

**CORNELL PUMP COMPANY**750 - 3500 GPM **Model 6NHTB** 100 - 325 Feet TDH**STANDARD SPECIFICATION**

Discharge - 6 inch discharge

Suction - 10 inch suction

Impeller - Enclosed, threaded, 2 vane: handles 3.38" solids

Volute - Right hand tangential discharge, eight positions

Mechanical Seal or Traditional Packing - Single type 2 tungsten silicon mechanical seal: Cycloseal® design, Run-dry available

Materials of Construction

- Cast iron casing, cast iron impeller
- Other materials available

MOUNTING OPTIONS

- **Frame Mount**
 - Cornell F18
 - Cornell F18DB
- **Engine Bracket**
 - Cornell EM18 (SAE 1, 2, 3, 4)
 - Cornell EM18DB (SAE 1, 2, 3, 4)
- **Oil Filled Bearing Frame**
 - Optional
- **Redi-Prime Self Priming System**
 - Optional

AVAILABILITY

- **Quick Ship**
 - Finished Product Regularly Stocked (48 Hours)
- **Preferred Pump**
 - Finished Components Regularly Stocked (10 business days)
- **Specialty Pump**
 - Cornell Pump Company will design and manufacture a variation of this pump specifically designed for your application

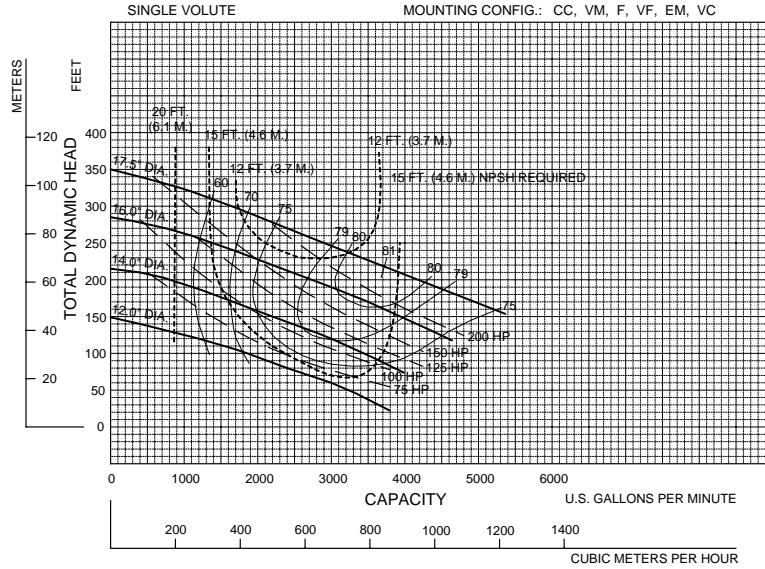
**FEATURES & BENEFITS**

- **Cornell's Tradition of Excellence:**
 - **Highest Quality Products**
 - **Experience**
 - Over 50 years in the centrifugal pump business
 - **Optimum Hydraulics**
 - In house engineering staff and test lab facilities
 - **Strong Local Dealer Support**
 - Our agricultural products are sold only through authorized dealerships
 - Dealerships provide full service to customers from sales to replacement parts
 - Dealers maintain and improve their knowledge at educational activities like Cornell's "Pump School"
- **Exceptional Design:**
 - **Efficiency**
 - Effectively converts energy into fluid flow and pressure
 - **Long Product Life**
 - Thick walled castings
 - Heavy duty shafts
 - 20,000 hour bearings
 - Replaceable wear rings and shaft sleeves

PERFORMANCE CURVES

6 NHTB
Various RPM

Speed	Impeller Dia.	Style	Solids Dia.	N _S	Suction	Discharge	No. vanes
1770	VARIOUS	ENCLOSED	3.38"	1880	10"	6"	2



Performance shown for water only. Other fluids may require performance adjustments.
 Other mounting styles or fluids may require performance adjustments.

