

# 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
<b>Horizontal End Suction Pumps-Vortex ..... Series 1500 and 1600</b>
Horizontal Self-priming Pumps- Centrifugal ..... Series 2100
Engineering Sample Specifications

**VERTIFLO SERIES 1600**

**Quality Design Features Assure Long, Trouble-Free Service**

**WIDE RANGE OF APPLICATIONS:**

- Food Processing Solids
- Waste Water Treatment
- Pollution Control
- Slurries
- Industrial Process
- Solids

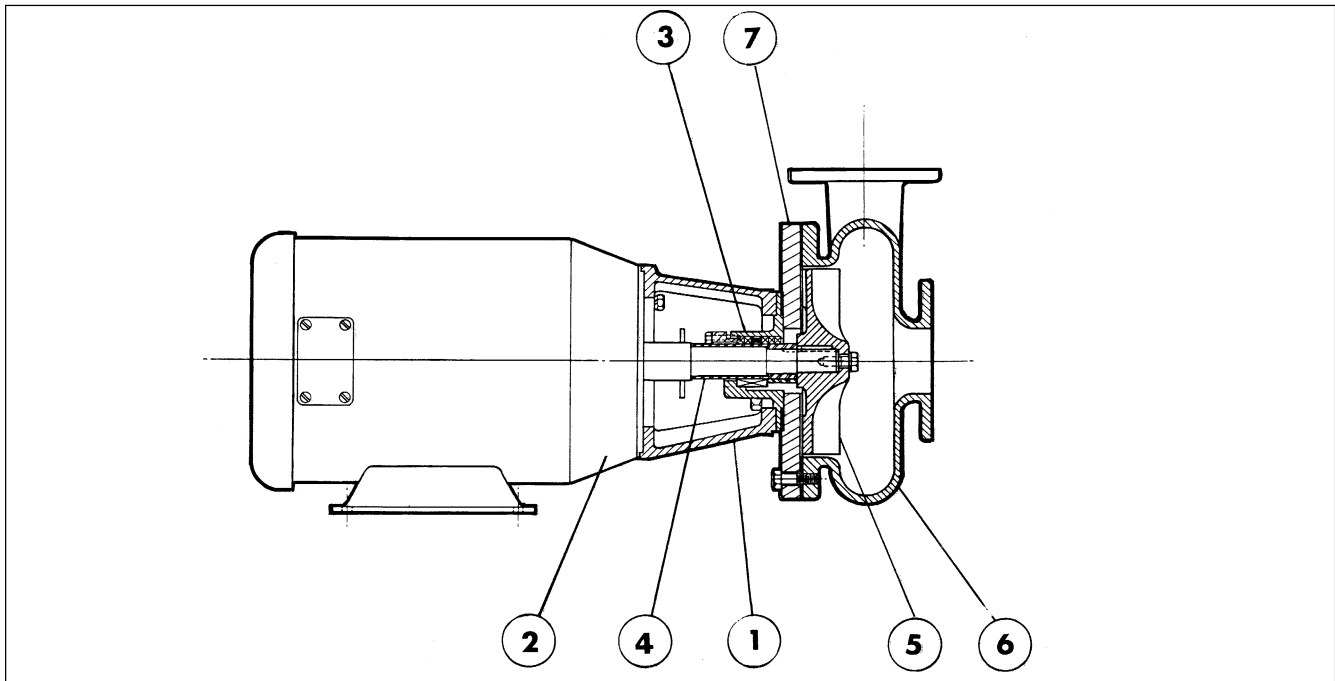
**CAPABILITIES:**

- Capacities to 1600 GPM
- Heads To 170 Feet TDH
- Temperature to 250°F
- Back Pull-Out Construction
- Fully Recessed Vortex Impeller
- Packing or Mechanical Seal

**CONSTRUCTION:**

- Cast Iron
- 316 Stainless Steel Fitted
- All 316 Stainless Steel
- Alloy 20
- CD4MC<sub>u</sub>

*Series 1600 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.

