## CHEMSTEEL™ PUMP SERIES

SM935 METALLIC

### CHEMSTEEL™ PUMP

### **CHEMSTEEL PUMPS SERIES SM935 M**

### **FEATURES**

Gear/bearing design allows for "trimming" for optimizing the pump's maximum flow to reach minimum turndown or to match flow to a specific OEM's requirement.

Special materials combinations are available for specific liquids:

- Stainless or Alloy C housing construction.
- Gears available in metallic 316 stainless. W88 stainless and Alloy C. Also in Polytetrafluoroethylene, polyphenylenesulfide, and polyetheretherketone.
- Shafts are 316 stainless steel or Alloy C.
- Bearings available in Carbon, Polytetrafluoroethylene and Polytetrafluoroethylene

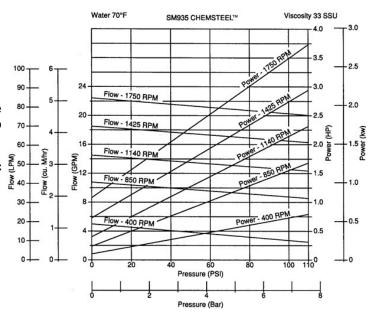
### **DRIVE**

The pump is driven directly from the electric motor shaft by means of a flexible coupling. A close coupled adapter connects the pump to the motor.

### LIQUIDS AND TEMPERATURE

This pump is suitable to handle clear lubricating and non lubricating fluids at temperatures to 450F. These pumps will handle viscous fluids to 100,000 cps (462,000 SSU) at reduced shaft speeds.

### **PERFORMANCE**



### **SUCTION LIFT**

This pump has a suction lift capability of 20 feet for a new pump. Though gear pumps are self priming, a foot valve is recommended. If possible, wet gears with the liquid to be pumped for the first dry start. Liquid retained in the system and gear chambers serves to wet the pump on subsequent starts.

# **EXPLODED VIEW AND PARTS LIST**

## CHEMSTEEL

S(M)923, S(M)930, S(M)9350 & S(M)946 METALLIC EXPLODED VIEW

> Shaft Seal Code "L" Two Lip Seals

Shaft Seal Codes "R", "S" & "T" Packing with Latern Ring

Shaft Seal Codes "N", "P" & "Q" Packing

Shaft Seal Code "H" & "G" Double Mechanical Seals

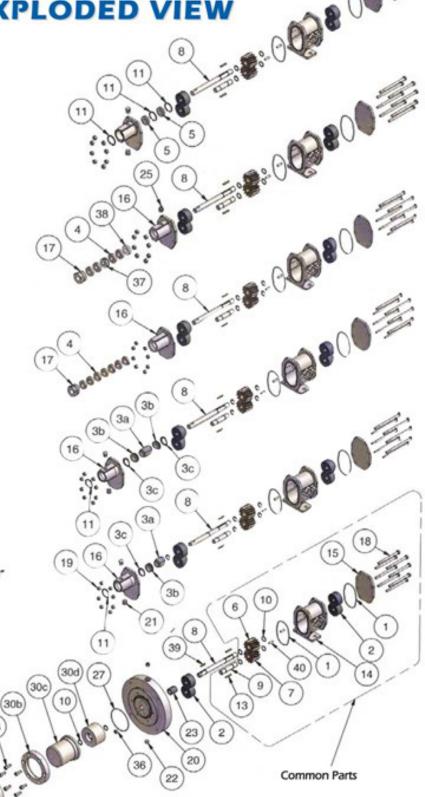
Shaft Seal Code "A", "B", "C", "D", "F" & "J" Single Mechanical Seals