699

Note:
Curves also available in 1800 and 1200 RPM

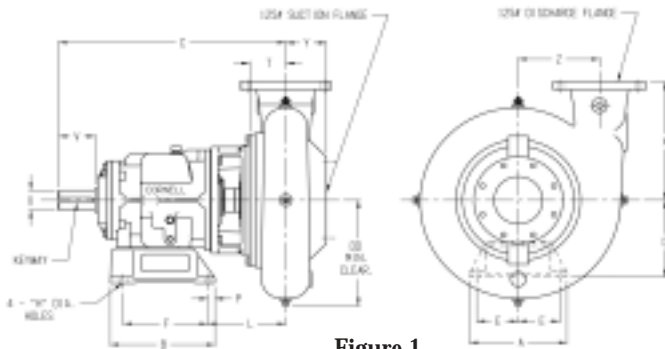


Figure 1

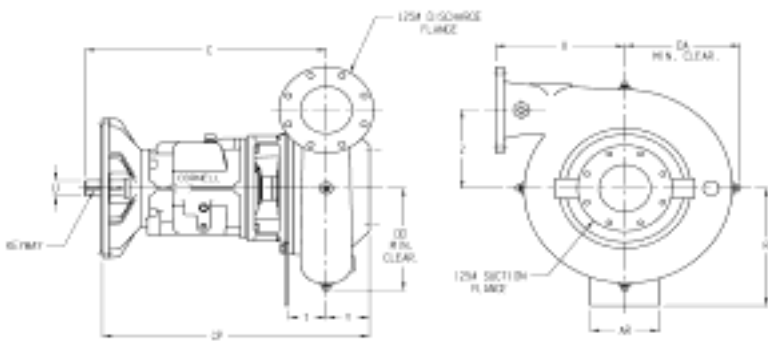
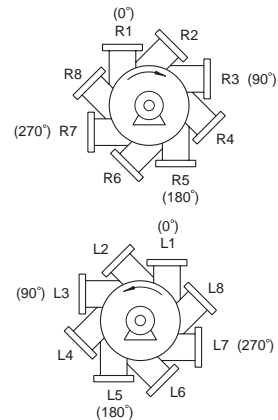


Figure 2

PUMP DIMENSIONS

MOUNT	Fig.	A	AR	B	C	CP	D	DA	DD	E	F	H	L	LP	P	R	T	U	V	X	Y	Z	KEYWAY
F18	1	12	-	12.88	28.44	-	10.5	-	13.12	5.12	10.38	0.81	10.09	-	0.88	-	4.41	2.5	4.5	15.5	5	10.25	.62 X .31
EM18	2	-	6	-	28.44	31.44	-	13.12	13.12	-	-	-	-	-	-	19.38	4.41	2.5	-	15.5	5	10.25	.62 X .31

Cornell Pump Company

P.O. Box 6334 • Portland, Oregon 97228-6334

Web: www.cornellpump.com • Phone (503) 653-0330 • Fax (503) 653-0338

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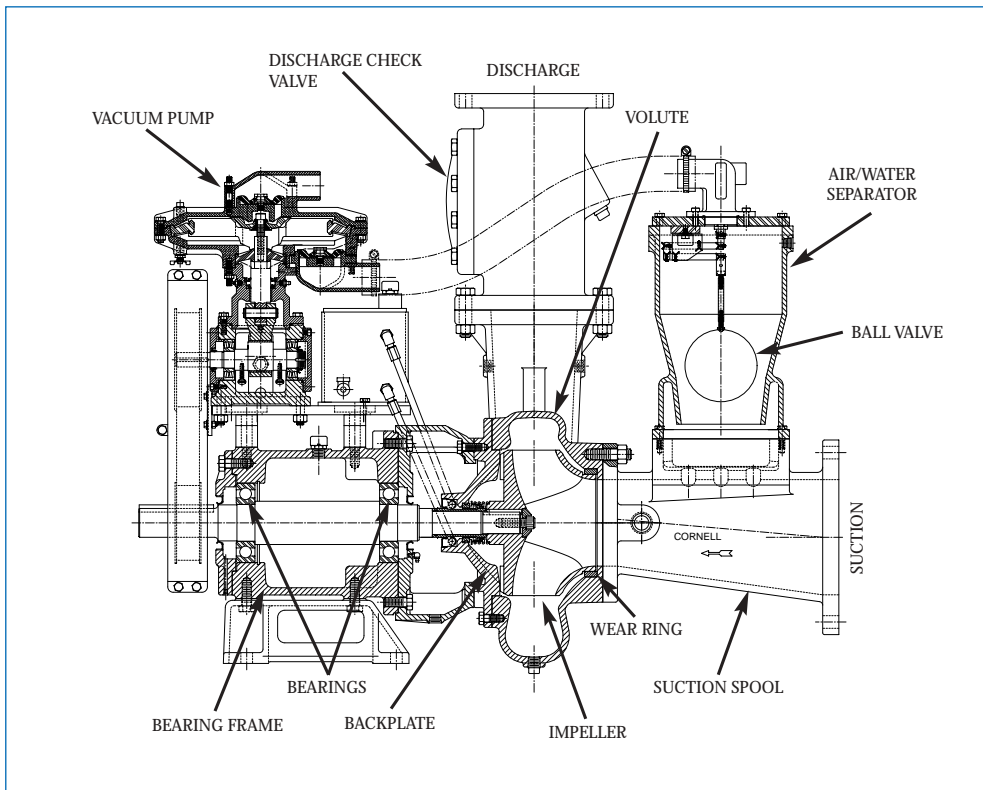