**5. Impeller**

Fully recessed design which accommodates passage of solids. All impellers have wiping vanes which 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**

Vortex-type concentric design. Extra heavy wall thickness for corrosion allowance. All suction and discharge openings are flanged for installation ease and integrity.

**7. Back Pull-Out**

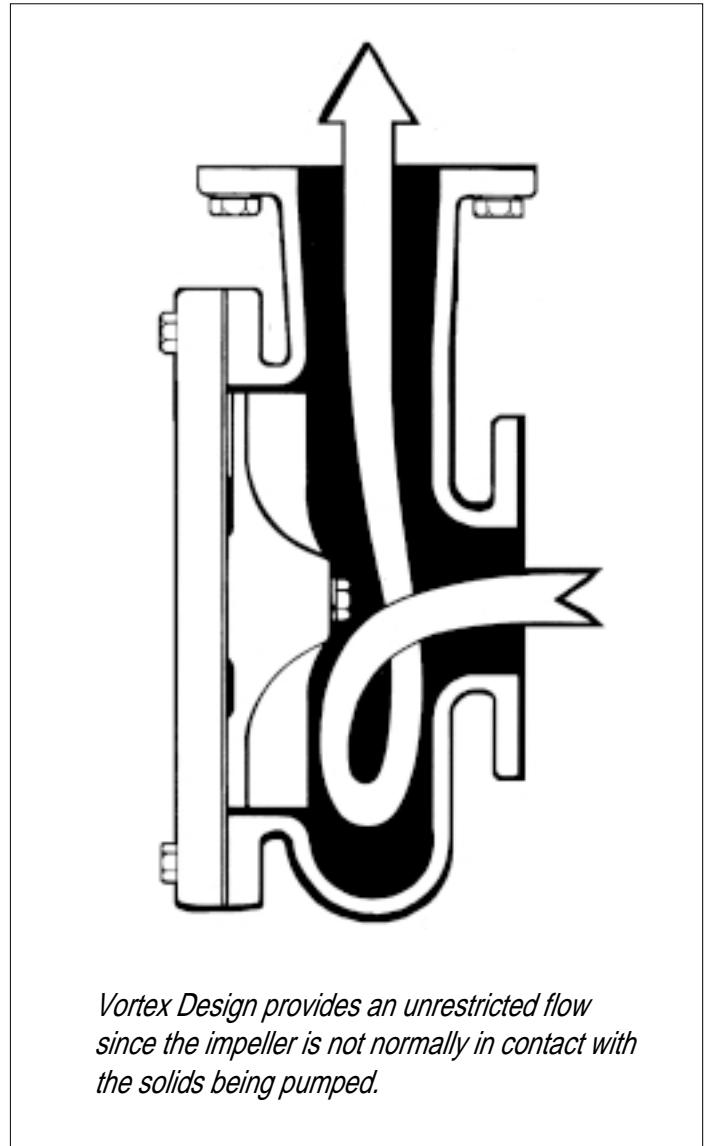
All pumps are designed with back pull-out feature which allows for removal of all pump rotating components without disturbing the piping connections.

**Standard**

- All iron construction
- 316 stainless steel shaft sleeve
- Fully recessed 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 or Alloy 20 construction
- 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



*Vortex Design provides an unrestricted flow since the impeller is not normally in contact with the solids being pumped.*

