VERTIFLO

The Vertical Pump Specialists

PUMPS FOR INDUSTRY

CONTENTS:

0407

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

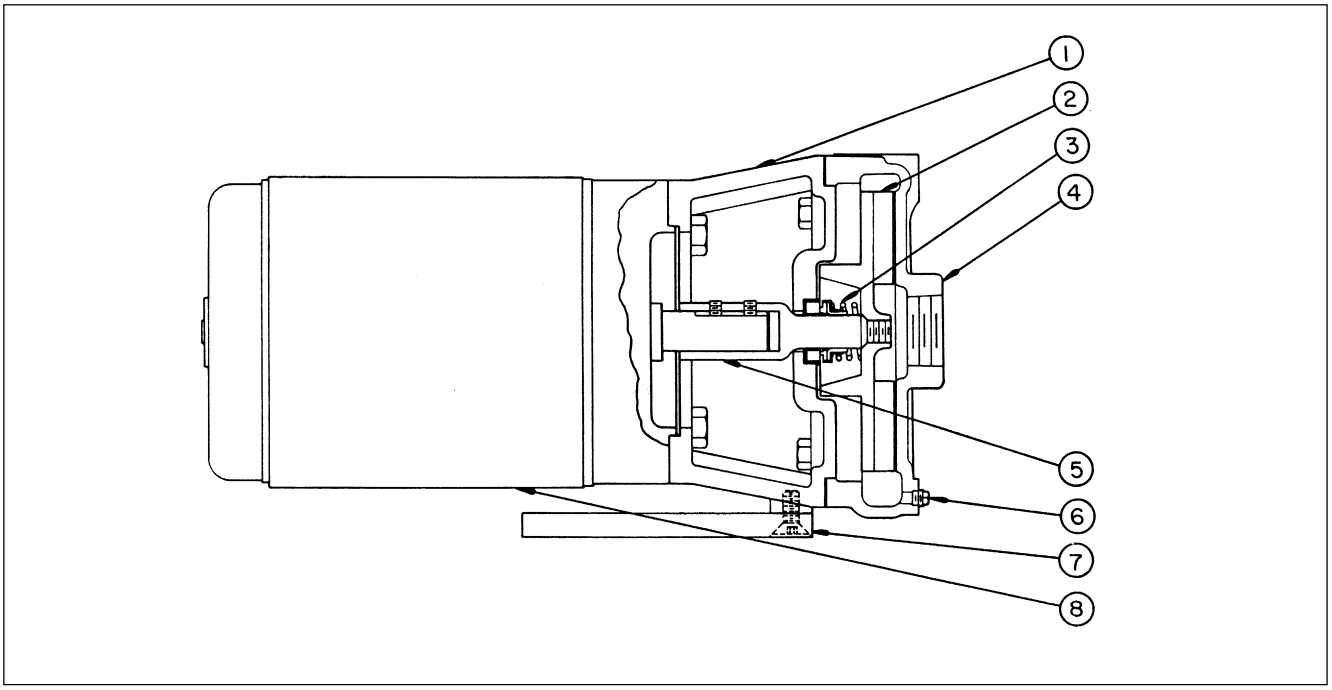
CONSTRUCTION:

- 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 replacable

6. Support Foot Adaptor (optional)

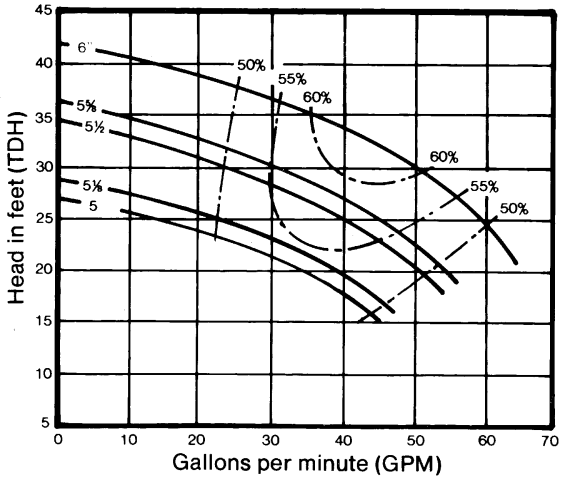
• Bolt-on type design for versatility

7. C-Face Motor
Standard

• Readily available

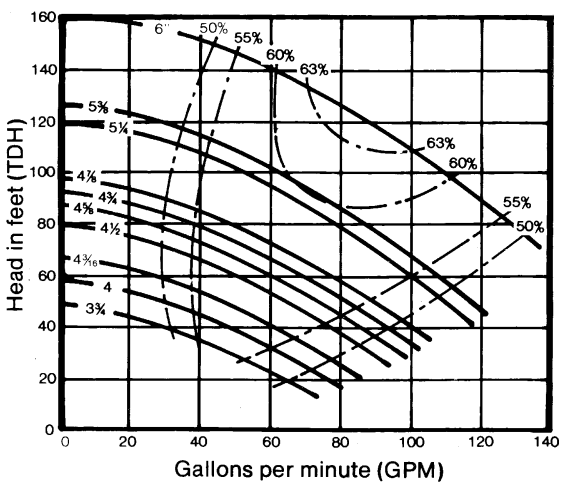
Series 1300 / Model 1312 Size 1 1/2 X 1 X 6

1750 RPM



HP	SF	DIA
¾	1.15	6
	1.00	6
½	1.15	5 ⅝
	1.00	5½
⅓	1.15	5⅛
	1.00	5

3500 RPM

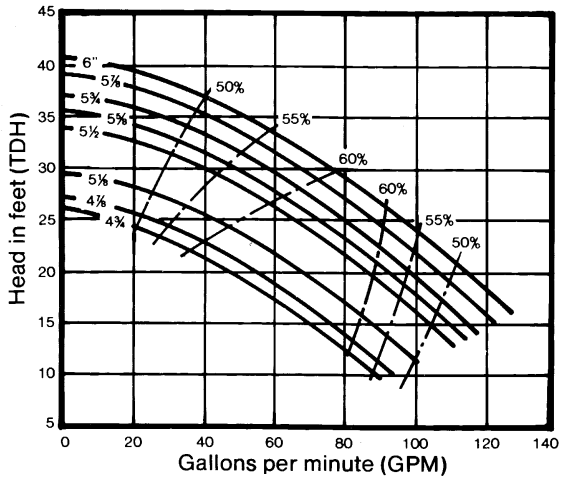


HP	SF	DIA
5	1.15	6
	1.00	6
3	1.15	5 ⅜
	1.00	5¼
2	1.15	4⅞
	1.00	4¾

HP	SF	DIA
1½	1.15	4⅝
	1.00	4½
1	1.15	4⅜
	1.00	4

Series 1300 / Model 1312 Size 2 X 1 1/2 X 6

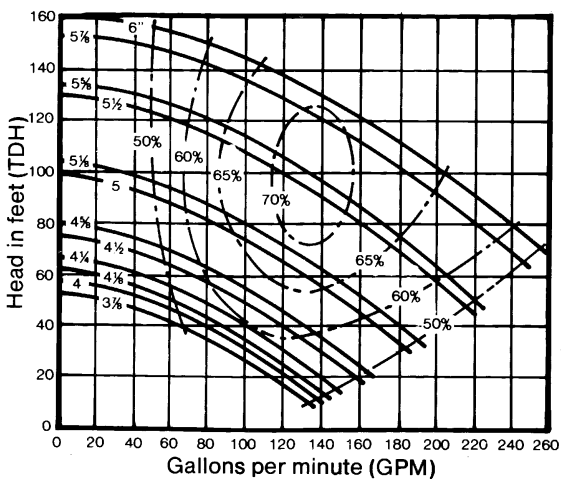
1750 RPM



HP	SF	DIA
1½	1.15	6
	1.00	6
1	1.15	5⅞
	1.00	4⅞

HP	SF	DIA
¾	1.15	5⅝
	1.00	5½
½	1.15	5⅛
	1.00	4⅞

3500 RPM



HP	SF	DIA
7½	1.15	6
	1.00	5⅞
5	1.15	5 ⅝
	1.00	5½
3	1.15	5⅛
	1.00	5

HP	SF	DIA
2	1.15	4⅝
	1.00	4½
1½	1.15	4¼
	1.00	4⅛
1	1.15	4
	1.00	3⅞

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

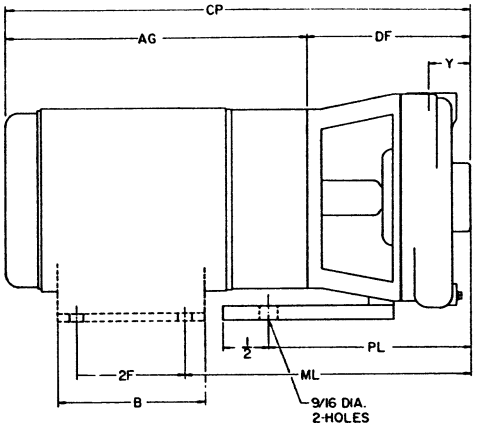
ENGINEER _____

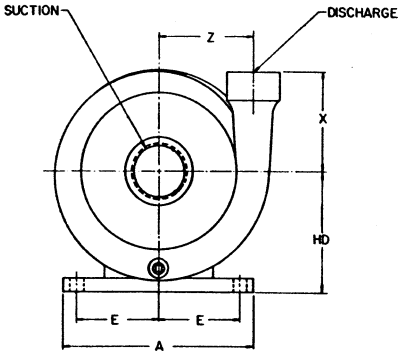
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Dimensions

1300 Series / Model 1312





Size 1½ x 1 x 6

RPM	HP	PUMP FOOT	SUC	DIS	A	AG	B	CP	E	2F	DF	H*	HD	ML	PL	X	Y	Z
1750	⅓	NOT REQ'D	1½" NPT	1" NPT	6.50	9.29	4.25	15.17	2.44	3.00	5.88	NA	4.38	8.75	5.50	3.75	1.25	3.50
	½																	
	¾																	
	1					9.94		15.82										
3500	1					9.29		15.19				.44	4.50					
	1½					10.29		16.17										
	2					11.06	5.94	16.94	2.75	5.00								
	3					12.07		17.82										
	5					13.68	6.50	19.56	3.75	5.50								

Dimensions are for TEFC motors only
****Optional pump foot shown for motors less feet***

Size 2 x 1½ x 6

RPM	HP	PUMP FOOT	SUC	DIS	A	AG	B	CP	E	2F	DF	H*	HD	ML	PL	X	Y	Z
1750	½	NOT REQ'D	2" NPT	1½" NPT	6.50	9.29	4.25	15.67	2.44	3.00	6.38	NA	4.38	9.25	6.00	3.88	1.63	3.63
	¾																	
	1					9.94		16.32										
	1½					10.19		16.57										
3500	1½					10.29		16.67										
	2					11.06	5.94	17.44	2.75	5.00								
	3					12.07		18.32				.44	4.50					
	5				8.63	13.68	6.50	20.06	3.75	5.50								
	7½					15.18		21.56										

Dimensions are for TEFC motors only. NA= not applicable
****Optional pump foot shown for motors less feet***

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

CUSTOMER_____CUSTOMER NO._____
PROJECT_____SERIAL NO._____
ENGINEER_____LOCATION_____
CONTRACTOR_____

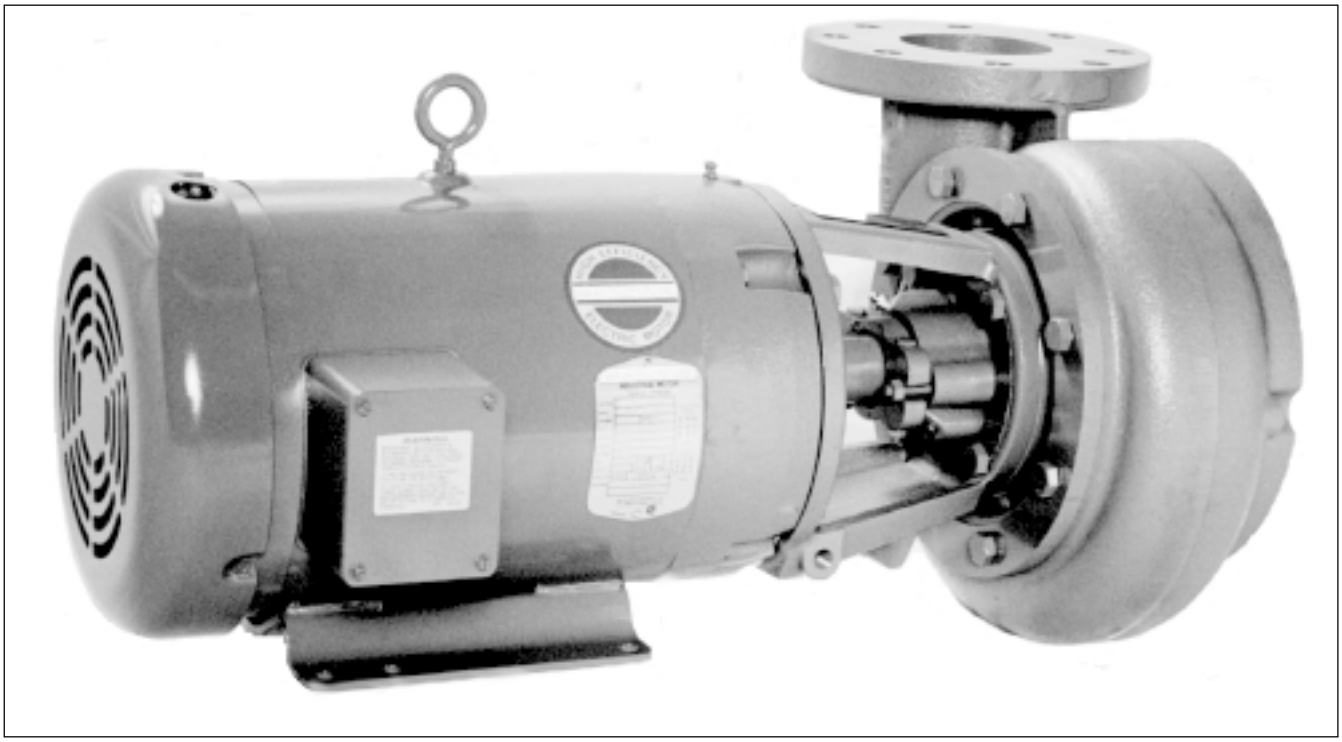
PUMP DATA	Model	Size	Curve No.	GPM	Head	SP. GR.@Temp.
	_____	_____	_____	_____	_____	_____

MOTOR DATA	Mfgr.	HP	RPM	Volt-Phase-Cycle	Frame	ENC.	Furnished by	Mounted by
	_____	_____	_____	_____	_____	_____	_____	_____

Shop Order_____Certified by_____Date_____

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

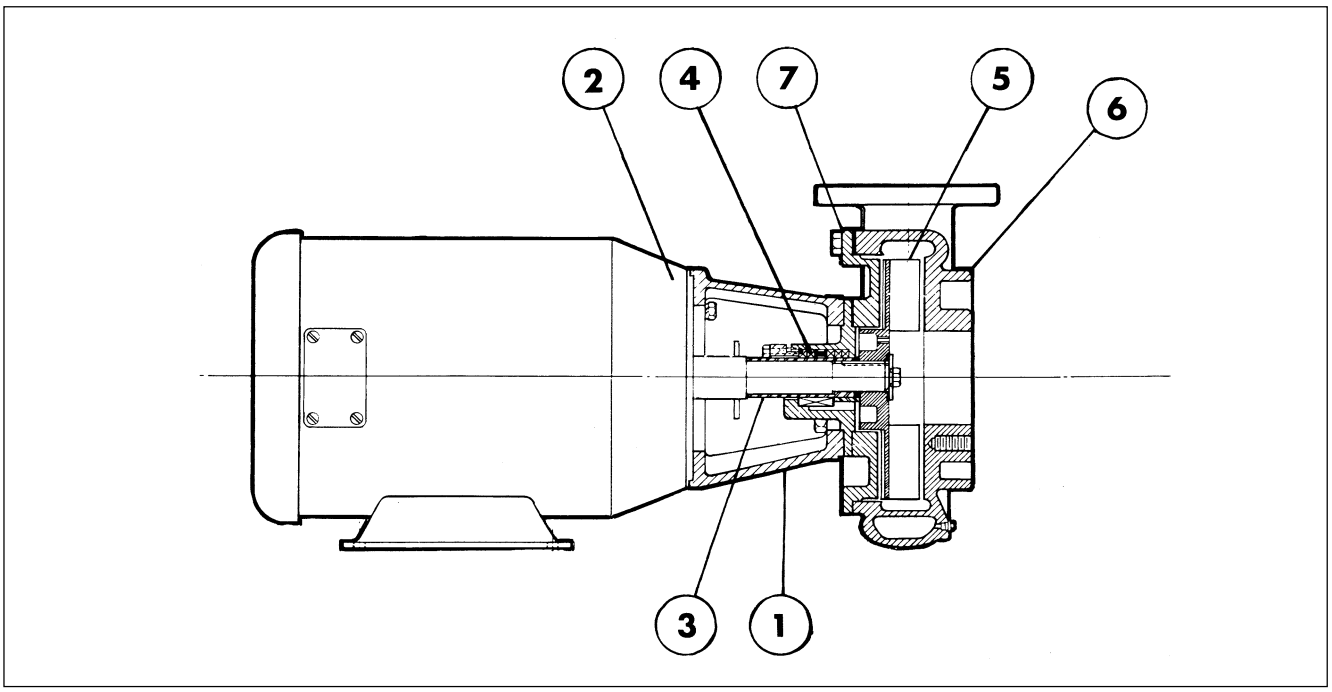
CAPABILITIES

- 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 interchangability 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

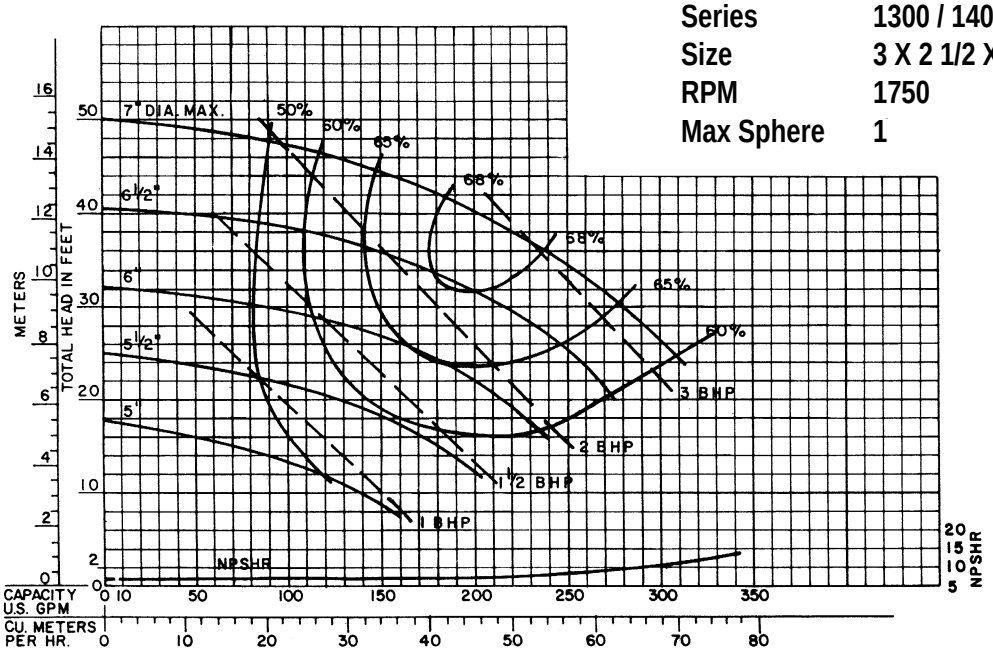
Options
- 316 stainless steel impeller
- All 316 stainless stee, Alloy 20, $CD4MC_u$
- Single or double mechanical seal (various materials)
- Product or fresh water flush to packing or mechanical seal
- Teflon® packing (standard in s.s. and alloy units)
- ODP, TEFC

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

VERTIFLO PUMP COMPANY Performance Curves

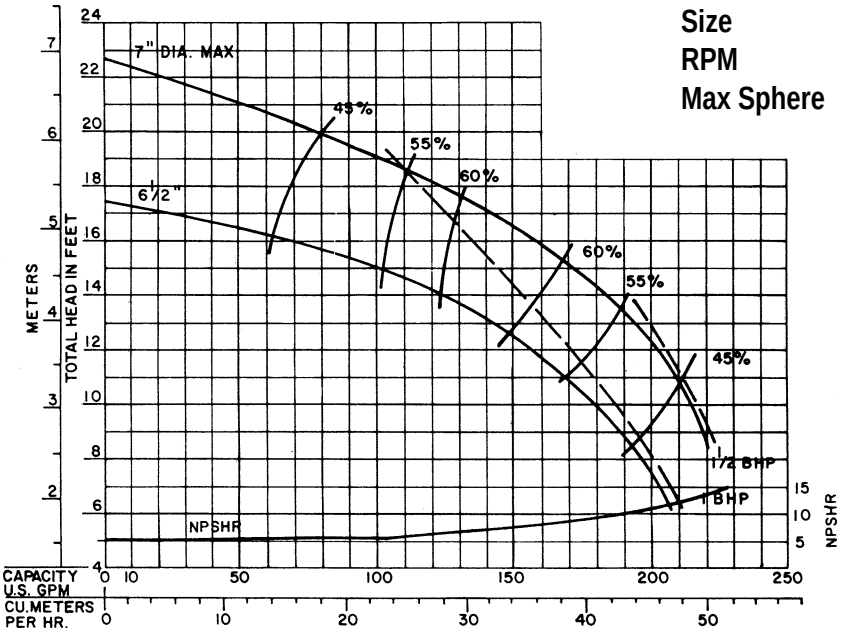
Curve PV-1525

Series	**1300 / 1400**
Size	**3 X 2 1/2 X 7**
RPM	**1750**
Max Sphere	**1**



Curve RV-1525

Series	**1300 / 1400**
Size	**3 X 2 1/2 X 7**
RPM	**1150**
Max Sphere	**1**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

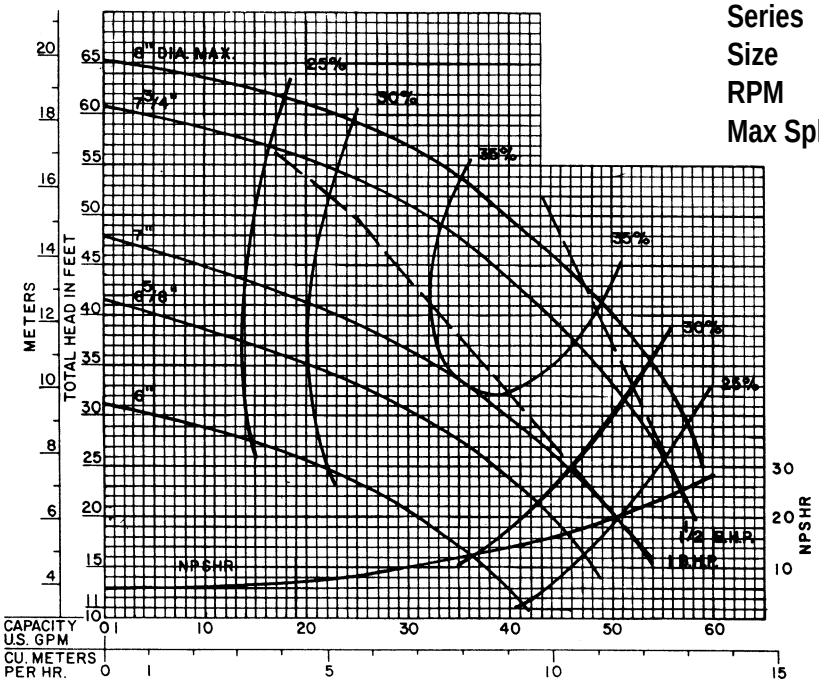
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

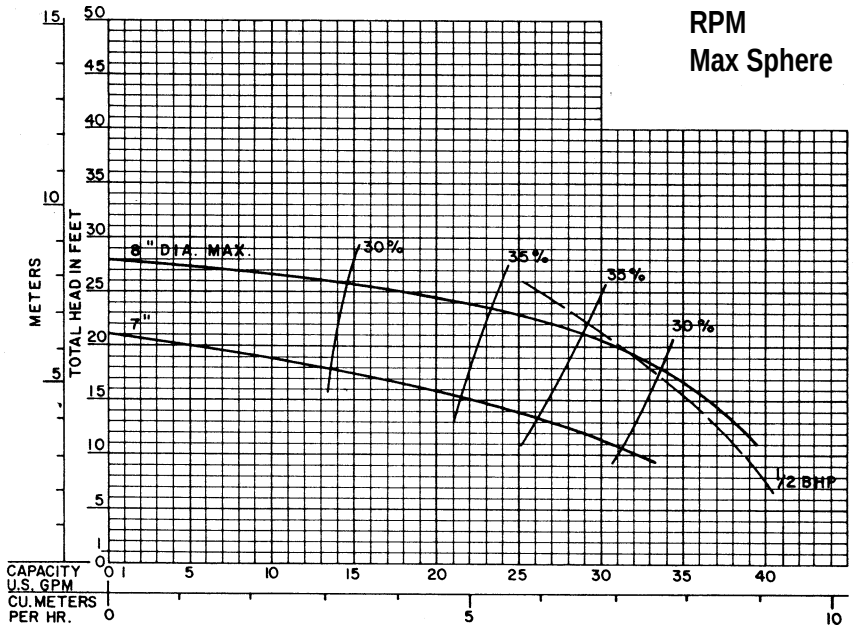
VERTIFLO PUMP COMPANY Performance Curves

