

**GEMSTONE PUMP COMPANY**250 - 2000 GPM **Model 4514T** 20 - 375 Feet TDH**STANDARD SPECIFICATION**

**Discharge** - 4 inch discharge

**Suction** - 5 inch suction

**Impeller** - Enclosed, 2 vane: handles 3" solids

**Volute** - Right and left hand tangential or centerline discharge, eight positions

**Mechanical Seal** - Single type 2 tungsten silicon mechanical seal: Cycloseal® design, Run-Dry™ available

**Materials of Construction**

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

**MOUNTING OPTIONS**

• **Frame Mount**

- Gemstone F16
- Gemstone F18
- Gemstone F18DB

• **Vertical Frame Mount**

- Gemstone VF16 Gemstone
- VF18

• **Vertical Coupled**

- Gemstone VC16
- Gemstone VC18

• **Engine Bracket**

- Gemstone EM18 (SAE 1, 2, 3)
- Gemstone EM18DB (SAE 1, 2, 3)

• **Oil Filled Bearing Frame**

- Available

• **Redi-Prime® Self Priming System**

- Available

**AVAILABILITY**

• **Specialty Pump**

- Gemstone 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 Gemstone's "Pump School"

• **Exceptional Design:**

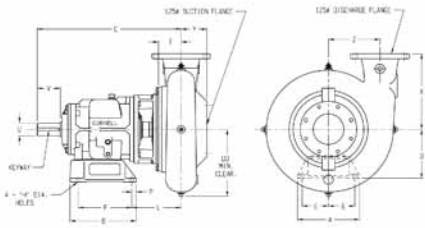
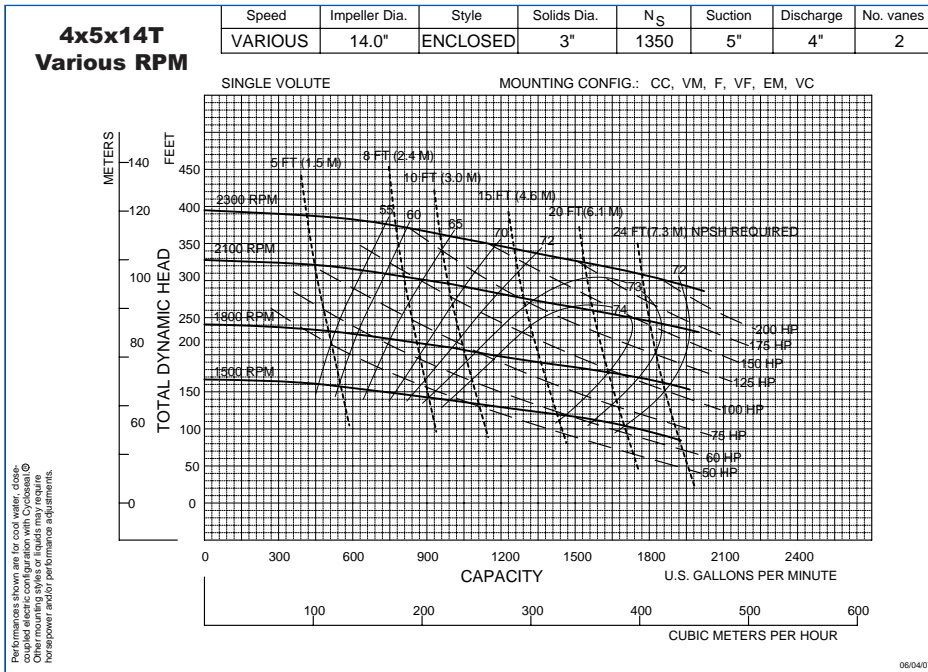
• **Efficiency**

