

HIGH PERFORMANCE AERATIONS SYSTEMS VOLCANO II & HYDROMAX SERIES

The perfect choice when a high performance, lower profile, floating surface aerator is desired. Volcano II and Hydromax Aeration Series produce astonishing aeration results due to their high GPM pumping rates and oxygen transfer capabilities.



5 HP VOLCANO II

VOLCANO II

	HORSEPOWER	½	1½	3½	5½
60Hz	HT x DIA ft	1 x 4	2.5 x 8	3.5 x 12	4.5 x 14
	GPM	420	1298	1975	2680
50Hz	HT x DIA m	0.3 x 1.2	0.8 x 2.7	1.1 x 3.7	1.4 x 4.9
	m3/hr	88	327	485	686



THE HYDROMAX SERIES

The HydroMax Series features Volcano II's high volume performance, but with a conical display pattern.



ETNA

	HORSEPOWER	½	1½	3½	5½
60Hz	HT x DIA ft	4 x 12	5.5 x 12	7.5 x 22	10 x 27
	GPM	258	517	845	1350

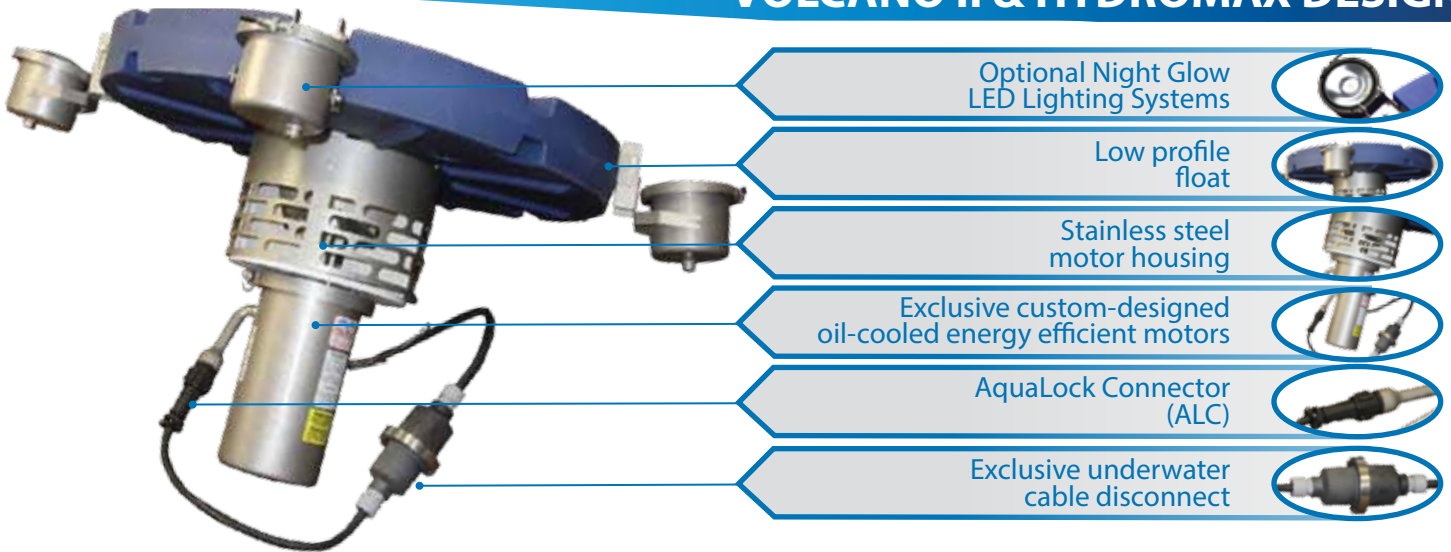


SHASTA

	HORSEPOWER	½	1½	3½	5½
60Hz	HT x DIA ft	1.5 x 7	4 x 10	5 x 16	7 x 18
	GPM	324	667	1070	1415
50Hz	HT x DIA m	0.5 x 1.5	1.4 x 3.1	1.4 x 3.4	2 x 5.5
	m3/hr	66	223	326	358