Curve AS-1610



Series	**1300 / 1400**
Size	**1 1/2 X 1 X 8**
RPM	**1750**
Max Sphere	**1/4**

Curve BS-1610



Series	**1300 / 1400**
Size	**1 1/2 X 1 X 8**
RPM	**1150**
Max Sphere	**1/4**

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

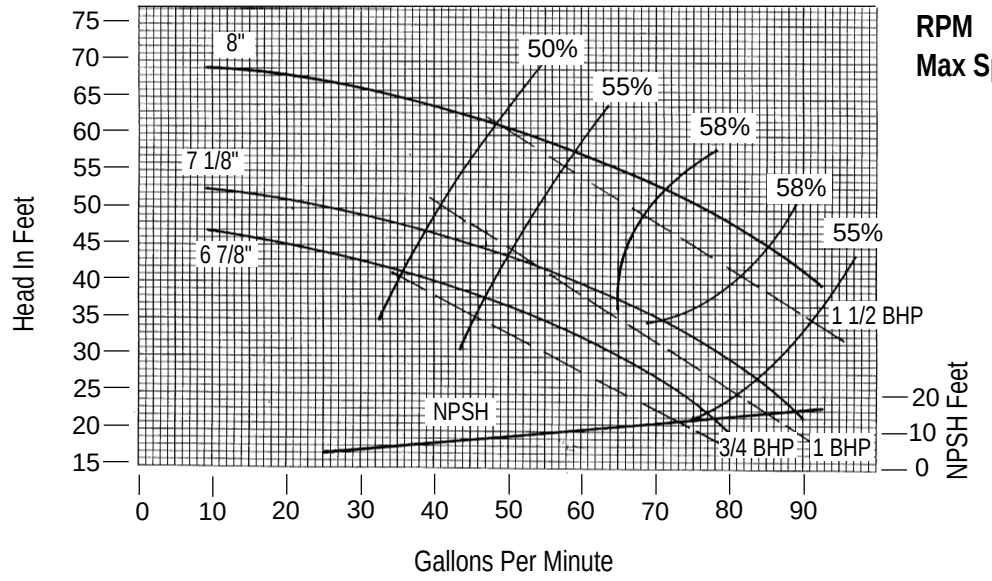
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

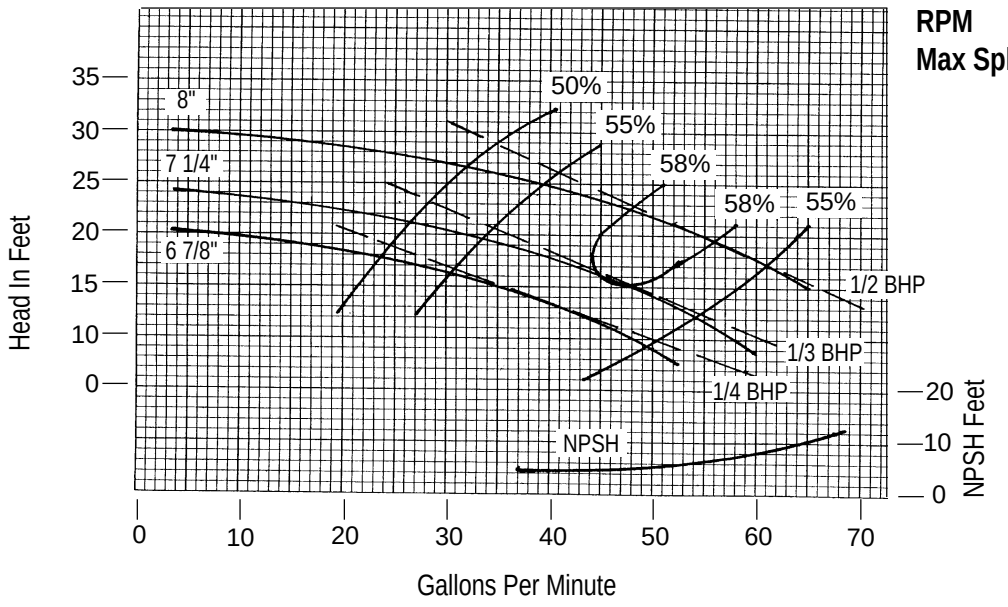
Curve AS-1612

Series	**1300 / 1400**
Size	**1 1/2 X 1 1/4 X 8**
RPM	**1750**
Max Sphere	**5/16**



Curve BS-1612

Series	**1300 / 1400**
Size	**1 1/2 X 1 1/4 X 8**
RPM	**1150**
Max Sphere	**5/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

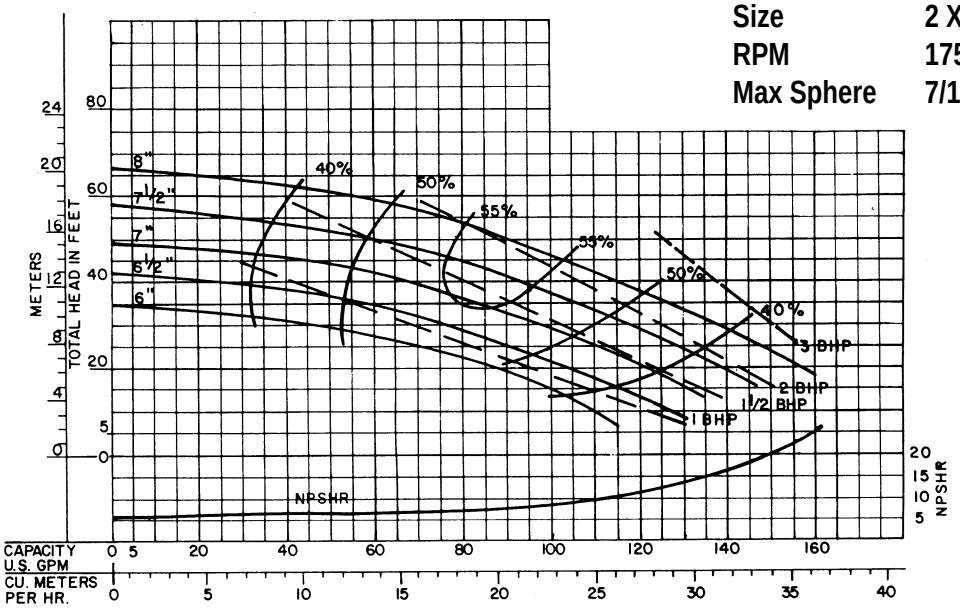
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

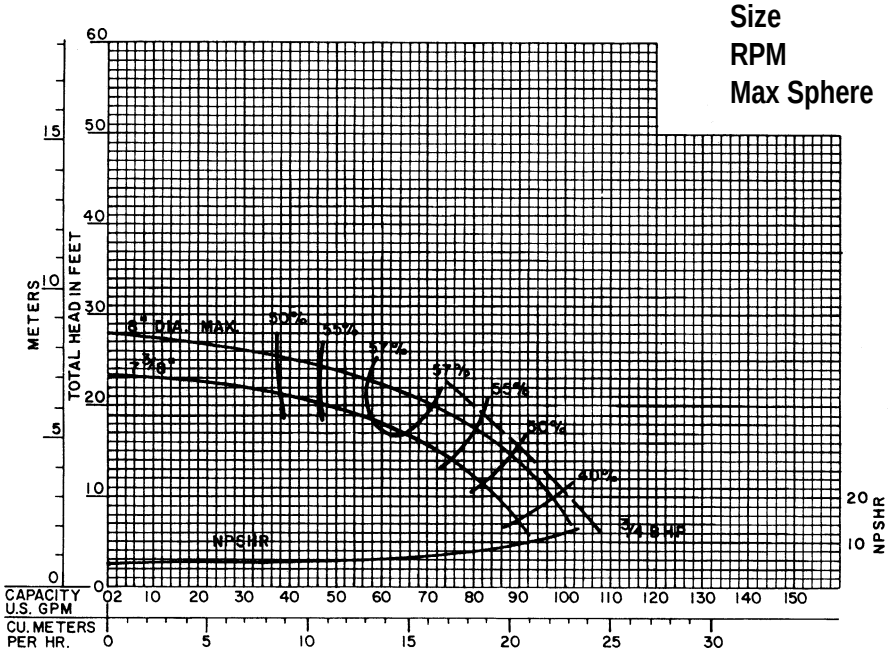
Curve BS-1615

Series	**1300 / 1400**
Size	**2 X 1 1/2 X 8**
RPM	**1750**
Max Sphere	**7/16**



Curve CS-1615

Series	**1300 / 1400**
Size	**2 X 1 1/2 X 8**
RPM	**1150**
Max Sphere	**7/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

CONTRACTOR _____

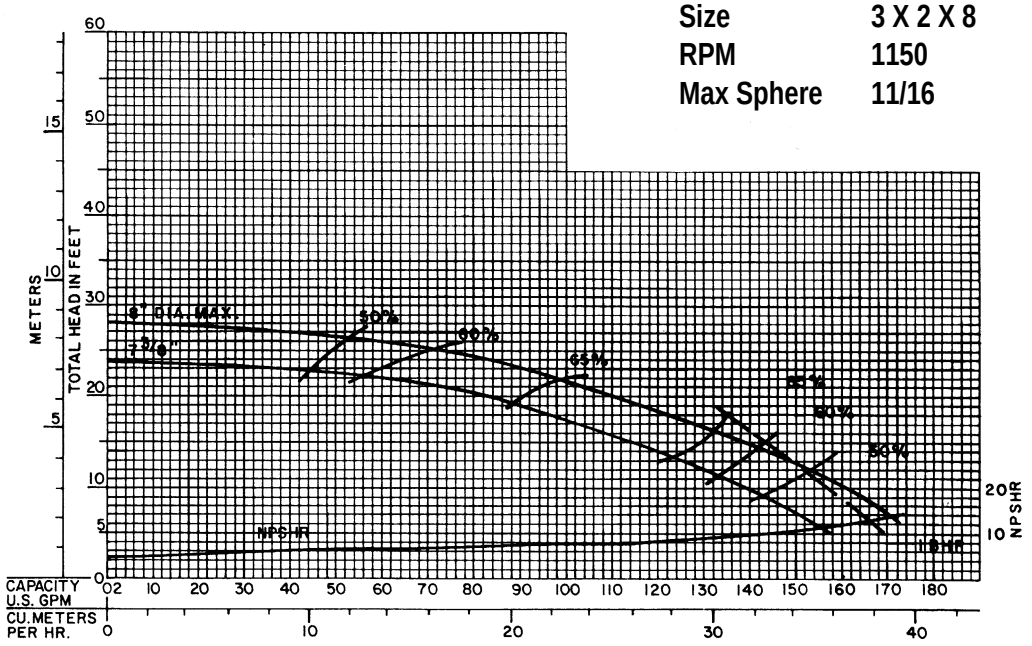
CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

Curve CS-1620

Series	**1300 / 1400**
Size	**3 X 2 X 8**
RPM	**1750**
Max Sphere	**11/16**

Curve DS-1620



Series	**1300 / 1400**
Size	**3 X 2 X 8**
RPM	**1150**
Max Sphere	**11/16**

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

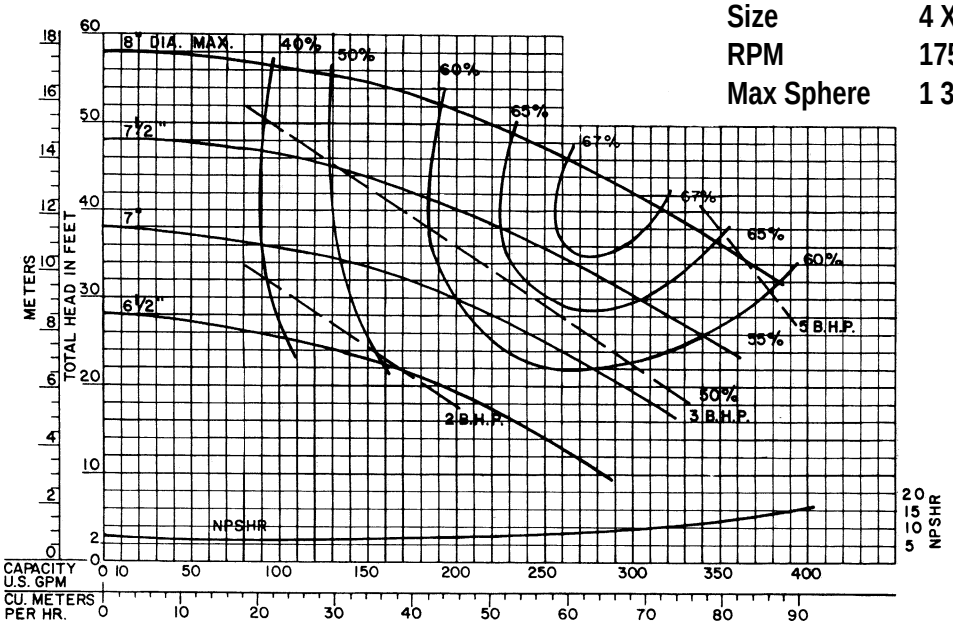
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

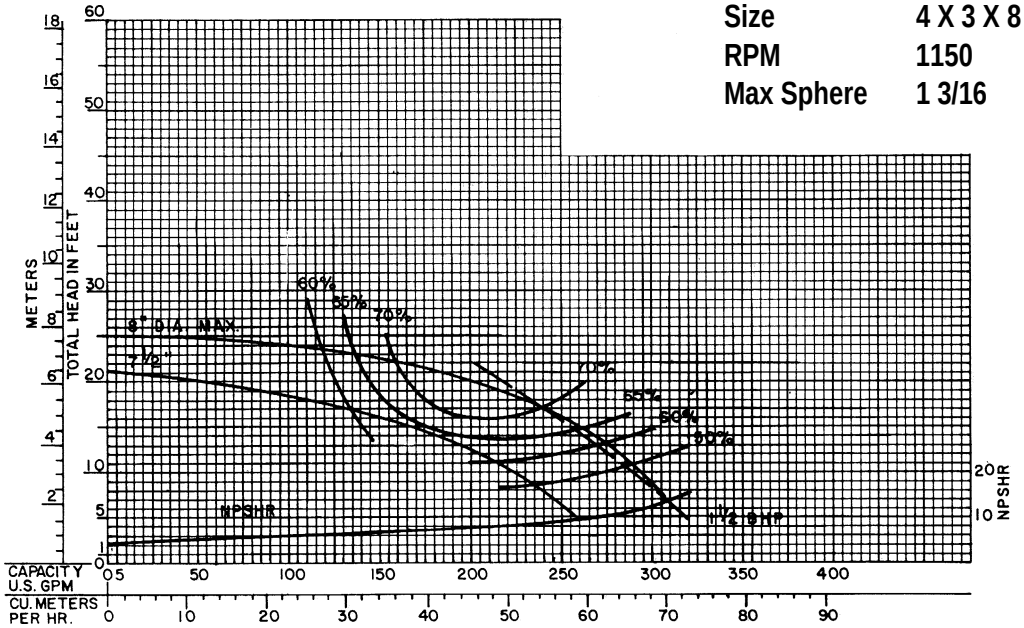
Curve CS-1630

Series	**1300 / 1400**
Size	**4 X 3 X 8**
RPM	**1750**
Max Sphere	**1 3/16**



Curve DS-1630

Series	**1300 / 1400**
Size	**4 X 3 X 8**
RPM	**1150**
Max Sphere	**1 3/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

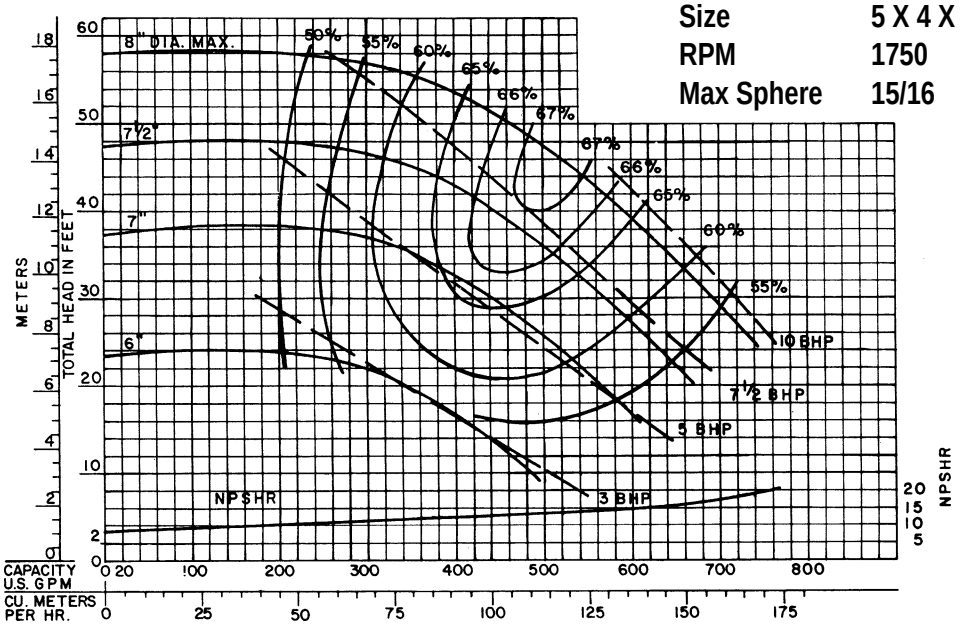
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

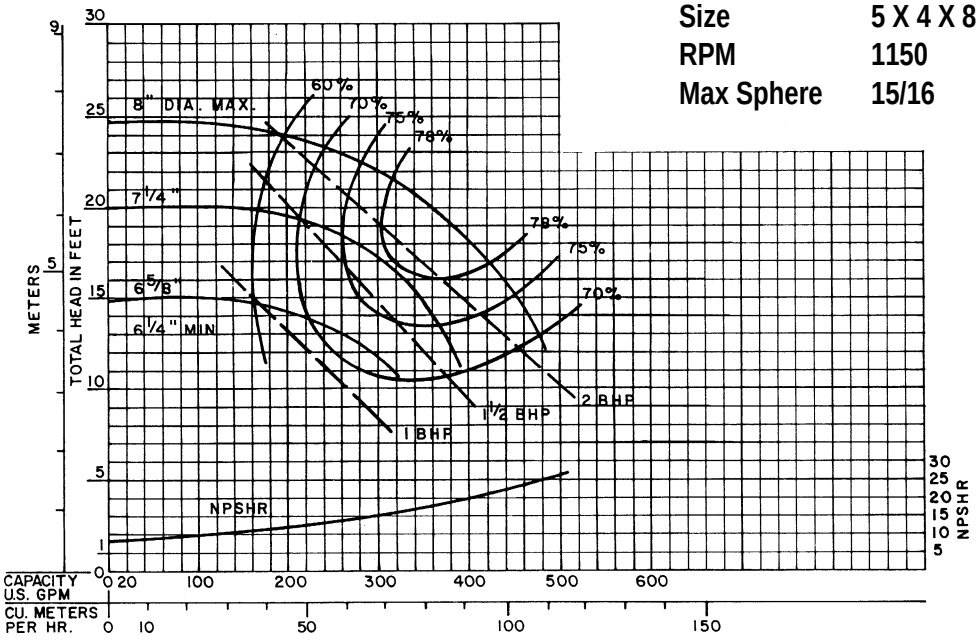
Curve ES-1640

Series	**1300 / 1400**
Size	**5 X 4 X 8**
RPM	**1750**
Max Sphere	**15/16**



Curve DS-1640

Series	**1300 / 1400**
Size	**5 X 4 X 8**
RPM	**1150**
Max Sphere	**15/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

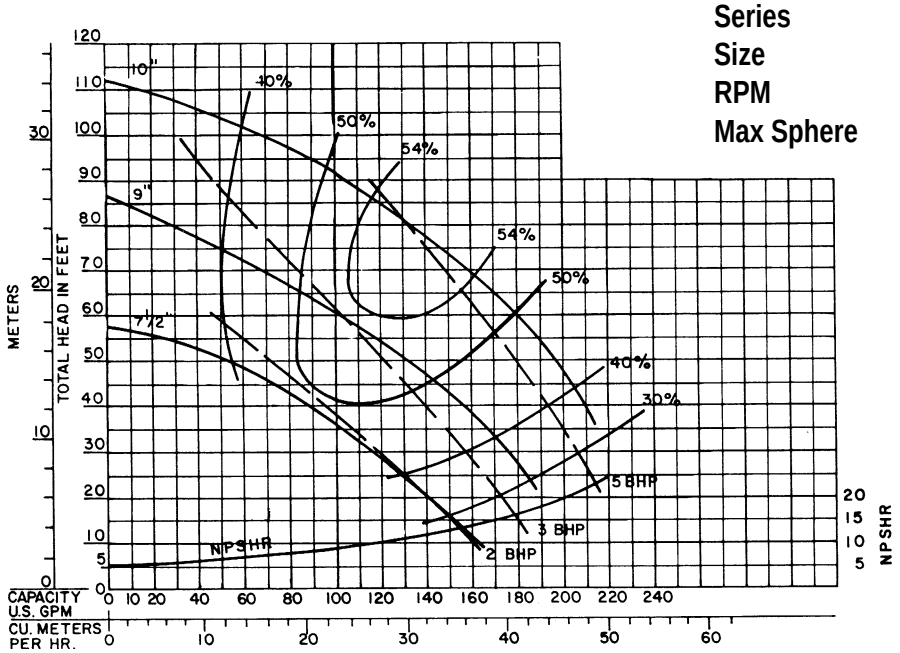
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

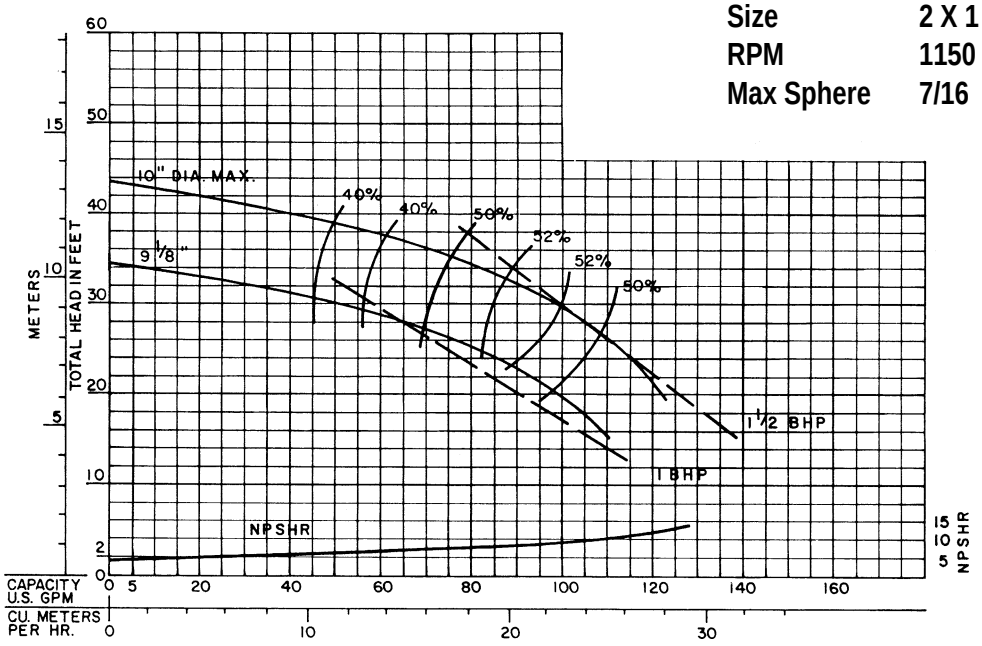
Curve SM-1915

Series	**1300 / 1400**
Size	**2 X 1 1/2 X 10**
RPM	**1750**
Max Sphere	**7/16**



Curve TM-1915

Series	**1300 / 1400**
Size	**2 X 1 1/2 X 10**
RPM	**1150**
Max Sphere	**7/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

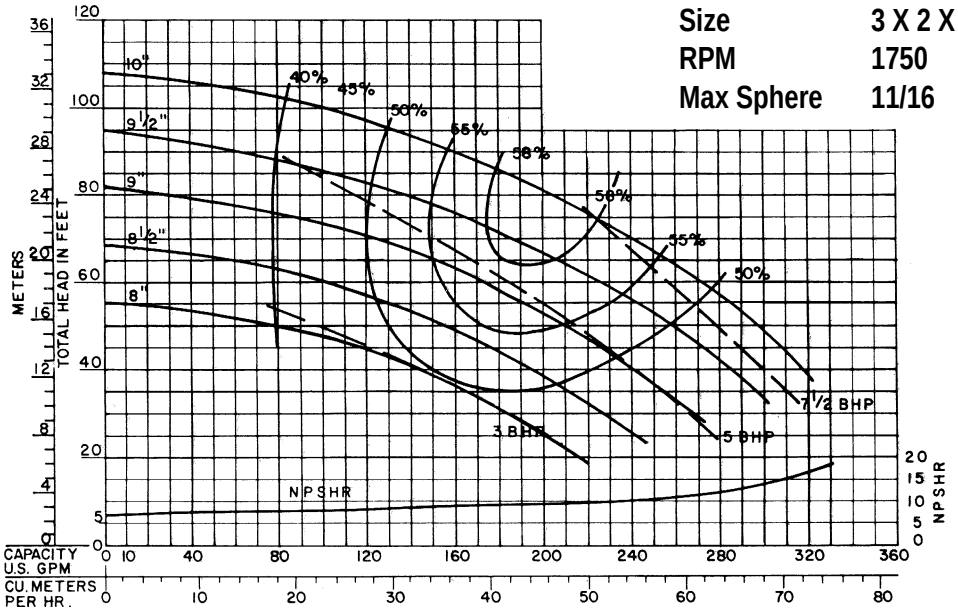
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

