

ASPIRATOR INDUSTRIAL AERATOR SPECIFICATIONS

3HP 380/415V 3PH 50HZ

MODEL: The aerator shall be a horizontal aspirator with a “jet type” pump which uses the venturi tube. Two configurations: Triton (floating) or Sub-Triton (submerged).

PUMPING CAPACITIES: The pumping capacity of the aerator shall be sufficient to influence 567,012 cubic feet (16,056 cubic meters) of water.

FLOAT (TRITON ONLY): The float shall be made of seamless, one-piece high-density polyethylene plastic, filled with high density closed cell polyurethane foam. The float shall be capable of providing full floatation if the shell is punctured or cracked. Metal floats or those with an internal void for additional ballast are not acceptable.

IMPELLER: The impeller shall be constructed of 420 Valox thermal plastic material molded by the injection molding process. The impeller shall be connected to the motor by a type 304 stainless steel bolt, extending through the impeller sleeve. Flexible shaft couplings are not acceptable.

MOTOR: The motor shall be a 3HP, 380/415 volt, three phase, 50Hz oil-cooled, submersible motor operating at 1725 RPM or 50Hz operates at 1425 RPM. The motor shaft exposed to water shall be 316 stainless steel. The service factor shall be 1.15. The motor shall operate in a reservoir of Otterbine oil for continuous lubrication of bearings and for efficient transfer of heat through the motor housing wall. Top mounted motors and water-lubricated motors are not acceptable. The rotor shall be dynamically balanced. The winding (stator) wires shall be covered with class F rated insulation designed for complete immersion in oil. The motor shall be attached to a Valox thermoplastic molded upper plate. This plate will house the bearings and upper motor seals (internal and external). The motor shall be protected against oil and water leakage by a combination of rotary seals, stationary seals, and molded rubber “O” rings.

MECHANICAL SEAL: The seal shall be a Viton mechanical spring seal with a 304 st/st spring and ceramic facing. The seal shall be rated for 200 degrees Celsius.

MOTOR HOUSING: The external motor housing shall be a canister formed from deep drawn 316 stainless steel. The top plate shall be constructed of Valox thermoplastic. A Valox boss will provide support and protection for the male electrical connector.

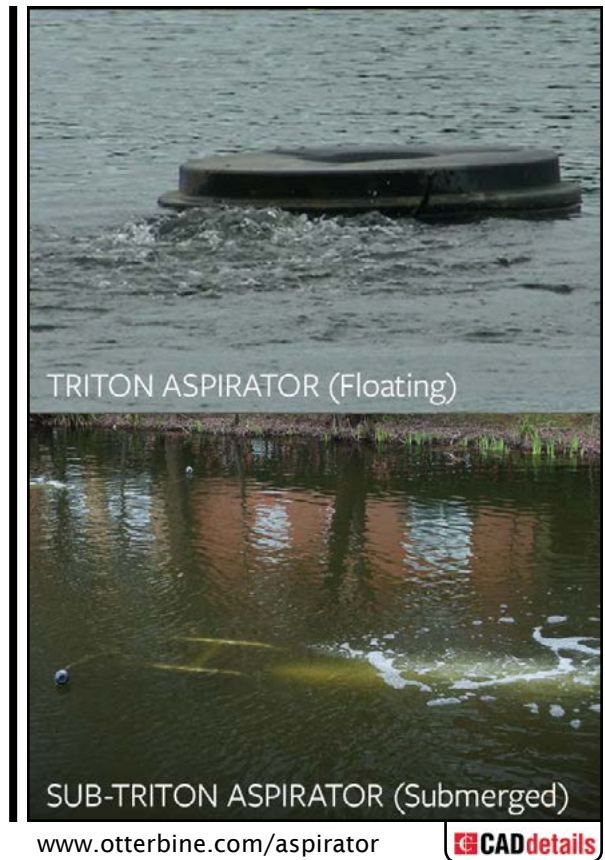
SUPPORT FRAME: The support frame for the aerator shall be constructed of type 304 stainless steel tube welded with a type 308 stainless steel weld. The frame shall minimize vibration of the unit. SUB-TRITON ONLY: Bottom barrier component of support frame shall be constructed of 1/4 inch or .64 cm polyethylene.

ASPIRATION TUBE: The aspiration tube shall be constructed of 1/2 inch (1cm) diameter by 50ft (15m) long black polyethylene. Attached to the tube shall be a 5” x 3.5” or 13cm x 9cm float. The float shall be black styrene and shall incorporate a muffler.

MOORING CABLE LEADS: The mooring or anchor cable leads shall be of 1/8 inch or .32cm diameter by 4ft or 1 meter long, type 300 series stainless steel wire rope.

FASTENERS: All fasteners are to be type 304 or 316 stainless steel.

ELECTRICAL CONNECTORS: The electrical connectors shall consist of a receptacle and a plug constructed of non-conductive polymers. The system shall create a vacuum seal when connected and have a threaded nut system as a backup. The plug shall have a keyway and be threaded into the top plate. The connector system shall be ETL, UL and CSA approved.



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CADdetails

