

CENTRY SUB-ANSI CENTRIFUGAL PUMPS



Centry® Model 621/622
Mag-Drive Pump shown
Close-Coupled to motor.



Centry® Model 621/622 Sealed Pump
shown Close-Coupled to motor.

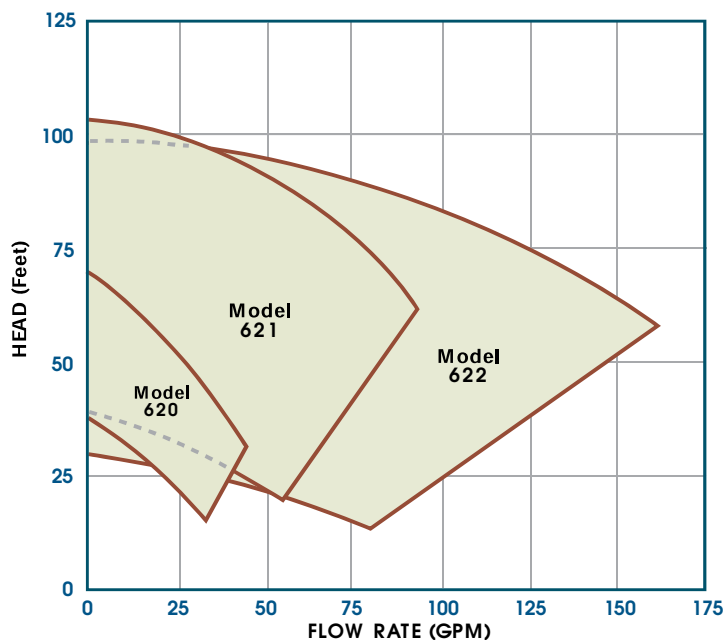
The Centry Series are Sealed and Magnetically-Coupled (MC) Centrifugal pumps engineered and manufactured for the user with increased needs for equipment reliability. These pumps are specifically designed to handle the lower flow applications that create maintenance problems for standard ANSI pumps operating at less than BEP. The Centry Series pumps can handle flows up to 160 GPM and heads up to 100 ft. They are available in 316 Stainless Steel or Alloy-C constructions, and with threaded or flanged port configurations.

Liquiflo's Centry line of Centrifugal pumps are available in 316 SS or Alloy-C with either Packing, Single Mechanical Seal, Double Mechanical Seal or Mag-Drive configuration.

MODELS AVAILABLE

| MODEL | SIZE* (inches) | MAX FLOW | MAX HEAD |
|-------|-----------------|----------|----------|
| 620 | 1 x 3/4 x 3 3/4 | 45 GPM | 65 ft |
| 621 | 1 1/4 x 1 x 5 | 90 GPM | 100 ft |
| 622 | 2 x 1 1/2 x 5 | 160 GPM | 95 ft |

* Suction Port Size x Discharge Port Size x Impeller Diameter



FEATURES

Centry® Models 621 and 622 are available with closed impellers as standard. Closed impellers eliminate axial loads and extend the life of the motor bearings when the pump is close-coupled to the motor. For close-coupled sealed pumps, closed impellers simplify the axial positioning of the impeller.

Single Mechanical Seals:

Single mechanical seals are the most economical type of seal to use when leakage is not desired. When properly installed and maintained, these seals will generally give years of trouble-free service.

Double Mechanical Seals:

Double Mechanical seals are also available for the Liquiflo Centry® Series centrifugal pumps. This seal configuration relies on a barrier lubrication system to cool and lubricate the seal faces.

Magnetically-Coupled Pumps:

These offer a simple and cost-effective solution to sealing toxic, noxious, crystallizing or most other fluids that present problems for single seals and would therefore require use of a double mechanical seal. Magnetically-coupled pumps eliminate the need for cooling loops that are required for double mechanical seals.

CUSTOMIZATION

Contact factory.

Features of Sealed and Sealless Centry Pumps



Centry® Model 620 Sealed Pump shown Close-Coupled to motor.