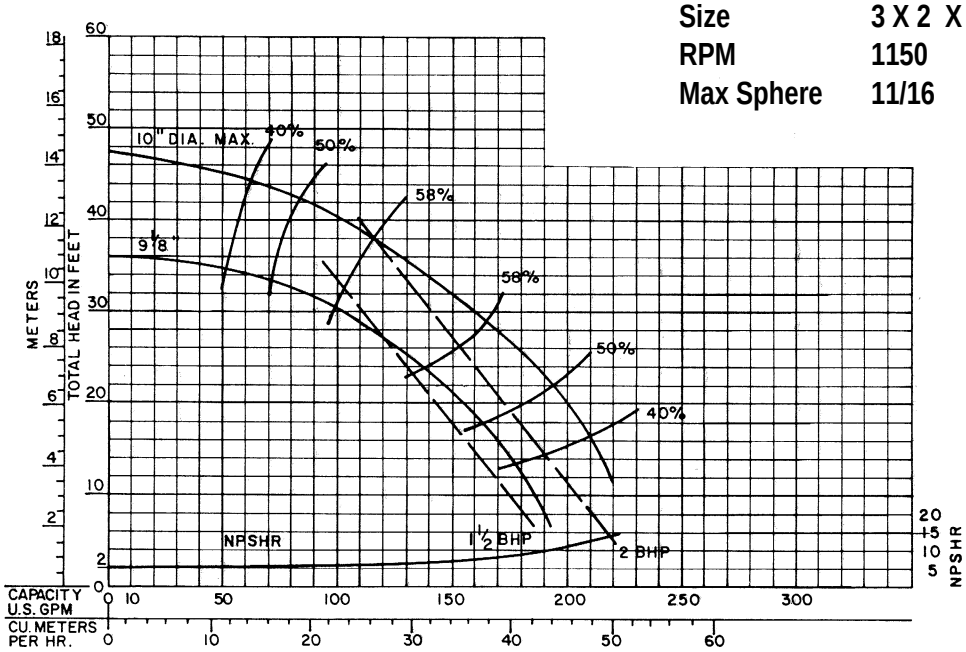
Curve JM-1720

Series	**1300 / 1400**
Size	**3 X 2 X 10**
RPM	**1750**
Max Sphere	**11/16**



Curve KM-1720

Series	**1300 / 1400**
Size	**3 X 2 X 10**
RPM	**1150**
Max Sphere	**11/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

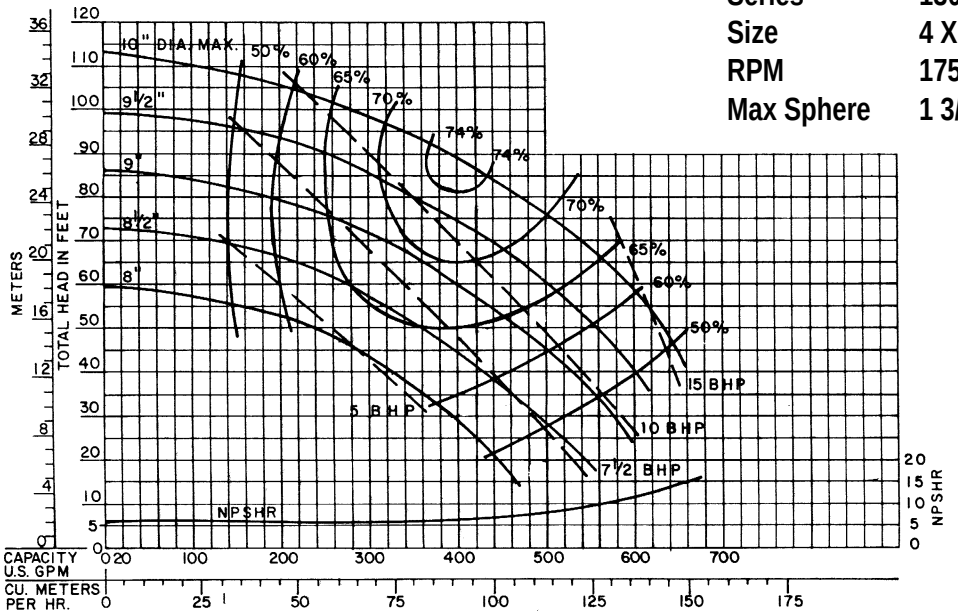
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

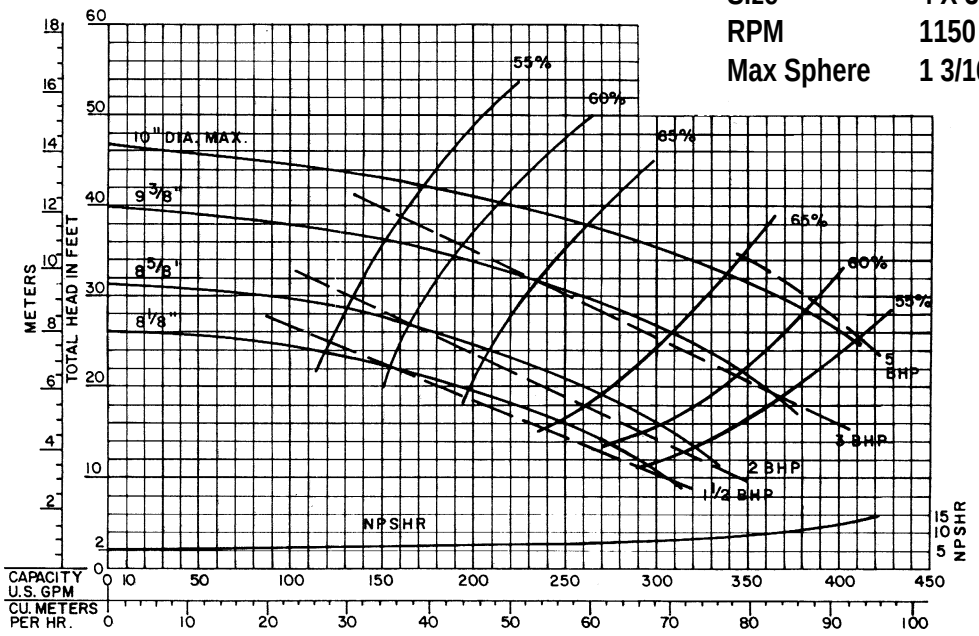
Curve RM-1730

Series	**1300 / 1400**
Size	**4 X 3 X 10**
RPM	**1750**
Max Sphere	**1 3/16**



Curve SM-1730

Series	**1300 / 1400**
Size	**4 X 3 X 10**
RPM	**1150**
Max Sphere	**1 3/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

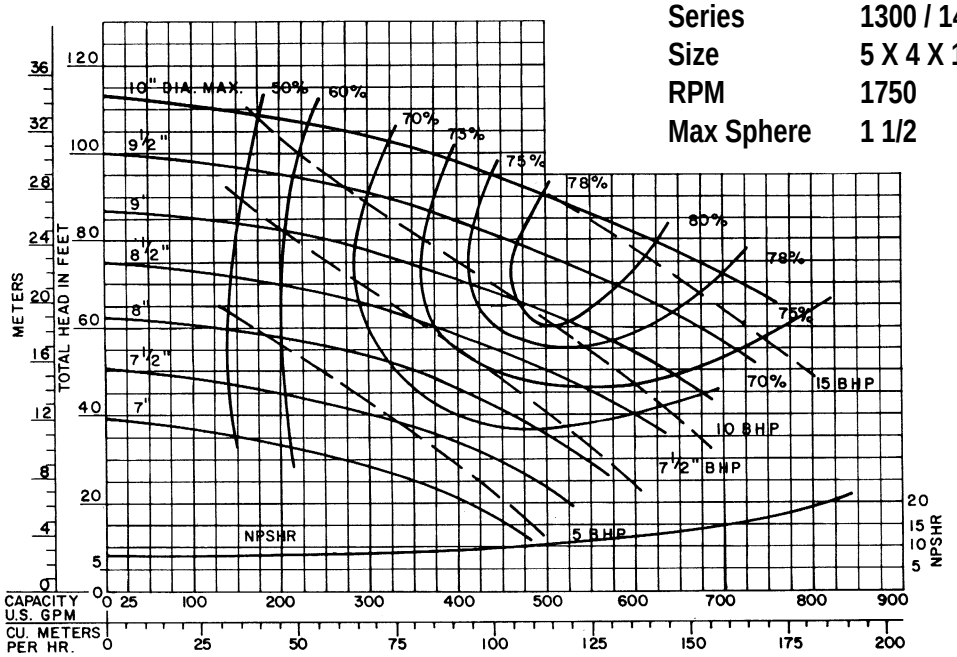
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

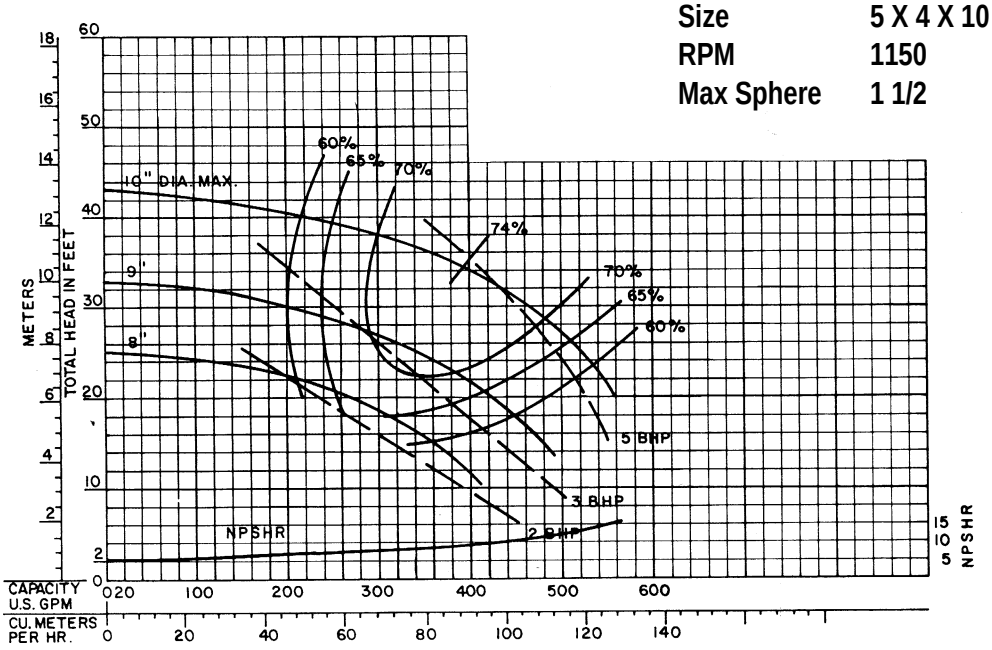
Curve TM-1740

Series	**1300 / 1400**
Size	**5 X 4 X 10**
RPM	**1750**
Max Sphere	**1 1/2**



Curve UM-1740

Series	**1300 / 1400**
Size	**5 X 4 X 10**
RPM	**1150**
Max Sphere	**1 1/2**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

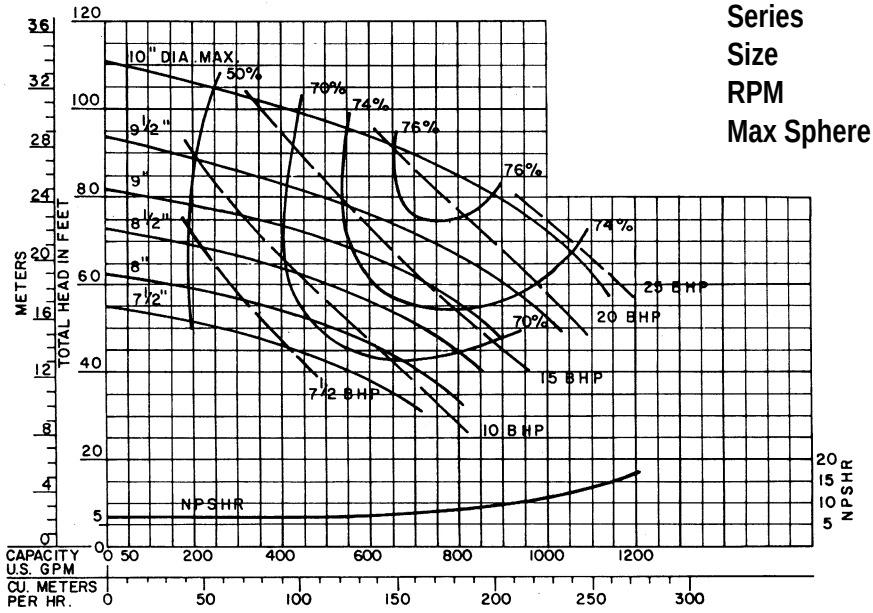
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

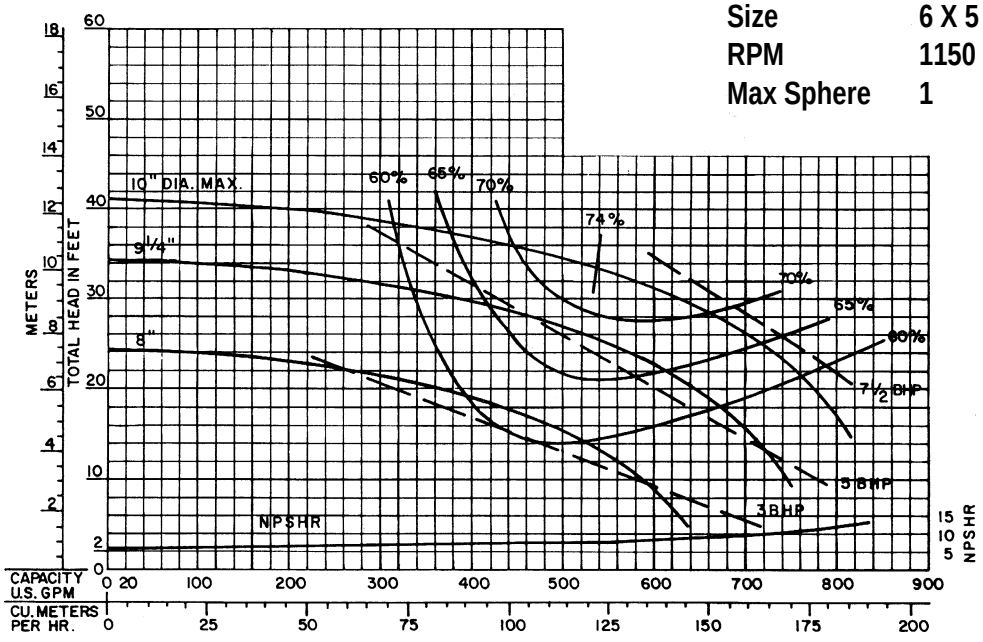
VERTIFLO PUMP COMPANY Performance Curves

Curve UM-1750



Series	**1300 / 1400**
Size	**6 X 5 X 10**
RPM	**1750**
Max Sphere	**1**

Curve VM-1750



Series	**1300 / 1400**
Size	**6 X 5 X 10**
RPM	**1150**
Max Sphere	**1**

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

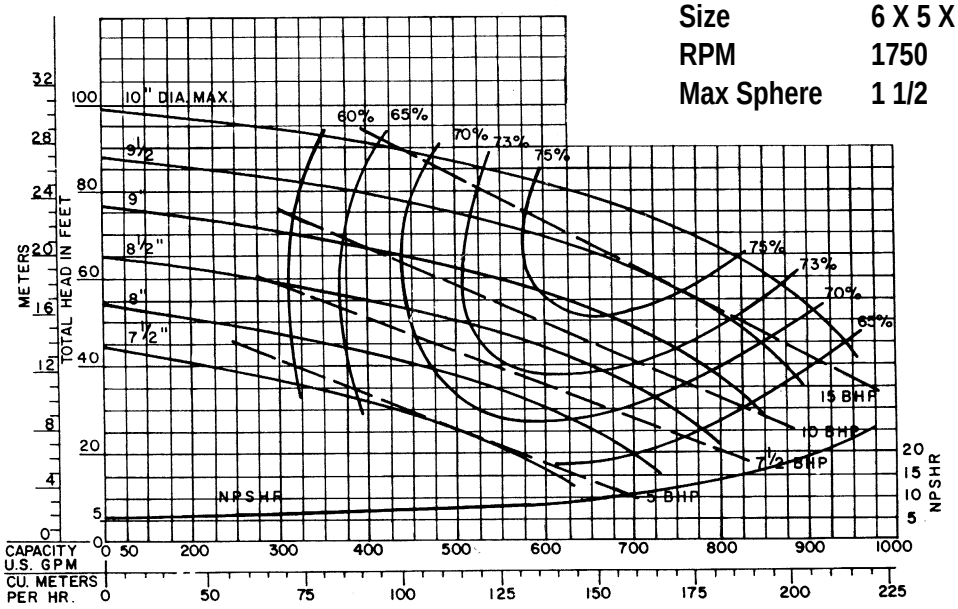
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

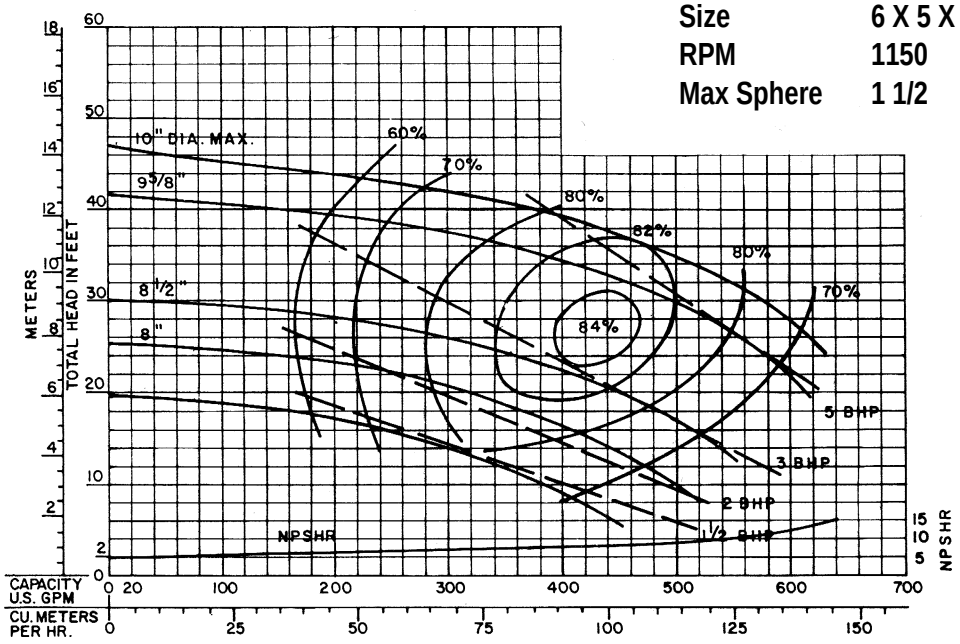
Curve SM-1750

Series	**1300 / 1400**
Size	**6 X 5 X 10A**
RPM	**1750**
Max Sphere	**1 1/2**



Curve SM-1850

Series	**1300 / 1400**
Size	**6 X 5 X 10A**
RPM	**1150**
Max Sphere	**1 1/2**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

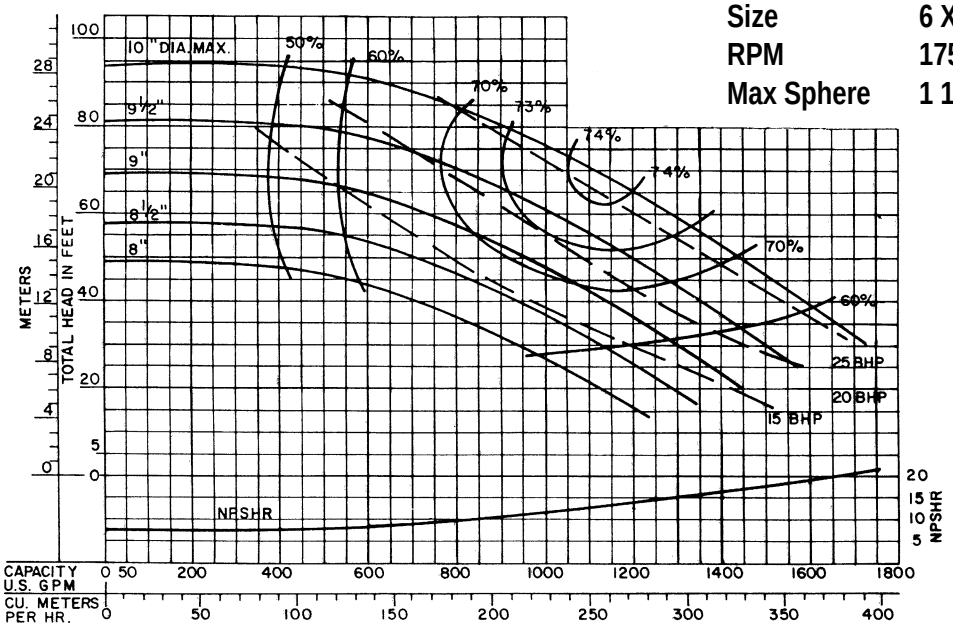
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

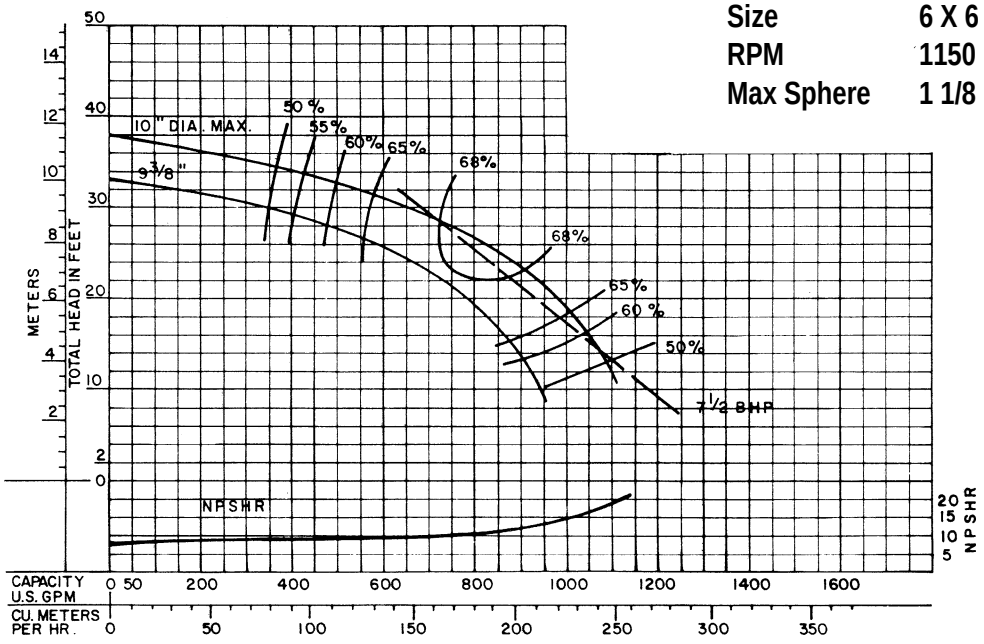
Curve TM-1760

Series	**1300 / 1400**
Size	**6 X 6 X 10**
RPM	**1750**
Max Sphere	**1 1/8**



Curve UM-1760

Series	**1300 / 1400**
Size	**6 X 6 X 10**
RPM	**1150**
Max Sphere	**1 1/8**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

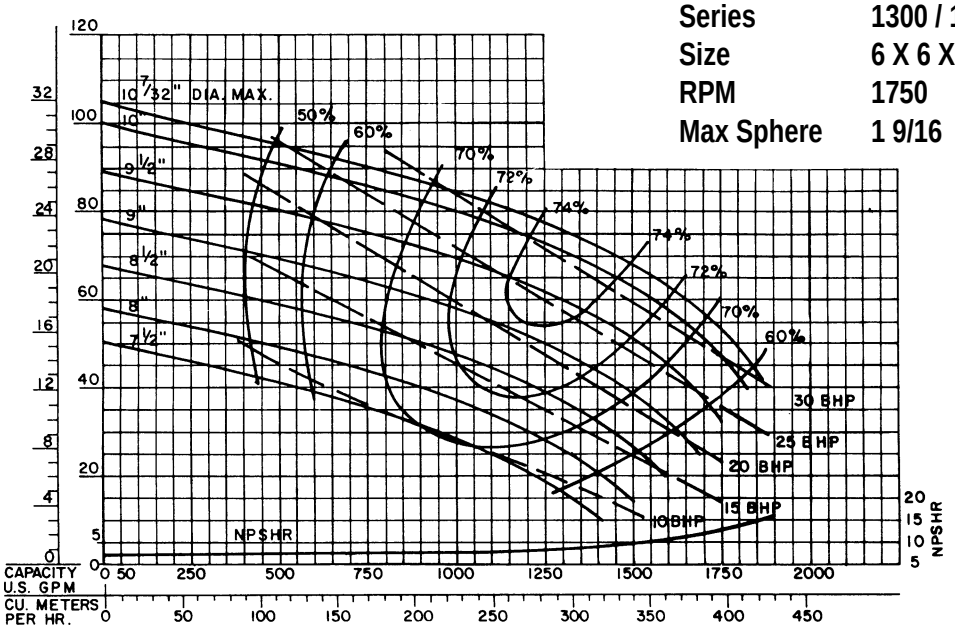
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

