



CPE SYSTEMS INC



MICROBREW 100

PORTABLE PUMP ASSEMBLY





The Microbrew 100 is a re-engineered C100 pump, ideal for microbreweries and other small-scale applications. The Microbrew 100's functionality and technology allows it to be used for food processing, dairy, beverage, winery, and brewery markets. While maintaining dimensional and hydraulic interchangeability with the C100, it provides added reliability, extended seal life, it is easier to adjust and maintain, and provides greater performance.

DESIGN

Standard Clamp: A 4" Tri-Clamp is used to secure the pump head. This casing clamp is superior to the traditional post/tab design as it allows for easy adjustments and removal.

Impeller & Shaft Design: The Microbrew 100's sealed impeller enhances hygienic performance and its split compression collar improves concentricity. These two features allow for less vibration and a longer seal life.

Seal Design: The seal is an external mechanical DG seal, a robust single mechanical seal design featuring both a silicon carbide stationary seal-face and a carbon rotary seal-face. This silicon carbide stationary seat is harder and smoother than stainless steel resulting in a longer lasting seal than the traditional D seal. This seat is also easily replaced allowing for quick repairs.

Seal Performance: The Microbrew 100 features a seal path design that improves seal cooling while easing the distribution of cleaning agents to the seal assembly. This improves seal cleaning during CIP.



FEATURES

- 3A Certified
- Clamped Casing
- Sealed Impeller Design
- DG Seal
- Split-shaft compression collar
- 1 1/2" X 1" Tri-Clamp connections
- 316L stainless steel construction

HORSEPOWER

| Horsepower | Max. Flow rate | Shut Off Head |
|------------|----------------|---------------|
| 0.5 HP | 34 GPM | 17 ft |
| 0.75 HP | 58 GPM | 40 ft |
| 1 HP | 68 GPM | 51 ft |
| 1.5 HP | 75 GPM | 58 ft |



TECHNICAL SPECIFICATIONS

| Materials | |
|----------------------------------|--|
| Parts in contact with product: | 316L Stainless Steel |
| Other steel parts: | 304 Stainless Steel |
| Gaskets in contact with product: | FKM or EPDM |
| Weight Without Motor: | 9 lbs |
| Mechanical Seal | |
| Rotary Seal: | Carbon |
| Stationary Seal: | Sintered Silicon Carbide |
| External Surface Finish: | Ra ≤ 63 |
| Internal Surface Finish: | Ra ≤ 32 |
| Connection Type: | Clamp |
| Connection Size: | 1 1/2" x 1" |
| Max. Impeller Diameter: | 3.68" |
| Motor | |
| Type: | S.S Premium Efficiency |
| Motor Frame Size: | NEMA 56C C-Face |
| Speeds: | 1750 & 3450 RPM |
| Operating Limits | |
| Nomial Pressure: | 30 - 40 ft |
| Temperature Range: | 32°F (0°C) - 212°F (100°C) |
| Maximum Flow: | 75 GPM |
| Maximum Differential Head: | 60 ft |
| Maximum Speed: | 3500RPM - 60Hz |
| Viscosity: | 0-500cPs |
| Optimum Operating System | |
| Flow: | 50 GPM |
| Head: | 44 ft |
| Approvals | |
| Certification | 3A- Authorization #1537, 02-11 (centrifugal pumps) for CIP |



Variable Speed Controller

The Lenze i550 protec is our new inverter series in the ½ HP to 20 HP range. The slim and sleek casing is also extremely durable, featuring both impact resistance and IP66 washdown protection. A micro USB interface is provided for more efficient programming. This user-friendly VFD is programmable and has scalable functionality. This trustworthy and powerful VFD can be implemented into your operations with ease. The i550 can be controlled by the keypad, a potentiometer, or a remote control (the remote control is available at additional cost). Our portable pump assemblies feature this VFD to achieve optimal efficiency.



FEATURES

- IP66 (NEMA 4X) approved; it is both dust and water resistant.
- Equipped with a Micro USB interface for programming and diagnostics.
- Full onboard PID programming for interfacing with flow meters, level controls, pressure sensors, and can/bottle fillers.
- The i550 Protec has a sensorless vector control for synchronous motors.
- Equipped with multiple digital and analog inputs for remote control and safety interlocks.
- Compatible with our wireless remote controls, pressure switches, and run dry protection.
- Equipped with a potentiometer.

