

**GEMSTONE PUMP COMPANY**

200 - 1000 GPM

**4 WH**

15 - 200 Feet TDH

**STANDARD SPECIFICATION****Discharge** - 4 inch flanged discharge**Suction** - 5 inch flanged suction**Balance Line** - Stainless steel tubing**Impeller** - Enclosed bronze**Volute** - Right hand tangential discharge, four positions**Mechanical Seal or Traditional Packing** - Single type 1 carbon ceramic mechanical seal: Cycloseal® design, run-dry available**Footprint** - Matches Gemstone's historical 4WB**Materials of Construction**

- Cast iron bronze fitted
- Other materials available

**MOUNTING OPTIONS****• Close Coupled Electric**

Standard JP motor shaft

- Standard Efficiency – Gemstone's Energy Efficient Design

**• Frame Mount**

Gemstone's F5

Gemstone's F16

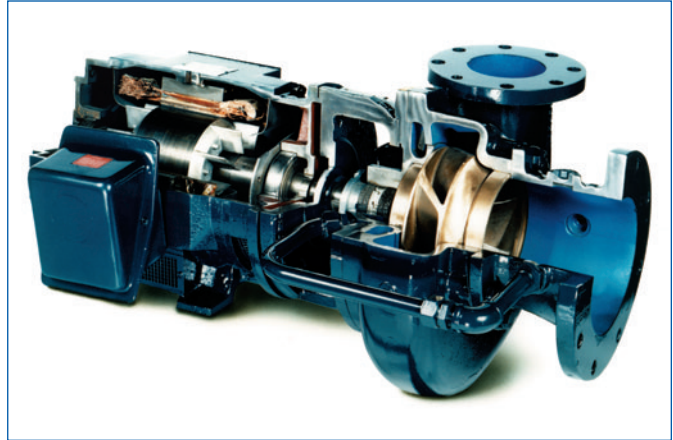
Gemstone's F85

**• Engine Bracket**

Gemstone's EM5 (SAE 5)

Gemstone's EM16 (SAE 3 and 4)

Gemstone's EM85 (SAE 3 and 4)

**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"

**• Economically Priced:****• Component Design**

- Efficient manufacturing through increased volume of common parts

**• Versatility**

- The ability to mix and match components reducing local inventory of both parts and whole goods with a wide variety of pumps and mounting configurations for the customer

**• Exceptional Design:****• Efficiency**

- Effectively converts energy into fluid flow and pressure

**• Long Product Life**

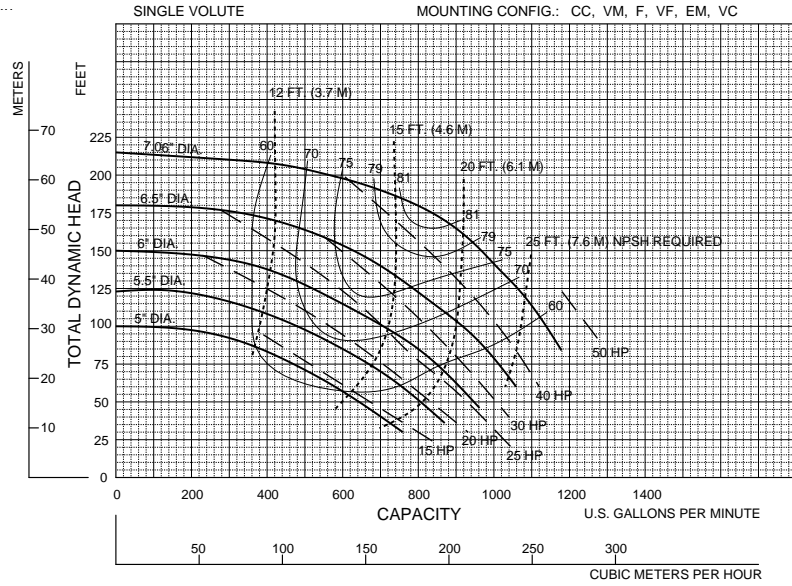
- Thick walled castings - Heavy duty shafts
- 20,000 hour bearings - Replaceable wear rings and shaft sleeves - Reduced thrust load through design and balance lines where appropriate

# PERFORMANCE CURVES

**4 WH**  
**3600 RPM**

Speed	Impeller Dia.	Style	Solids Dia.	N <sub>S</sub>	Suction	Discharge	No. vanes
3560	VARIOUS	ENCLOSED	1.19"	2107	5"	4"	5

Performances shown are for cool water, above.  
Other mounting styles or liquids may require horsepower and/or performance adjustments.