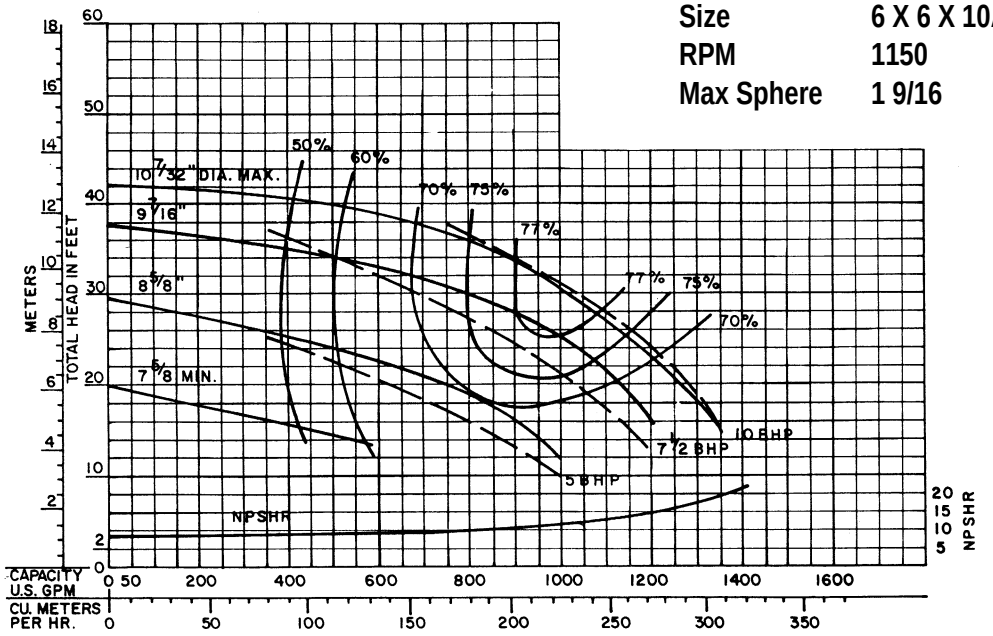
Curve LM-1760

Series	**1300 / 1400**
Size	**6 X 6 X 10A**
RPM	**1750**
Max Sphere	**1 9/16**



Curve LM-1860

Series	**1300 / 1400**
Size	**6 X 6 X 10A**
RPM	**1150**
Max Sphere	**1 9/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

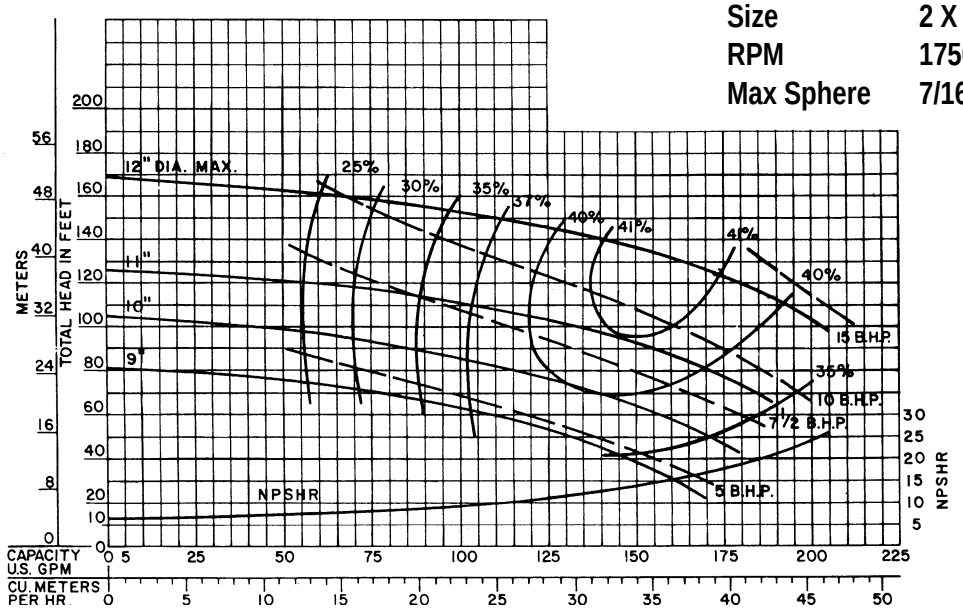
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

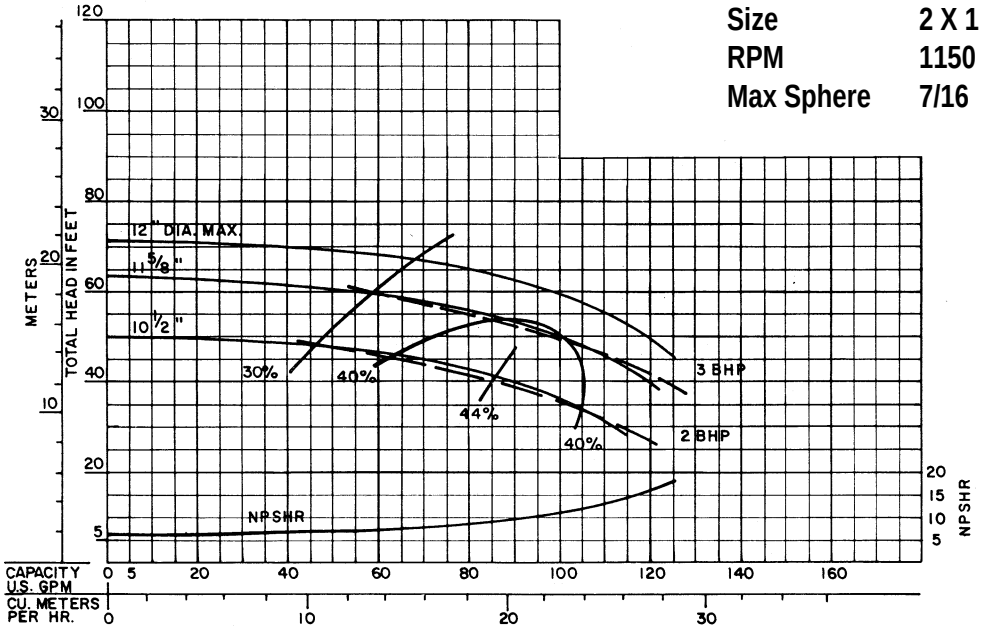
Curve KL-1915

Series	**1300 / 1400**
Size	**2 X 1 1/2 X 12**
RPM	**1750**
Max Sphere	**7/16**



Curve LL-1915

Series	**1300 / 1400**
Size	**2 X 1 1/2 X 12**
RPM	**1150**
Max Sphere	**7/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

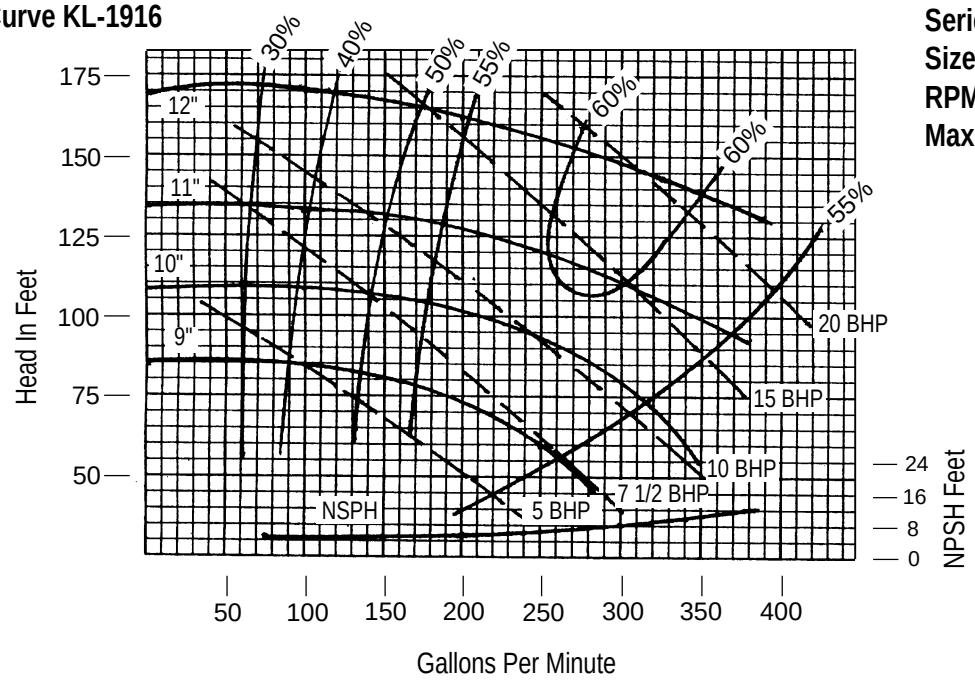
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

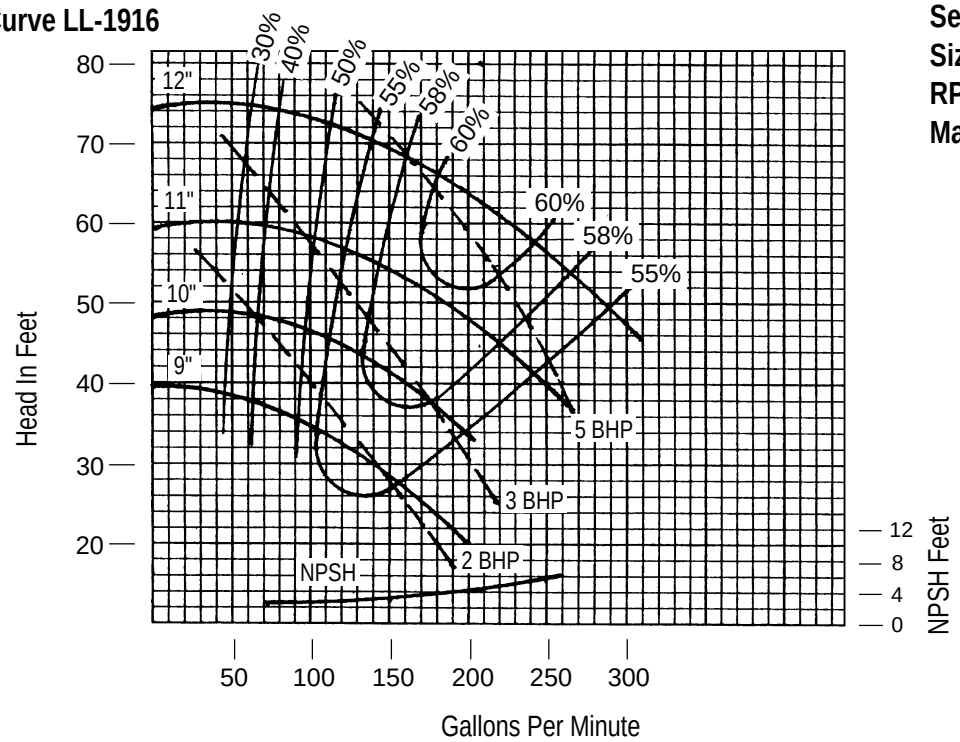
VERTIFLO PUMP COMPANY Performance Curves

Curve KL-1916



Series	**1300/1400**
Size	**3 X 2 X 12**
RPM	**1750**
Max Sphere	**3/4**

Curve LL-1916



Series	**1300/1400**
Size	**3 X 2 X 12**
RPM	**1150**
Max Sphere	**3/4**

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

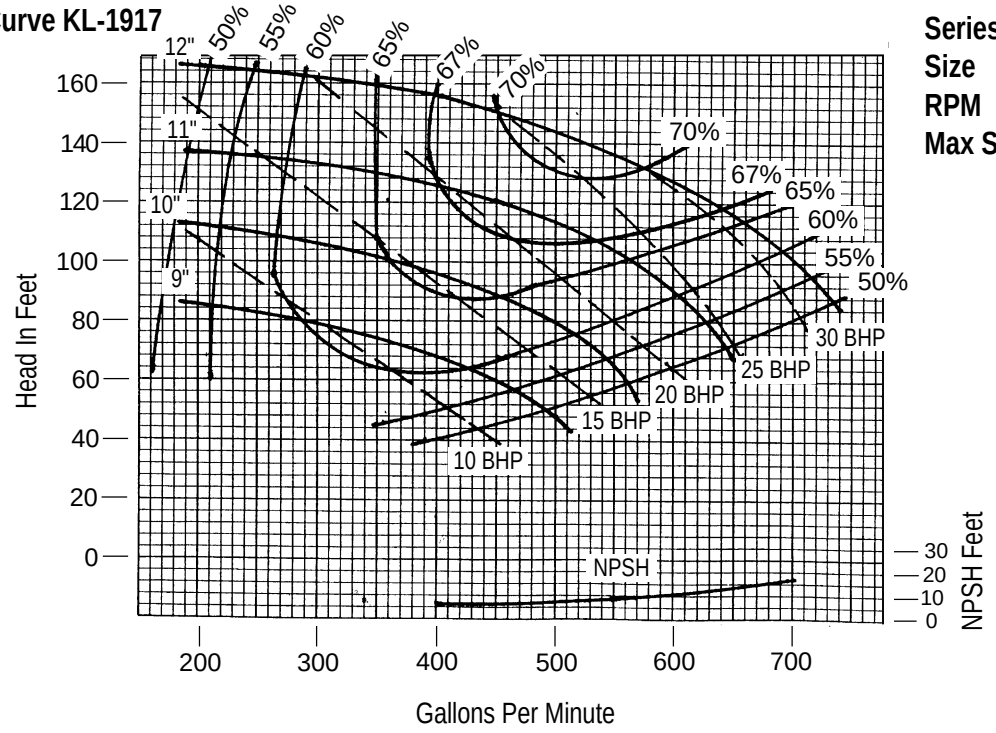
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

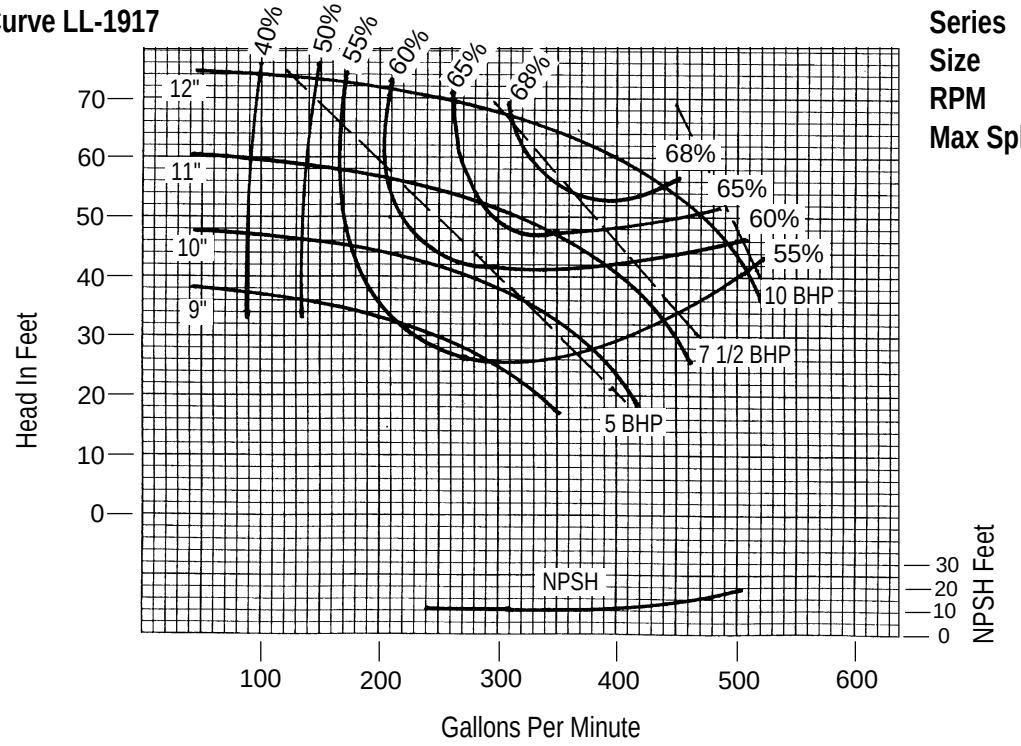
VERTIFLO PUMP COMPANY Performance Curves

Curve KL-1917



Series	**1300 / 1400**
Size	**4 X 3 X 12**
RPM	**1750**
Max Sphere	**1 1/4**

Curve LL-1917



Series	**1300 / 1400**
Size	**4 X 3 X 12**
RPM	**1150**
Max Sphere	**1 1/4**

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

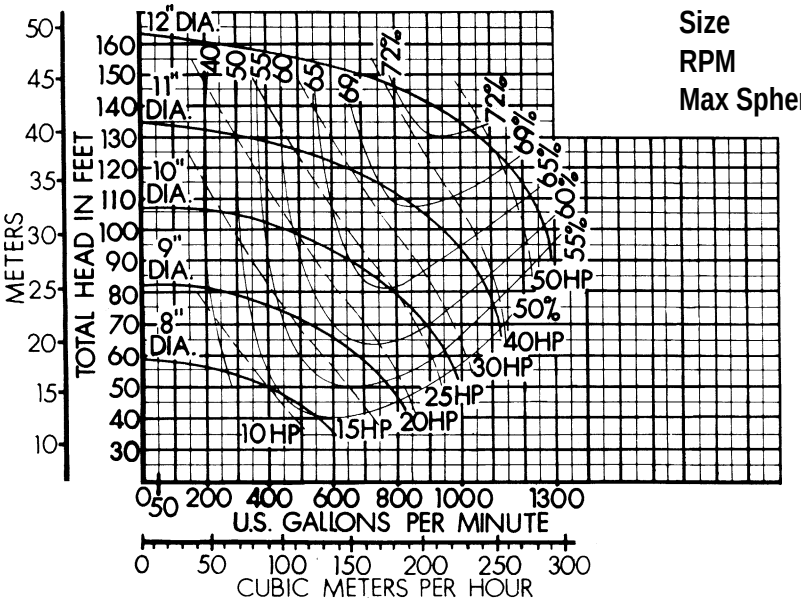
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

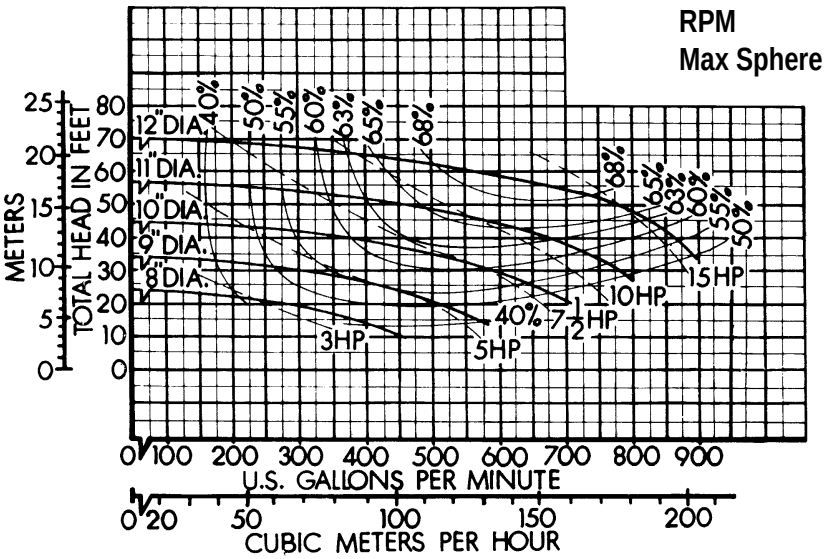
Curve 64124

Series	**1300 / 1400**
Size	**6 X 4 X 12**
RPM	**1750**
Max Sphere	**1 1/2**



Curve 64126

Series	**1300 / 1400**
Size	**6 X 4 X 12**
RPM	**1150**
Max Sphere	**1 1/2**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

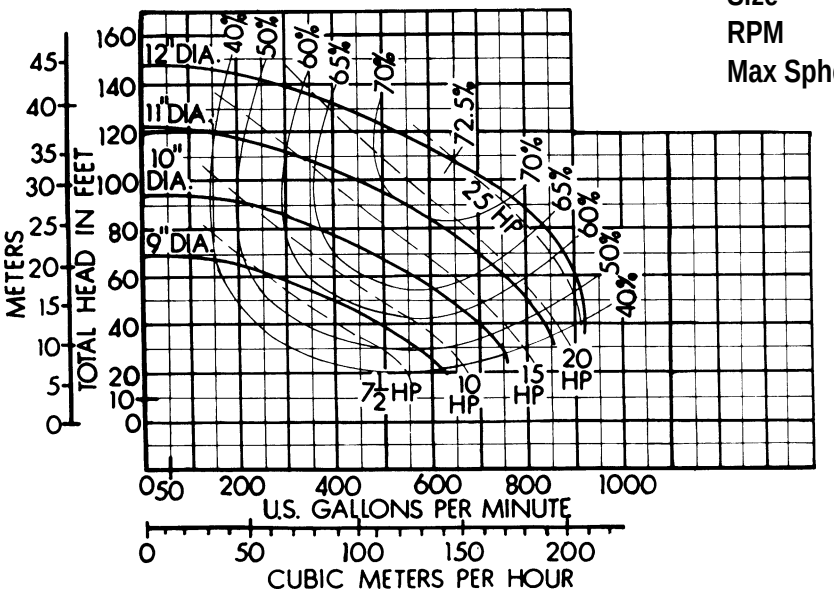
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

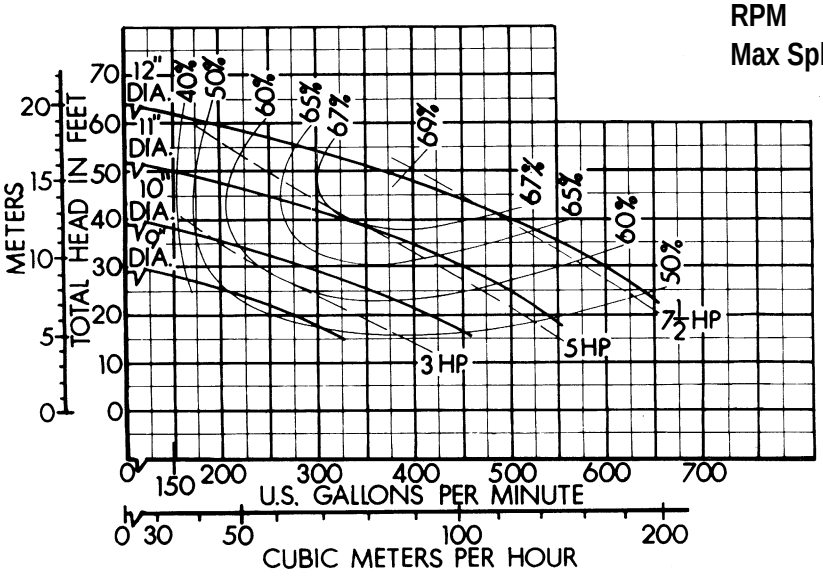
Curve 6412A4

Series	**1300 / 1400**
Size	**6 X 4 X 12A**
RPM	**1750**
Max Sphere	**1 1/8**



Curve 6412A6

Series	**1300 / 1400**
Size	**6 X 4 X 12A**
RPM	**1150**
Max Sphere	**1 1/8**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

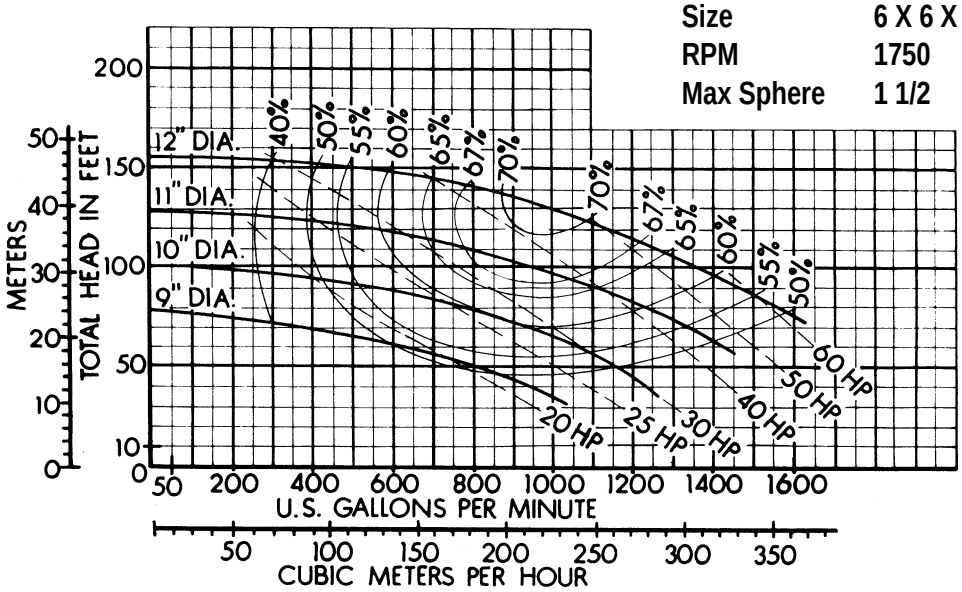
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

