SHURFIO_____

Installation and Operation Instructions

The SHURflo Beer ACE II is designed to accept pressurized liquids. Beers may be pumped without extracting (degassing) the carbonation. The gas driving the pump is never in contact with the product. The Beer ACE operates when the faucet is opened. It may supply up to 3 faucets 100 feet [30.5M] away and a single faucet up to 500 feet [152M] away delivering flow rates between 1 3 GPM [3.8 11.4 LPM].

Prior to installing a pump, SHURflo recommends estimating systems losses due to variables like; fluid viscosity, temperature, inner diameter of tubing, fittings, the desired flow rate at the faucet, and tubing run length (horizontal and vertical) from the pump to the faucet.

SHUT-OFF OPERATION

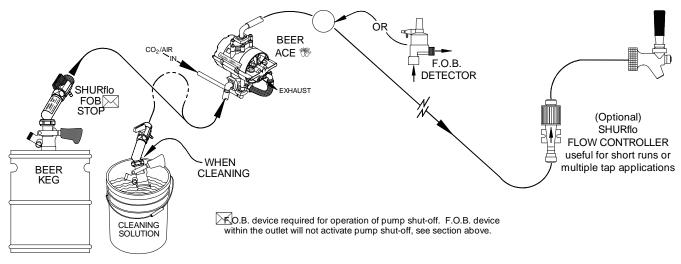
The Beer ACE II shut-off will *only* operate through the use of Foam-On-Beverage (F.O.B.) devices, such as the SHURflo FOB Stop, when plumbed between the keg coupler and the pump. The ability of such devices to interrupt beer pressure is what activates the integral shut-off, stopping gas pressure to the pump.

When other manufacture's F.O.B. devices are plumbed within 18" [45 cm] of the *outlet* of the pump, positive shut-off of the pump does not occur. Pump operation in this case is stopped through the equalization of the gas and outlet line pressure. Depending on the amount of foam (gas, air, etc.) within the pump, equalization may or may not occur.

CAUTION: If a FOB is not used, the pump will cycle at an extremely high rate (run-on) once the vessel empties. Allowing the pump to cycle at high rates for a period of time will diminish pump life and/or lead to premature failure. If allowed to "run-on" the pump will use up the CO₂ supply. Failures due to ∀run-on∀ *are not* covered under the terms of the SHURflo Limited Warranty.

INSTALLATION GUIDELINES

- The outlet port/fitting of the pump is to be mounted vertical O up.
- A minimal length of tubing between the FOB and the pump is recommend, as limited degassing within the inlet may be evident during shut-off. Most beers will allow re-suspension of carbonation when under higher outlet pressure. Inlet tubing should not exceed 10 ft. [3M].
- Use high pressure, brewery approved tubing from the Beer ACE outlet to the faucet. Cut outlet, and CO₂ tubing at least 2 ft [.6M] longer than necessary to provide a service loop.
- Use *new*, high pressure tubing to the pump(s) CO₂ inlet. The gas used to drive the pump *MUST* be clean and contain no contaminants (water, rust, oil, syrup, etc.). Air compressors may be used with proper particle filters and moisture separators. Air storage tanks should be drained weekly. Pumps subjected to contaminated air *are not* covered by warranty.
- **<u>CAUTION</u>**: Pumps driven with CO_2 are to be operated in well-ventilated areas. If used in a confined area (basement, closet, cooler box, etc.), vent the pump exhaust port to the outside or use exhaust fans capable of changing the room air on a continuous basis.