32

28

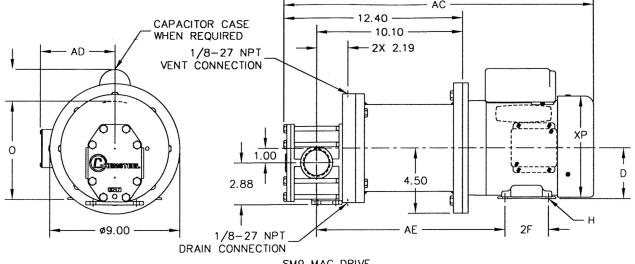
Magnetically Driven

30a

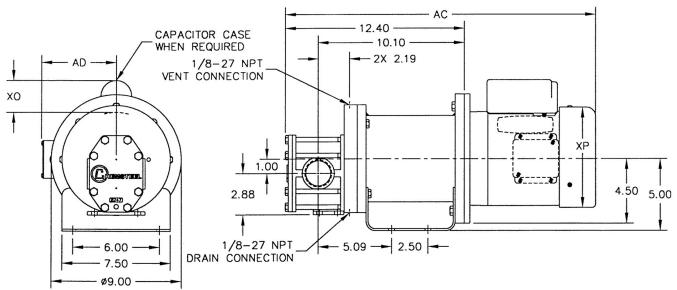


Series	Model	Repair Kit
SM935 M	SM93539CW-M6	SM93539CW-M6K
	SM93539CW-FFM2	SM93539CW-FFM2K
	SM93535CW-M2	SM93535CW-M2K
	SM93533JW-M6	SM93533JW-M6K
	SM9351FJW-M2	SM9351FJW-M2K
	SM9351FCW-M6	SM9351FCW-M6K
	SM9351FCW-M2	SM9351FCW-M2K
	SM9351FCW	SM9351FCWK
	SM9351EPW-M6	SM9351EPW-M6K
	SM9351EPW	SM9351EPWK
	SM93517JW-M6	SM93517JW-M6K
	SM93517JW-M2	SM93517JW-M2K
	SM93516CW-XM6	SM93516CW-XM6K
	SM93516CWM6-X97	SM93516CWM6-X97K
	SM93516CW-M6	SM93516CW-M6K
	SM93516CW-HM6	SM93516CW-HM6K
	SM93512CW-T4M6	SM93512CW-T4M6K
	SM93512CW	SM93512CWK

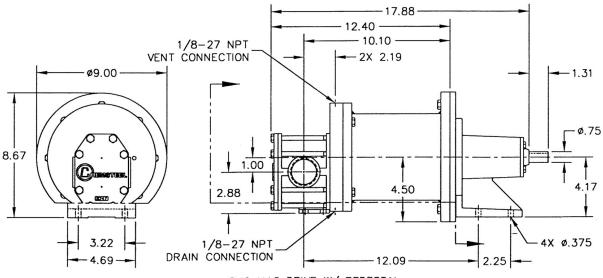
# **DIMENSIONS**



SM9 MAG DRIVE



SM9 MAG DRIVE W/ FOOT ACCESSORY



SM9 MAG DRIVE W/ PEDESTAL

### **MODEL CHART**

MODEL	SM935
Maximum Flow (gpm) @1750 RPM	23
Theoretical Displacement (cc/revolution)	57.8
Maximum Differential Pressure (psig)	110
Maximum System Pressure (psig)	225
Maximum Speed (RPM)	1800
Maximum Fluid Temperature	450° F
Minimum Fluid Temperature	-50° F
NPSHR @ 1750 (feet)	4
Standard Port Size	1 1/2 inch FNPT
weight-less motor (lbs)	50

### MAINTENANCE

A three-part housing provides easy disassembly and service. Full size bearings match the gear diameter, and eliminate the need for separate wear plates. TFE encapsulating silicone o-ring pump housing seals provide elastic memory to assure an effective long lasting seal and thus avoiding the re-torqueing required of pumps using pure TFE.

To order a CHEMKIT™ parts kit, simply add a "K" to the end of the model number.

A repair kit contains the following parts: bearings, gears, o-rings, shafts, keys, c clips, and retaining ring.

### LIFE CYCLE/COST OF OWNERSHIP

Pump design and materials selection, together provide the longest life available from a gear pump. Key attributes include:

- Gear & bearing combinations of metallic and nonmetallic wear surfaces.
- Slotted bearings to lubricate shaft and gear surfaces.
- Hydraulic porting to balance axial thrust and to reduce wear.
- Ample port sizing to reduce the likelihood of cavitation when inlet pressure is marginal.
- Effective housing seals with elastic memory prevent leakage of corrosives.
- Recirculation heat port versatility.
- · Containment can flush & drain connections.

### **FIT**

Connections are 1 1/2" female NPT or BSPT, pump hardware is metric and close couple adapters mount to both NEMA and IEC standard motor frame sizes for worldwide acceptance. The port size is the same as competitive pumps.