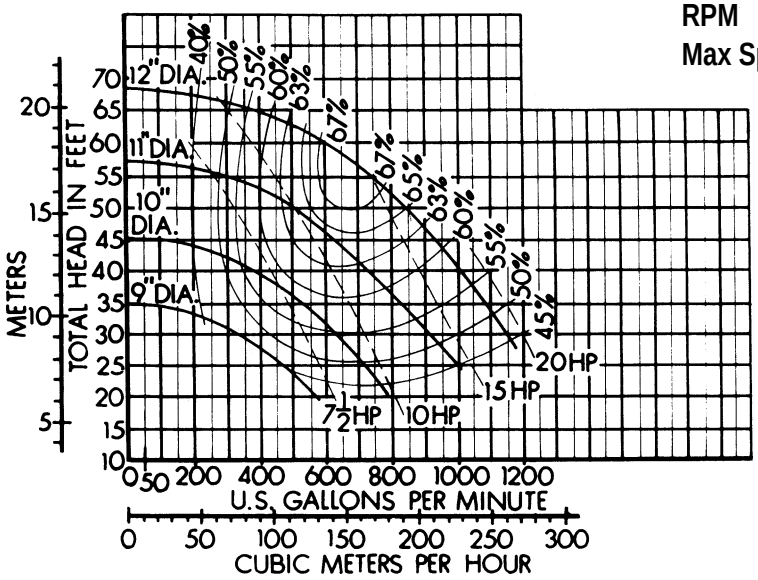
Curve 66124

Series	**1300 / 1400**
Size	**6 X 6 X 12**
RPM	**1750**
Max Sphere	**1 1/2**



Curve 66126

Series	**1300 / 1400**
Size	**6 X 6 X 12**
RPM	**1150**
Max Sphere	**1 1/2**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

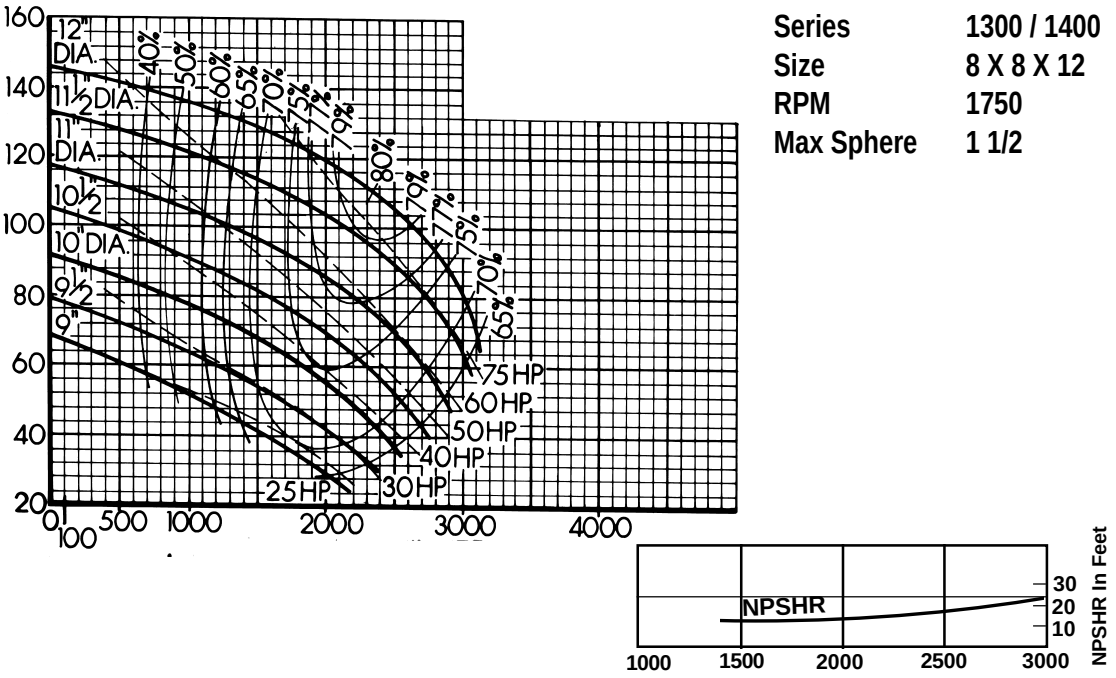
PROJECT _____

ENGINEER _____

CONTRACTOR _____

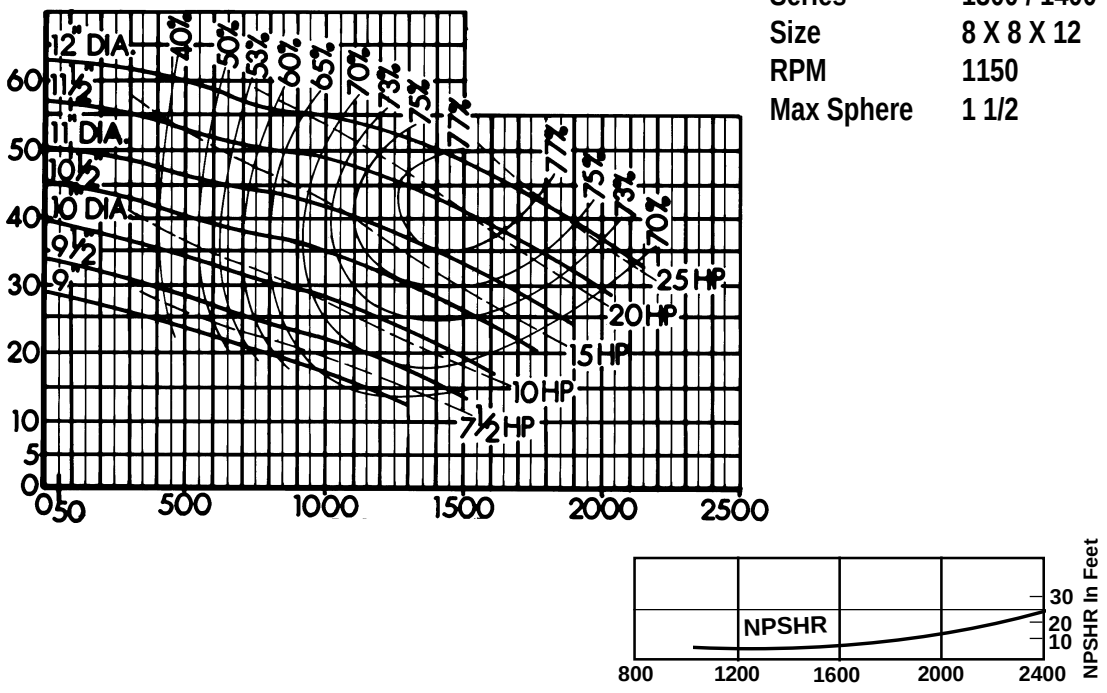
CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

Curve 88124



Series	**1300 / 1400**
Size	**8 X 8 X 12**
RPM	**1750**
Max Sphere	**1 1/2**

Curve 88126



Series	**1300 / 1400**
Size	**8 X 8 X 12**
RPM	**1150**
Max Sphere	**1 1/2**

1300

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

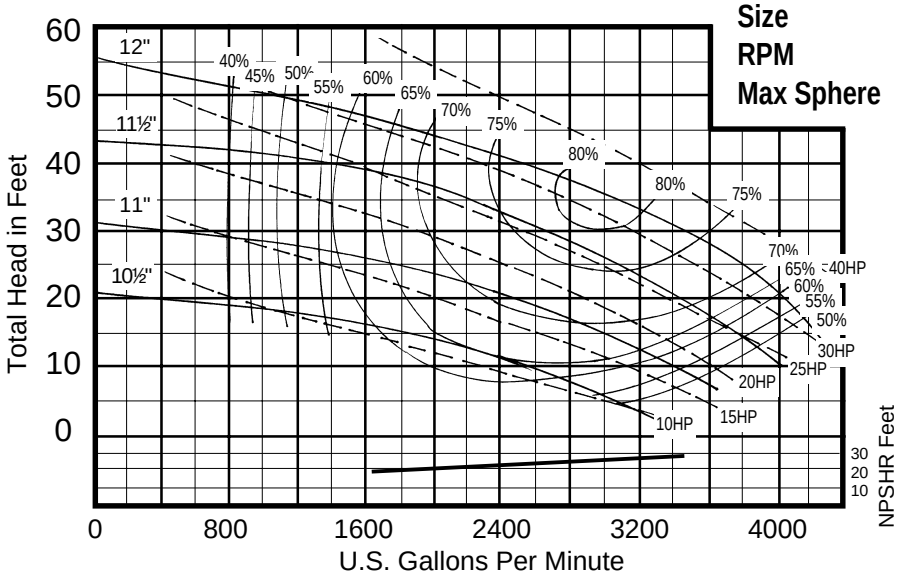
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY

Curve 101012

Series	**1300 / 1400**
Size	**10 X 10 X 12**
RPM	**1750**
Max Sphere	**1 1/2**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

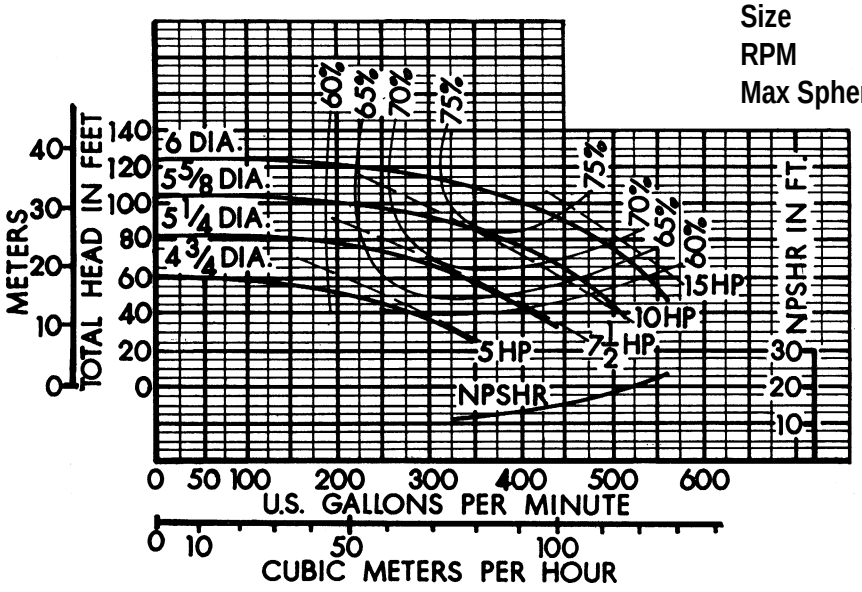
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

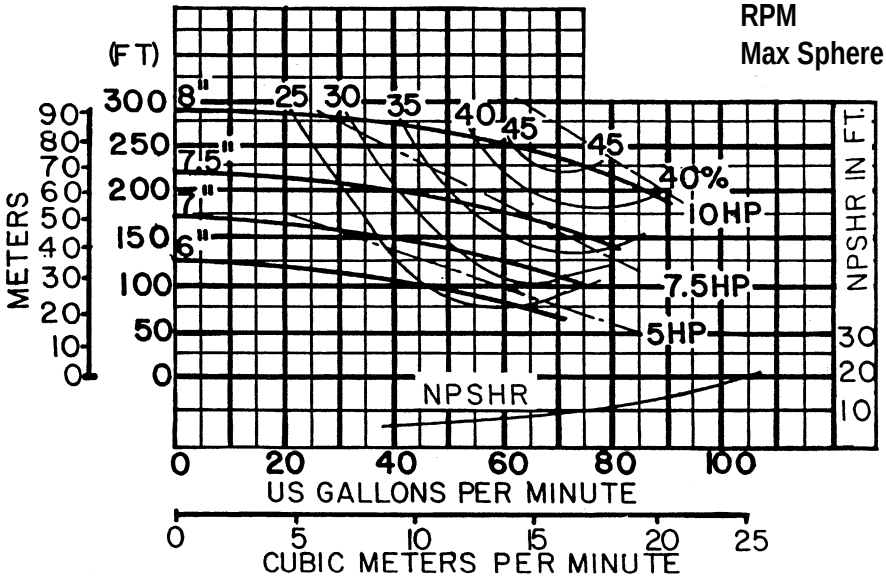
Curve 3272

Series	**1300 / 1400**
Size	**3 X 2 1/2 X 7**
RPM	**3500**
Max Sphere	**1**



Curve 11082

Series	**1300 / 1400**
Size	**1 1/2 X 1 X 8**
RPM	**3500**
Max Sphere	**1/4**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

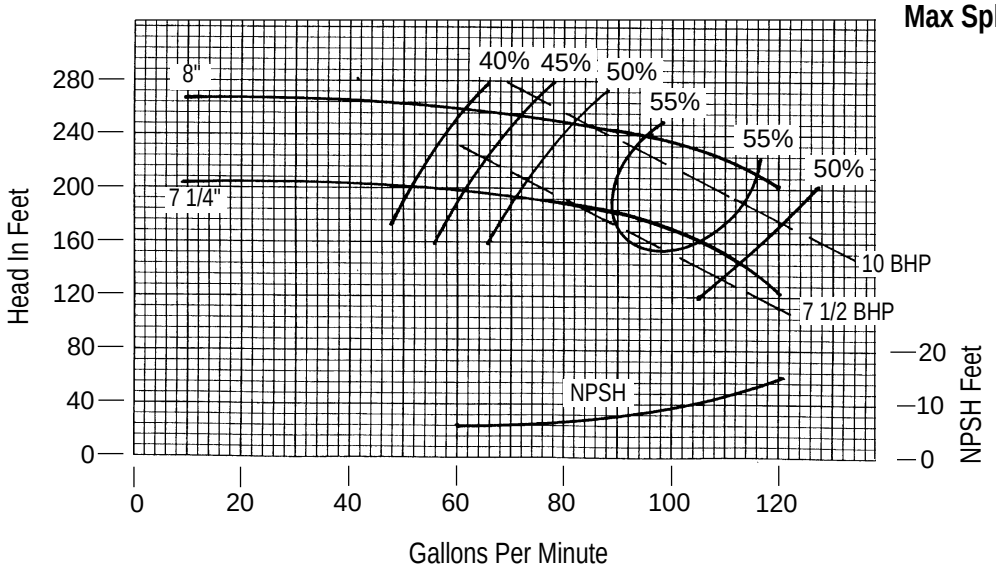
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

Curve 11092

Series	**1300 / 1400**
Size	**1 1/2 X 1 1/4 X 8**
RPM	**3500**
Max Sphere	**5/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

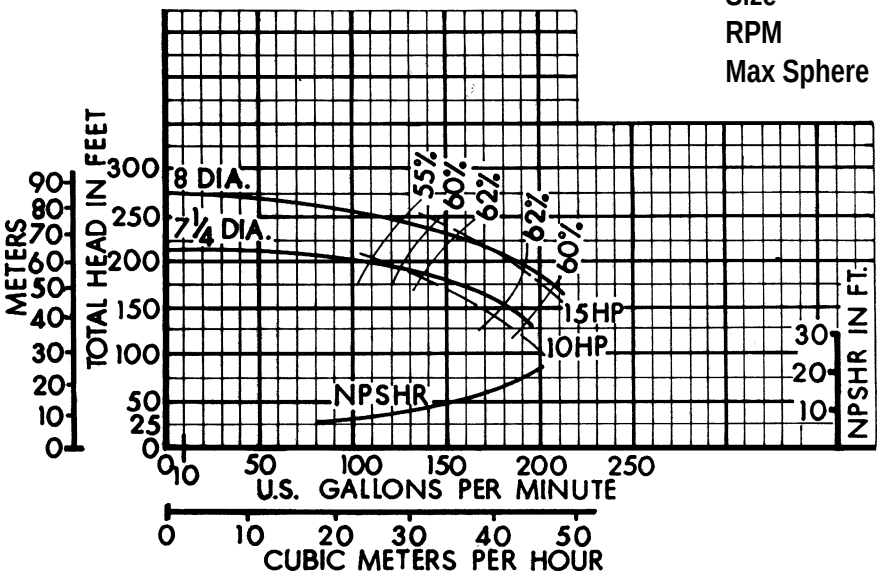
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

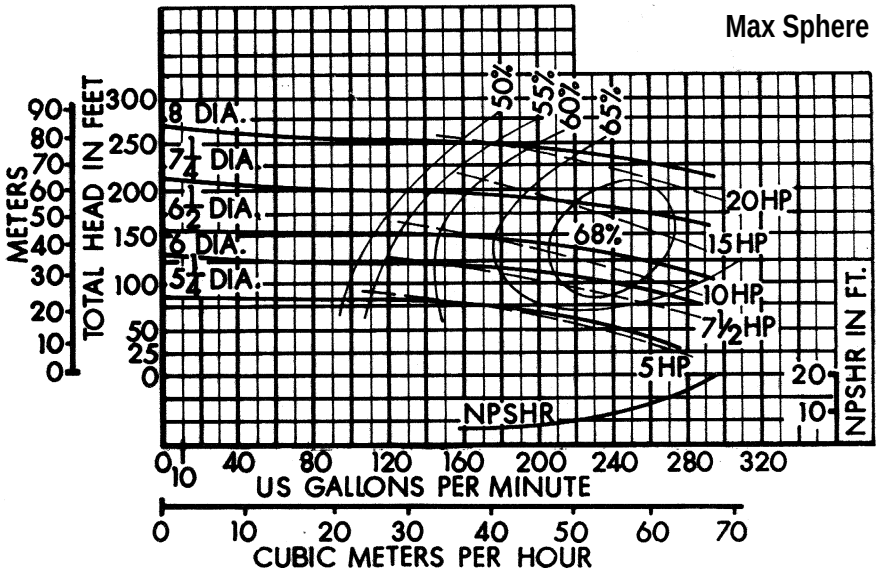
Curve 2182

Series	**1300 / 1400**
Size	**2 X 1 1/2 X 8**
RPM	**3500**
Max Sphere	**7/16**



Curve 3282

Series	**1300 / 1400**
Size	**3 X 2 X 8**
RPM	**3500**
Max Sphere	**11/16**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

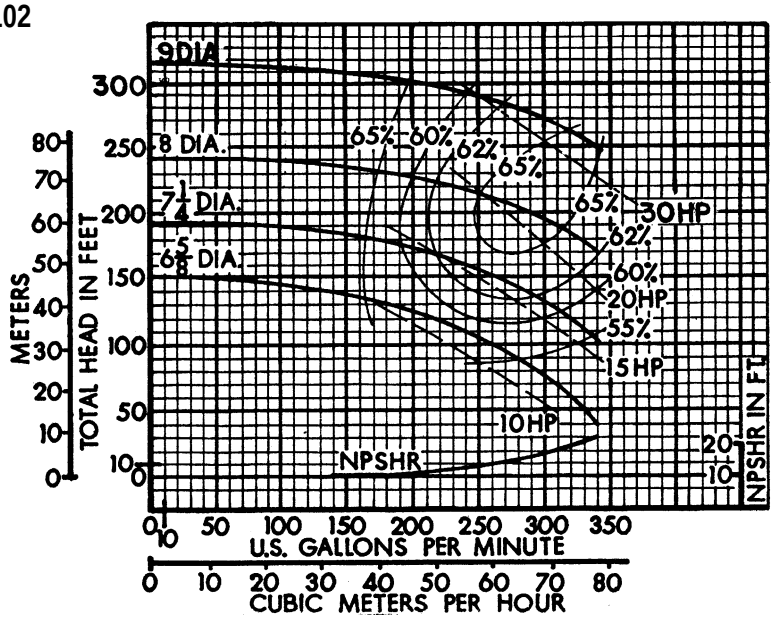
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

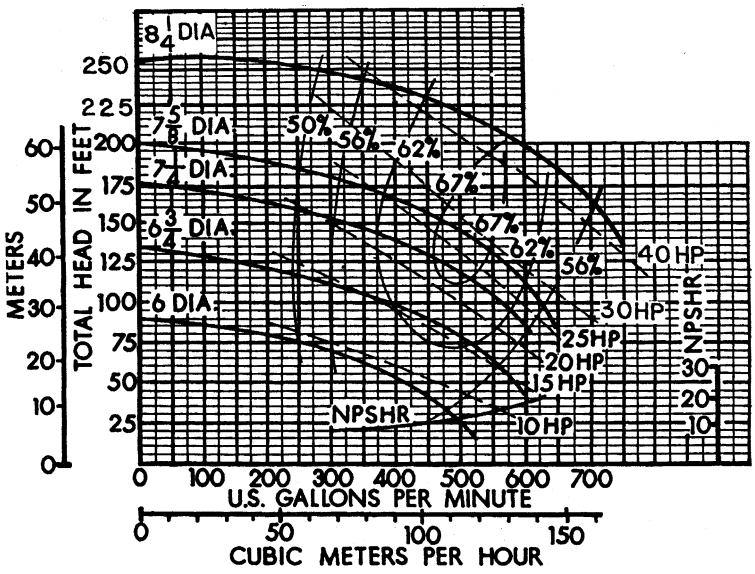
VERTIFLO PUMP COMPANY Performance Curves

Curve 32102



Series	**1300 / 1400**
Size	**3 X 2 X 10**
RPM	**3500**
Max Sphere	**11/16**

Curve 11082



Series	**1300 / 1400**
Size	**4 X 3 X 10**
RPM	**3500**
Max Sphere	**1 3/16**

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

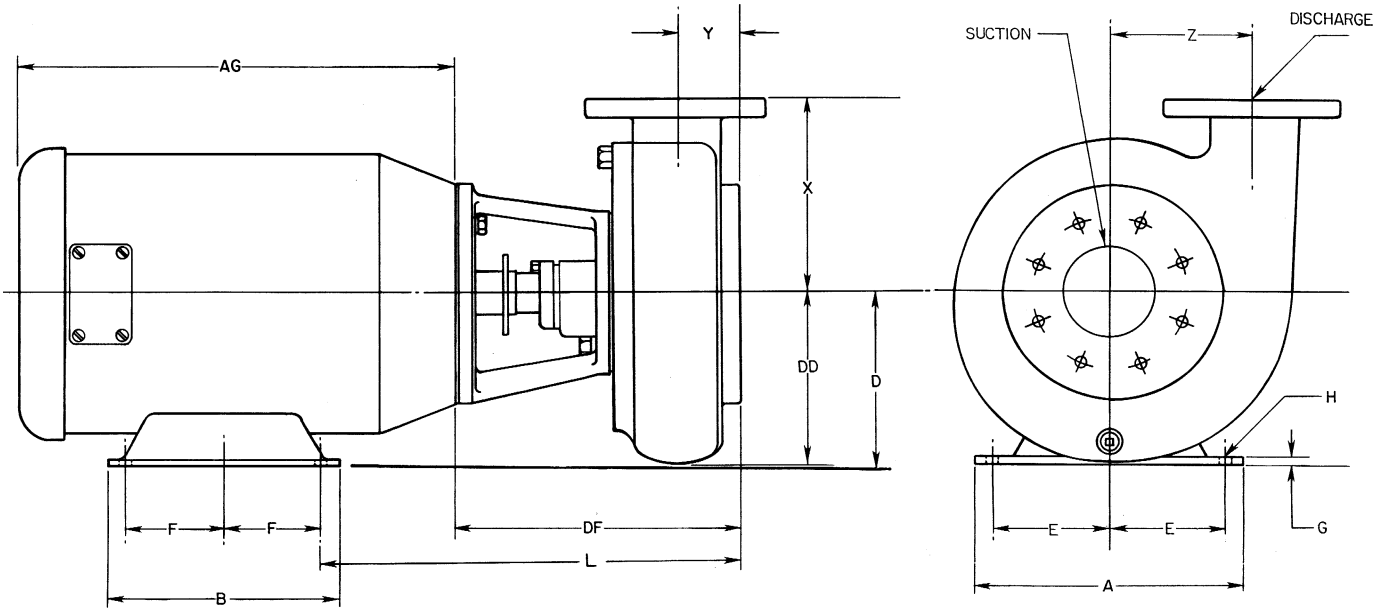
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Dimensions

1300 Series - 8" Line



MOTOR DATA

FRAME	A	B	D	E	F	G	H	AG
143 JP	6½	6	3½	2¾	2	⅛	11/32	9 7/16
145 JP	6½	6	3½	2¾	2½	⅛	11/32	9 7/16
182 JP	8⅜	6⅜	4½	3¾	2¼	⅜	13/32	13½
184 JP	8⅜	6⅜	4½	3¾	2¾	⅜	13/32	13½
213 JP	9½	7⅜	5¼	4¼	2¾	⅝	13/32	15½
215 JP	9½	8⅞	5¼	4¼	3½	⅝	13/32	17
254 JP	11⅜	10 11/16	6¼	5	4⅛	1 1/16	17/32	20⅛
256 JP	11⅜	12 7/16	6¼	5	5	1 1/16	17/32	21⅞
284 JP	12⅞	12¼	7	5½	4¾	¾	17/32	22⅜

Dimensions Based on TEFC, JP Frame Motors.