- Effectively converts energy into fluid flow and pressure

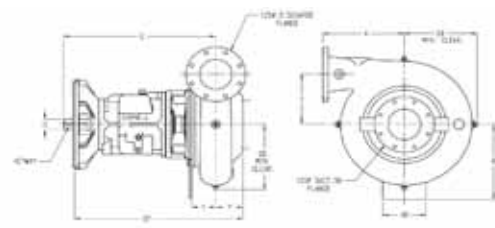
• **Long Product Life**

- Thick walled castings
- Heavy duty shafts
- 20,000 hour bearings - minimum
- Replaceable wear rings and shaft sleeves

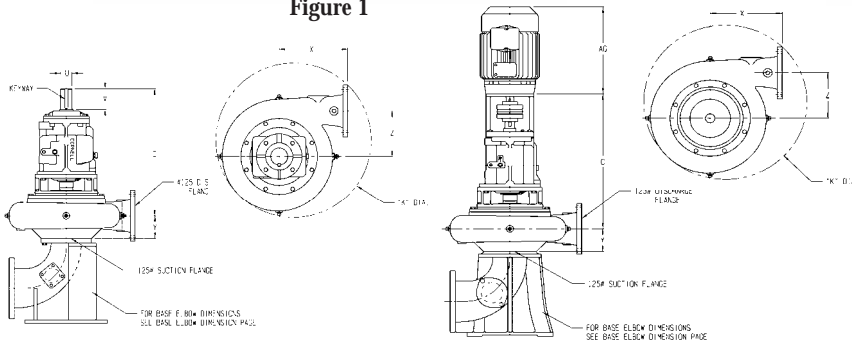
# PERFORMANCE CURVES



**Figure 1**

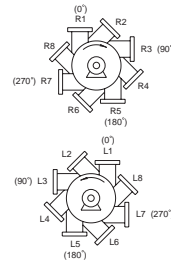


**Figure 4**

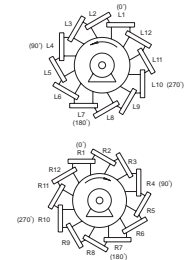


**Figure 2**

**Figure 3**



All configurations



F18, VF18, VC18 and Engine Mount only

## PUMP DIMENSIONS

MOUNT	Fig.	BD	A	AR	B	C	CP	D	DA	DD	E	F	H	K	L	LP	P	R	T	U	V	X	Y	Z	KEYWAY
F16	1	-	12	-	12.88	26.5	-	9.75	-	11.31	5.12	10.38	0.81	-	8.62	-	0.88	-	3.94	2	4.5	11	4.75	9.25	.50 X .25
F18	1	-	12	-	12.88	27.5	-	10.5	-	11.31	5.12	10.38	0.81	-	9.12	-	0.88	-	3.94	2.5	4.5	11	4.75	9.25	.62 X .31
VF16	2	-	-	-	-	27.5	-	-	-	-	-	-	-	29	-	-	-	-	2.5	4.5	11	4.75	9.25	.50 X .25	
VF18	2	-	-	-	-	27.5	-	-	-	-	-	-	-	29	-	-	-	-	2.5	4.5	11	4.75	9.25	.62 X .31	
VC16	3	10	-	-	-	29.5	-	-	-	-	-	-	-	29	-	-	-	-	-	-	-	11	4.75	9.25	.50 X .25
VC16	3	16.5	-	-	-	31.25	-	-	-	-	-	-	-	29	-	-	-	-	-	-	-	11	4.75	9.25	.50 X .25
VC18	3	16.5	-	-	-	32.25	-	-	-	-	-	-	-	29	-	-	-	-	-	-	-	11	4.75	9.25	.62 X .31
EM18	4	-	-	8	-	27.5	30.25	-	11.31	11.25	-	-	-	-	-	-	-	14.42	3.94	2.5	-	11	4.75	9.25	.62 X .31

## VC MOTOR DIMENSIONS

NEMA FRAME	182	184	213	215	254	256	284	286	324	326	364	365	404	405	444	445	505
AG	13.16	14.16	18.25	19.75	22.31	24.06	24.5	26	27.44	28.94	26	26	28.81	28.81	33	33	35.25