

**GEMSTONE PUMP COMPANY**

150 - 350 GPM

**2.5 YH**

200 - 425 Feet TDH

**STANDARD SPECIFICATION****Discharge** - 2.5 inch flanged discharge**Suction** - 4 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 Gemstone's historical 3WB**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 instructions

Obtain drives locally or through Gemstone's

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

Standard JP motor shaft

- Standard Efficiency – Gemstone's Energy Efficient Design

**• Frame Mount**

Gemstone's F85

**• Engine Bracket**

Gemstone's EM309 (SAE 5)

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

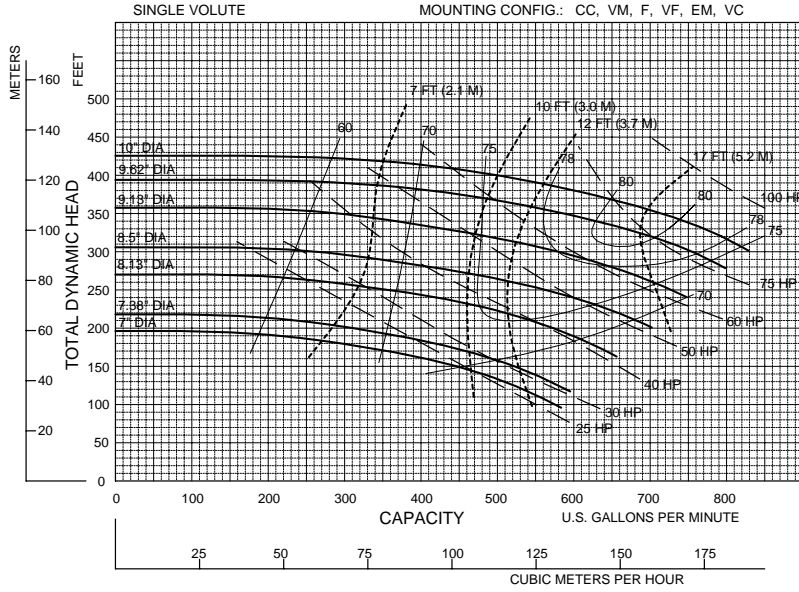
**• Long Product Life**

- 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

**2.5 YH  
3600 RPM**

Speed	Impeller Dia.	Style	Solids Dia.	N <sub>S</sub>	Suction	Discharge	No. vanes
3525	VARIOUS	ENCLOSED	.50"	1130	4"	2.5"	6



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

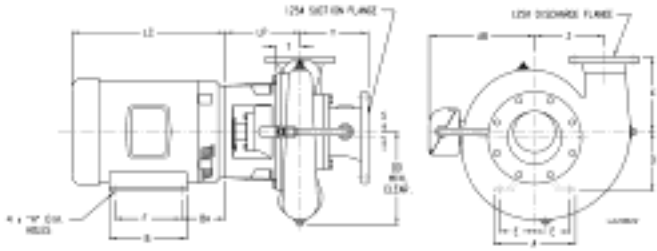


Figure 1

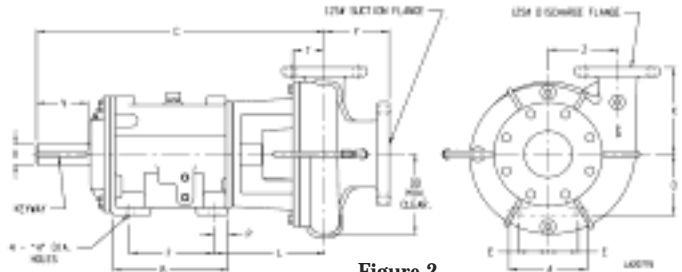


Figure 2

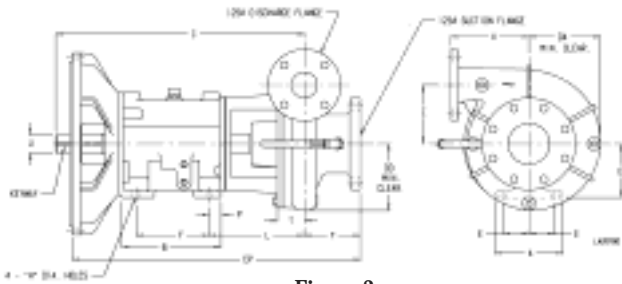
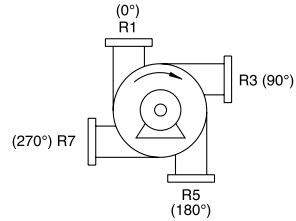


Figure 3



## 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	-	-	-	-	-	2.59	-	-	7.5	5.38	5.75	7.44	-
	12.5	1	-	-	-	-	-	-	7	-	-	-	-	-	2.59	-	-	7.5	5.38	5.75	7.44	-
F85	-	2	6.5	9.52	24.28	-	5.25	-	7	2.5	7	0.69	9.19	1.16	2.59	2	4.81	7.5	5.38	5.75	-	.50 X .25
EM85	-	3	6.5	9.52	24.28	27.66	5.25	7	7	2.5	7	0.69	9.19	1.16	2.59	2	-	7.5	5.38	5.75	-	.50 X .25
EM309	-	-	-	-	17.67	21.68	-	-	7	-	-	-	-	-	2.59	1.25	-	7.5	5.38	5.75	-	.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
404-5	12.5	18.5	16.62	10	8	13.75	0.81	16.39	6.88	29.97

Gemstone Pump Company

ISO9001:2000 CERTIFIED