1300

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

CUSTOMER_____CUSTOMER NO._____
PROJECT_____SERIAL NO._____
ENGINEER_____LOCATION_____
CONTRACTOR_____

PUMP DATA	Model	Size	Curve No.	GPM	Head	SP. GR.@Temp.
	_____	_____	_____	_____	_____	_____

MOTOR DATA	Mfgr.	HP	RPM	Volt-Phase-Cycle	Frame	ENC.
	_____	_____	_____	_____	_____	_____

Shop Order_____Certified by_____Date_____

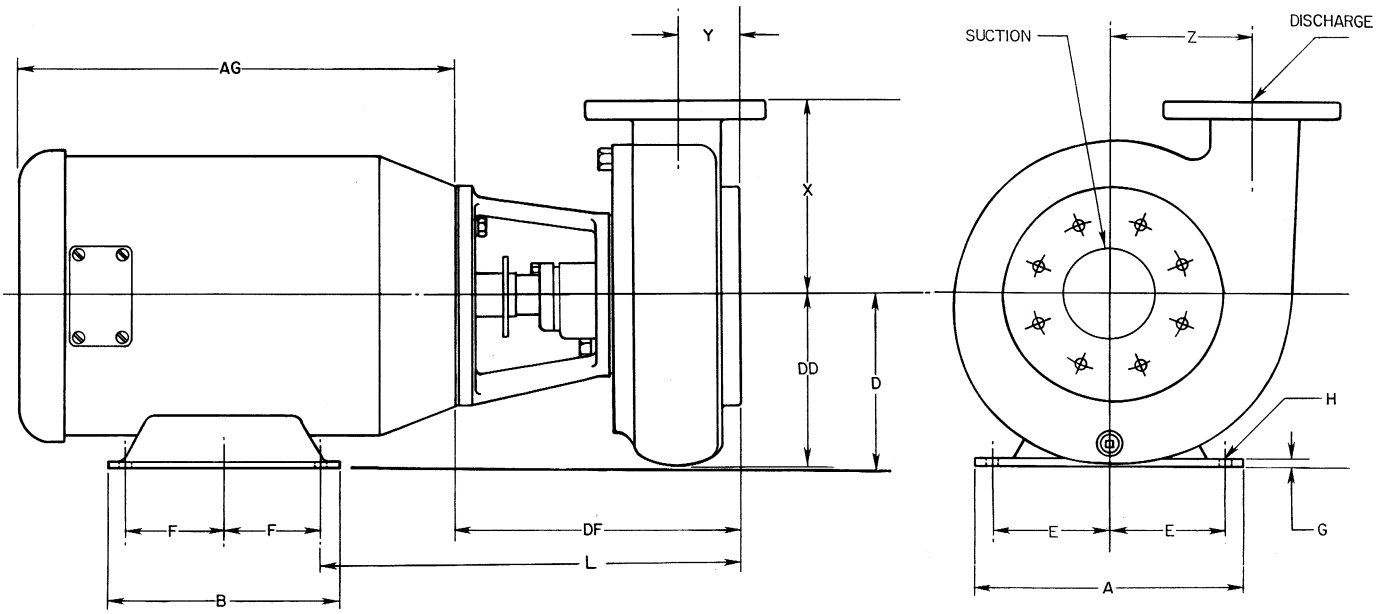
VERTIFLO PUMP COMPANY Dimensions

1300 Series - 8" Line

			SUCTION FLANGE						DISCHARGE FLANGE												
LIQUID END	PUMP MODEL	MOTOR FRAME	FLG. SIZE	DIA. FLG.	# OF HOLES	HOLE DIA.	TAP	B.C.	FLG. SIZE	DIA. FLG.	# OF HOLES	HOLE DIA.	B.C.	DF	L	X	Y	Z	DD	R_1	R_2
3 x 2½ x 7	1320	143 JP	3	7½	4	—	⅝ 11	6	2½	7	4	¾	5½	10 9/16	13 9/16	6¼	2⅜	4¾	5½		
		145 JP													13 5/16						
		182 JP													14¼						
		184 JP																			
	1326	213 JP												11⅛	15 11/16						
		215 JP																			
		254 JP													16 3/16						
1½ x 1 x 8	1320	143 JP	1½	5	4	—	½ 13	3⅞	1	4¼	4	⅝	3⅛	9⅜	12 1/16	6	1⅝	4½	5¼		
		145 JP													11 3/16						
		182 JP													12¾						
		184 JP																			
	1326	213 JP												9 15/16	14½						
		215 JP																			
1½ x 1¼ x 8	1320	143 JP	1½	5	4	—	½ 13	3⅞	1¼	4⅝	4	⅝	3½	9⅜	13 5/16	5¾	1 13/16	4¾	5⅜	5½	5¾
		145 JP													13 1/16						
		182 JP													14						
		184 JP																			
	1326	213 JP												9¾	15 7/16						
		215 JP													15 15/16						
		254 JP																			
		256 JP																			
2 x 1½ x 8	1320	143 JP	2	6	4	—	⅝ 11	4¾	1½	5	4	9/16	3⅞	9 13/16	12¾	5¾	2	4¾	5⅜		
		145 JP													12½						
		182 JP													13 7/16						
		184 JP																			
	1326	213 JP												10⅜	14 15/16						
		215 JP																			
3 x 2 x 8	1320	143 JP	2½	7	4	—	⅝ 11	5½	2	6	4	¾	4¾	10 1/16	13	6¼	2⅛	4¾	5¾		
		145 JP													12¾						
		182 JP													13 11/16						
		184 JP																			
	1326	213 JP												10⅝	15 3/16						
		215 JP																			
		254 JP													15 11/16						
		256 JP																			
4 x 3 x 8	1320	145 JP	4	9	8	—	⅝ 11	7½	3	7½	4	¾	6	11	13¾	7	2¾	5¼	6		
		182 JP													14 11/16						
		184 JP																			
5 x 4 x 8	1320	145 JP	5	10	8	—	¾ 10	8½	4	9	8	¾	7½	11⅜	14¼	7	2⅞	6	7⅛		
		182 JP													15 1/16						
		184 JP																			
	1326	213 JP												11 15/16	16½						
		215 JP																			

VERTIFLO PUMP COMPANY Dimensions

1300 Series - 10/12" Line



MOTOR DATA

FRAME	A	B	D	E	F	G	H	AG
143 JP	6½	6	3½	2¾	2	⅛	11/32	97/16
145 JP	6½	6	3½	2¾	2½	⅛	11/32	97/16
182 JP	8⅜	6⅜	4½	3¾	2¼	⅜	13/32	13½
184 JP	8⅜	6⅜	4½	3¾	2¾	⅜	13/32	13½
213 JP	9½	7⅜	5¼	4¼	2¾	⅝	13/32	15½
215 JP	9½	8⅞	5¼	4¼	3½	⅝	13/32	17
254 JP	11⅜	10 11/16	6¼	5	4⅛	11/16	17/32	20⅛
256 JP	11⅜	12 7/16	6¼	5	5	11/16	17/32	21⅞
284 JP	12⅞	12¼	7	5½	4¾	¾	17/32	22⅜
286 JP	12⅞	13¾	7	5½	4¾	¾	17/32	23⅞
324 JP	15¾	13½	8	6¼	5¼	1⅛	21/32	24 11/16
326 JP	15¾	16	8	6¼	6	1⅛	21/32	26 3/16
364 JP	17¾	14¼	9	7	5⅝	1¼	21/32	26 9/16

Dimensions Based on TEFC, JP Frame Motors.

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

CUSTOMER_____CUSTOMER NO._____
PROJECT_____SERIAL NO._____
ENGINEER_____LOCATION_____
CONTRACTOR_____

PUMP DATA	Model	Size	Curve No.	GPM	Head	SP. GR.@Temp.
	_____	_____	_____	_____	_____	_____

MOTOR DATA	Mfgr.	HP	RPM	Volt-Phase-Cycle	Frame	ENC.
	_____	_____	_____	_____	_____	_____

Shop Order_____Certified by_____Date_____

VERTIFLO PUMP COMPANY Dimensions

1300 Series 10/12" Line

			SUCTION FLANGE						DISCHARGE FLANGE										
LIQUID END	PUMP MODEL	MOTOR FRAME	FLG. SIZE	DIA. FLG.	# OF HOLES	HOLE DIA.	TAP	B.C.	FLG. SIZE	DIA. FLG.	# OF HOLES	HOLE DIA.	B.C.	DF	L	X	Y	Z	DD
2x1½x10	1320	145 JP	2	6	4	—	⅝ 11	4¾	1½	5	4	⅝	3⅞	9 11/16	12 7/16	6½	2	5¾	6⅜
		182 JP													13⅜				
		184 JP																	
	1326	213 JP												10¼	14 13/16				
		215 JP																	
		254 JP													15 5/16				
		256 JP																	
3x2x10	1320	145 JP	3	7½	4	—	⅝ 11	6	2	6	4	¾	4¾	10 1/16	12¾	7	2⅛	5¾	6½
		182 JP													13 11/16				
		184 JP																	
	1326	213 JP												10⅝	15 3/16				
		215 JP																	
		254 JP													15 11/16				
		256 JP																	
		284 JP																	
4x3x10	1320	145 JP	4	9	8	—	⅝ 11	7½	3	7½	4	¾	6	10⅝	13 5/16	8⅜	2 7/16	6¼	7
		182 JP													14¼				
	1326	213 JP												11¼	15¾				
		215 JP																	
		254 JP													16¼				
		256 JP																	
		284 JP																	
5x4x10	1320	184 JP	5	10	8	—	¾ 10	8½	4	9	8	¾	7½	11 3/16	14 13/16	9	2¾	6½	7½
	1326	213 JP												11¾	16⅜				
		215 JP																	
		254 JP													16⅞				
		256 JP																	
6x5x10 6x5x10A	1320	145 JP	6	11	8	—	¾ 10	9½	5	10	8	⅞	8½	11 5/16	13⅞	9	2 13/16	7⅛	8⅜
		182 JP													14 13/16				
	1326	213 JP												11⅞	16 7/16				
		215 JP																	
		254 JP													16 15/16				
		256 JP																	
		284 JP																	
6x6x10 6x6x10A	1326	215 JP	6	11	8	—	¾ 10	9½	6	11	8	⅞	9½	12 3/16	16¾	9	2 15/16	8	10
		254 JP													17¼				
		256 JP																	
		284 JP																	
2x1½x12	1320	184 JP	2	6	4	¾	—	4¾	1½	5	4	⅝	3⅞	11½	15	7½	3¾	6¾	3⅞
	1326	213 JP												12 1/16	16½				
		215 JP																	
		254 JP													17				

VERTIFLO PUMP COMPANY Dimensions

			SUCTION FLANGE						DISCHARGE FLANGE										
LIQUID END	PUMP MODEL	MOTOR FRAME	FLG. SIZE	DIA. FLG.	# OF HOLES	HOLE DIA.	TAP	B.C.	FLG. SIZE	DIA. FLG.	# OF HOLES	HOLE DIA.	B.C.	DF	L	X	Y	Z	DD
3x2x12	1326	213 JP	3	7½	4	—	⅝ 11	6	2	6	4	¾	4¾	12⅛	16⅝	9½	2⁵⁄₁₆	5	7⅞
		215 JP																	
		254 JP													17⅛				
		256 JP																	
		284 JP																	
4x3x12	1326	215 JP	4	9	8	—	⅝ 11	7½	3	7½	4	¾	6	11¾	16¼	8½	2½	7⅜	8½
		254 JP													16¾				
		256 JP																	
		284 JP																	
		286 JP																	
6x4x12	1326	254 JP	6	11	8	—	¾ 10	9½	4	9	8	⅞	7½	12¼	17¼	9	2¾	7¾	9
		256 JP																	
		284 JP																	
		286 JP													17¾				
		324 JP																	
		326 JP																	
	1334	364 JP													18⅜				
6x6x12	1326	256 JP	6	11	8	—	¾ 10	9½	6	11	8	¾	9½	13	18	9	3¼	8⅜	9⅞
		284 JP																	
		286 JP																	
		324 JP													18½				
		326 JP																	
	1334	364 JP													19⅛				
8x8x12	1326	256 JP	8	13½	8	—	¾ 10	11¾	8	13½	8	¾	11¾	14½	19½	11	4½	10½	13⅜
		284 JP																	
		286 JP																	
		324 JP													20				
		326 JP																	
	1334	364 JP													20⅝				
10x10x12	1326	256 JP	10	16	12	—	⅞	14¼	10	16	12	⅞	14¼	16½	21½	11	5½	10⅝	13¾
		284 JP																	
		286 JP																	
		324 JP													22				
		326 JP																	
	1334	364 JP													22⅝				

Dimension DF will be larger on frame 364 and larger.

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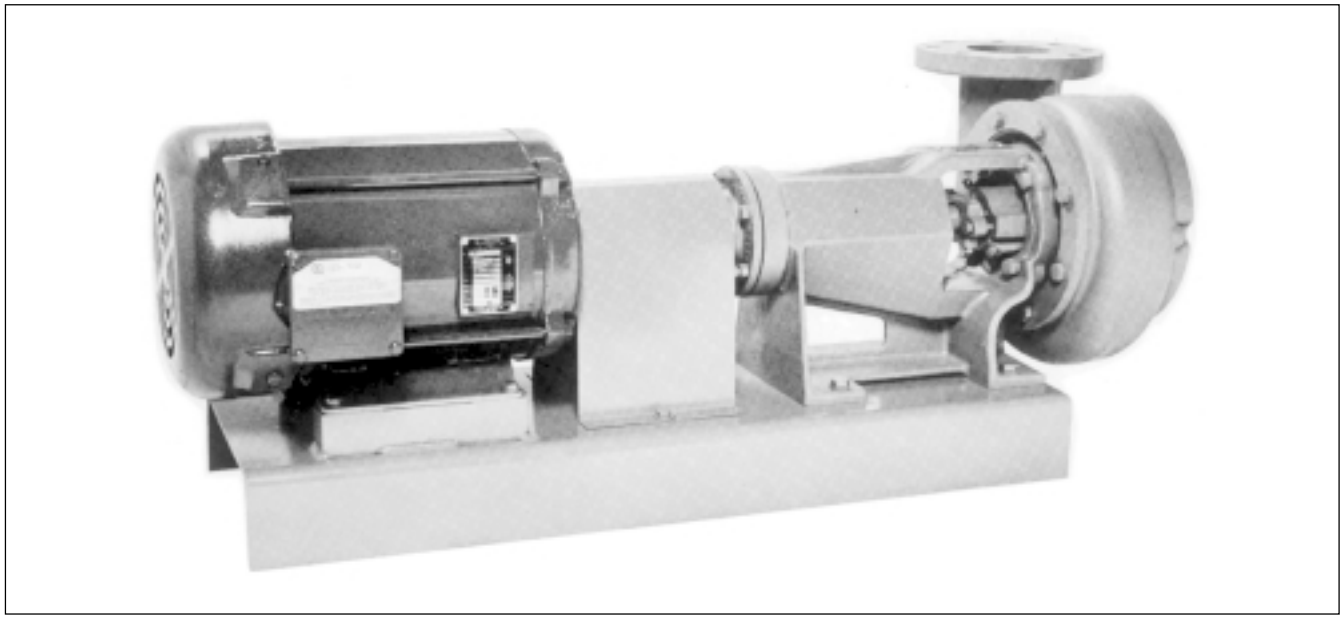
VERTIFLO SERIES 1400 Models 1420/1424
Quality Design Features Assure Long, Trouble-Free Service



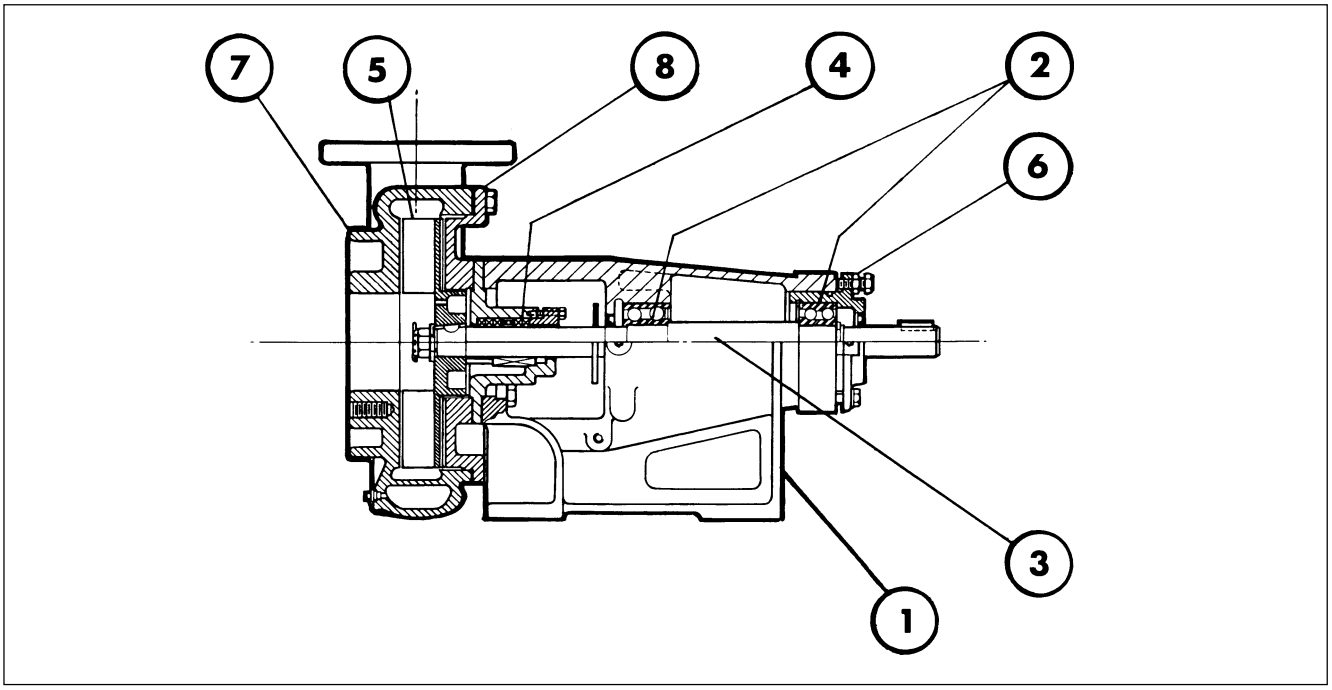
WIDE RANGE OF APPLICATIONS:
- Industrial Process
- Pollution Control
- General Pumping
- Spray Systems
- Deionized Water
- Waste Water
- Clear Liquids
- Corrosive Liquids
- Chemicals
- Acids
- Water

CAPABILITIES
- Capacities to 1800 GPM
- Heads To 275 Feet TDH
- Temperature to 250° F
- Back Pull-Out Construction
- Semi-Open Impeller
- External Impeller Adjustment
- Packing or Mechanical Seal

CONSTRUCTION:
- Cast Iron
- 316 Stainless Steel Fitted
- All 316 Stainless Steel
- Alloy 20CD4MC$_u$

Series 1400 horizontal base-mounted end suction pumps are designed for use with any T or U frame motor, or with virtually any type of drive. VERTIFLO's base-mounted 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. Power Frame
Rugged heavy duty cast iron design incorporating integrally cast support and ribbed mounting feet which assure a solid, dependable pump installation and operation. One frame fits all pump sizes. External impeller adjustment is standard. Grease lubrication of bearings is standard; oil lubrication available.

2. Bearings
Series 1400 contains a high capacity cartridge-mounted double row thrust bearing allowing use on high suction pressure applications. Radial bearing is single row or double row and floats in a precision bored housing.

3. Shaft
416 stainless steel, precision machined with preferred taper at impeller location. Positive attachment is provided with castellated impeller nut and cotter pin, which assures that the impeller will not back off the shaft if the pump is accidentally operated in reverse rotation. 316 stainless steel shaft is optional.

4. 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.

E.I DuPont registered®

5. Impeller
Semi-open design which accommodates passage of solids or fines. All impellers have balance 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 with a positive taper fit to assure perfect attachment.

6. Impeller Adjustment
Every power frame contains an external impeller adjustment utilizing jackscrews which provides for clearance adjustment between the impeller vanes' face and casing. This adjustment feature compensates for internal wear. Expensive casing and impeller wearing rings are eliminated.

7. 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.

8. 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 2X1 1/2X12

Standard
- All iron construction
- 416 stainless steel shaft
- Semi-open impeller
- Back pull-out design
- Packed stuffing box or mechanical seal
- External impeller adjustment
- Heavy duty power frame
- Regreaseable ball bearings
- Flanged suction and discharge on all sizes
- Flexible coupling
- Steel mounting base

Options
- 316 stainless steel shaft
- 316 stainless steel impeller
- All 316 stainless steel, alloy 20 or hastelloy construction (all wetted parts)
- Teflon® packing (standard in s.s. and alloy units)
- Single or double mechanical seal (various materials)
- Product or fresh water flush to packing or mechanical seal
- Oil lubricated bearings with sight level indicator
- Coupling guard (recommended)
- ODP, TEFC, XP motors
- Steam turbine drive
- Diesel or gasoline engine drive

	Design Details	Model 1420	Model 1424
Pump	Rotation from driver end	CW	CW
Shaft	Diameter through stuffing box	1.250	1.500
	Diameter between bearings	1.750	1.750
	Diameter at coupling end	1.250	1.250
	Coupling key - square	0.250	0.250
	Bearing centers	6.692	6.692

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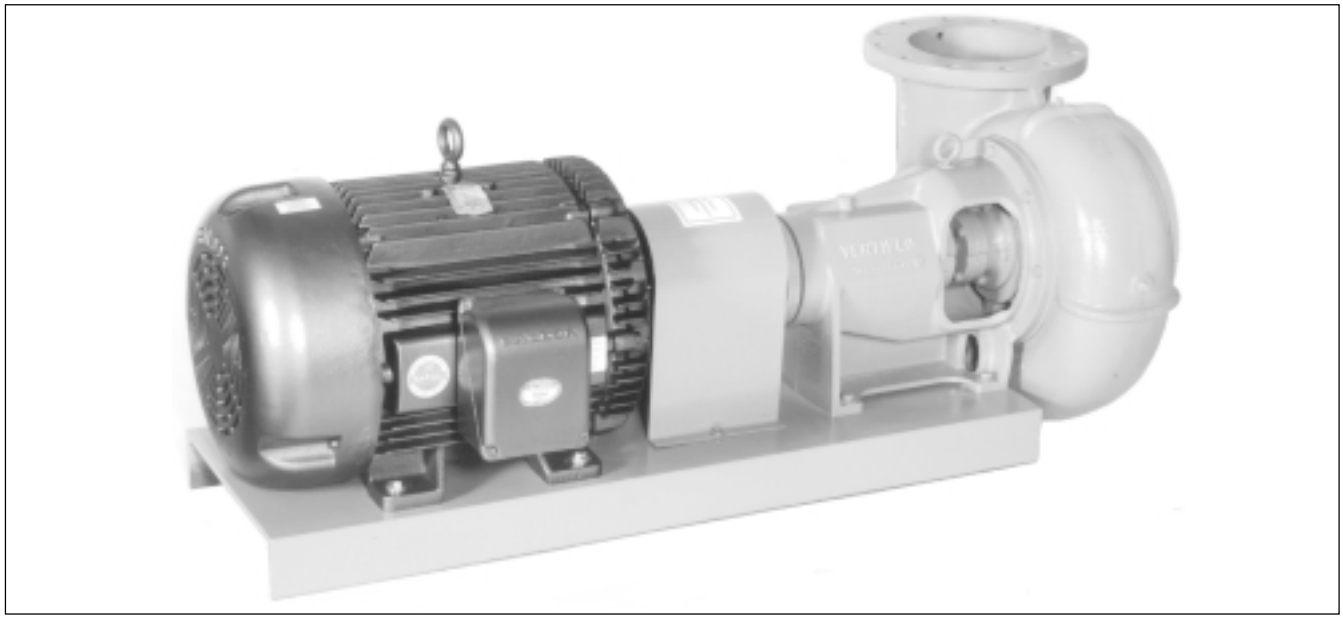
VERTIFLO Model 1434
Quality Design Features Assure Long, Trouble-Free Service



WIDE RANGE OF APPLICATIONS:
- Industrial Process
- Waste Water
- Chemicals
- Deionized Water
- Polution Control
- Solids Pumping
- General Water Pumping

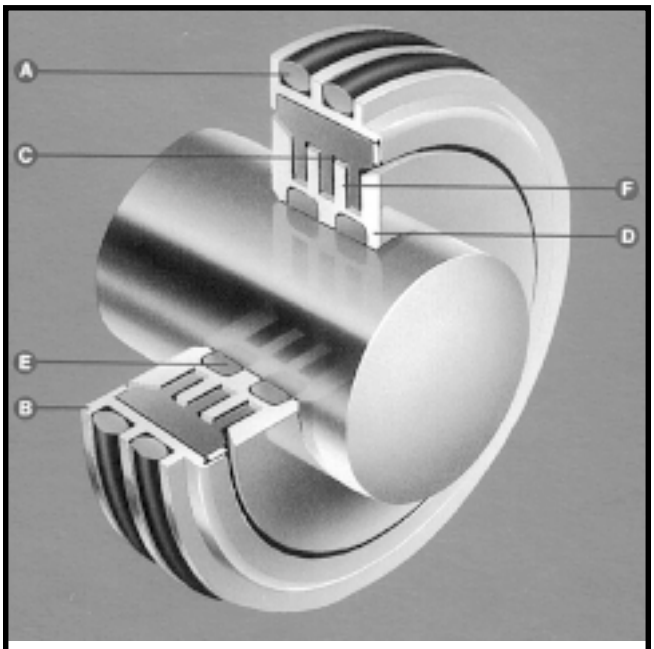
CAPABILITIES
- Capacities to 3600 GPM
- Heads To 160 Feet
- Temperature to 250˚ F
- Back Pull-Out Construction
- Semi-Open Impeller
- External Impeller Adjustment
- Packing or Mechanical Seal

CONSTRUCTION:
- Cast Iron
- 316 Stainless Steel Fitted
- All 316 Stainless Steel
- Alloy 20

Model 1434 horizontal base-mounted end suction pumps are designed for use with any T or U frame motor, or with virtually any type of drive. VERTIFLO's base-mounted 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.