**Note:**  
Curves also available in 1800 and various RPM

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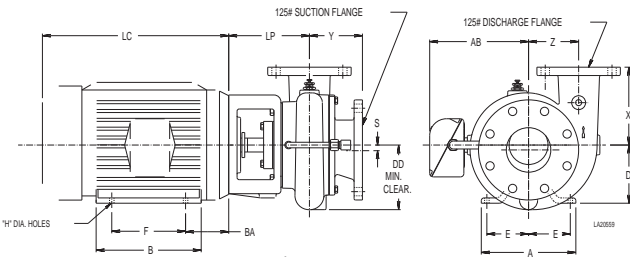


Figure 1

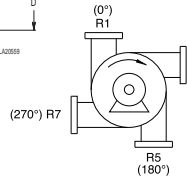


Figure 2

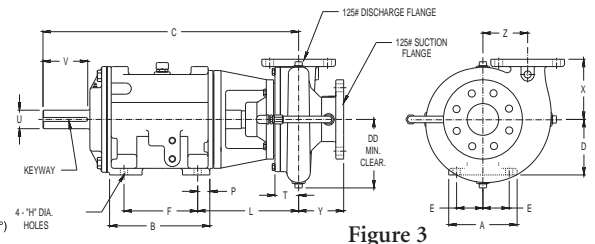


Figure 3

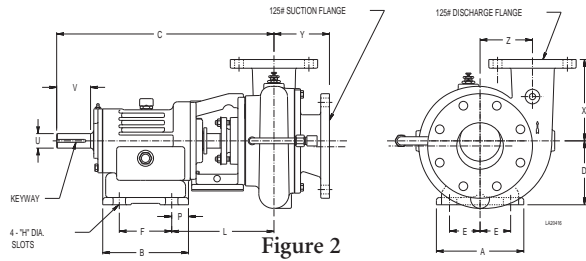


Figure 4

## PUMP DIMENSIONS

MOUNT	AK	Fig.	A	B	C	CP	D	DA	DD	E	F	H	L	P	T	U	V	X	Y	Z	LP	KEYWAY
CC	8.5	1	-	-	-	-	-	-	7.41	-	-	-	-	-	-	-	-	7.5	5.03	4.75	8	-
	12.5	1	-	-	-	-	-	-	7.41	-	-	-	-	-	-	-	-	7.5	5.03	4.75	8	-
F5	-	2	7.5	7.36	19.5	-	5.5	-	7.5	2.62	4.5	0.56	9.59	1.44	-	1.25	3	7.5	5.03	4.75	-	.25 X .12
F16	-	2	12	12.88	26	-	9.75	-	7.5	5.12	10.38	0.69	8.16	0.88	-	2	4.5	7.5	5.03	4.75	-	.50 X .25
F85	-	3	6.5	9.52	24.45	-	5.25	-	7.5	2.5	7	0.69	9.72	1.15	2.38	1.75	4.25	7.5	5.03	4.75	-	.38 X 19
EM5	-	4	7.5	7.36	19.5	24.14	5.5	7.5	7	2.62	4.5	0.56	9.59	1.44	3.5	1.25	-	7.5	5.03	4.75	-	.25 X .12
EM16	-	4	-	-	26	29.03	-	7.5	7	-	-	-	-	-	-	2	-	6	4.76	4.5	-	.50 X .25
EM85	-	4	-	-	24.45	27.88	5.25	-	7.50	-	-	-	-	-	2.38	1.75	-	7.50	5.03	4.75	-	.38 X 19

## MOTOR DIMENSIONS

MOTOR FRAME	AK DIM.	A	B	D	E	F	H	AB	BA	LC
143-5	4.5	6.5	5.94	3.5	2.75	5	0.34	5.62	2.88	10
182-3	4.5	8.62	6.5	4.5	3.75	5.5	0.41	6.75	3.5	12.25
	8.5	8.62	6.5	4.5	3.75	5.5	0.41	6.75	3.5	12.25
213-5	8.5	9.5	8	5.25	4.25	7	0.41	7.94	4.5	13.69
254-6	8.5	11.25	11.25	6.25	5	10	0.53	9.5	5	17.94
284-6	12.5	12.25	12.25	7	5.5	11	0.53	11.37	5	21.31
324-6	12.5	14.25	13.75	8	6.25	12	0.66	12.22	5.5	22.19
364-5	12.5	15.75	14	9	7	12.25	0.66	13.2	6.12	24.31

Gemstone Pump Company

ISO9001:2000 CERTIFIED