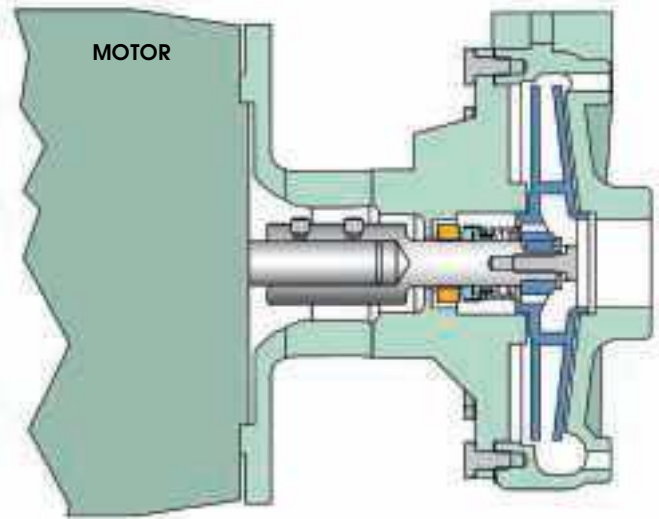


Centry® Model 620 Mag-Drive Pump shown Close-Coupled to motor.

Mechanically Sealed Pumps:

- Compact close-coupled design or long-coupled mounting
- Back pullout design to simplify maintenance
- Type 9 or Type 21 seals are available
- Several choices for seal materials to meet the requirements of the application
- Single or Double mechanical seal configurations are available

SEALED PUMP

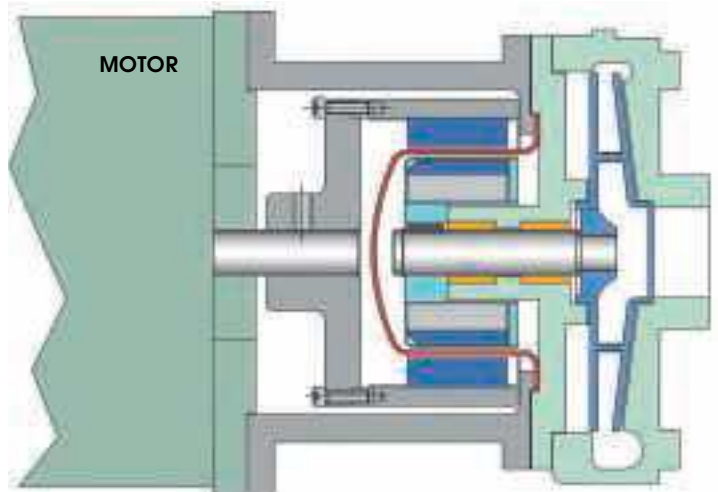


Centry® Model 621 or Model 622

Mag-Drive Pumps:

- Double support sleeve bearings are available in Carbon or Silicon Carbide to extend the working life of the pump
- Optional hard Ceramic coated or Tungsten Carbide coated shafts are available for abrasive or thin fluids
- Available in compact close-coupled or Power Frame design, depending on model

MAG-DRIVE PUMP



Centry® Model 621 or Model 622

PUMP MODEL CODING



CENTRY-SERIES
CENTRIFUGAL PUMPS

EXAMPLE:

620FS2000, designates a Centry Model 620 Sealed Centrifugal Pump.

| | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|
| <u>6</u> | <u>F</u> | <u>S</u> | <u>2</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| Pos. | Description | Selection |
|------|--------------------|---------------------------|
| 1 | Pump Model | <u>620</u> Model 620 |
| 2 | Impeller Diameter | <u>F</u> Full- 3.75 |
| 3 | Basic Material | <u>S</u> 316 SS |
| 4 | Seal Configuration | <u>2</u> Sing. Inf. Mech. |
| 5 | Motor Frame | <u>0</u> NEMA 56C |
| 6 | O-Rings/Gaskets | <u>0</u> Teflon |
| 7 | Impeller Trim | <u>0</u> No Trim |