John Crane Type 31 Series Labri-Seal Bearing Protectors



A. Outer ring O-rings when space permits
B. Stationary outer ring
C. Inward projecting PTFE “fingers”
D. Moving/free-floating inner ring
E. Shaft-side inner ring O-rings
F. Outward projecting stainless steel “fingers”

- Exclusive “finger-locking” design traps and blocks oil leakage.
- Stationary outer ring projects special PTFE composition “fingers” inward. They mesh perfectly with outward projecting steel “fingers” of moving/free floating inner ring. The flexible labyrinth blocks bearing oil. Leakage is virtually *zero*. Drag is virtually *zero*.
- Contamination threats from outside are blocked, too.

VERTIFLO Feature Selector

Standard

- All iron construction
- 416 stainless steel shaft
- Semi-open impeller
- 316 stainless steel shaft sleeve
- Back pull-out design
- Packed stuffing box or mechanical seal
- External impeller adjustment
- Heavy duty power frame
- Regreaseable ball bearings
- Flanged suction and discharge on all sizes
- Dual volute casing 6x4x12 and larger

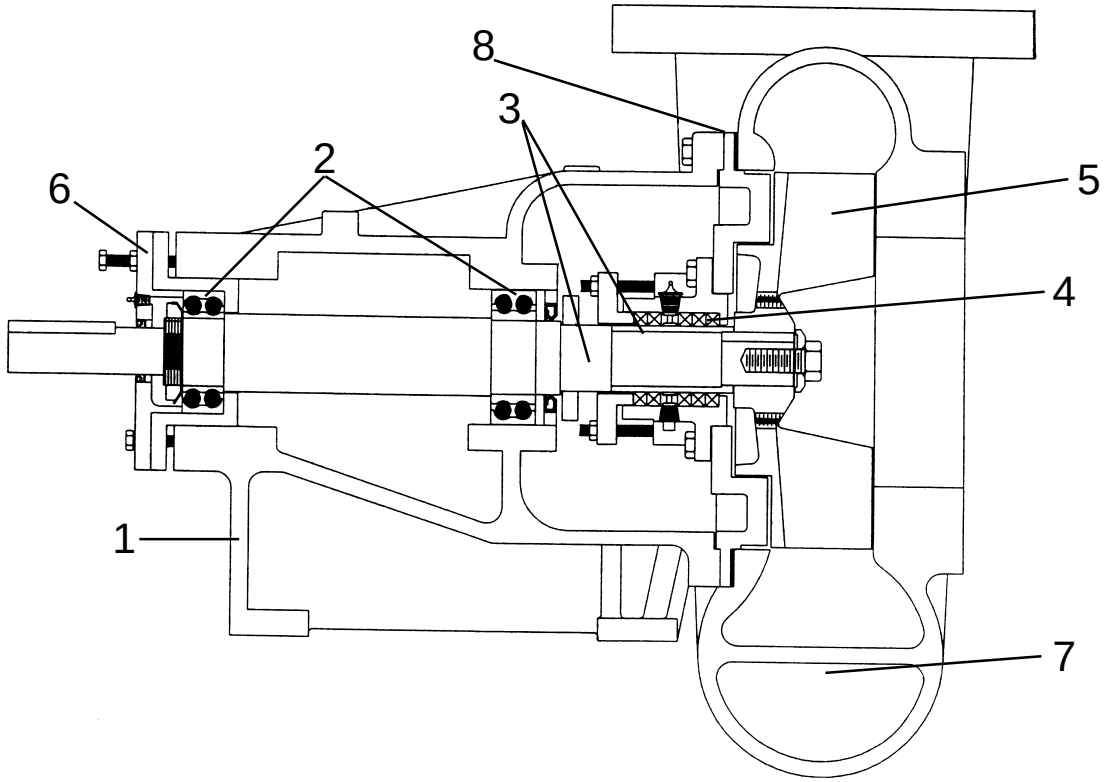
Options

- Labri-seal bearing protectors
- 316 stainless steel shaft
- 316 stainless steel impeller
- All 316 stainless steel or alloy 20 construction (all wetted parts)
- Teflon® packing (standard in s.s. and alloy units)
- Single or double mechanical seal (various materials)
- Product or fresh water flush to packing or mechanical seal
- Oil lubricated bearings with sight level indicator
- Coupling guard (recommended)
- ODP, TEFC, XP motors
- Flexible coupling
- Steel mounting base
- Cartridge mechanical seal

E.I DuPont registered®

Design Details

Pump Shaft	Model 1434
Rotation from driver end	CW
Diameter over shaft sleeve	2.125
Diameter between bearings	2.500
Diameter at coupling end	1.500
Coupling key - square	0.375
Bearing centers	9.750



1. Power Frame
Rugged heavy duty cast iron design incorporating integrally cast support and ribbed mounting feet which assure a solid, dependable pump installation and operation. One frame fits all pump sizes. External impeller adjustment is standard. Grease lubrication of bearings is standard; oil lubrication available.

2. Bearings
Model 1434 contain a high capacity cartridge-mounted double row thrust bearing allowing use on high suction pressure applications. Radial bearing is double row and floats in a precision bored housing.

3. Shaft and Shaft Sleeve
A 416 stainless steel shaft is standard with a 316 stainless steel shaft sleeve. A 316 stainless steel shaft is optional.

4. 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. Oversized seal housing is ready to adapt for cartridge-type mechanical seal.

E.I DuPont registered®

5. Impeller
Semi-open design which accommodates passage of solids or fines. All impellers have balance holes near the impeller hub which reduce thrust load and pressure in the packing or seal area. All impellers have a balancing ring. Impeller is keyed to shaft.

6. Impeller Adjustment
Power frame contains an external impeller adjustment which provides for clearance adjustment between the impeller vanes' face and casing. This adjustment feature compensates for internal wear. Expensive casing and impeller wearing rings are eliminated.

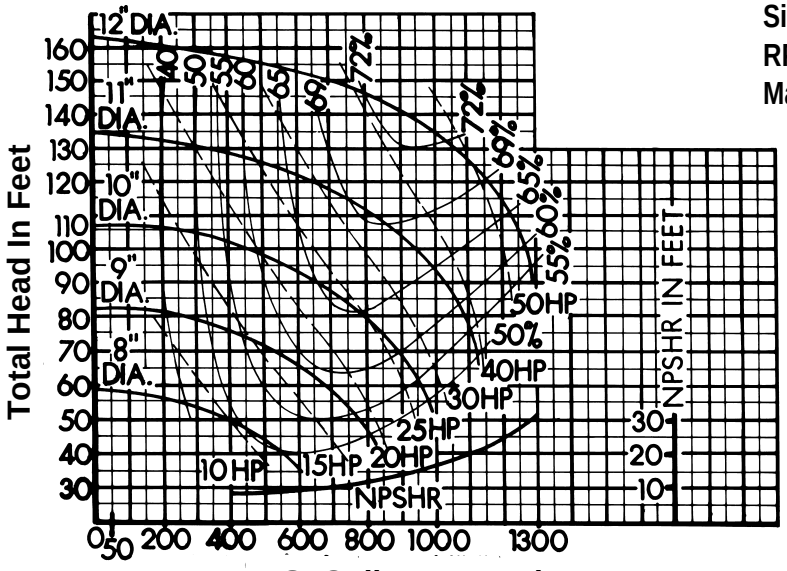
7. Casing
High efficiency volute design. Sizes, 6 x 4 x 12 and larger, are double volute, containing a splitter, which reduces bearing loading and shaft deflection; thus extending bearing and packing or mechanical seal life. All suction and discharge openings are flanged for installation ease and integrity.

8. 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.

VERTIFLO PUMP COMPANY Performance Curves

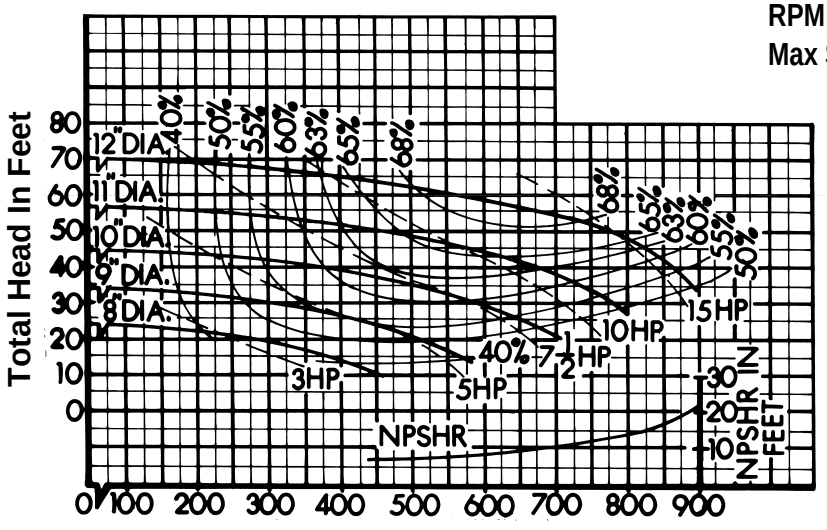
Curve 64124

Model	**1434**
Size	**6 X 4 X 12**
RPM	**1750**
Max Sphere	**1 1/2**



Curve 64126

Model	**1434**
Size	**6 X 4 X 12**
RPM	**1150**
Max Sphere	**1 1/2**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

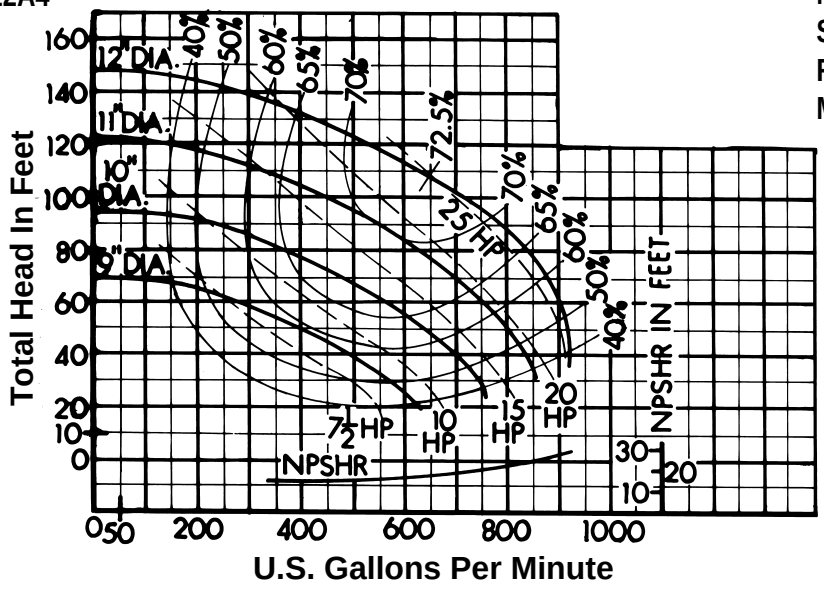
PROJECT _____

ENGINEER _____

CONTRACTOR _____

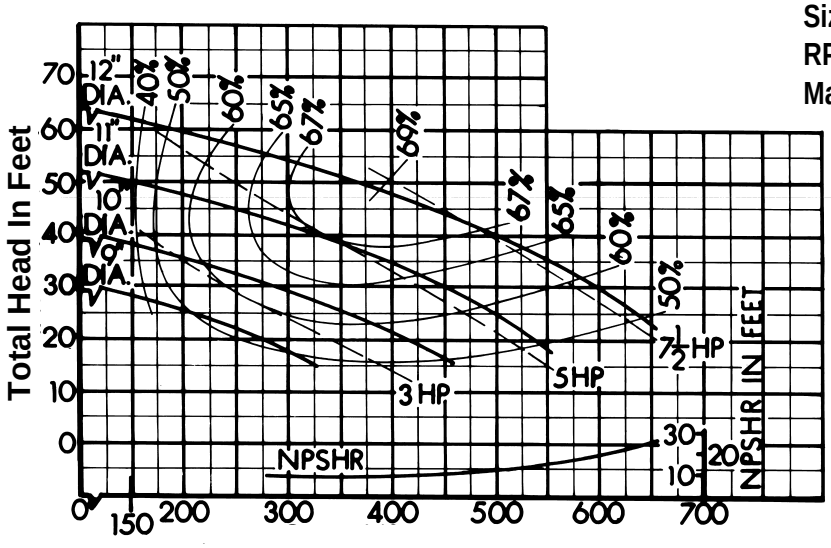
CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

Curve 6412A4



Model	**1434**
Size	**6 X 4 X 12A**
RPM	**1750**
Max Sphere	**1 1/8**

Curve 6412A6



Model	**1434**
Size	**6 X 4 X 12A**
RPM	**1150**
Max Sphere	**1 1/8**

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

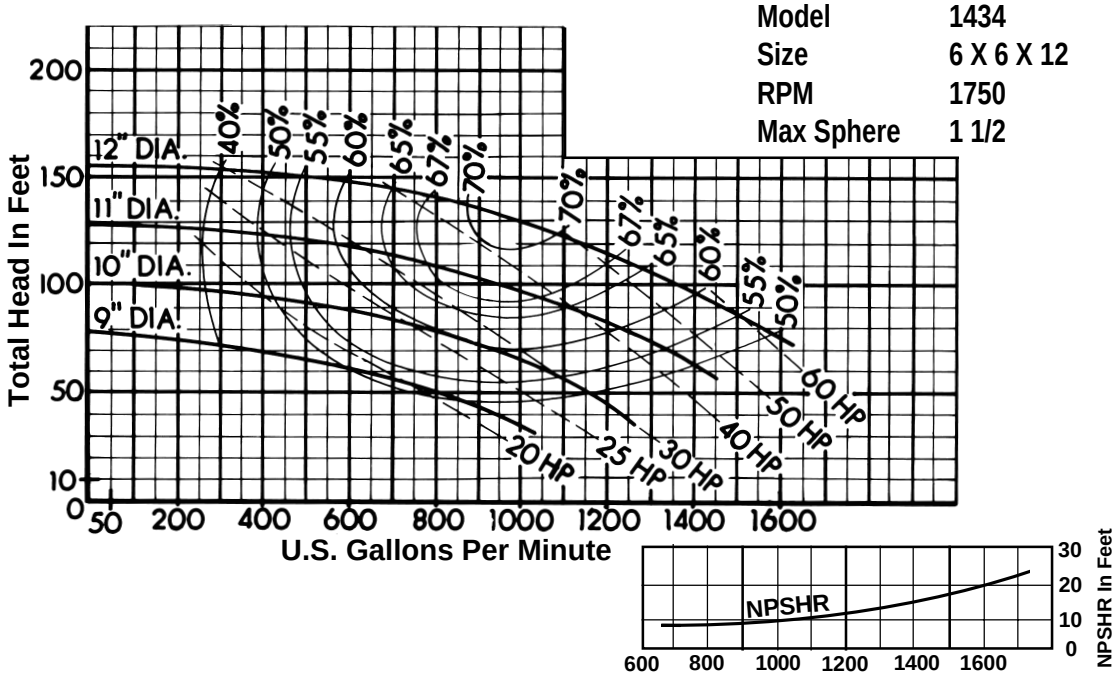
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

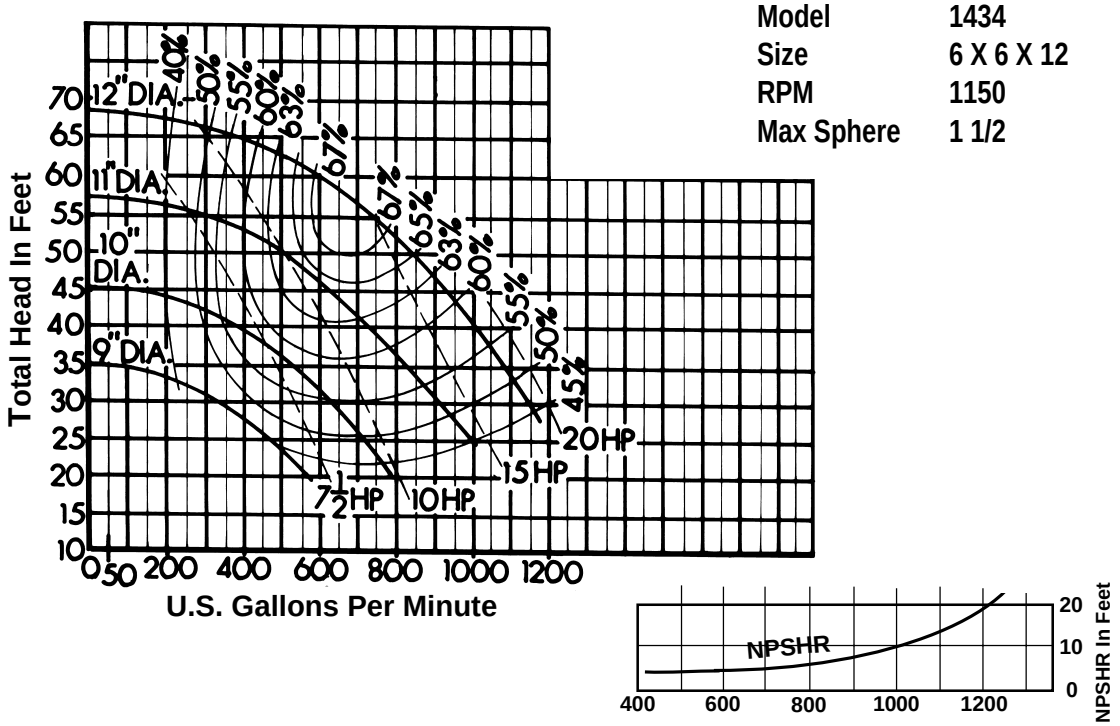
Curve 66124

Model	**1434**
Size	**6 X 6 X 12**
RPM	**1750**
Max Sphere	**1 1/2**



Curve 66126

Model	**1434**
Size	**6 X 6 X 12**
RPM	**1150**
Max Sphere	**1 1/2**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

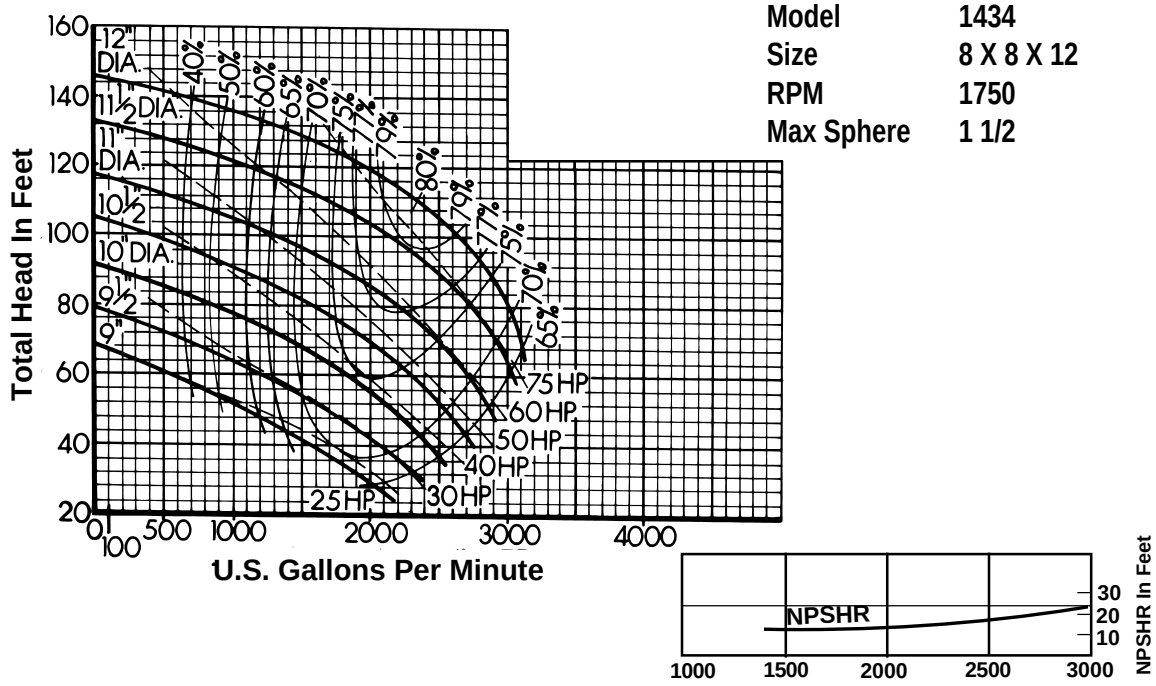
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

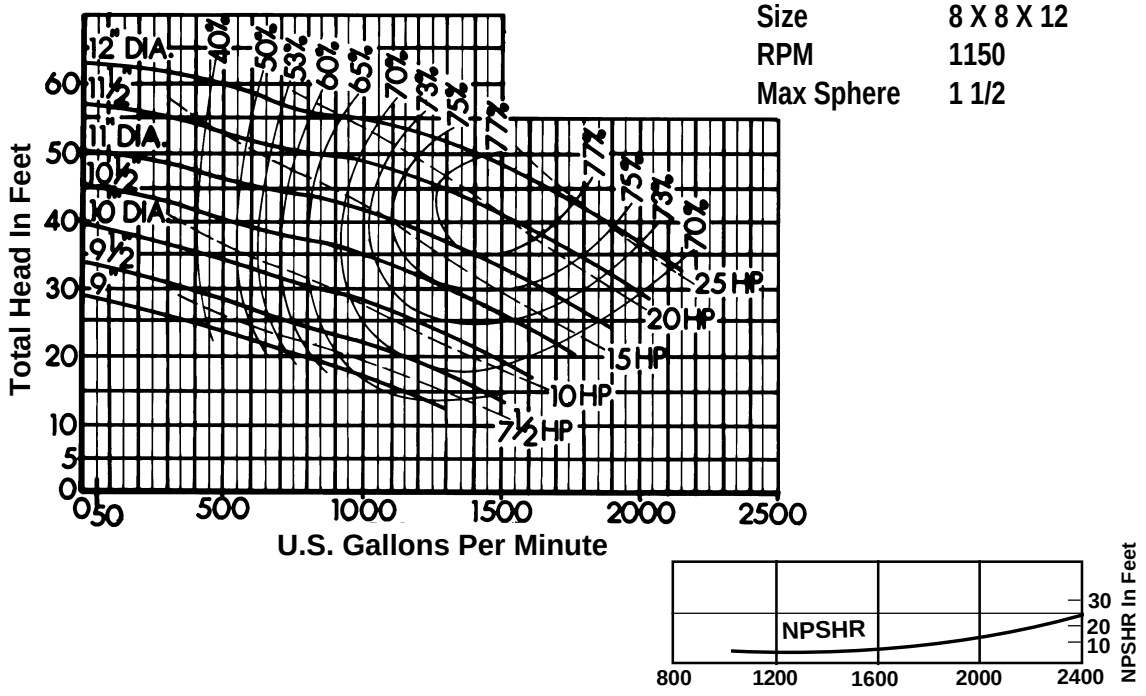
VERTIFLO PUMP COMPANY Performance Curves

Curve 88124



Model	**1434**
Size	**8 X 8 X 12**
RPM	**1750**
Max Sphere	**1 1/2**

Curve 88126



Model	**1434**
Size	**8 X 8 X 12**
RPM	**1150**
Max Sphere	**1 1/2**

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

ENGINEER _____

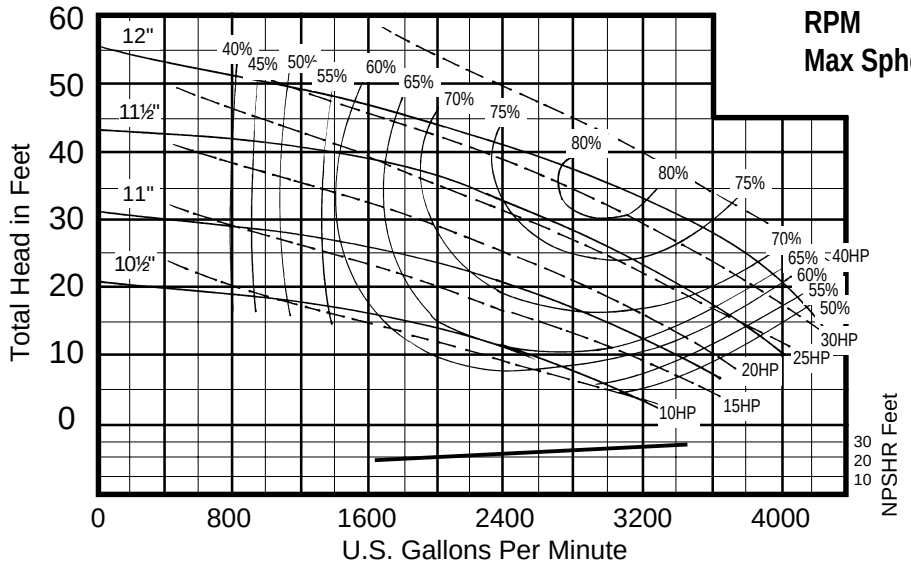
CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Performance Curves

