

SPECIFICATIONS
MASTERS DECORATIVE SERIES® 60HZ FLOATING FOUNTAIN AERATOR SYSTEM

1.0 GENERAL

1.1 DESCRIPTION

- A. Manufacturer shall furnish a floating fountain aerator system capable of pumping water from below the surface of a body of water.
- B. A submersible motor shall draw water into an impeller housing where it shall be pumped into the atmosphere in the form of a decorative spray - type fountain.
- C. The water droplets shall become oxygen enriched and return to the surface, therefore transferring oxygen from the atmosphere into the body of water. Surface area of water body shall also be increased through constant wave action resulting in additional atmospheric oxygen transfer.
- D. This repeated action shall effectively mix and de-stratify the body of water and distribute the dissolved oxygen continuously.
- E. Fountain aerator system shall include an oil-cooled motor sealed in a stainless steel housing, with shaft mounted impeller, attached to a float. This assembly shall be connected to an electrical control panel by underwater power cable, all of which as specified in SECTION 1.2.

1.2 AERATOR COMPONENTS DESCRIPTION

- A. **1/2HP Float** shall be made of linear low density polyethylene. Float shall contain a center tube which shall be minimum Schedule 40 PVC and is attached to the impeller housing with four series 300 stainless steel hex head bolts. An o-ring is used to prevent leakage. A protective series 300 stainless steel intake screen shall be mounted around the impeller housing between the float assembly and motor housing. The motor housing shall be attached to the impeller housing with series 300 stainless steel hardware. All optional lights and anchor mounting shall be capable of being installed into fixture mounting areas which are molded into the float design as an integral part of the float. (See SECTION 5).
- B. **Impeller** shall be precision cast and balanced urethane with brass shaft insert. The impeller is connected to the motor shaft by a series 300 stainless steel bolt and lockwasher.
- C. **Impeller Housing** shall be molded from glass reinforced nylon type 6 material. The impeller housing shall be precision molded to accept the float tube and capable of being bolted to the motor housing. The impeller housing shall house the impeller, insert and flow straightener (if applicable).
- D. **Flow Straightener (where applicable)** shall be precision formed from T304 stainless steel material and shall have 4 curved vanes. The vanes shall take the spinning discharge water from the impeller and convert it to a straight, vertical flow. It shall be factory installed for various optional spray patterns.
- E. **Motor Housing** shall be Series 300 Stainless Steel. The housing shall have a series 300 stainless steel electrical hub welded on the bottom of the housing to allow electrical cable entry.

