AERMAX™ MEMBRANE TUBE DIFFUSER SPECIFICATION
(Wide Band Fine Pore Diffuser)
MODEL S-225

GENERAL

Diffusers shall be AERMAX™ perforated membrane tube type as manufactured by Aeration Technologies, Inc. (AERTEC). The diffuser shall be hollow cylindrical shape with integral air duct and plenum design to insure completely uniform distribution of air over the entire operating range of air flows. The diffuser shall be furnished totally assembled by the manufacturer, ready for installation.

The nominal diffuser length shall be 24 inches as measured from outside ends of the diffuser frame excluding threaded end connector for attaching the diffuser to the air distribution pipe. The nominal diameter of the diffuser shall be 2.5 inches.

DIFFUSER ASSEMBLY

Each diffuser shall consist of the following:

- one 3/4-inch NPT threaded stainless steel diffuser connector
- one stainless steel diffuser frame and plenum
- one EPDM diffuser membrane
- two stainless steel membrane fasteners
- one HDPE moulded end bushing
- one HDPE moulded end cap
- one check valve and air metering orifice assembly

DIFFUSER MEMBRANE

The diffuser membrane shall consist of EPDM rubber compound 40K6 extruded into a one piece flexible tube with the following characteristics:

Parameters	Standard	Value/Unit
Elongation at Break	ASTM D412	600%
Tensile Strength	ASTM D412	1,450 psi
Tear Growth Resistance	ASTM D624	100 lbs./in. (against grain)
Tear Growth Resistance	ASTM D624	110 lbs./in. (with grain)
Hardness	ASTM D2240	40 ±5

The tubing shall be perforated with precision die punch slits that open under pressure.

The surface of the membrane shall be reasonably smooth to prevent biological growth build-up, no increase in headloss, and to provide for easy cleaning. Non-rubber membranes that do not exhibit elastic characteristics are not acceptable. Plasticized PVC and polypropylene sheaths are not acceptable. Membranes manufactured using a longitudinal seam are not acceptable.

The membrane shall be 2.5-in. nominal diameter by 0.07-in. nominal thickness with an overall length of 26 inches. Perforated length on diffuser membrane shall be 22 inches.

The total active surface area of the diffuser membrane shall be 160 square inches. Demonstration of full utilization of perforated area shall be provided to the Engineer upon request. Incomplete utilization of perforated surface area under design conditions shall not be acceptable.

MEMBRANE FASTENER

The diffuser membrane shall be folded double over each end of the diffuser frame and shall be fastened with circular crimped 304 stainless steel ring fasteners. The fastener shall guarantee a 360° seal through use of a tongue and groove design that leaves no steps, gaps or unbridged parts on the inner circumference. The fastener shall have a built-in spring action which permits the fastener to "breathe" without loosening, and shall not require retightening. Fasteners using worm gears, screws, or other components which could tear the membrane, leave gaps or require retightening shall not be acceptable.

DIFFUSER FRAME ASSEMBLY

The membrane frame shall be a tubular 304 stainless steel tube 0.75-in. diameter with 0.035-in. wall. The frame shall be threaded at one end to accept the plastic end cap fitting. The other end shall be inserted into and full

360 degree fillet welded to the diffuser connector. HDPE molded plastic end fittings shall be press fit or screwed to the ends of the frame. These fittings shall provide an air tight and smooth surface for clamping of the membrane.

DIFFUSER CONNECTOR

The diffuser connector shall be manufactured of a standard 0.75-inch 304 stainless pipe with NPT thread on one end. One end shall be used to hold the inlet end fitting and the other end shall be used to connect to the air distribution piping. Plastic nipple connectors shall not be acceptable. The mounting connection employed for the diffuser element shall be capable of withstanding an external load of 400 ft.-lbs. without structural failure. Small diameter threaded connections shall not be acceptable to attach diffusers to the air piping. The connecting end shall be shipped with plastic thread cover to protect the threads during shipment and handling.