Curve 101012

Model	**1434**
Size	**10 X 10 X 12**
RPM	**1150**
Max Sphere	**1 5/8**



Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

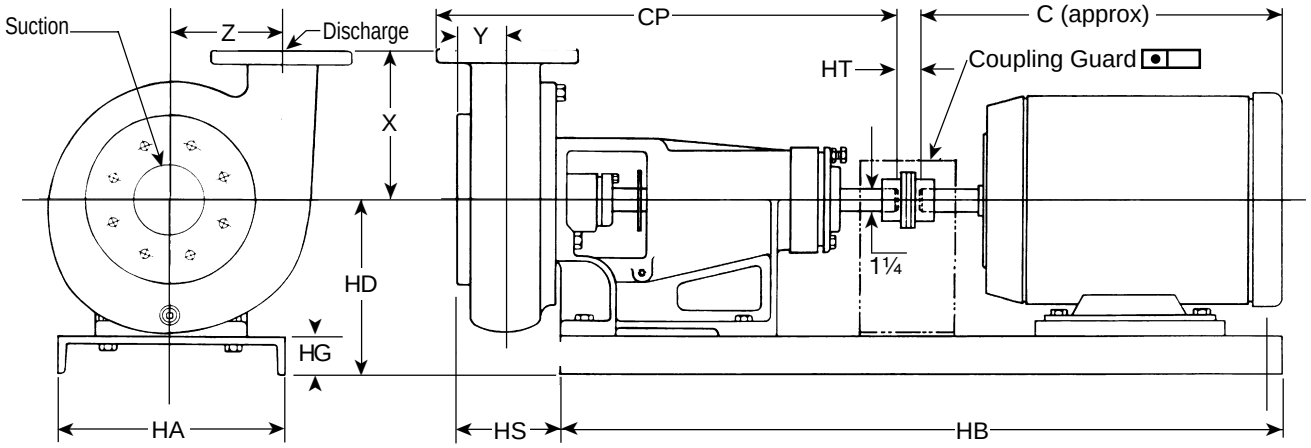
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Dimensions

1400 Series - Base-Mounted
Models 1420/1424



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

CUSTOMER_____CUSTOMER NO._____
PROJECT_____SERIAL NO._____
ENGINEER_____LOCATION_____
CONTRACTOR_____

PUMP DATA	Model	Size	Curve No.	GPM	Head	SP. GR.@Temp.
	_____	_____	_____	_____	_____	_____

MOTOR DATA	Mfgr.	HP	RPM	Volt-Phase-Cycle	Frame	ENC.	Furnished by	Mounted by
	_____	_____	_____	_____	_____	_____	_____	_____

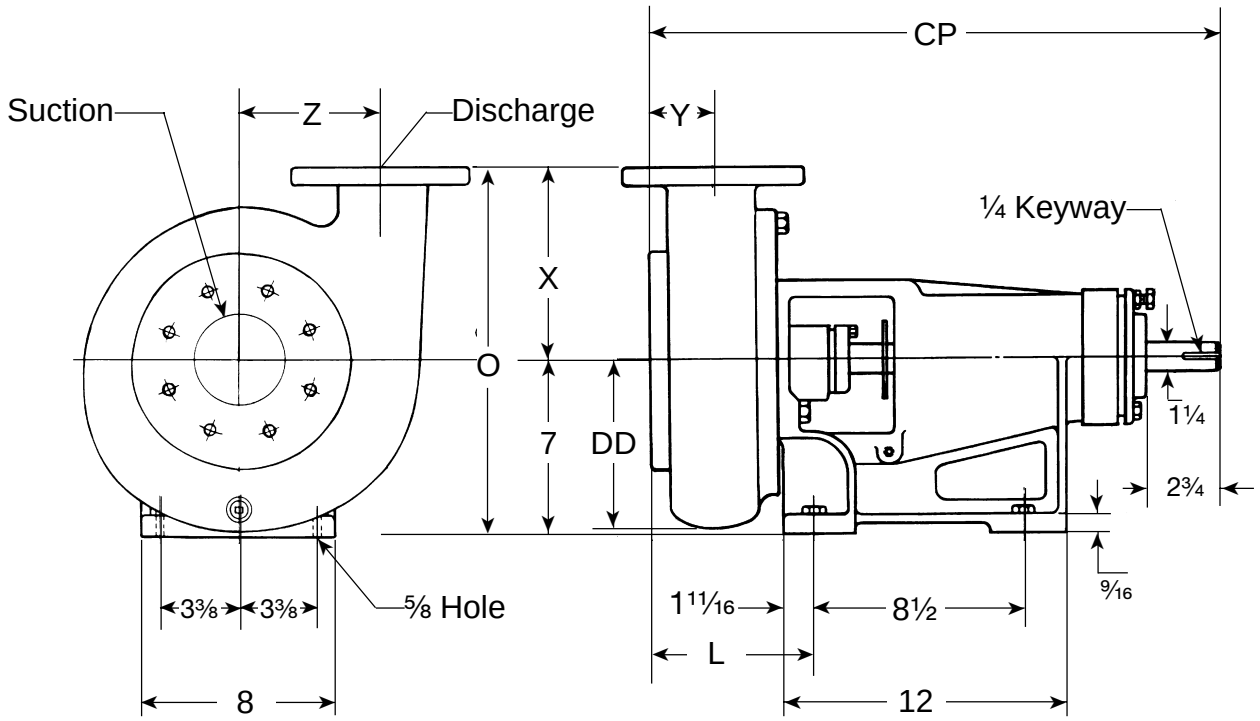
Shop Order_____Certified by_____Date_____

	SUCTION FLANGE						DISCHARGE FLANGE												
Liquid End	FLG. Size	DIA. FLG.	# of Holes	Tap	Hole DIA.	Bolt Circle DIA.	FLG. Size	DIA FLG.	# of Holes	Hole DIA.	Bolt Circle DIA.	X	Y	Z	CP	HS	DD	L	O
3x2½x7	3	7½	4	⅝-11		6	2½	7	4	¾	5½	6¼	2⅜	4¾	22¾	5¼	5½	6 15/16	13¼
1½x1x8	1½	5	4	½-13		3⅞	1	4¼	4	⅝	3⅛	6	1⅝	4½	21½	4	5¼	5 11/16	13
1½x1¼x8	1½	5	4	½-13		3⅞	1¼	4⅝	4	¾	4¾	5¾	1⅞	4¾	20 1/16	4¼	5¼	4¼	12¾
2x1½x8	2	6	4	⅝-11		4¾	1½	5	4	9/16	3⅞	5¾	2	4¾	22	4½	5⅜	6 3/16	12¾
3x2x8	2½	7	4	⅝-11		5½	2	6	4	¾	4¾	6¼	2⅛	4¾	22¼	4¾	5¾	6 7/16	13¼
4x3x8	4	9	8	⅝-11		7½	3	7½	4	¾	6	7	2¾	5¼	23⅛	5⅝	6	7 5/16	14
5x4x8	5	10	8	¾-10		8½	4	9	8	¾	7½	7	2⅞	6	23½	6	7⅛	7 11/16	14
2x1½x10	2	6	4	⅝-11		4¾	1½	5	4	⅝	3⅞	6½	2	5¾	21⅞	4⅜	6⅜	6 1/16	13½
3x2x10	3	7½	4	⅝-11		6	2	6	4	¾	4¾	7	2 3/16	5¾	22¼	4¾	6½	6 7/16	14
4x3x10	4	9	8	⅝-11		7½	3	7½	4	¾	6	8⅜	2⅜	6¼	22¾	5¼	7	6 15/16	15
5x4x10	5	10	8	¾-10		8½	4	9	8	¾	7½	9	2¾	6½	23⅜	5⅞	7½	7 9/16	16
6x5x10	6	11	8	¾-10		9½	5	10	8	⅞	8½	9	2 13/16	7⅛	23½	6	8⅜	7 11/16	16
6x5x10A	6	11	8	¾-10		9½	5	10	8	⅞	8½	9	2 13/16	7⅛	23½	6	8⅜	7 11/16	16
6x6x10	6	11	8	¾-10		9½	6	11	8	⅞	9½	9	2 15/16	8	23¾	6¼	10	7 15/16	16
6x6x10A	6	11	8	¾-10		9½	6	11	8	⅞	9½	9	2 15/16	8	23¾	6¼	10	7 15/16	16
2X1½x12	2	6	4		¾	4⅜	1½	5	4	⅝	3⅞	7½	3¾	6¾	23½	6	7⅜	7 11/16	14½
3x2x12	3	7½	4	⅝-11		6	2	6	4	¾	4¾	9½	2 5/16	5	22 1/16	5⅞	7¾	6¼	16½
4x3x12	4	9	8	⅝-11		7½	3	7½	4	¾	6	8½	2½	7⅜	21 11/16	5½	8 5/16	5⅞	15½
6x4x12	6	11	8	¾-10		9½	4	9	8	¾	7½	9	2¾	7¾	22 3/16	6	9	6⅜	16
6x6x12	6	11	8	¾-10		9½	6	11	8	⅞	9½	9	3¼	8⅜	22 15/16	6¾	9⅞	7⅛	16

Frame No.	143T	145T	182T	184T	213T	215T	254T	256T	284TS	284T	286TS	286T	324TS	324T	326T	326TS	364TS	364T	365TS	365T
HA	12	12	12	12	12	12	15	15	15	15	15	15	18	18	18	18	18	18	18	18
HB	36	36	36	36	36	36	44	44	44	44	44	44	48	48	48	48	48	48	48	48
C	13⅛	13⅛	14⅝	15⅝	17¾	19¼	22⅞	24⅝	24½	25⅞	26	27⅜	27¼	28¾	28¾	30¼	31	33⅛	32	34⅛
HD	10	10	10	10	10	10	10⅜	10⅜	10⅜	10⅜	10⅜	10⅜	12	12	12	12	13	13	13	13
HG	3	3	3	3	3	3	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	4	4	4	4	4	4	4	4
HT	¾	¾	¾	¾	¾	¾	1	1	1	1	1	1	1	1	1	1	1	1	1	1

VERTIFLO PUMP COMPANY Dimensions

1400 Series - Pump Only
Models 1420/1424



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

CUSTOMER_____CUSTOMER NO._____
PROJECT_____SERIAL NO._____
ENGINEER_____LOCATION_____
CONTRACTOR_____

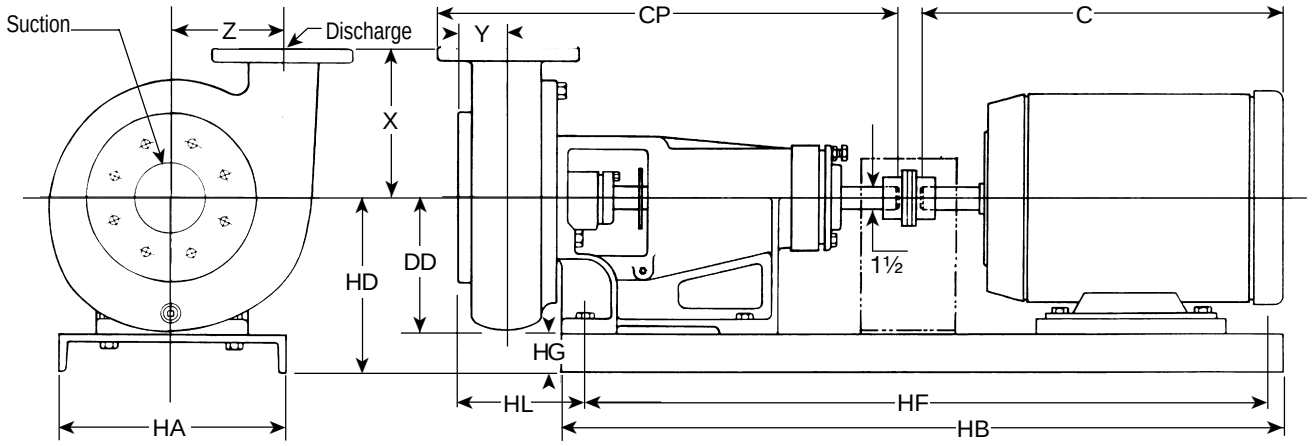
PUMP DATA	Model	Size	Curve No.	GPM	Head	SP. GR.@Temp.
	_____	_____	_____	_____	_____	_____

MOTOR DATA	Mfgr.	HP	RPM	Volt-Phase-Cycle	Frame	ENC.	Furnished by	Mounted by
	_____	_____	_____	_____	_____	_____	_____	_____

Shop Order_____Certified by_____Date_____

VERTIFLO PUMP COMPANY Dimensions

1400 Series - Base-Mounted Model 1434



	SUCTION				DISCHARGE									
Pump Size	Size	DIA. FLG.	Bolts	BC	Size	DIA. FLG.	Bolts	BC.	X	Y	Z	CP	DD	HS
6x4x12	6	11	8-¾	9½	4	9	8-⅝	7½	9	2¾	7¾	28⅛	9	7⅛
6x4x12A	6	11	8-¾	9½	4	9	8-⅝	7½	9	2¾	7¾	28⅛	9	7⅛
6x6x12	6	11	8-¾	9½	6	11	8-¾	9½	9	3¼	8⅜	28⅞	10¼	7⅞
8x8x12	8	13½	8-¾	11¾	8	13½	8-¾	11¾	11	4½	10½	30⅜	13⅜	9⅜
10x10x12	10	16	12-⅞	14¼	10	16	12-⅞	14¼	11	5½	10⅝	32⅜	13¾	11⅜

Frame Size	213T	215T	254T	256T	284TS	284T	286TS	286T	324TS	324T	326TS	326T	364TS	364T	365TS	365T	404TS	404T	405TS	405T
C	17¾	19¼	22⅞	24⅝	24½	25⅞	26	27⅜	27¼	28¾	28¾	30¼	31	33⅛	32	34⅛	34¼	37¼	36	38⅞
HA	15	15	15	15	15	15	15	15	18	18	18	18	18	18	18	18	25	25	25	25
HB	40	40	43	47	47	47	47	47	51	51	51	51	51	51	51	51	50	57	50	57
HD	12⅜	12⅜	12⅜	12⅜	12⅜	12⅜	12⅜	12⅜	13	13	13	13	13	13	13	13	15½	15½	15½	15½
HD 8x8x12	14⅜	14⅜	14⅜	14⅜	14⅜	14⅜	14⅜	14⅜	15	15	15	15	15	15	15	15	15½	15½	15½	15½
HD 10x10x12	14⅜	14⅜	14⅜	14⅜	14⅜	14⅜	14⅜	14⅜	15	15	15	15	15	15	15	15	15½	15½	15½	15½
HF	37½	37½	40½	44½	44½	44½	44½	44½	48½	48½	48½	48½	48½	48½	48½	48½	47	54	47	54
HG	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	4	4	4	4	4	4	4	4	4½	4½	4½	4½

Performance at Casing Discharge Flange

Curves Show Performance with Liquid Having Specific Gravity 1.0 Viscosity • 30 SSU

CUSTOMER _____ CUSTOMER NO. _____

PROJECT _____

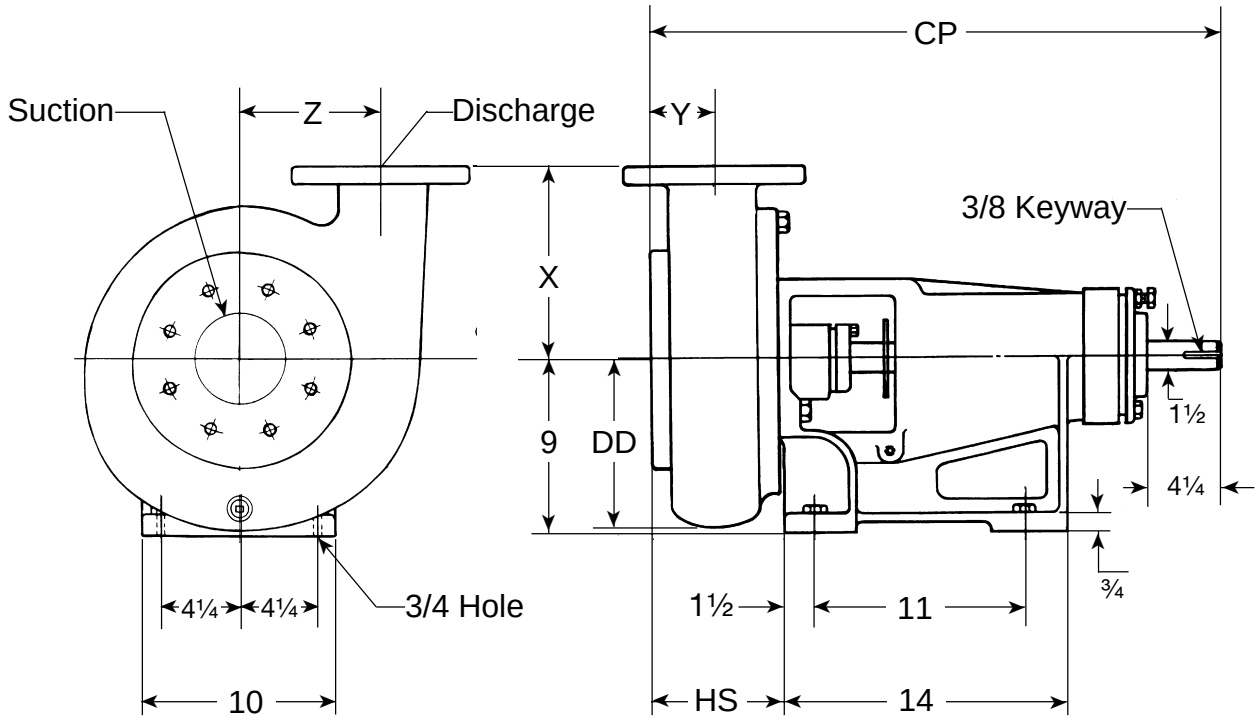
ENGINEER _____

CONTRACTOR _____

CONDITIONS:_____GPM_____TDH_____HP_____EFF%_____IMP. DIA _____

VERTIFLO PUMP COMPANY Dimensions

Model 1434 - Pump Only



1400

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

CUSTOMER_____ CUSTOMER NO._____
PROJECT_____ SERIAL NO._____
ENGINEER_____ LOCATION_____
CONTRACTOR_____

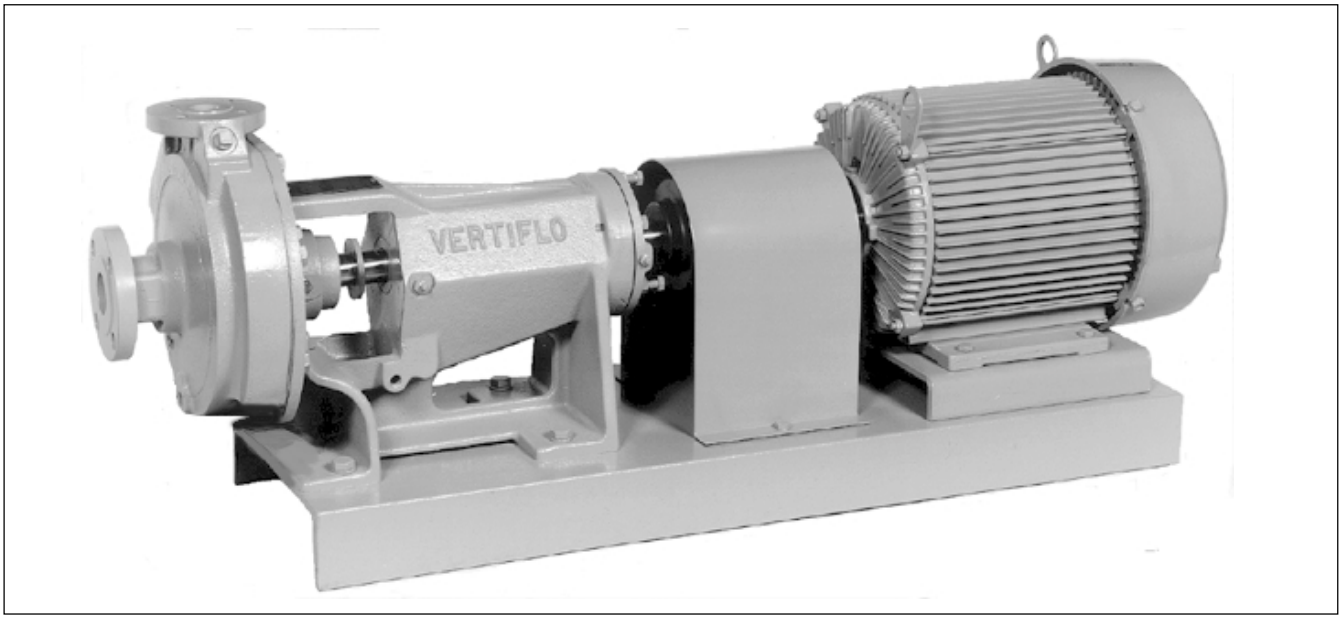
PUMP DATA	Model	Size	Curve No.	GPM	Head	SP. GR.@Temp.	Pump Length	Plate

MOTOR DATA	Mfgr.	HP	RPM	Volt-Phase-Cycle	Frame	ENC.	Furnished by	Mounted by

Shop Order_____ Certified by_____ Date_____

VERTIFLO Model 1400LF

Quality Design Features Assure Long, Trouble-Free Service



WIDE RANGE OF APPLICATIONS:

- Boiler Feed
- Condensate
- Chemical Process
- Washdown
- Spray Washers

Also available as vertical wet pit pump

CAPABILITIES

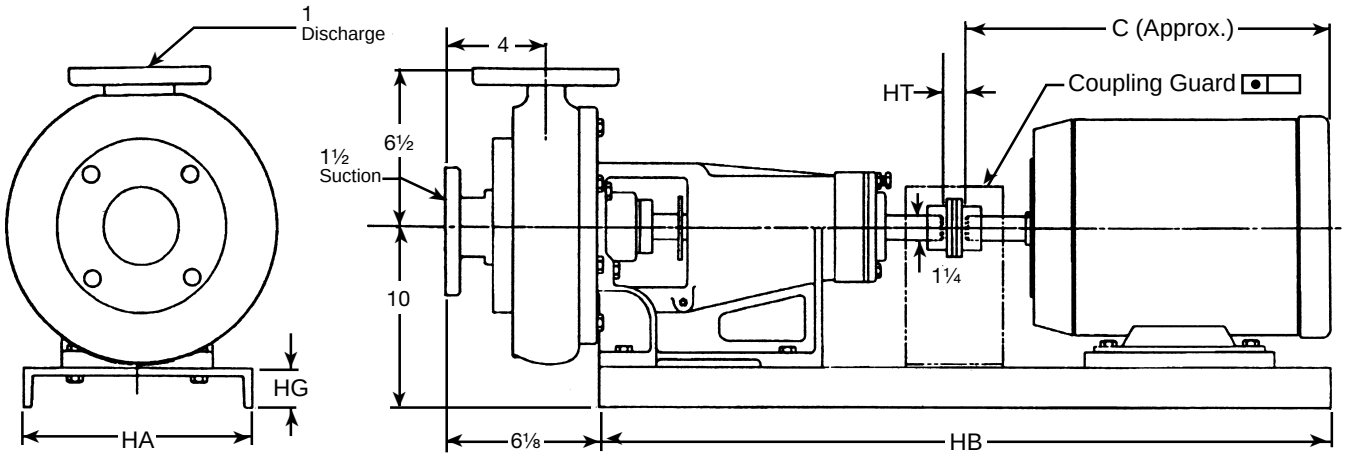
- Capacities to 50 GPM
- Heads To 345 Feet TDH
- Temperature to 250˚ F
- Back Pull-Out Construction
- Radial Vane Impeller
- External Impeller Adjustment
- Packing or Mechanical Seal

CONSTRUCTION:

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

Series 1400 horizontal base-mounted end suction pumps are designed for use with any T or U frame motor, or with virtually any type of drive. VERTIFLO's base-mounted 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.



1400LF Dimensions

Frame No.	143T	145T	182T	184T	213T	215T	254T	256T	284TS	284T
HA	12	12	12	12	12	12	15	15	15	15
HB	36	36	36	36	36	36	44	44	44	44
C	13⅛	13⅛	14⅝	15⅝	17¾	19¼	22⅞	24⅝	24½	25⅞
HG	3	3	3	3	3	3	3⅜	3⅜	3⅜	3⅜
HT	¾	¾	¾	¾	¾	¾	1	1	1	1

1400LF Performance Curve