TECHNICAL SPECIFICATIONS

| | |
|-------------------------|---|
| Horsepower: | 0.5 to 1.5 HP |
| 1Ø/3Ø Input: | 1Ø 115/230 VAC ; 3Ø 230/460 VAC |
| 3Ø Output: | 208-230/460 VAC |
| Ambient Temperature: | -22°F - 131°F (-30°C - 55°C) |
| Standard IO: | 5x digital input, 1x digital output, 2x analog input, 1x analog output |
| Communication Networks: | CANopen, Modbus RTU, Modbus TCP, IO-Link, EtherCAT, EtherNet/IP, PROFINET |
| Approvals: | CE, UL, CSA, EAC, RoHS |

Pump Cart



Custom designed for the craft food and beverage industry, this is our smallest pump cart, built for pumps up to 2 HP. This cart is aerodynamic, tilt draining, maneuverable, and has a small footprint. The knockdown cart handle is removable, creating a compact cart that can be easily stored or wheeled into tight spaces. All parts are hand welded in Canada for quality assurance and durability.

| | |
|-----------|--|
| Frame: | 16 ga stainless steel square tube with foot |
| Handle: | 16 ga stainless steel square tube |
| Platform: | 14 ga Stainless steel AISI 304 Pre-drilled to fit 56 and 143 NEMA frame |
| Axle: | 1/2 ga Stainless steel rod axle |
| Wheels: | 2" x 5" non marking neoprene wheels |



Capacity Curves

MODEL: MB100

Frequency: 60hz

RPM: 1750 & 3500

Size: 1.5" x 1.0" x 3.68"

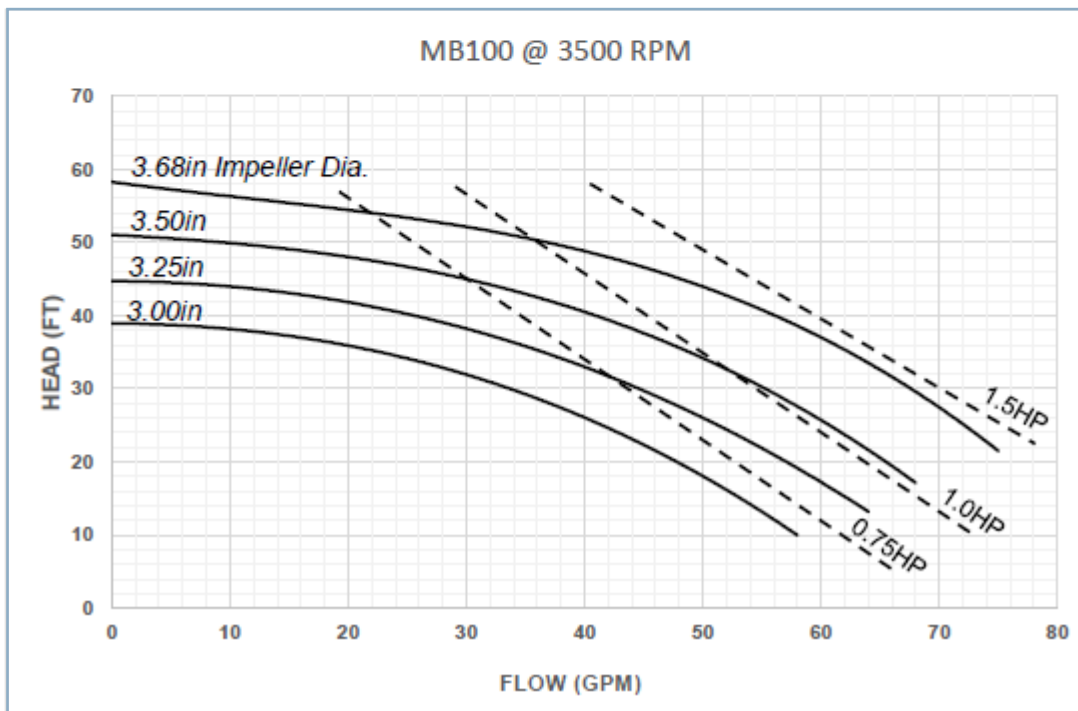
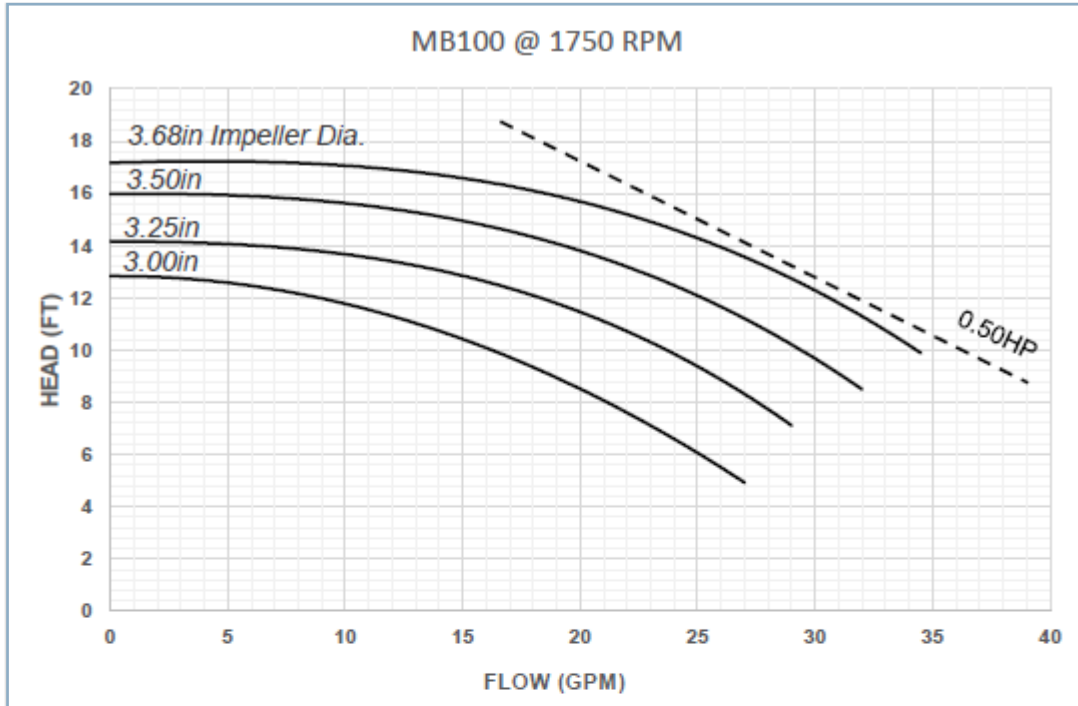


