.

3. Shaft Sealing

Packed arrangement utilizes a 2-piece split gland, slinger, Teflon® split lantern ring and 5-ring packing set. Grease lubrication is standard with product or water flush available. Wide choice of John Crane and Durametallic mechanical seals of various configurations and materials are optional.

4. Shaft Sleeve

316 stainless steel is standard. Positively driven and gasketed, protecting motor shaft from liquid being pumped.

E.I DuPont registered®

5. Impeller

Semi-open design which accommodates passage of solids or fines. All impellers have holes near the impeller hub which reduce thrust load and pressure in the packing or seal area. Wiping vanes reduce axial loading and prevent dirt from entering the sealing area. Impeller is keyed to shaft, and an impeller locking screw assures positive attachment.

6. Casing

High efficiency volute design. 4X3X10 and larger sizes are double volute, containing a splitter, which reduces bearing loading and shaft deflection; thus extending bearing and packing or mechanical seal life. All suction and discharge openings are flanged for installation ease and integrity.

7. Back Pull-Out

All pumps* are designed with back pull-out feature which allows for removal of all pump rotating components without disturbing the piping connections.

*except size 2 X 1 1/2 X 12

Standard

- All iron construction
- 316 stainless steel shaft sleeve
- Semi-open impeller
- Back pull-out design
- Packed stuffing box or mechanical seal
- Flanged suction and discharge on all pump sizes
- NEMA standard JP shaft motor

Options

- 316 stainless steel impeller
- All 316 stainless steel, Alloy 20, CD4MC_u
- Single or double mechanical seal (various materials)
- Product or fresh water flush to packing or mechanical seal
- Teflon® packing (standard in s.s. and alloy units)
- ODP, TEFC

Design Details**Model 1320****Model 1326****Model 1334**

Rotation from driver end	CW	CW	CW
Outside diameter of shaft sleeve	1.250	1.625	2.125
Shaft diameter at impeller	0.875	1.250	1.750