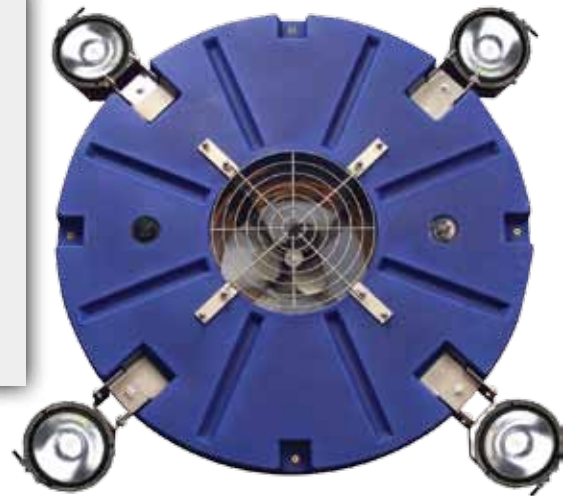


VOLCANO II & HYDROMAX DESIGN



Volcano II Design Features

Top and side views with optional lights configuration. Give even more drama to your Volcano II series aerator by adding the UL, cUL Listed and CE Recognized Night Glow LED 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.



- Easily installed, similar to Floating Fountain Aerators
- Only requires three feet of depth ($\frac{1}{2}$ HP operating depth is 2')
- Works in deeper depths with optional float mounted deep water intake
- $\frac{1}{2}$ to 5 $\frac{1}{2}$ HP, 1 and 3 phase motors
- Quality stainless steel components
- Night Glow LED or RGBW Lighting Systems now available for all models
- Creates a fluid boil effect, resulting in maximum pumping rates and O₂ transfer

WARRANTY

$\frac{1}{2}$ HP	3 Years Parts & Labor	DOMESTIC
1 $\frac{1}{2}$ - 5 $\frac{1}{2}$ HP	5 Years Parts & Labor	
$\frac{1}{2}$ HP	2 Years Parts & 1 Year Labor	INTERNATIONAL
1 $\frac{1}{2}$ - 5 $\frac{1}{2}$ HP	3 Years Parts & 1 Year Labor	

Warranties subject to change. Please contact AquaMaster® for most current warranties.



HIGH PERFORMANCE DIFFUSED AQUAAIR® ULTRA SERIES

AquaAir® Ultra provides ponds and lakes with superior aeration, circulation, and destratification. Dissolved oxygen (DO) levels are increased throughout the entire water column with the use of bottom-mounted diffusers. The diffusers employ a super fine micro-bubble technology resulting in the highest diffuser oxygen transfer rate (OTR) available today. The micro-bubbles draw water from the pond floor to the surface where atmospheric Oxygen is absorbed and then Transferred throughout the water column. Additionally, this process provides excellent deterrence to thermal stratification (layers of different temperature within the water).

The diffusers are connected to a revolutionary design enclosure containing one of four compressor sizes—by self-weighted Super Sink air supply tubing. System sizes range from $\frac{1}{3}$ to 2 HP with one to twelve diffusers.



AQUAAIR® ULTRA SINGLE DIFFUSER

AquaAir® Ultra provides ponds and lakes with superior aeration, circulation, and destratification. Dissolved oxygen (DO) levels are increased throughout the entire water column with the use of bottom-mounted diffusers. The diffusers employ a super fine micro-bubble technology resulting in the highest diffuser oxygen transfer rate (OTR) available today. The micro-bubbles draw water from the pond floor to the surface where atmospheric Oxygen is absorbed and then Transferred throughout the water column.

AQUAAIR® ULTRA

AquaAir® Ultra provides ponds & lakes with superior aeration, circulation, and de-stratification. A stainless steel, base mounted enclosure containing up to four compressors delivers the highest air flow rates available. Service is made easy by "tool-less" compressor removal. Weighted Super Sink air tubing supplies air flow to the diffusers while remaining unseen and un-obstructive on the pond bottom. Coated, anti-fouling diffuser membranes utilize micro-bubble technology to synergistically lift water from the pond bottom to the surface where atmospheric oxygen transfer occurs and a subsequent, oxygen enhanced, beneficial circulation is created. AquaAir® Ultra is backed by a 3 year warranty on compressors.