START-UP PROCEDURE

- 1. Connect the coupler to the keg.
- 2. Adjust Beer ACE II CO₂ regulator to 20 psi.[1.4 bar] allowing the pump to stroke slowly.
- 3. Allow product to flow from the faucet until **all** the air trapped within the tubing has been purged.
- **4.** Once the air has been purged, adjust the Beer ACE II CO₂ regulator to the pressure necessary to achieve the desired flow at the faucet. *Minimum* pressure is 25 psi. [1.7 bar], maximum 85 psi. [5.8 bar] static

PUMP/LINE CLEANING

Frequent cleaning of the Beer ACE II and *ALL* equipment in the system is required. The Beer ACE can be used as a line-cleaning pump, as it can draw solution in under a vacuum. Simply disconnect keg coupler and submerge in cleaning solution. Consult other equipment manufacturer's instructions for their cleaning requirements. For further information refer to SHURflo S/B [#]1025 for NSF List Sanitizing procedure

TECHNICAL SPECIFICATIONS

| DESIGN: | Twin Chamber Double Diaphragm |
|---|--|
| MATERIALS OF CONSTRUCTION: | Polypropylene, EDPM, Santoprene, 300 Stainless Steel, |
| | FDA sanctioned, NSF Listed, CE, S-K |
| POWER SOURCE: | CO ₂ , Nitrogen, or compressed filtered air |
| OPERATING PRESSURE: | 25 psi. MIN. [1.7 bar] / 85 psi. MAX. [5.8 bar] static |
| MAXIMUM STROKE RATE: | 2 strokes /sec; intermittent duty (consult factory) |
| DISPLACEMENT: | 3.4 oz. per cycle [101 cc] |
| AUTOMATIC SOLD-OUT: | 6–12"Hg. [27–37kPa] activation (wet). Creation of vacuum pressure through the use of Foam–On–Beverage (F.O.B.) device on inlet side. |
| TEMPERATURE LIMITS: | 30°—120°F [-1.1°—49°C] Do not subject to freezing. |
| WEIGHT: | 1 lb. [.45 kg] |
| AVAILABLE* LIQUID FITTINGS: | ¹ /4" [6mm], ³ /8" [10mm], and ¹ /2" [13mm] barb elbows, straights; and 90° configurations; plastic or stainless. John Guest [®] straight tube; plastic. |
| AVAILABLE* CO2 / AIR / EXHAUST FITTINGS: | 1/4" [6mm] barb elbows or "T"s; plastic or brass; with internal check valve. 1/4" [6mm] barb elbows or straights; plastic (no c/valve). |
| *Pump assembly part number determines fitting configuration. Metric fittings dimensions are approximation to U.S. inch size. | John Guest [®] straight tube; plastic (no c/valve). Muffler assembly |

RETURN POLICY

Whenever a Beer ACE II is removed from service, it *MUST* be sanitized / flushed to prevent contamination and possible health hazards. Beer ACE II's that have not received periodic sanitization will be deemed non-returnable. For pumps that do not operate, warm water from a faucet can/*must* be flushed through the inlet port as soon as it is removed from service. Pumps returned to SHURflo that have not been properly sanitized and/or flushed will be dispositioned as a "scrapped pump" and will not be considered for testing, repair, or warranty replacement.

BEER ACE II LIMITED WARRANTY

SHURflo warrants the Beer ACE II to be free from material and workmanship defects (under normal use and service) for a period of 3 (three) years from the date of manufacture.

The limited warranty will not apply to pumps that were improperly installed, misapplied, or incompatible with fluids or components not manufactured by SHURflo. SHURflo will not warrant any pump, which is physically damaged or modified outside the SHURflo factory. The limited warranty will not apply to pumps that have been subjected to contaminated air.

Beer ACE II's must be flushed and/or sanitized when removed from service. Pumps returned to SHURflo, which have not been flushed and/or sanitized are not considered for testing, rework, or warranty replacement and will be dispositioned as a "scrapped pump".

All SHURflo gas pumps should be returned to the authorized distributor where they were purchased. SHURflo's obligation under this warranty policy is limited to repair or replacement. Pumps found not defective (under the terms of this limited warranty) are subject to charges to be paid by the returnee for the testing and packaging of "tested good" units.

Consult SHURflo Service Bulletin #1049 for complete Limited Warranty Details.







SHURflo reserves the right to update specifications, prices, or make substitutions.

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