**Design Details**

**Model 1620**

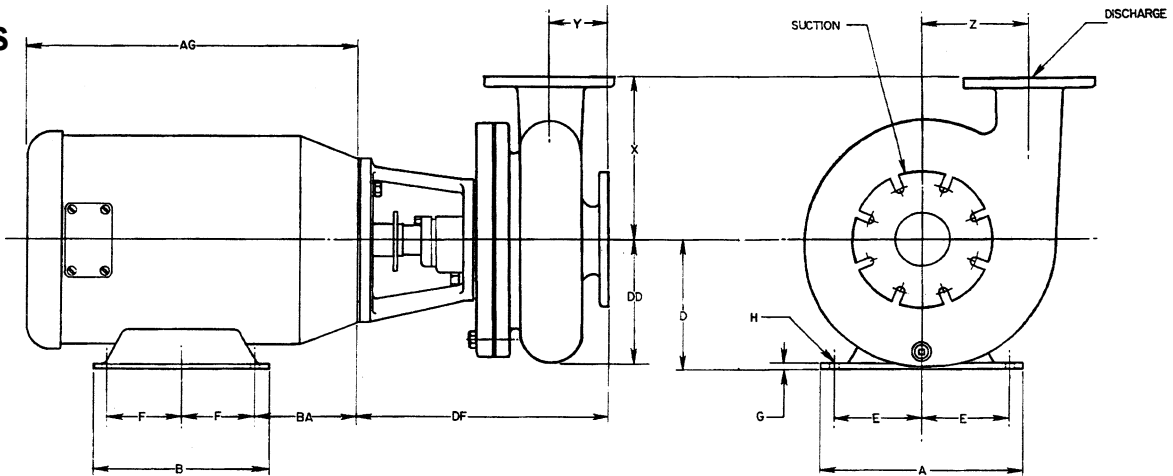
**Model 1626**

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

# VERTIFLO PUMP COMPANY Dimensions

## 1600 Series

Models  
1620, 1626



Flanges

Liquid End	FLG. Size	DIA. FLG.	# of Holes	Slot Width	DIA. Circle	X	Y	Z	DD
1½x1½x10	1½	5	4	5/8	37/8	9	43/16	5¼	7½
2x2x10	2	6	4	¾	4¾	911/16	5½	55/16	7½
3x3x10	3	7½	4	¾	6	11	57/8	55/16	7½
4x4x10	4	9	8	¾	7½	1113/16	73/16	55/16	7½
8x6x10	8	13½	8	7/8	11¾	11¾	77/8	5¼	85/8
	6	11	8	7/8	9½	11¾	77/8	5¼	85/8

### Motor Details

	A	B	D	E	F	G	H	AG	BA
143JP	6½	6	3½	2¾	2	1/8	11/32	97/16	4½
145JP	6½	6	3½	2¾	2½	1/8	11/32	97/16	4½
182JP	85/8	63/8	4½	3¾	2¼	3/8	13/32	13½	5½
184JP	85/8	63/8	4½	3¾	2¾	3/8	13/32	13½	5½
213JP	9½	75/8	5¼	4¼	2¾	5/8	13/32	15½	67/8
215JP	9½	85/8	5¼	4¼	3½	5/8	13/32	17	67/8
254JP	115/8	1011/16	6¼	5	4½	11/16	17/32	205/8	73/8
256JP	115/8	127/16	6¼	5	5	11/16	17/32	217/8	73/8
284JP	127/8	12¼	7	5½	4¾	¾	17/32	223/8	73/8

Pump Size	DF	
	56-184 JP	213-326 JP
1½x1½x10	125/8	137/8
2x2x10	14	14½
3x3x10	155/8	167/8
4x4x10	18	18½
8x6x10	22½	23

Not for construction unless certified, some dimensions may vary ± 1/2". Pump Construction: \_\_\_\_\_

CUSTOMER \_\_\_\_\_ CUSTOMER NO. \_\_\_\_\_  
 PROJECT \_\_\_\_\_ SERIAL NO. \_\_\_\_\_  
 ENGINEER \_\_\_\_\_ LOCATION \_\_\_\_\_  
 CONTRACTOR \_\_\_\_\_  
 PUMP Model Size Curve No. GPM Head SP. GR. @Temp.  
 DATA \_\_\_\_\_  
 MOTOR Mfr. HP RPM Volt-Phase-Cycle Frame ENC. Furnished by Mounted by  
 DATA \_\_\_\_\_  
 Shop Order \_\_\_\_\_ Certified by \_\_\_\_\_ Date \_\_\_\_\_