- F. **Motor** shall contain a Series 316 Stainless Steel shaft incorporating a permanent split phase capacitor run on single phase motors. The rotor shall be dynamically balanced and run in a ball bearing supported system. The stator windings shall be double dipped and baked with a Class F insulation, designed for oil immersion operation. The oil shall be a highly refined, mineral oil of food grade quality, specially formulated for lubrication. It shall meet FDA regulations. The oil shall provide continuous lubrication of bearings and internal seals and further function as an efficient heat transfer medium, allowing the motor to operate at 3450 RPM, at relatively low temperatures. The motor shall be contained in the motor housing by a series 300 stainless steel top plate.
- G. **Seals** used to protect the motor against water or oil leakage shall be a mechanical, rotating type assembly, composed of silicon carbide and series 300 stainless steel. All elastomers shall meet UL 778 requirements. This assembly shall then be encapsulated and protected within a series 300 stainless steel cartridge assembly.
- H. **Underwater Power Cable** shall be UL Listed and specifically designed for underwater use. The conductors are flexible, stranded copper wire sized for the amp draw and length of run. The conductors shall be resistant to oil, water and cracking. Power cable shall be fitted with a cable strain relief device, located within five feet of motor housing, capable of being attached to the latch mounted on the motor housing clamp. This will ensure that no potential damage can occur to any cable connections, due to tension on the cable.
- I. **Underwater Pin and Socket Connector**
1/2HP shall consist of a Series 900, IP68 pin and socket connector. It shall be of a 4 pin configuration rated 32 amps at 600 volts AC. The pin end shall be potted into a series 300 stainless steel straight bell-shaped adapter with an approved ridged epoxy. This assembly shall be permanently attached to a reinforced braided hose assembly, a series 300 stainless steel motor housing. This complete assembly shall be sealed with an approved flexible potting compound. The socket end shall be attached to a customer specified length of UL Listed underwater power cable. It shall be permanently secured to the UL Listed power cable by means of an integrated clamp and series 300 stainless steel screws. It shall be completely epoxied to prevent entry of water or any other foreign matter.
- J. **Fasteners and Anchor Connectors** shall be Series 300 Stainless Steel.
- K. **Electrical Control Panel** shall be UL Listed and have a NEMA 3R outdoor rated lockable enclosure containing Ground Fault Protection, a 24 hour Timer and Photo-eye for lighting option. For upgraded panel specifications, see SECTION 3.
- L. **Intake Screen** shall be made of 20 Gauge, Series 300 Stainless Steel. The screen shall have a minimum of 58% open area, representing 76 square inches.
- M. **Large Custom Intake Screen** (optional) shall be made of 18 Gauge, Series 300 Stainless Steel. The large custom intake screen shall completely enclose the motor power unit assembly. It shall have a minimum of 58% open area representing 367 square inches. Additional depth is required.

- N. **Nozzles** (optional) shall be interchangeable without the use of tools, in most cases. Nozzles will be sealed to the float tube utilizing an o-ring and series 300 stainless steel thumb screws to prevent leakage.
- O. **Series 316 Stainless Steel Upgrade** (optional) is available for sites with salt or brackish water. This option will upgrade all series 300 stainless steel components to series 316.

FOUNTAIN AERATOR DETAIL SPECIFICATIONS

2.0 DETAILED INFORMATION - Refer to TABLES 1, 2 and 3 to complete this section

- 2.1 This specification is intended to provide prospective bidders the necessary information pertaining to the fountain aerator(s) specified for the _____ Project.
- 2.2 The MOTOR(S) shall be 1/2 HP, operating at _____ Volts, 60 Hertz, Single Phase at 3450 RPM.
- 2.3 The MASTERS DECORATIVE SERIES® MODEL(S) specified shall be the _____ MODEL NUMBER _____ capable of creating a _____ pattern. It shall come complete with an electrical control panel, protective intake screen to be attached to a float assembly and _____ feet of _____ gauge, 3 conductor underwater power cable.
- 2.4 The fountain aerator shall produce a SPRAY PATTERN _____ feet in diameter and _____ feet in height.

FOUNTAIN AERATOR DETAIL SPECIFICATIONS (cont.)

3.0 UPGRADED ELECTRICAL CONTROL PANEL COMPONENTS DESCRIPTION

- A. **Electrical Enclosure** shall be NEMA 3R type, galvanized and powder-coat painted gray in color. Panel shall be both lock and mount capable.
- B. **Ground Fault Protection**
 - 1. 120V, a GFCI outlet shall provide over load and short circuit protection.
 - 2. 240V, a GFCI breaker shall provide overload and short circuit protection, combined with Class A ground fault protection.
- C. **Control Breaker (240V only)** shall provide overload protection and be capable of disconnecting all incoming electricity from the control panel.
- D. **Motor Contactor (240V only)** shall provide a means for disconnection of all motor leads. It shall be a magnetic, across the line starter type.
- E. **Overload Relay (240V only)** shall provide overload protection by means of a bi-metallic overload relay. It is adjustable over the full load amperage draw of the motor. It shall have a visual trip indicator, test button and manual/automatic reset modes.
- F. **Digital Timer** shall be a single pole type, rated at 120 Volts, 16 Amps, capable of 8 ON / OFF functions per day for 7 days. Digital timer has a lithium battery to retain the programming when power is disconnected.

