



# GEMSTONE PUMP COMPANY

100 - 250 GPM

1.5 YH

200 - 400 Feet TDH

## STANDARD SPECIFICATION

**Discharge** - 1.5 inch threaded discharge

**Suction** - 2 inch threaded suction

**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 1.5Y

### 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

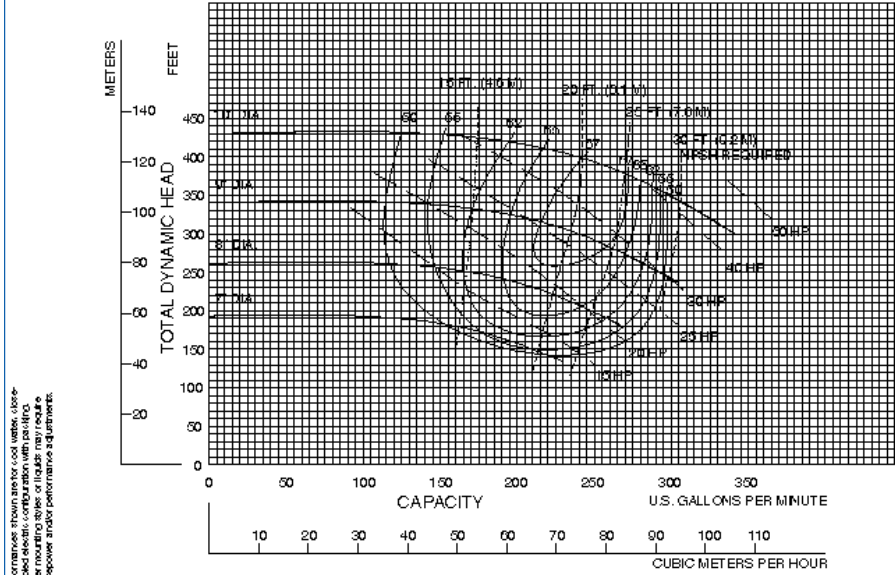
- **Gemstone's Tradition of Excellence:**
  - **Highest Quality Products**
  - **Experience**
    - Over 50 years in the centrifugal pump business
  - **Optimum Hydraulics**
    - In house engineering staff and test lab facilities
  - **Strong Local Dealer Support**
    - Our agricultural products are 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 wholegoods 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

**1.5 YH  
3600 RPM**

Speed	Impeller Dia.	Style	Solids Dis.	N <sub>S</sub>	Suction	Discharge	No. vanes
3525	VARIOUS	ENCLOSED	.25"	690	2.0"	1.5"	6

SINGLE VOLUTE MOUNTING CONFIG.: CC, VM, F, VF, EM, VC



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

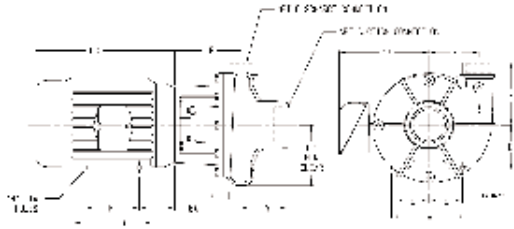


Figure 1

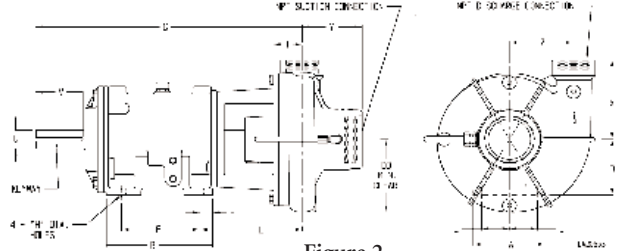


Figure 2

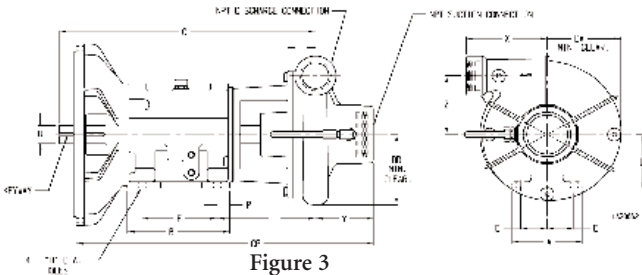
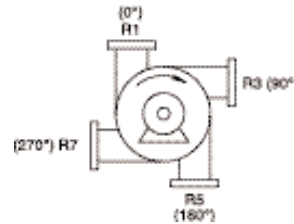


Figure 3



## 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	4.5	1	-	-	-	-	-	-	6.38	-	-	-	-	-	3.15	-	-	6.5	3.47	5.5	7.19	-
	8.5	1	-	-	-	-	-	-	6.38	-	-	-	-	-	3.15	-	-	6.5	3.47	5.5	8	-
	12.5	1	-	-	-	-	-	-	6.38	-	-	-	-	-	3.15	-	-	6.5	3.47	5.5	8	-
F5	-	2	7.5	7.36	18.62	-	5.5	-	6.38	2.62	4.5	0.56	8.78	1.44	-	1.25	3	6.5	3.47	5.5	-	.25 X .12
F85	-	2	6.5	9.52	24.45	-	5.25	-	6.38	2.5	7	0.69	9.72	1.16	3.15	2	4.81	6.5	3.47	5.5	-	.50 X .25
EM5	-	-	7.5	7.36	18.62	21.72	5.5	8.25	6.38	2.62	4.5	0.56	8.78	1.44	-	1.25	-	6.5	3.47	5.5	-	.25 X .12
EM85	-	-	6.5	9.52	24.45	26.31	5.25	6.38	6.38	2.5	7	0.69	9.75	1.16	3.15	2	-	6.5	3.47	5.5	-	.50 X .25
EM309	-	-	-	-	18.23	20.33	-	-	6.38	-	-	-	-	-	3.15	1.25	-	6.5	3.47	5.5	-	.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