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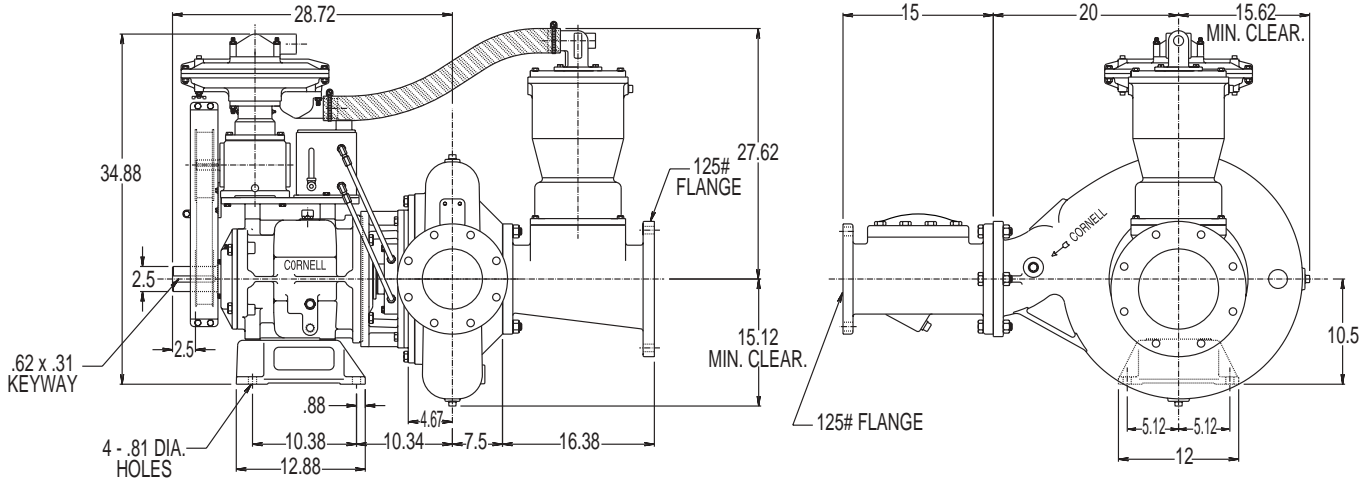
Model 6NHTB-F Redi-Prime®

PUMP SPECIFICATIONS

- **Size:** 6NHTB - 6" discharge x 10" suction with 125# cast iron flanges.
- **Casing:** Cast Iron.
- **Impeller:** Enclosed - 2 vane. Handles 3.38" diameter solids.
- **Wear Rings:** Replaceable. (Double wear rings available).
- **Seal:** Cornell's patented Cycloseal® design with Run-Dry oil lubrication system. John Crane T-2 single mechanical seal with Viton® elastomers, stainless steel hardware and tungsten- vs. silicon-carbide seal faces for abrasion resistance.
- **Check Valve:** SwingFlex® Val-Matic®.
- **Shaft Sleeve:** Heat treated 416 stainless steel.
- **Bearings:** Heavy duty, grease lubricated, deep groove ball bearings, with a minimum of 50,000 hours bearing life.
- **Hardware:** Stainless steel float linkage. A positive seating vacuum priming valve prevents water carry-over to the vacuum, pump or atmosphere.
- **Vacuum Pump** - 50 SCFM Maximum.