3.1 SAFETY TESTING CONTROL PANEL

The electrical control panel shall be tested and approved as a complete unit. It is inspected and listed by Underwriters Laboratories, Inc. under Category 508: Industrial Control Panels and Category 778: Submersible Aerators and Aerating Fountain Pump Systems.

3.2 ACCEPTABLE MANUFACTURER

This fountain aerator electrical control panel, as specified in Section 3.0, shall be manufactured by AQUAMASTER® FOUNTAINS AND AERATORS, 16024 CTH X, Kiel, WI 53042, (800) 693-3144 or approved equal.

3.3 INSTALLATION

The electrical control panel must be installed in accordance with the installation instructions, in compliance with all local and National Electrical Code requirements. This should be done by a licensed electrical contractor. Any alterations to or substitution for items in this system, unless allowed by the installation instructions, will void the Underwriters Laboratories Listing and will void the product warranty. It may also create a hazardous installation. Read the instructions thoroughly before starting the installation and follow them carefully throughout.

3.4 ELECTRICAL CONTROL PANEL WARRANTY

Standard control panels with photo-eye have a 1 year warranty. All upgraded control panels and their components have a 3 year warranty on parts and labor.

FOUNTAIN AERATOR DETAIL SPECIFICATIONS (cont.)

4.0 SAFETY TESTING

The floating fountain aeration system shall be tested and approved as a complete unit. This approval must meet Underwriters Laboratories Inc. requirements in compliance with Category 508: Industrial Control Panels and Category 778: Submersible Aerators and Aerating Fountain Pump Systems. Individual component testing and wet niche environment equipment approval are not acceptable.

4.1 ACCEPTABLE MANUFACTURER

This fountain aerator, as specified in Sections 2.2, 2.3 and 2.4, shall be manufactured by AQUAMASTER® FOUNTAINS AND AERATORS, 16024 CTH X, Kiel, WI 53042, (800) 693-3144, or approved equal.

4.2 INSTALLATION

All AQUAMASTER® FOUNTAIN AERATORS are designed and built to be installed with an AQUAMASTER® UL Listed control panel and to be operated as a complete system. Any alterations to or substitution for items in this system, unless allowed by the installation instructions, will void the UL Listing and will void the product warranty. It may also create a hazardous installation. Read the instructions thoroughly before starting the installation and follow them carefully throughout.

4.3 WARRANTY

1/2 HP AQUAMASTER® MASTERS DECORATIVE SERIES® FOUNTAIN AERATORS motor, seal assembly, float and underwater power cable (referred to as in-water components) are covered under warranty at 100% replacement cost should it fail due to defects in materials or workmanship for a period of 5 years on parts and labor with an upgraded control panel (3 years with standard control panel). This is in effect from the date of shipment, when given normal and proper usage as determined by The Seller upon examination, and when owned by the original user.

FOUNTAIN AERATOR LIGHTING SYSTEMS AND OPTIONS SPECIFICATIONS

- 5.0 **LIGHTING SYSTEM** shall be LED/RGBW (circle one) _____ Volts/Watts, Model #s)_____. There are _____ total fixtures, containing _____ (choose color(s): white, warm white, amber, blue, red, or green) light engines or RGBW light engines.
- 5.1 A total length of _____ feet of _____ gauge 3(LED) or 5(RGBW) (circle one) conductor underwater power cable is required.
- 5.2 **DEEP WATER INTAKE SYSTEM** shall be capable of drawing water from further depths, in three foot increments. This system provides the fountain aerator the capability to de-stratify the pond very efficiently. Total length should reach beyond 50% depth but not to exceed 75%. Total _____ feet.
- 5.3 **LARGE CUSTOM INTAKE SCREEN** shall provide additional protected intake area if Fountain Aerator(s) will operate in a potentially high debris filled aquatic environment. Yes ____ No ____
- 5.4 **SERIES 316 STAINLESS STEEL UPGRADE** is available for sites with salt or brackish water. Yes ____ No ____

Please refer to TABLE 4 to assist in the completion of SECTION 5.