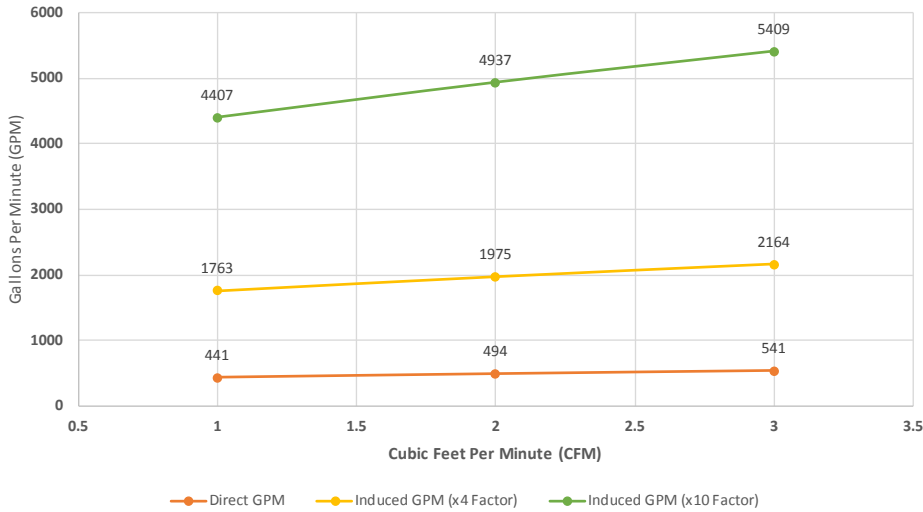
LAKE AND POND BENEFITS

- Entire water column circulation
- Elimination of thermal stratification
- Increased dissolved oxygen levels that stimulate the natural aerobic digestion process thus reducing nutrient levels and associated algal growth
- Elimination of oxygen related fish kills and expansion of the oxygenated habitat and ecosystem
- Reduction of mosquito and aquatic midge infestations
- Elimination of foul odors from undesirable gases
- Reduction of organic bottom sediment
- Preservation of a healthy aquatic ecosystem and an aesthetically pleasing aquascape to view and enjoy through improved water quality
- Available in 3 colors White, Green, and Light Brown/Sand



PUMPAGE VS AIR FLOW

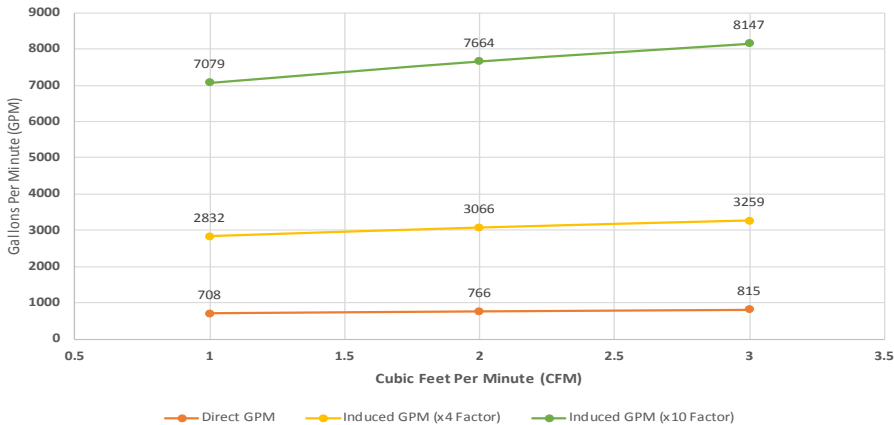
Pumpage vs Air Flow for One Single 12" Membrane Diffuser



AquaMaster® recommends utilization of Induced GPM (x4 Factor) calculation as the minimum industry standard for conservative sizing.

For diffuser performance of less than 1 cfm, recommended induced GPM factor should not exceed 4x factor.

Pumpage vs Air Flow for One Dual 12" Membrane Diffuser





MASTER THE **POWER** AND **BEAUTY** OF WATER

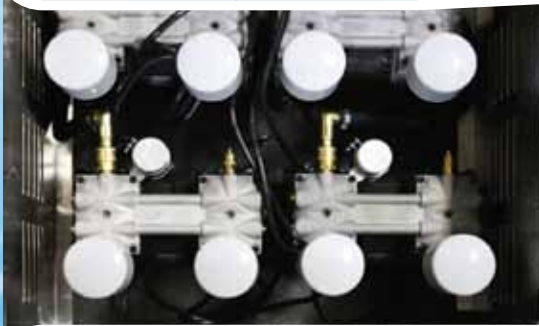
AquaAir® Ultra provides ponds and lakes with superior aeration, circulation, and destratification. Dissolved oxygen (DO) levels are increased throughout the entire water column with the use of bottom-mounted diffusers. The diffusers employ a super fine micro-bubble technology resulting in the highest diffuser oxygen transfer rate (OTR) available today. The micro-bubbles draw water from the pond floor to the surface where atmospheric Oxygen is absorbed and then Transferred throughout the water column.