EXAMPLE:

622RSEB12VF2, designates a Centry Model 622 Mag-drive Centrifugal Pump.

| | | | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <u>6</u> | <u>2</u> | <u>R</u> | <u>S</u> | <u>E</u> | <u>B</u> | <u>1</u> | <u>2</u> | <u>V</u> | <u>F</u> | <u>2</u> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |

| Pos. | Description | Code Selection |
|------|-------------------|--------------------------|
| 1 | Pump Model | <u>622</u> Model 622 |
| 2 | Impeller Diameter | <u>R</u> Reduced |
| 3 | Basic Material | <u>S</u> 316 SS |
| 4 | Bearings | <u>E</u> Carbon 60 |
| 5 | Thrust Washers | <u>B</u> SiC |
| 6 | Motor Frame | <u>1</u> 143TC/145TC |
| 7 | Shaft Coating | <u>2</u> TC-coated |
| 8 | O-Rings/Gaskets | <u>V</u> Viton |
| 9 | Magnetic Coupling | <u>F</u> MCF, 120 in-lbs |
| 10 | Impeller Trim | <u>2</u> 4.0 Dia. |

Liquiflo's Model Code describes both the pump's size and materials selected. This model code is required for the future identification of your pump when reordering either a pump or replacement parts. Model code is permanently stamped into pump housing.

- n Available
- ⊗ Not Available
- CF Contact Factory

SEALED Pump Sample Model No. **620 F S 2 0 0 0**

Position No. 1 2 3 4 5 6 7

| Position Model | 1 | SEALED Pump Model | 620 | 621 | 622 |
|--|----------|---|-----|-----|-----|
| Position Impeller Diameter | 2 | F Full 3.75 /5.0 /5.0 R Reduced (See Pos. 7) | n | n | n |
| Position Housing Material & Port Type | 3 | S 316 SS NPT L 316 SS ANSI 150# RF Flanges H Alloy-C NPT C Alloy-C ANSI 150# RF Flanges | n | n | n |
| Position Seal Configuration | 4 | 2 Single Internal Carbon/SiC 3 Single Internal Teflon/SiC 4 Double Carbon/SiC 5 Lantern Ring Teflon Packing 7 Lantern Ring Graphoil Packing | n | n | n |
| Position Motor Frame | 5 | 0 NEMA 56C/56HC (Close-Coupled) 1 NEMA 143T C/145T C (Close-Coupled) 5 NEMA 182T C/184T C (Close-Coupled) P Power Frame | n | n | n |
| Position O-rings/Gaskets | 6 | 0 Teflon V Viton G Graphoil | n | n | n |
| Position Impeller Trim (Standard) | 7 | 0 No Trim (Pos. 2 F) 1 3.50 /4.5 /4.5 (Pos. 2 R) 2 3.25 /4.0 /4.0 (Pos. 2 R) 3 3.00 /3.5 /3.5 (Pos. 2 R) 4 2.75 /3.0 /3.0 (Pos. 2 R) | n | n | n |