6.0 DESCRIPTION - LIGHTING SYSTEM

- A. **Lamp Housings** shall be of Series 300 Stainless Steel construction. They shall have a permanent series 300 stainless steel electrical hub welded on the bottom of the housing to allow electrical cable entry and be mounted to the float with series 300 stainless steel spring loaded retainers.
- B. **Construction** shall consist of nonmetallic Cord Connectors to prevent water from entering the lamp housing. LEDs/RGBWs will be powered by an AC/DC power supply fixed to the bottom of the lamp housing. An LED/RGBW light engine will be attached to a copper heat sink for heat dissipation. Reflectors/lenses shall be of composite construction and be sized specifically for each light engine.
- C. **Light Fixture Assembly** shall consist of “V” shaped Lamp gaskets made of silicon construction. Lens shall be of tempered glass with a clear non-diffusing surface with a minimum of 5/32nd thickness. Clamp ring shall be of series 300 stainless steel. Fasteners and mounting hardware shall be of series 300 stainless steel.
- D. **Underwater Pin and Socket Connector** shall consist of a Series 900, IP68 pin and socket connector. It shall be of a 3 pin (5 pin when RGBW is used) configuration rated 32 Amps at 600 VAC. The pin and socket ends shall each be attached to a 30” piece of UL Listed underwater power cable rated at 600 Volts. They both shall be permanently secured to their UL Listed power cables by a integrated neoprene grommet and compression nut assembly. These assemblies shall be epoxy filled to prevent entry of water or any other foreign matter. The pin end assembly shall be permanently attached to the light housing with a nonmetallic connector. This shall be potted using a flexible approved potting compound.
- E. **Light Controls** shall consist of a GFCI (Ground Fault Circuit Interrupter), overcurrent protection (fuse), digital timer with battery back-up and RGBW controller (optional) with power supply.
(For RGBW only) The RGBW controller is pre-programmed with assorted color, shows and holiday themed selectable programs. The controller can also adjust program speed and brightness. The standard controller shall consist of a programmable controller with push button interface.
- F. **Safety Testing Lighting** shall be tested and approved as a complete assembly. This approval must meet Underwriters Laboratories Inc. requirements in compliance with UL Category 676: Underwater Lighting Fixtures.
- G. **Warranty** on all AQUAMASTER® LIGHTING SYSTEMS are covered under warranty at 100% replacement cost should it fail due to defects in materials or workmanship for a period of 3 years including the LED light engine. This is in effect from the date of shipment, when given normal and proper usage as determined by The Seller upon examination, and when owned by the original user.