HIGH PERFORMANCE MEMBRANE DIFFUSER TECHNOLOGY



- Hollow base design for sand or gravel weighting
- Large base area for soft bottom sediment
- Self-cleaning, low maintenance construction
- Ultra low back pressure check valve
- Micro-bubble technology
- Five year warranty (Diffusers)
- Single membrane features flexible 12" disc
- Dual membrane features two flexible 12" membrane discs
- Quad membrane features four flexible 12" membrane discs
- Weighted Diffuser Bases Optional

COMPRESSORS



- 1/3 HP Single Piston Compressor, 120V & 240V Single Phase
- 1/2 HP Dual Piston Compressor, 120V & 240V Single Phase
- Thermal overload motor protection
- 3 Year Warranty on Compressors

COMPRESSOR ENCLOSURES



- Heavy-duty cooling fan circulates air around compressor
- Stainless steel hasp latch with Padlock included
- Stainless steel cover and hardware
- Green, Brown, & White color options available
- Ease of internal accessibility
- Limited lifetime warranty (cooling fan 3 year warranty)
- Outside Dimensions including overhang of cover
AAU 1-3 – 17.0" L x 15.0" W x 16.5" H; 24.0" x 24.0" HDPE Base
AAU 4-6 – 21.0" L x 17.0" W x 16.5" H; 24.0" x 24.0" HDPE Base
- Outside Dimensions including overhang of cover & external manifold housing
AAU 7-12 – 28.6" L x 24.4" W x 18.1" H; 24.0" x 24.0" HDPE Base



SUPER SINK AIR TUBING



- Flexible, will not crack or kink even in cold temperatures
- Self-weighted for easy installation and quick sinking
- Sizes available: 1/2" (.58" ID x 1.06" OD) in 100ft, 200ft, & 500ft roll lengths
5/8" (.63" ID x 1.15" OD) in 100ft roll lengths
1" (1.0" ID x 1.70" OD) in 250ft roll lengths
(Consult Factory for Availability)
- Utilizes PVC insert fittings for quick connections
- 15 year warranty

60 Hz

AQUAAIR® ULTRA PERFORMANCE SPECIFICATIONS

System	# of Diffusers	Cabinet Size	Compressor(s)	Total Amp Draw	Total Air Flow	Air Flow per Diffuser
AquaAir® Ultra 1	1	Small	(1) ½ HP	3 - 3.8A @ 120V* 1.1 - 1.5A @ 240V**	2.4 CFM	2.4 CFM
AquaAir® Ultra 2S	2	Small	(1) ½ HP	3 - 3.8A @ 120V* 1.1 - 1.5A @ 240V**	2.4 CFM	1.2 CFM
AquaAir® Ultra 2	2	Small	(1) ½ HP	3.5 - 5A @ 120V* 1.7 - 2.5A @ 240V**	5 CFM	2.5 CFM
AquaAir® Ultra 3	3	Small	(1) ½ HP	3.5 - 5A @ 120V* 1.7 - 2.5A @ 240V**	5 CFM	1.7 CFM
AquaAir® Ultra 3 High Flow	3	Medium	(2) ½ HP	7 - 10A @ 120V* 3.4 - 5A @ 240V**	10 CFM	3.3 CFM
AquaAir® Ultra 4S	4	Small	(1) ½ HP	3.5 - 5A @ 120V* 1.7 - 2.5A @ 240V**	5 CFM	1.25 CFM
AquaAir® Ultra 4	4	Medium	(2) ½ HP	7 - 10A @ 120V* 3.4 - 5A @ 240V**	10 CFM	2.5 CFM
AquaAir® Ultra 5	5	Medium	(2) ½ HP	7 - 10A @ 120V* 3.4 - 5A @ 240V**	10 CFM	2 CFM
AquaAir® Ultra 5 High Flow	5	Large	(3) ½ HP	10.5 - 15A @ 120V*** 5.1 - 7.5A @ 240V**	15 CFM	3 CFM
AquaAir® Ultra 6	6	Medium	(2) ½ HP	7 - 10A @ 120V* 3.4 - 5A @ 240V**	10 CFM	1.7 CFM
AquaAir® Ultra 6 High Flow	6	Large	(3) ½ HP	10.5 - 15A @ 120V*** 5.1 - 7.5A @ 240V**	15 CFM	2.5 CFM
AquaAir® Ultra 7	7	Large	(3) ½ HP	10.5 - 15A @ 120V*** 5.1 - 7.5A @ 240V**	15 CFM	2.1 CFM
AquaAir® Ultra 8S	8	Medium	(2) ½ HP	7 - 10A @ 120V* 3.4 - 5A @ 240V**	10 CFM	1.25 CFM
AquaAir® Ultra 8	8	Large	(3) ½ HP	10.5 - 15A @ 120V*** 5.1 - 7.5A @ 240V**	15 CFM	1.9 CFM
AquaAir® Ultra 8 High Flow	8	Large	(4) ½ HP	14 - 20A @ 120V**** 6.8 - 10A @ 240V**	20 CFM	2.5 CFM
AquaAir® Ultra 9	9	Large	(3) ½ HP	10.5 - 15A @ 120V*** 5.1 - 7.5A @ 240V**	15 CFM	1.7 CFM
AquaAir® Ultra 9 High Flow	9	Large	(4) ½ HP	14 - 20A @ 120V**** 6.8 - 10A @ 240V**	20 CFM	2.2 CFM
AquaAir® Ultra 10	10	Large	(4) ½ HP	14 - 20A @ 120V**** 6.8 - 10A @ 240V**	20 CFM	2 CFM
AquaAir® Ultra 11	11	Large	(4) ½ HP	14 - 20A @ 120V**** 6.8 - 10A @ 240V**	20 CFM	1.8 CFM
AquaAir® Ultra 12	12	Large	(4) ½ HP	14 - 20A @ 120V**** 6.8 - 10A @ 240V**	20 CFM	1.7 CFM