PUMP DIMENSIONS



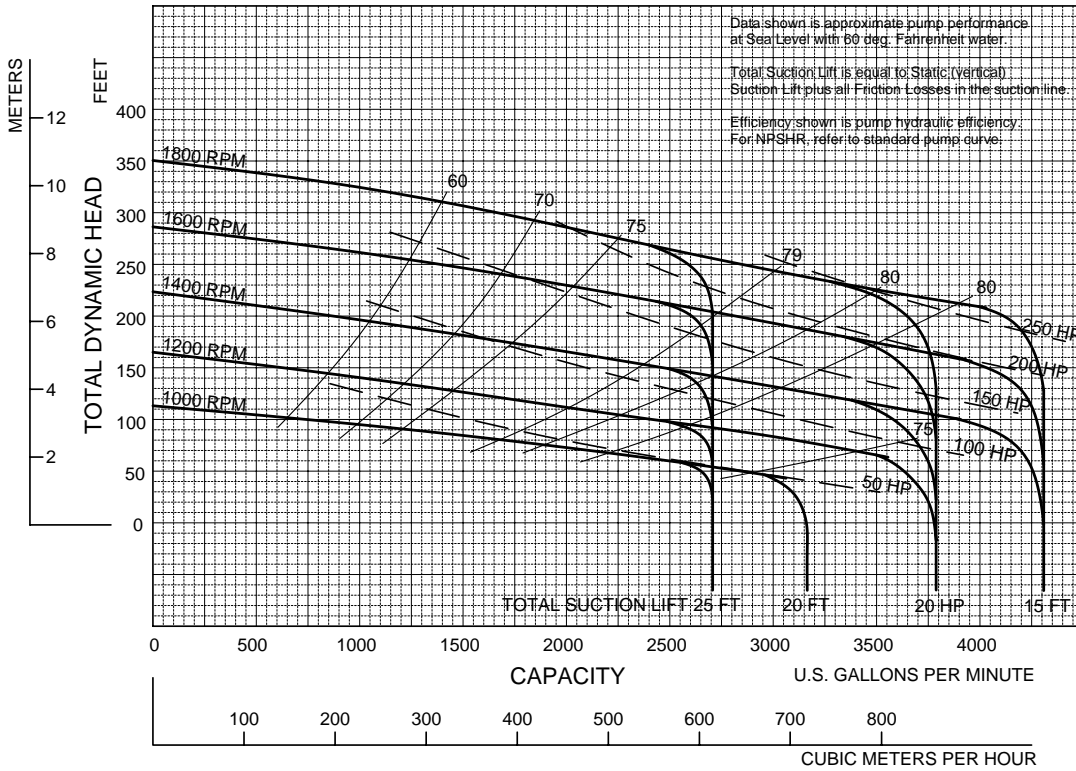
- NOTES:**
1. Frame mounting foot thickness is .75".
 2. Flange connection dimension can vary $\pm .12$ inch.
 3. Do not use for construction unless certified.

PERFORMANCE CURVES

Feet x .305 = Meters
 Inches x 25.4 = Millimeters
 GPM x .227 = Cubic Meters/Hour
 GPM x 3.785 = Liters/Minute
 HP x .746 = KW

Speed	Impeller Dia.	Style	Solids Dia.	N _S	Suction	Discharge	No. vanes
VARIOUS	17.50"	ENCLOSED	3.38"	1880	10"	6"	2

SINGLE VOLUTE MOUNTING CONFIG.: F, EM



Performances shown are for cool water.
 Add 1.5 HP for belt driven diaphragm frame mounted configuration with Cyclo Seal. Other liquids, seal arrangements or mounting configurations may require performance adjustments.