MAG-DRIVE Pump Sample Model No. **622 R S E B 1 2 V F 2**

Position No. 1 2 3 4 5 6 7 8 9 10

| Position Model | 1 | MAG-DRIVE Pump Model | 620 | 621 | 622 |
|--|-----------|---|-----|-----|-----|
| Position Impeller Diameter | 2 | F Full 3.75 /5.0 /5.0 R Reduced (See Pos. 10) | n | n | n |
| Position Housing Material & Port Type | 3 | S 316 SS NPT L 316 SS ANSI 150# RF Flanges H Alloy-C NPT C Alloy-C ANSI 150# RF Flanges | n | n | n |
| Position Bearings | 4 | 2 Carbon 3 Teflon B Silicon Carbide E Carbon 60 | ⊗ | ⊗ | ⊗ |
| Position Thrust Washers | 5 | 2 Carbon 3 Teflon B Silicon Carbide E Carbon 60 | ⊗ | ⊗ | ⊗ |
| Position Motor Frame (Outer Magnet Bore) | 6 | 0 NEMA 56C/56HC (0.625) 1 NEMA 143T C/145T C (0.875) 2 IEC 71 B5 (14 mm) 3 IEC 80 B5 (19 mm) 4 IEC 90 B5 (24 mm) 5 NEMA 182T C/184T C (1.125) | n | n | n |
| Position Shaft Coating | 7 | 1 Chrome Oxide 2 Tungsten Carbide | n | n | n |
| Position O-Rings/Gaskets | 8 | 0 Teflon V Viton G Graphoil | n | n | n |
| Position Magnetic Coupling | 9 | D (MCD) 33 in-lbs F (MCF) 120 in-lbs W (MCW) 200 in-lbs | n | ⊗ | ⊗ |
| Position Impeller Trim (Standard) | 10 | 0 No Trim (Pos. 2 F) 1 3.50 /4.5 /4.5 (Pos. 2 R) 2 3.25 /4.0 /4.0 (Pos. 2 R) 3 3.00 /3.5 /3.5 (Pos. 2 R) 4 2.75 /3.0 /3.0 (Pos. 2 R) | n | n | n |

620 SEALED

620-MC MAG-DRIVE



Sealed, Close-Coupled

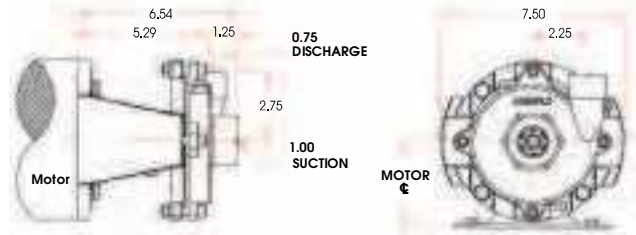


Mag-drive, Close-Coupled

| | | |
|-----------------------------------|-----------------------------|------------|
| Port Connections: | | |
| Suction | 1.00 NPT/FLG | |
| Discharge | 0.75 NPT/FLG | |
| Impeller Diameter | 3.75 | |
| Impeller Trims (standard) | 3.50", 3.25", 3.00" & 2.75" | |
| Max Flow Rate | 45 GPM | |
| Max Total Head | 65 ft | |
| Max Discharge Pressure | 300 PSI | |
| Max Temperature | 500 F | |
| Min Temperature | -40 F | |
| NPSHR 3500 RPM & BEP | 7.5 ft | |
| NPSHR 1750 RPM & BEP | 2.0 ft | |
| Pump Weights: (less motor) | NPT | FLG |
| Sealed, Single Int. Mech. | 16 lbs | 20 lbs |
| Sealed, Packing & Dbl. Mech. | 26 lbs | 30 lbs |
| Mag-Drive | 30 lbs | 34 lbs |