CFM = Cubic Feet per Minute (Air Flow)
ALL BASES 24.0" x 24.0"*15 Amp Service, NEMA 5-15 Plug
***20 Amp Service, NEMA 5-20 Plug**15 Amp Service, NEMA 6-15 Plug
****30 Amp Service, NEMA 5-30 Plug* A pond's surface acreage is determined by multiplying its length in feet by its width in feet then dividing that total by 43,560.
A pond's actual shape and depth should be considered when selecting a system.

SYSTEM SIZING GUIDE

System	Suggested Pond Size (surface acreage*)	Operating Depths
AquaAir® Ultra 1	Up to ½ Up to 1	4' - 12' 13' - 35'
AquaAir® Ultra 2S	Up to ½	4' - 8'
AquaAir® Ultra 2	Up to 1 Up to 2	4' - 12' 13' - 35'
AquaAir® Ultra 3	Up to 1½ Up to 3	4' - 12' 13' - 35'
AquaAir® Ultra 3 High Flow	Up to 2 Up to 4	4' - 12' 13' - 35'
AquaAir® Ultra 4S	Up to 1	4' - 8'
AquaAir® Ultra 4	Up to 2 Up to 4	4' - 12' 13' - 35'
AquaAir® Ultra 5	Up to 2.5 Up to 5	4' - 12' 13' - 35'
AquaAir® Ultra 5 High Flow	Up to 3 Up to 6	4' - 12' 13' - 35'
AquaAir® Ultra 6	Up to 3 Up to 6	4' - 12' 13' - 35'

System	Suggested Pond Size (surface acreage*)	Operating Depths
AquaAir® Ultra 6 High Flow	Up to 3.5 Up to 7	4' - 12' 13' - 35'
AquaAir® Ultra 7	Up to 3.5 Up to 7	4' - 12' 13' - 35'
AquaAir® Ultra 8S	Up to 2	4' - 8'
AquaAir® Ultra 8	Up to 4 Up to 8	4' - 12' 13' - 35'
AquaAir® Ultra 8 High Flow	Up to 4.5 Up to 9	4' - 12' 13' - 35'
AquaAir® Ultra 9	Up to 4.5 Up to 9	4' - 12' 13' - 35'
AquaAir® Ultra 9 High Flow	Up to 5 Up to 10	4' - 12' 13' - 35'
AquaAir® Ultra 10	Up to 5 Up to 10	4' - 12' 13' - 35'
AquaAir® Ultra 11	Up to 5.5 Up to 11	4' - 12' 13' - 35'
AquaAir® Ultra 12	Up to 6 Up to 12	4' - 12' 13' - 35'