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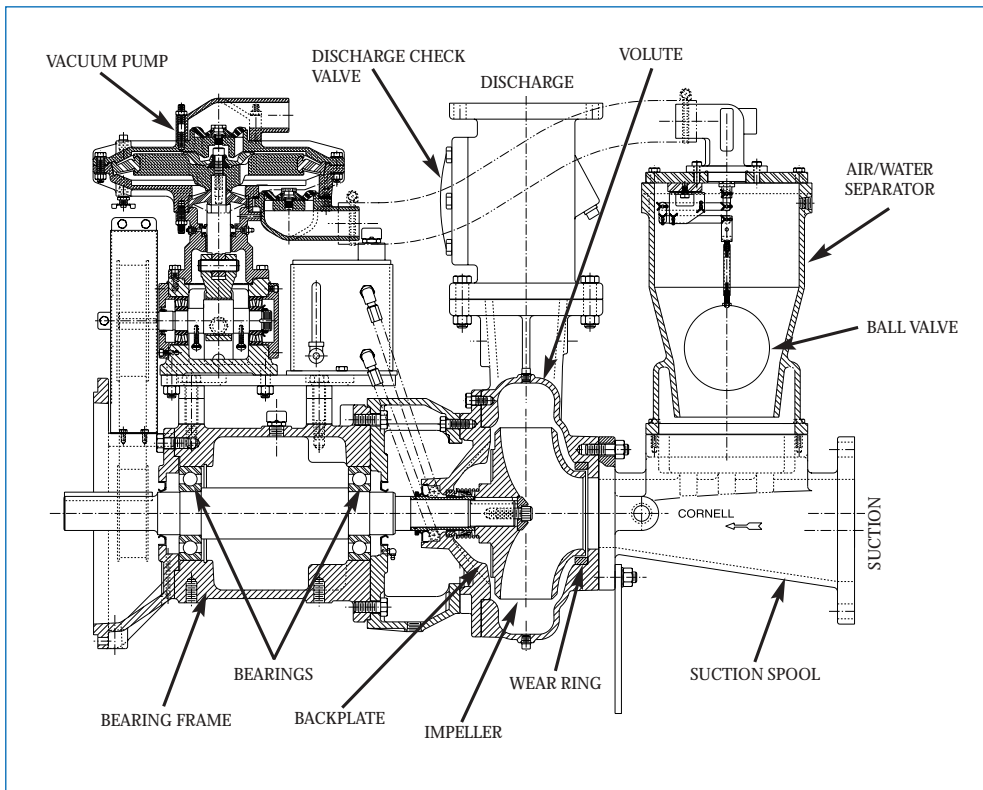


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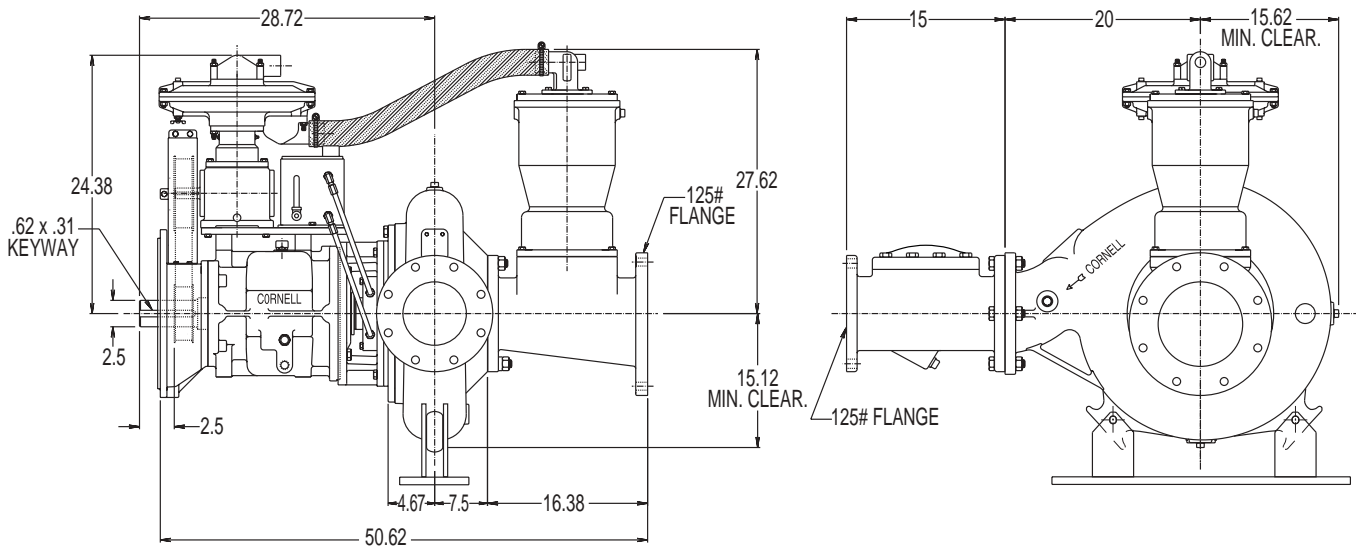
Model 6NHTB-EM Redi-Prime®

