



GEMSTONE PUMP COMPANY

100 - 400 GPM

2.5 WH

75 - 200 Feet TDH

STANDARD SPECIFICATION

Discharge - 2.5 inch flanged discharge

Suction - 3 inch flanged suction

Balance Line - Stainless steel flexible line

Impeller - Enclosed cast iron

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 Cornell's historical 2.5WB

Materials of Construction

- Cast iron bronze fitted
- Other materials available

PURCHASE OPTIONS

- **Complete Pump** Fully assembled at the factory Ready to go to the field
- **Pump End Kit** Finished components
 - PrePainted Easy assembly
 - Common tools – Simple instructionsObtain drives locally or through Gemstone

MOUNTING OPTIONS

- **Close Coupled Electric** Standard JP motor shaft
 - Standard Efficiency – Gemstone's Energy Efficient Design
- **Frame Mount**
 - Gemstone F5
 - Gemstone F85
- **Engine Bracket** Gemstone EM5 (SAE 5) Gemstone EM309 (SAE 5) Gemstone EM85 (SAE 3 and 4)



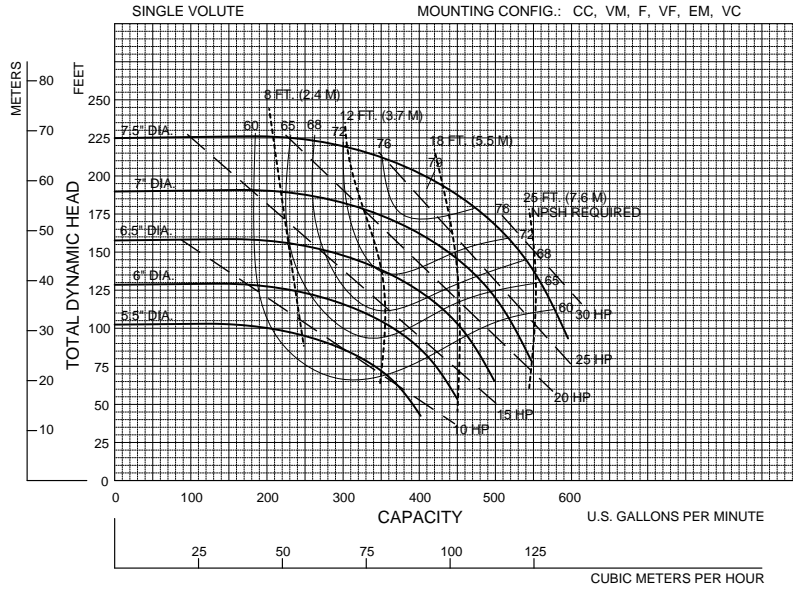
FEATURES & BENEFITS

- **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

2.5 WH
3600 RPM

Speed	Impeller Dia.	Style	Solids Dia.	N _S	Suction	Discharge	No. vanes
3525	VARIOUS	ENCLOSED	.50"	1357	3"	2.5"	5



Performance shown for 30% water, closed-coupled electric configuration with padding. Other mounting styles or liquids may require horsepower and/or performance adjustments.

Note:
Curves also available in 1800 and various RPM

04/27/04

2

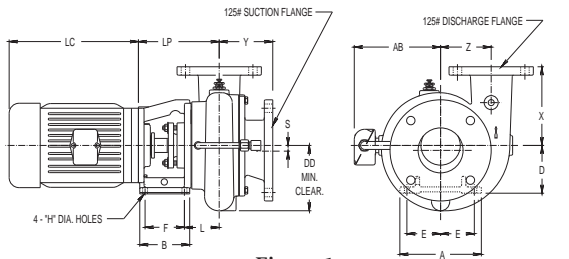


Figure 1

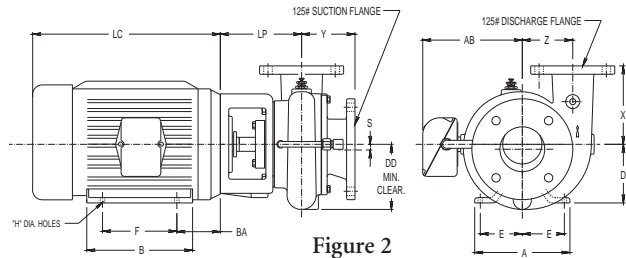


Figure 2

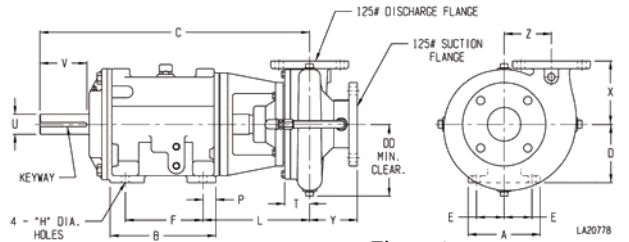


Figure 3

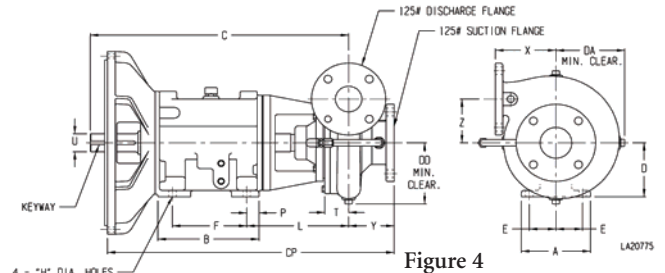


Figure 4

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	4.5	1	-	-	-	-	-	-	7	-	-	-	2.97	-	-	-	-	5.69	4.28	4.25	7.06	-
	8.5	2	-	-	-	-	-	-	7	-	-	-	-	-	-	-	-	5.69	4.28	4.25	7.88	-
F5	-	3	7.5	7.36	18.5	-	5.5	-	7	2.62	4.5	0.56	8.66	1.44	-	1.25	3	5.69	4.28	4.25	-	.25 x .12
F85	-	3	6.5	9.52	24.32	-	5.25	-	7	2.5	7	0.69	9.59	1.16	2.25	2	4.81	5.69	4.28	4.25	-	.50 X .25
EM5	-	4	7.5	7.36	18.5	22.39	5.5	5.62	7.00	2.62	4.5	0.56	8.66	1.44	-	1.25	-	5.69	4.28	4.25	-	.25 X .12
EM85	-	4	6.5	9.52	24.32	27	5.25	7	6.5	2.5	7	0.69	9.59	1.16	2.25	2	-	5.69	4.28	4.25	-	.50 X .25
EM309	-	4	-	-	18.12	21.03	-	-	7	-	-	-	-	-	2.25	1.25	-	5.69	4.28	4.25	-	.25 X .12

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