50 Hz

AQUAAIR® ULTRA PERFORMANCE SPECIFICATIONS

System	# of Diffusers	Cabinet Size	Compressor(s)	Total Amp Draw	Total Air Flow	Air Flow per Diffuser
AquaAir® Ultra 1	1	Small	(1) ½ HP	0.7 – 1.2A @ 220V	0.06 CMM	0.06 CMM
AquaAir® Ultra 2S	2	Small	(1) ½ HP	0.7 – 1.2A @ 220V	0.06 CMM	0.03 CMM
AquaAir® Ultra 2	2	Small	(1) ½ HP	1.4 – 2.0A @ 220V	0.12 CMM	0.06 CMM
AquaAir® Ultra 3	3	Small	(1) ½ HP	1.4 – 2.0A @ 220V	0.12 CMM	0.04 CMM
AquaAir® Ultra 3 High Flow	3	Medium	(2) ½ HP	2.8 – 4.0A @ 220V	0.24 CMM	0.08 CMM
AquaAir® Ultra 4S	4	Small	(1) ½ HP	1.4 – 2.0A @ 220V	0.12 CMM	0.03 CMM
AquaAir® Ultra 4	4	Medium	(2) ½ HP	2.8 – 4.0A @ 220V	0.24 CMM	0.06 CMM
AquaAir® Ultra 5	5	Medium	(2) ½ HP	2.8 – 4.0A @ 220V	0.24 CMM	0.05 CMM
AquaAir® Ultra 5 High Flow	5	Large	(3) ½ HP	4.2 – 6.0A @ 220V	0.36 CMM	0.07 CMM
AquaAir® Ultra 6	6	Medium	(2) ½ HP	2.8 – 4.0A @ 220V	0.24 CMM	0.04 CMM
AquaAir® Ultra 6 High Flow	6	Large	(3) ½ HP	4.2 – 6.0A @ 220V	0.36 CMM	0.06 CMM
AquaAir® Ultra 7	7	Large	(3) ½ HP	4.2 – 6.0A @ 220V	0.36 CMM	0.05 CMM
AquaAir® Ultra 8S	8	Medium	(2) ½ HP	2.8 – 4.0A @ 220V	0.24 CMM	0.03 CMM
AquaAir® Ultra 8	8	Large	(3) ½ HP	4.2 – 6.0A @ 220V	0.36 CMM	0.045 CMM
AquaAir® Ultra 8 High Flow	8	Large	(4) ½ HP	5.6 – 8.0A @ 220V	0.48 CMM	0.06 CMM
AquaAir® Ultra 9	9	Large	(3) ½ HP	4.2 – 6.0A @ 220V	0.36 CMM	0.04 CMM
AquaAir® Ultra 9 High Flow	9	Large	(4) ½ HP	5.6 – 8.0A @ 220V	0.48 CMM	0.053 CMM
AquaAir® Ultra 10	10	Large	(4) ½ HP	5.6 – 8.0A @ 220V	0.48 CMM	0.048 CMM
AquaAir® Ultra 11	11	Large	(4) ½ HP	5.6 – 8.0A @ 220V	0.48 CMM	0.044 CMM
AquaAir® Ultra 12	12	Large	(4) ½ HP	5.6 – 8.0A @ 220V	0.48 CMM	0.04 CMM

CMM = Cubic Meters per Minute (Air Flow)

SYSTEM SIZING GUIDE

* A pond's surface acreage is determined by multiplying its length in meters by its width in meters then dividing that total by 10,000. A pond's actual shape and depth should be considered when selecting a system.

System	Suggested Pond Size (Ha)	Operating Depths
AquaAir® Ultra 1	Up to 0.2 Up to 0.4	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 2S	Up to 0.2	1.2 – 1.9m
AquaAir® Ultra 2	Up to 0.4 Up to 0.8	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 3	Up to 0.6 Up to 1.2	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 3 High Flow	Up to 0.8 Up to 1.6	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 4S	Up to 0.4	1.2 – 1.9m
AquaAir® Ultra 4	Up to 0.8 Up to 1.6	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 5	Up to 1 Up to 2	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 5 High Flow	Up to 1.2 Up to 2.4	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 6	Up to 1.2 Up to 2.4	1.2 – 3.7m 4.0 – 10.7m

System	Suggested Pond Size (Ha)	Operating Depths
AquaAir® Ultra 6 High Flow	Up to 1.4 Up to 2.8	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 7	Up to 1.4 Up to 2.8	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 8S	Up to 0.8	1.2 – 1.9m
AquaAir® Ultra 8	Up to 1.6 Up to 3.2	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 8 High Flow	Up to 1.8 Up to 3.6	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 9	Up to 1.8 Up to 3.6	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 9 High Flow	Up to 2 Up to 4	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 10	Up to 2 Up to 4	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 11	Up to 2.2 Up to 4.4	1.2 – 3.7m 4.0 – 10.7m
AquaAir® Ultra 12	Up to 2.4 Up to 4.8	1.2 – 3.7m 4.0 – 10.7m