TABLE 1: THE MASTERS SERIES® PERFORMANCE SPECIFICATIONS

**TECHNICAL DATA
REFERENCE MATERIAL FOR SECTION 2.0 DETAILED INFORMATION**

Model Number	HP	Voltage and Phase	Running Amp Draw	Minimum Operating Depth	Ship Weight LBS.	LAKEWOOD FULL FLOW (no nozzle)	MASTERS NOZZLE SERIES
							Biscayne
M5301-ESC	1/2	120-1PH	5.6	2'	250	6.5 x 16 GPM 104	Upper 9 Lower 5 x 12 GPM 80
M5302-ESC		208-240 - 1PH	2.8				
Model Number	HP	Voltage and Phase	Running Amp Draw	MASTERS NOZZLE SERIES			
				Masters Crown & Geyser	Masters Crown & Wide Geyser	Masters Crystal Geyser	Eagle
M5301-ESC	1/2	120-1PH	5.6	Geyser Ht 7 x 2 Crown 4 X 24 GPM 80	Geyser Ht 7 x 3 Crown 4 X 24 GPM 80	8 x 20 GPM 79	9 x 6 GPM 45
M5302-ESC		208-240 - 1PH	2.8				
Model Number	HP	Voltage and Phase	Running Amp Draw	MASTERS NOZZLE SERIES			NOZZLES REQUIRING FLOW STRAIGHTENERS
				Masters Geyser	Par	Masters Wide Geyser	Arabella
M5301-ESC	1/2	120-1PH	5.6	10 x 2 GPM 66	Upper 5 Lower 2.5 x 18 GPM 102	11 X 5 GPM 66	Upper 5.5 x 6 Lower 2 x 20 GPM 95
M5302-ESC		208-240 - 1PH	2.8				
Model Number	HP	Voltage And Phase	Running Amp Draw	NOZZLES REQUIRING FLOW STRAIGHTENERS			
				Augusta	Bayside	Captiva	Champion
M5301-ESC	1/2	120-1PH	5.6	7 x14 GPM 64	Upper 6 x 8 Lower 1.5 x 10 GPM 81	5 X 3 GPM 36	5.5 X 18 GPM 72
M5302-ESC		208-240 - 1PH	2.8				
Model Number	HP	Voltage And Phase	Running Amp Draw	NOZZLES REQUIRING FLOW STRAIGHTENERS			
				Colonial	Diamondback	Doral	Double Eagle
M5301-ESC	1/2	120-1PH	5.6	Upper 10 Lower 6 x 16 GPM 25	5 x 35 GPM 62	Upper 7 x 7 Lower 4 x 5 GPM 75	11 x 2 GPM 45
M5302-ESC		208-240 - 1PH	2.8				
Model Number	HP	Voltage and Phase	Running Amp Draw	NOZZLES REQUIRING FLOW STRAIGHTENERS			
				Firestone	Half Moon	Imperial	Medinah
M5301-ESC	1/2	120-1PH	5.6	Upper 8.5 Middle 5 x 10 Lower 2 x 14 GPM 65	4 x 13 GPM 100	Upper 6 Middle 4 x 12 Lower 1 x 14 GPM 75	8 x 12 GPM 37
M5302-ESC		208-240 - 1PH	2.8				
Model Number	HP	Voltage and Phase	Running Amp Draw	NOZZLES REQUIRING FLOW STRAIGHTENERS			
				Prestwick	Riviera	Royal	Somerset
M5301-ESC	1/2	120-1PH	5.6	Upper 8 x 8 Lower 3 x 25 GPM 60	Upper 11 Middle 7.5 x 10 Lower 4.5 x 14 GPM 23	Upper 4 x 14 Lower 2 x 16 GPM 78	Upper 7 Lower 4 x 12 GPM 70
M5302-ESC		208-240 - 1PH	2.8				

TABLE 1: THE MASTERS SERIES® PERFORMANCE SPECIFICATIONS (cont.)

TECHNICAL DATA
REFERENCE MATERIAL FOR SECTION 2.0 DETAILED INFORMATION

Model Number	HP	Voltage and Phase	Running Amp Draw	NOZZLES REQUIRING FLOW STRAIGHTENERS		ADJUSTABLE NOZZLES W/FLOW STRAIGHTENERS	
				Turnberry	Valhalla	AquaDome	Reflection
M5301-ESC	1/2	120-1PH	5.6	4 x 10 GPM 77	Upper 8 Middle 6 x 12 Lower 3 x 25 GPM 71	Narrow 2 x 4 Wide 2 x 5.5 GPM N/A	Upper 5 x 7 Lower 2 x 20 GPM 91
M5302-ESC		208-240 - 1PH	2.8				

Model Number	HP	Voltage and Phase	Running Amp Draw	ADJUSTABLE NOZZLES REQUIRING FLOW STRAIGHTENERS			
				Sanibel			
M5301-ESC	1/2	120-1PH	5.6	7 x 8 GPM 77			
M5302-ESC		208-240 - 1PH	2.8				

*All performance data (heights and diameters), have been tested at 240 volt single phase electrical.
Your overall performance may vary due to actual voltage, intake restrictions and cable lengths.