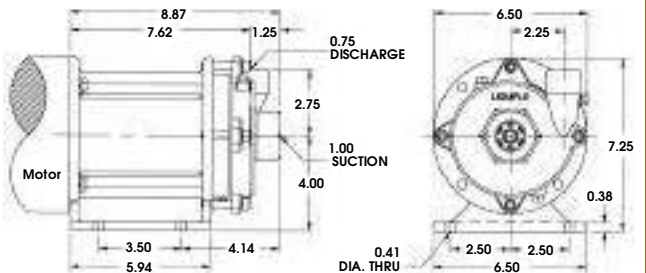
620 SEALED

Dimensional data - inches

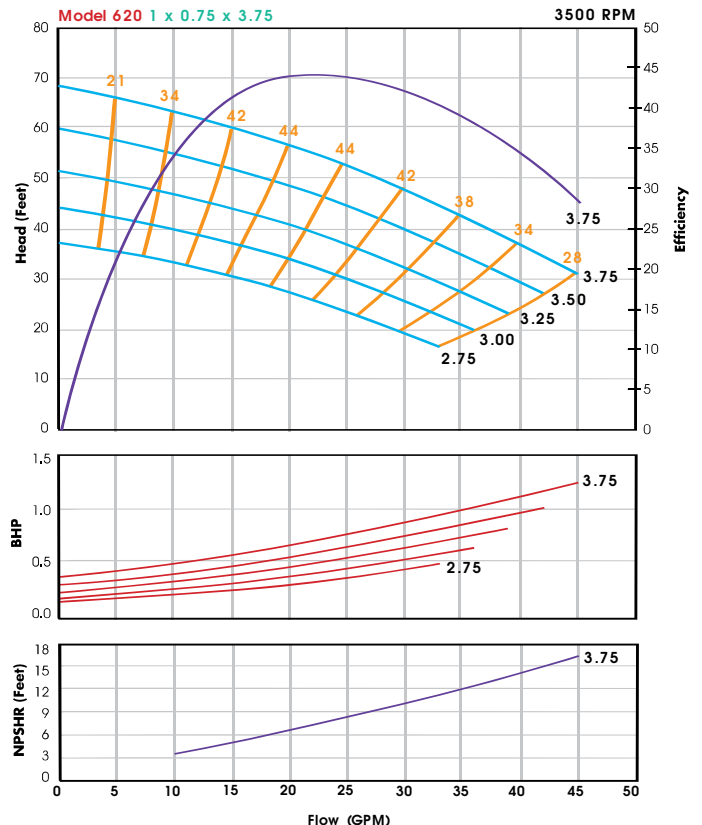
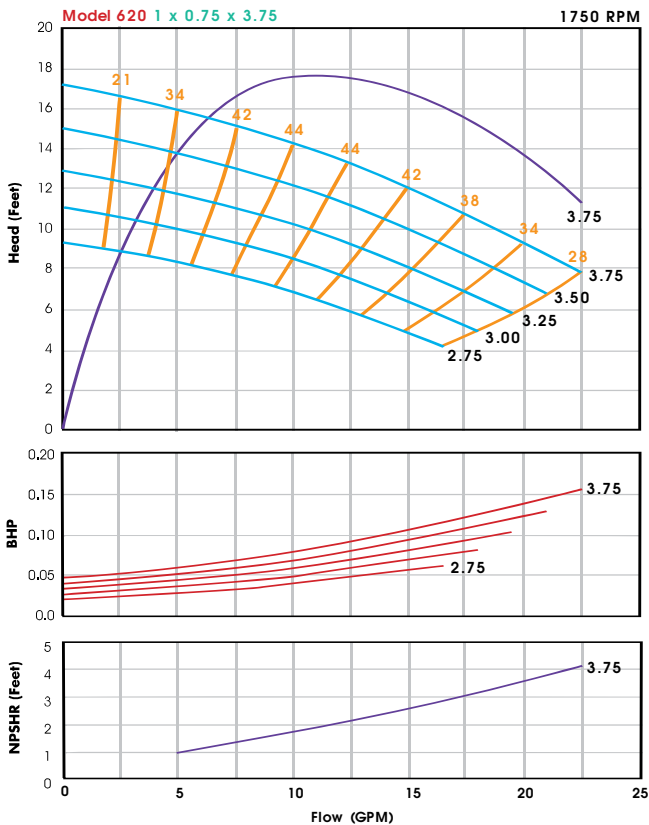


