



**ANY LIQUID,  
AT ANY DEPTH, IN  
ANY ENVIRONMENT.**

# ANCHOR ELECTRIC PISTON PUMP®

## Patented Top-Head-Drive Piston Pump

### TECHNICAL SPECIFICATIONS

#### MODEL 103E

##### FLOW RANGE

**0-7 US GPM  
27 LPM**

##### OPERATIONAL DEPTH

**Up to 157 Ft.  
47 M  
with 1 hp motor**

##### WELL CASING SIZE

**Minimum 4 in.**

**Patented,  
Electric Top-Head  
Drive Motor**



**Customizable  
Downhole Pump**

#### DESCRIPTION

The Anchor Electric Piston Pump Model 103E is powered by electricity. The control motor is located at surface grade for easy installation and maintenance. Power to the pump is direct from grade through the sucker rod assembly. The pump removes water and product (e.g. oil, solvents, leachate) from a four (4) inch (10.16 cm) diameter well casing or greater to depths of 157 feet (47 meters) with a 1 hp motor. The fluid inlet is located at the bottom of the pump intake cylinder and removes water or product to 0 submergence depth.

#### PERFORMANCE AND TECHNICAL DATA

##### PERFORMANCE

Operational Depth	157'
Flow Range	0 to 7 GPM/ 27 LPM 10,080 US GPD/39,000 LPD
Discharge per Stroke	0.27 US Gallons per stroke Note: flow does not vary with depth
Motor	1/2 or 1 hp
Power Supply	120 or 230 Volt Single Phase or 230 or 460 Volt Three Phase
Maximum Discharge Pressure	68 PSI
Maximum Lift	157 feet of water or 68 PSIG Variable speed (stroke) control adjusts to well conditions; liquid drawn down to top of strainer.

##### TECHNICAL

Stroke Length	12" (30.48 cm)
Maximum External Diameter	3.9" (9.9 cm)
Total Cylinder Length	30" (76.2 cm)
Connection of Riser Pipe	3" (7.62 cm)
Connection to Sucker Rod	7/16" - 20
Recommended Internal Diameter of Bore Hole	4-5" (10.16 - 12.7 cm) or greater diameter
Weight of Cylinder	12 lbs.
Discharge Size	3" NPT
Installation	Unit can be installed vertically or horizontally
Driver Weight	40 lbs.
Driver Rod Weight	12 lbs./100'
Foot Valve Assembly Weight	14 lbs.
Minimum Well Casing Size	4"

# ANCHOR ELECTRIC PISTON PUMP® MODEL 103E

## TECHNICAL SPECIFICATIONS

### MATERIALS OF CONSTRUCTION

(Materials of construction can be modified to meet specific applications)

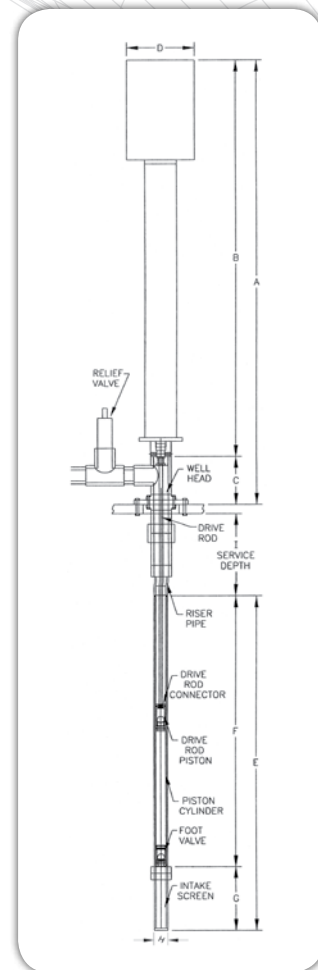
#### ABOVE GROUND

Drive Motor	Stainless Steel/ Aluminum
Seal Plate	Delrin®
Seal Plate Seals	Nitrile/Viton
Relief Valve	Stainless Steel
Discharge Tee	Stainless Steel
Well Head	Steel

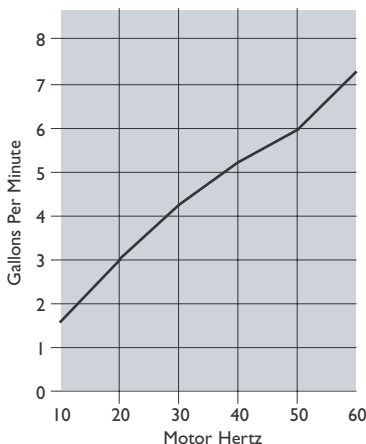
#### DOWNHOLE

Drive Rod	Fiberglass
Drive Rod Connector	Stainless Steel
Drive Piston Seal	Nitrile/Viton
Drive Piston Check Ball	Stainless Steel
Drive Piston	Delrin®
Piston Cylinder	Stainless Steel
Foot Valve Check Ball	Stainless Steel
Foot Valve	Delrin® with Stainless seat
Intake Screen	Stainless Steel/PVC

### PUMP DIMENSIONS



### ANCHOR 103E ELECTRIC PUMP FLOW PERFORMANCE



### AVAILABLE OPTIONS

- ✓ Level Control Systems
- ✓ Hazardous Duty Components
- ✓ Metered Flow Control
- ✓ Flow Measurement
- ✓ Variable Frequency Drive
- ✓ SCADA Capability

### DIMENSIONS (IN INCHES)

- A** Above Well Height.....50.5
- B** Driver Height..... 43
- C** Discharge Tee & Well Seal Height.....7.5
- D** Driver Diameter ..... 8
- E** Foot Valve Assembly Length.....38
- F** Foot Valve Length..... 30
- G** Intake Screen Length..... 8
- H** Downhole Diameter ..... 3.9