TABLE 2: CABLE SIZING CHARTS

Maximum recommended length (in feet) from fountain aerator to control panel.

AquaMaster® recommends consulting a Licensed Electrician to properly size any underground cable from the main power source to our control panel. Cable runs to the panel located away from main power source requires recalculating voltage drop to insure proper cable sizing. Please contact AquaMaster® if assistance is required.

Single Phase 3 conductor			3 conductor Copper Wire Gauge Size						
Unit	Volts	Approx Amps	#14	#12	#10	#8	#6	#4	#2
1/2HP	120	5.6	150	250	450	650	1050	1700	2650
1/2HP	208-240	2.8	600	900	1550	2350	3750	5950	9250

Actual voltage to motor will affect your fountain's performance.

TABLE 3: FOUNTAIN AERATOR SPRAY PATTERN DESCRIPTIONS

1. **Masters Series® ARABELLA - Straightened Flow Pattern (SFP)**
Sparkling, two-tiered pattern consisting of an upper multi-stream and a lower full conical spray design.
SPECIFICATION DESCRIPTION: COMBINED FAN AND STREAMS
2. **Masters Series® AQUA DOME - Straightened Flow Pattern (SFP)**
Clear, laminar, low height dome pattern.
SPECIFICATION DESCRIPTION: SMOOTH DOME SHAPE
3. **Masters Series® AUGUSTA - Straightened Flow Pattern (SFP)**
Beautiful multi-tiered streamed pattern with a center geyser to add height.
SPECIFICATION DESCRIPTION: FAN SHAPE INDIVIDUAL STREAMS WITH CENTER GEYSER
4. **Masters Series® BAYSIDE - Straightened Flow Pattern (SFP)**
Dazzling, narrow, two-tiered pattern with multiple-point sprays for a refreshing ambience.
SPECIFICATION DESCRIPTION: COMBINED FAN AND STREAMS
5. **Masters Series® BISCAYNE - Basic Flow Pattern (BFP)**
Variation of classic two-tier with taller, narrower lower spray.
SPECIFICATION DESCRIPTION: UPRIGHT FAN & COLUMN
6. **Masters Series® CAPTIVA - Specialty Pattern**
Heavy-water vertical frothy column, excellent in open areas.
SPECIFICATION DESCRIPTION: DENSE FROTHY COLUMN
7. **Masters Series® CHAMPION - Straightened Flow Pattern (SFP)**
Multi-stream pattern with specific points resulting in a dramatic surface effect.
SPECIFICATION DESCRIPTION: INDIVIDUAL STREAMS FAN SHAPE
8. **Masters Series® COLONIAL - Straightened Flow Pattern (SFP)**
Two tier pattern that has a narrow center geyser, surrounded by a multi-streamed lower tier.
SPECIFICATION DESCRIPTION: FAN SHAPED INDIVIDUAL STREAMS WITH CENTER GEYSER
9. **Masters Series® CROWN & GEYSER - Basic Flow Pattern (BFP)**
A beautiful, dramatic pattern still achieves aeration results. This nozzle combines the Lakewood Full Flow with the vertical Geyser column of water through its center.
SPECIFICATION DESCRIPTION: COMBINED FAN & COLUMN
10. **Masters Series® CROWN & WIDE GEYSER - Basic Flow Pattern (BFP)**
A variation on our CROWN & GEYSER pattern. This nozzle produces a wider, less dense geyser column with a Lakewood Full Flow.
SPECIFICATION DESCRIPTION: COMBINED FAN & COLUMN

TABLE 3: FOUNTAIN AERATOR SPRAY PATTERN DESCRIPTIONS (cont.)