620 MAG-DRIVE

Dimensional data - inches



CENTRY MODEL 620 TYPICAL PERFORMANCE CHARACTERISTICS



621 SEALED 621-MC MAG-DRIVE



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CENTRIFUGAL PUMPS



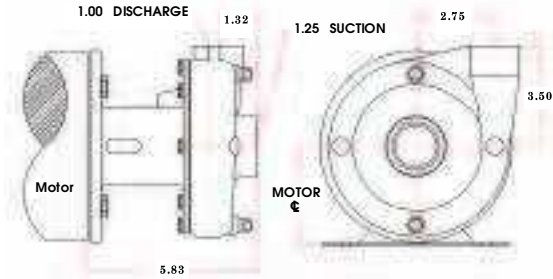
Sealed, Close-Coupled

Mag-drive, Close-Coupled

| | |
|-----------------------------------|------------------------------------|
| Port Connections: | |
| Suction | 1.25 NPT/FLG |
| Discharge | 1.00 NPT/FLG |
| Impeller Diameter | 5.0 |
| Impeller Trims (standard) | 4.5", 4.0", 3.5" & 3.0" |
| Max Flow Rate | 90 GPM |
| Max Total Head | 100 ft |
| Max Discharge Pressure | 300 PSI |
| Max Temperature | 500 F |
| Min Temperature | -40 F |
| NPSHR 3500 RPM & BEP | 15 ft |
| NPSHR 1750 RPM & BEP | 3.7 ft |
| Pump Weights: (less motor) | NPT FLG |
| Sealed, Single Int. Mech. | 17 lbs 23 lbs |
| Mag-Drive | 42 lbs 48 lbs |

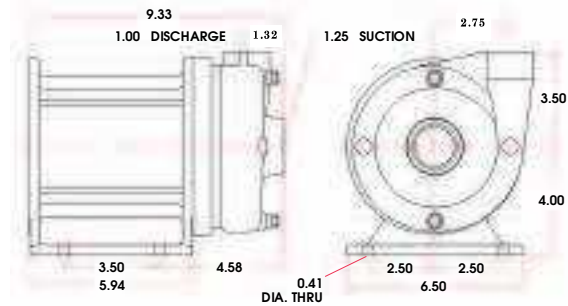
621 SEALED

Dimensional data - inches

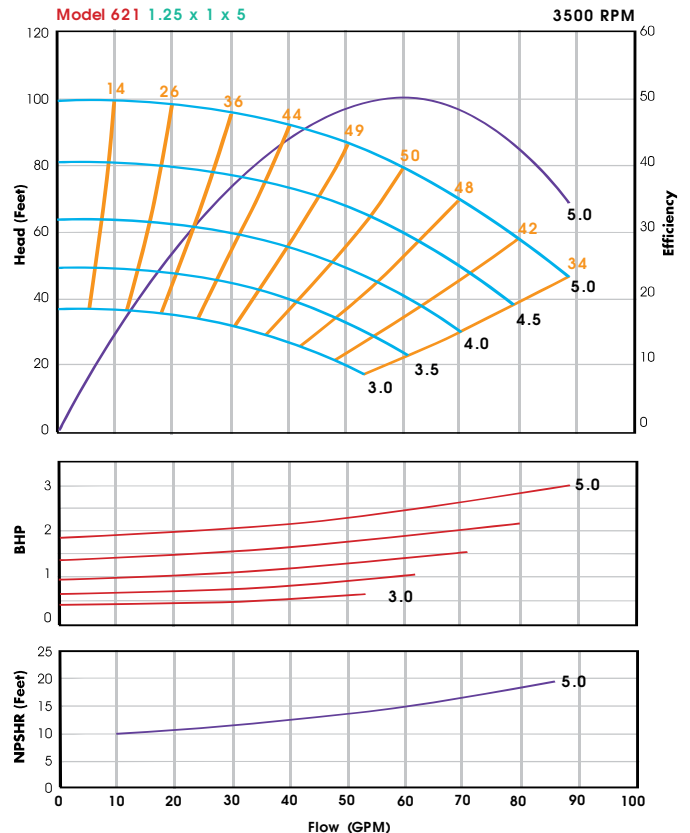
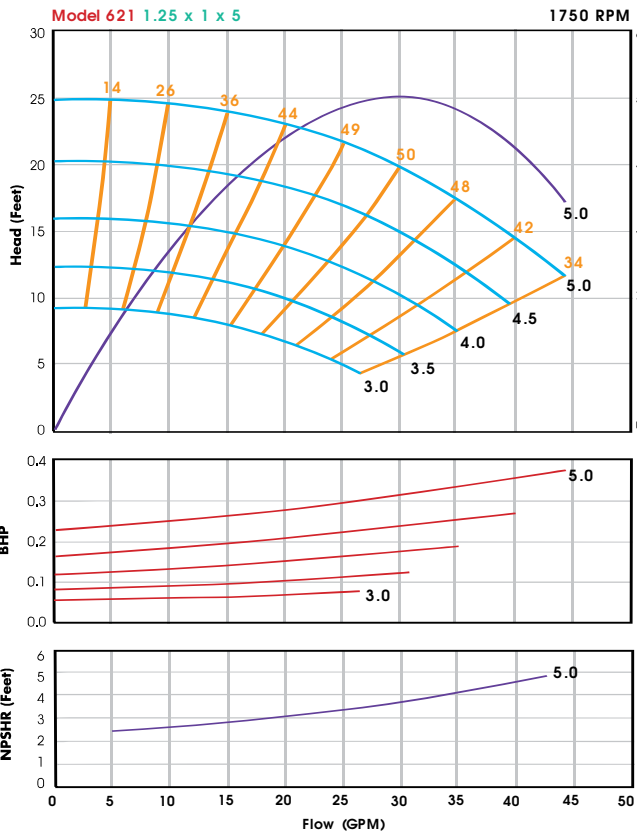