Figure 1: Dimensions

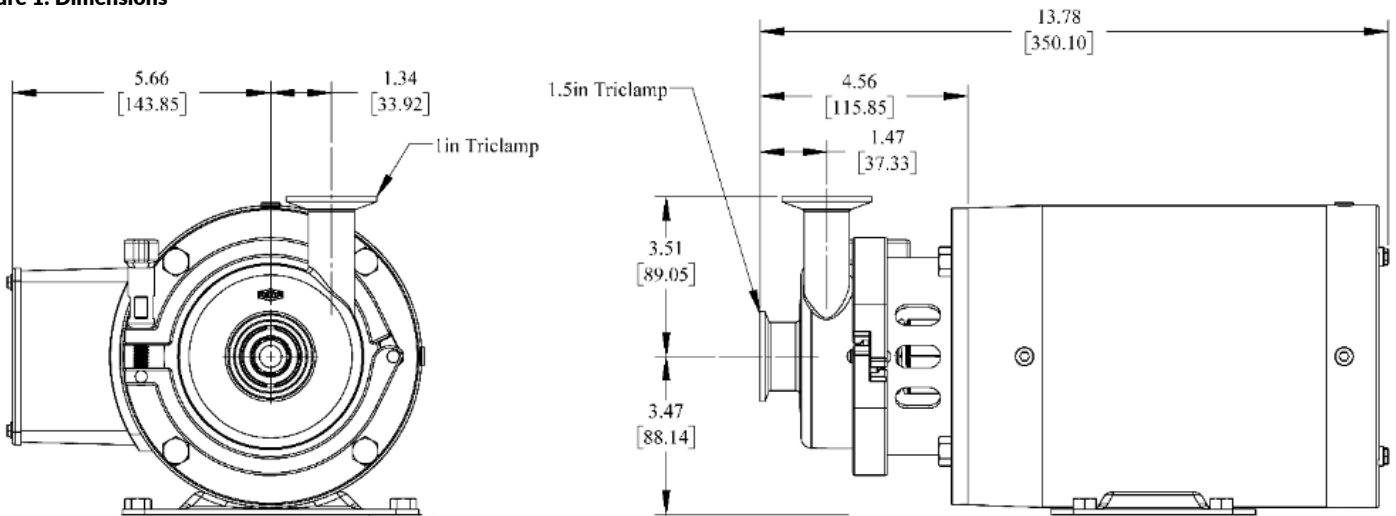


Figure 2: Blown out view