11. **Masters Series® CRYSTAL GEYSER- Basic Flow Pattern (BFP)**
This nozzle produces a very decorative crystalline spray pattern in an abstract, multi-tiered formation.
SPECIFICATION DESCRIPTION: FROTHY SPRAY
12. **Masters Series® DIAMONDBACK - Straightened Flow Pattern (SFP)**
Low height pattern sending streams of water in tremendous diameter.
SPECIFICATION DESCRIPTION: WIDEST LOW FAN SHAPE
13. **Masters Series® DORAL - Straightened Flow Pattern (SFP)**
A two-tiered multi-streamed arch pattern.
SPECIFICATION DESCRIPTION: TWO-TIERED FAN SHAPED INDIVIDUAL STREAMS
14. **Masters Series® DOUBLE EAGLE - Straightened Flow Pattern (SFP)**
Statuesque, frothy vertical pattern creates a stunning full profile.
SPECIFICATION DESCRIPTION: SOLID VERTICAL COLUMN
15. **Masters Series® EAGLE - Basic Flow Pattern (BFP)**
Elongated, frothy vertical pattern creates a beautiful, full profile.
SPECIFICATION DESCRIPTION: FROTHY VERTICAL COLUMN
16. **Masters Series® FIRESTONE - Straightened Flow Pattern (SFP)**
Beautiful tri-tier, perfect for smaller area applications.
SPECIFICATION DESCRIPTION: TRI-TIER MULTIPLE STREAMS
17. **Masters Series® GEYSER - Basic Flow Pattern (BFP)**
A multi-port nozzle achieves a dramatic vertical pattern in a solid column of water, fanning slightly at the top.
SPECIFICATION DESCRIPTION: SOLID VERTICAL COLUMN
18. **Masters Series® HALF MOON - Straightened Flow Pattern (SFP)**
Gorgeous multi-stream pattern results in a full floral effect.
SPECIFICATION DESCRIPTION: SCALLOPED FAN SHAPE
19. **Masters Series® IMPERIAL - Straightened Flow Pattern (SFP)**
Spectacular tri-tier, multiple-point rotating formation creating a dramatic effect.
SPECIFICATION DESCRIPTION: ROTATING COMBINED FAN AND STREAMS WITH CENTER GEYSER
20. **LAKEWOOD - Basic Flow Pattern (BFP)**
Internal impeller technology creates this full, more upright cone pattern, **without a nozzle**. This is the base model for The Masters Series®.
SPECIFICATION DESCRIPTION: FAN SHAPE

TABLE 3: FOUNTAIN AERATOR SPRAY PATTERN DESCRIPTIONS (cont.)

21. **Masters Series® MEDINAH - Straightened Flow Pattern (SFP)**
Taller, narrower version of the Turnberry.
SPECIFICATION DESCRIPTION: NARROW FAN SHAPE
22. **Masters Series® PAR - Basic Flow Pattern (BFP)**
Heavy-water version of the Crown & Geyser, excellent choice in open areas.
SPECIFICATION DESCRIPTION: DENSE COMBINED FAN & COLUMN
23. **Masters Series® PRESTWICK - Straightened Flow Pattern (SFP)**
Dramatic multi-streamed two-tiered pattern.
SPECIFICATION DESCRIPTION: TWO-TIERED MULTIPLE STREAMS
24. **Masters Series® REFLECTION - Adjustable Straightened Flow Pattern (ASFP)**
Dazzling, full circle, two-tiered pattern with multiple-point formation.
SPECIFICATION DESCRIPTION: ADJUSTABLE COMBINED FAN AND STREAMS
25. **Masters Series® RIVIERA - Straightened Flow Pattern (SFP)**
Dazzling, three tier display that combines a narrow multi-streamed geyser with two surrounding conical shaped tiers. Great for applications that require a tiered, narrower pattern.
SPECIFICATION DESCRIPTION: TWO-TIERED FAN SHAPED INDIVIDUAL STREAMS WITH CENTER GEYSER
26. **Masters Series® ROYAL - Straightened Flow Pattern (SFP)**
Spectacular two-tier, multiple-point rotating formation creating a dramatic effect.
SPECIFICATION DESCRIPTION: ROTATING COMBINED FAN AND STREAMS
27. **Masters Series® SANIBEL - Adjustable Straightened Flow Pattern (ASFP)**
Taller and frothier version of Medinah.
SPECIFICATION DESCRIPTION: NARROW FAN SHAPED
28. **Masters Series® SOMERSET - Straightened Flow Pattern (SFP)**
Heavy upright multi-stream fan shape with a geyser creates a stunning full profile pattern.
SPECIFICATION DESCRIPTION: HEAVY INDIVIDUAL STREAM FAN SHAPE WITH CENTER GEYSER
29. **Masters Series® TURNBERRY - Straightened Flow Pattern (SFP)**
Upright funnel shape creates a stunning full profile pattern.
SPECIFICATION DESCRIPTION: HEAVY FAN SHAPE
30. **Masters Series® VALHALLA - Straightened Flow Pattern (SFP)**
Stunning tri-tier resulting in both excellent height and diameter.
SPECIFICATION DESCRIPTION: TRI-TIER SPRAY