621 MAG-DRIVE

Dimensional data - inches



CENTRY MODEL 621 TYPICAL PERFORMANCE CHARACTERISTICS



622 SEALED 622-MC MAG-DRIVE



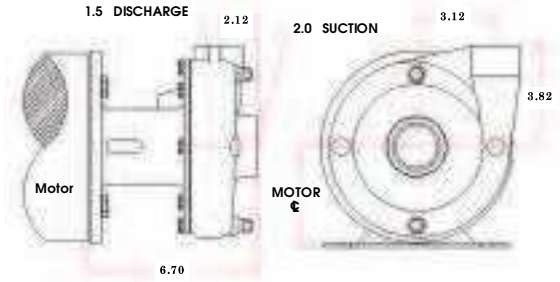
Sealed, Close-Coupled

Mag-drive, Close-Coupled

| | |
|-----------------------------------|-------------------------|
| Port Connections: | |
| Suction | 2.0 NPT/FLG |
| Discharge | 1.5 NPT/FLG |
| Impeller Diameter | 5.0 |
| Impeller Trims (standard) | 4.5", 4.0", 3.5" & 3.0" |
| Max Flow Rate | 160 GPM |
| Max Total Head | 95 ft |
| Max Discharge Pressure | 300 PSI |
| Max Temperature | 500 F |
| Min Temperature | -40 F |
| NPSHR 3500 RPM & BEP | 13 ft |
| NPSHR 1750 RPM & BEP | 3.2 ft |
| Pump Weights: (less motor) | |
| Sealed, Single Int. Mech. | NPT FLG |
| Mag-Drive | 22 lbs 30 lbs |
| | 48 lbs 56 lbs |

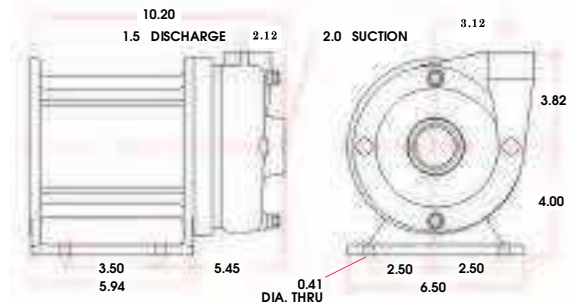
622 SEALED

Dimensional data - inches



622 MAG-DRIVE

Dimensional data - inches



CENTRY MODEL 622 TYPICAL PERFORMANCE CHARACTERISTICS