PUMP SPECIFICATIONS

- **Size:** 6NHTB - 6" discharge x 10" suction with 125# cast iron flanges.
- **Casing:** Cast Iron.
- **Impeller:** Enclosed - 2 vane. Handles 3.38" diameter solids.
- **Wear Rings:** Replaceable. (Double wear rings available).
- **Seal:** Cornell's patented Cycloseal® design with Run-Dry oil lubrication system. John Crane T-2 single mechanical seal with Viton® elastomers, stainless steel hardware and tungsten- vs. silicon-carbide seal faces for abrasion resistance.
- **Check Valve:** SwingFlex® Val-Matic®.
- **Shaft Sleeve:** Heat treated 416 stainless steel.
- **Bearings:** Heavy duty, grease lubricated, deep groove ball bearings, with a minimum of 50,000 hours bearing life.
- **Hardware:** Stainless steel float linkage. A positive seating vacuum priming valve prevents water carry-over to the vacuum, pump or atmosphere.
- **Vacuum Pump** - 50 SCFM Maximum.



PUMP DIMENSIONS



- NOTES:**
1. Flange connection dimension can vary $\pm .12$ inch.
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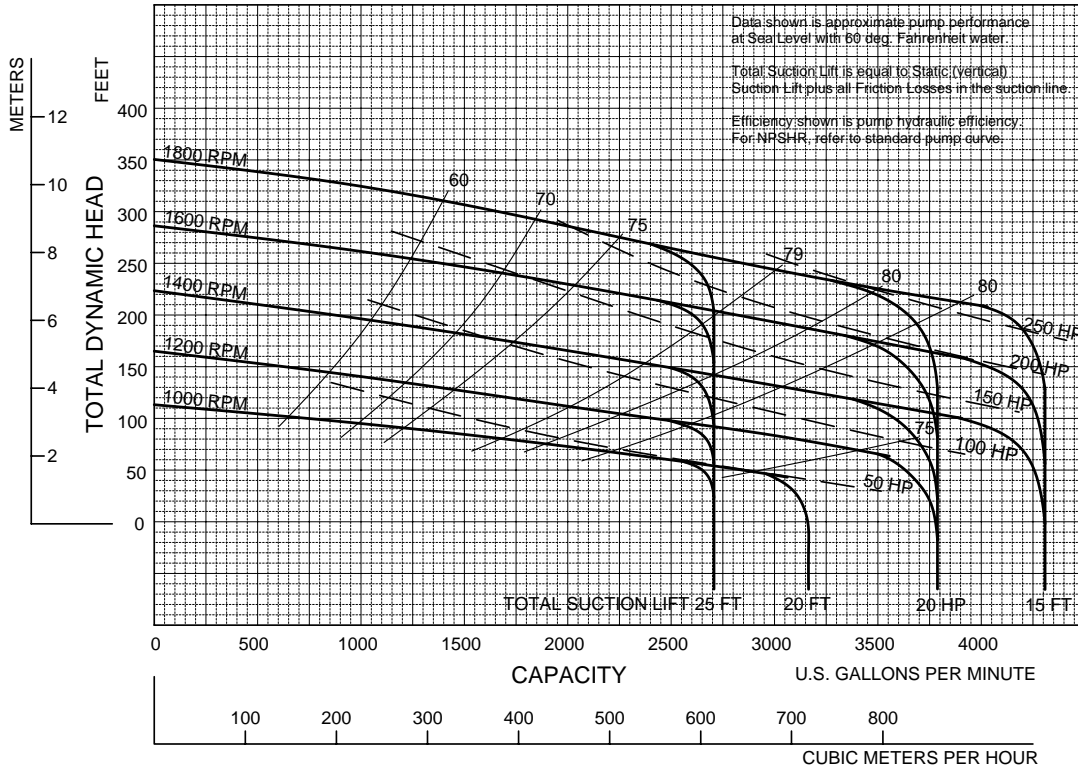
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Speed	Impeller Dia.	Style	Solids Dia.	N _S	Suction	Discharge	No. vanes
VARIOUS	17.50"	ENCLOSED	3.38"	1880	10"	6"	2

SINGLE VOLUTE

MOUNTING CONFIG.: F, EM



Data shown is approximate pump performance at Sea Level with 60 deg. Fahrenheit water.
 Total Suction Lift is equal to Static (vertical) Suction Lift plus all Friction Losses in the suction line.
 Efficiency shown is pump hydraulic efficiency. For NPSHR, refer to standard pump curve.

Performances shown are for cool water, frame mounted configuration with Cyclo Seal. Other liquids, seal arrangements or mounting configurations may require performance adjustments.
 Add 1.5 HP for belt driven diaphragm vacuum pump. Performance curve does not include discharge check valve losses.

4/4/02

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