TABLE 3: FOUNTAIN AERATOR SPRAY PATTERN DESCRIPTIONS (cont.)

31. Masters Series® WIDE GEYSER - Basic Flow Pattern (BFP)

A modification of the Geyser nozzle produces a less dense, more decorative version.
SPECIFICATION DESCRIPTION: WIDE VERTICAL COLUMN

TABLE 4: FOUNTAIN AERATOR LIGHTING SYSTEMS

AQUAMASTER® FOUNTAIN AERATORS are even more dramatic at night, with the addition of a UL and cUL Listed NIGHT GLOW LIGHTING SYSTEM.

Any lighting system choice includes stainless steel lamp housings, ready to be installed in the float, sealed with clear tempered glass lenses in a stainless-steel clamp ring. Minimal installation is required. All lights remain water-cooled and out of sight below the surface.

All necessary electrical controls, including digital timer, are pre-wired into the fountain aerator's existing UL Listed control panel.

For uniformity of spray pattern coverage, 4 lights minimum is recommended.

LINE VOLTAGE: 120 Volt LED Lighting Systems

A. 1/2HP Fountain Aerators are only available with 11 watt or 20 watt RGBW fixtures

11 Watt Fixtures	Each system includes: <ul style="list-style-type: none"> • 11 Watt LED light engine • 50' of underwater cable • GFCI Protection • Digital Timer • Clear lenses • UL and cUL Listing • Choice of White, Warm White, Red, Green, Blue, or Amber Light Engine
2 light system: Model # 870808	
4 light system: Model # 870809	
20 Watt RGBW Fixtures	Each system includes: <ul style="list-style-type: none"> • 20 Watt LED RGBW light engine • RGBW Controller • 50' of underwater cable • GFCI Protection • Digital Timer • Clear lenses • UL and cUL Listing
2 light system: Model # 870810	
4 light system: Model # 870811	

TABLE 4: FOUNTAIN AERATOR LIGHTING SYSTEMS (cont.)

CABLE SIZING CHART FOR LED/RGBW LIGHTS

Maximum recommended length (in feet) from fountain aerator to control panel.

AquaMaster® recommends consulting a Licensed Electrician to properly size any underground cable from the main power source to our control panel. Cable runs to the panel located away from main power source requires recalculating voltage drop to insure proper cable sizing. Please contact AquaMaster® if assistance is required.

3 Conductor				Copper Wire Gauge Size		
Watts Per Fixture	# of Fixtures	Volts	Approx Amps	#14	#12	#10
11	2	120	0.183	5250	8150	13600
11	4	120	0.367	2600	4050	9050
5 Conductor						
20 RGBW	2	120	0.333	2900	-	7500
20 RGBW	4	120	0.667	1450	-	3750