CHECK VALVE AND AIR METERING ORIFICE ASSEMBLY

The diffuser assembly shall be equipped with a circular umbrella check valve specially manufactured for the service, and it shall be of soft molded rubber requiring a slight positive pressure to open. The purpose of the check valve shall be to exclude water from the diffuser and air distribution piping upon shutoff of the air. The check valve shall not impede airflow and keep headloss to a minimum. The check valve shall be designed such that positive closure is assured. Flap valves of sheet material are not acceptable. Housing for the check valve shall act as an air metering orifice to insure equal distribution of air through all diffusers. The housing shall be press fit into the entrance end of the diffuser connector.

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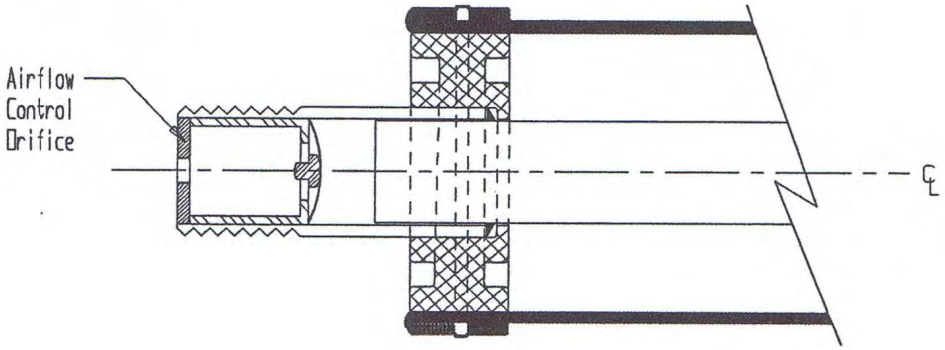
AERMAX™ MEMBRANE TUBE DIFFUSER
PRODUCT INFORMATION

MODEL S-225

Optional Components

Component	Design Features	Materials of Construction	Options
Airflow Control Orifice	Precise airflow control and air balancing for special applications	machined 1/8-in. thick brass	Special materials available

Option Detail



Airflow Control Orifice

MODEL S-225
SUPPLEMENTAL SPECIFICATIONS
(Optional Features and Services)

CONTROL ORIFICE
(Special applications only)

The engineered control orifice shall be manufactured of 1/8-inch brass and press fit into the diffuser connector. The control orifice shall be sized for a specific pressure drop to match the system airflow delivery requirements and/or system. Airflow balancing and maldistribution analysis shall be submitted if requested.

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PERFORMANCE
(Configuration and submergence dependent)

Each diffuser shall have the following oxygen transfer efficiency and headloss characteristics when tested at ____ feet submergence and at the project geometric configuration.

Diffuser Air Flow, SCFM	Min. SOTE, %	Max. Headloss, Inches of Water
1.0		
3.0		
5.0		
7.0		

The manufacturer shall furnish actual test results by an independent laboratory supporting the above, if requested.

(Consult manufacturer to determine appropriate performance values as performance is related to submergence, diffuser density and placement in the tank.)

MANUFACTURER SERVICES

The manufacturer shall provide the services of a competent factory trained representative familiar with the installation of the diffusers and air piping system, as required to assist the contractor in the proper installation of the equipment and to instruct the owner's personnel in the equipment's operation and maintenance.

The following service times shall be furnished:

	man hours of instruction on the installation of the aeration equipment
	man hours for the supervision of the installation of the aeration system
	man hours for the inspection of the completed system
	man hours for the start-up of the system and for operator training and maintenance and care

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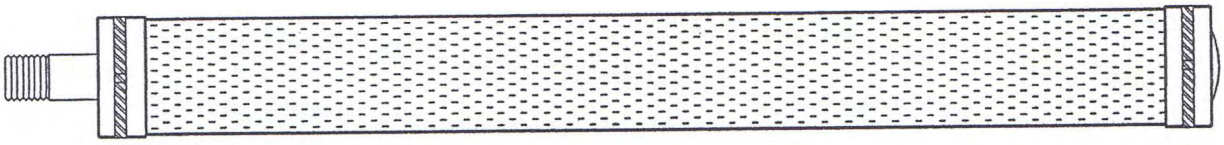
AERMAX™ MEMBRANE TUBE DIFFUSER
(Wide Band Fine Pore Diffuser)

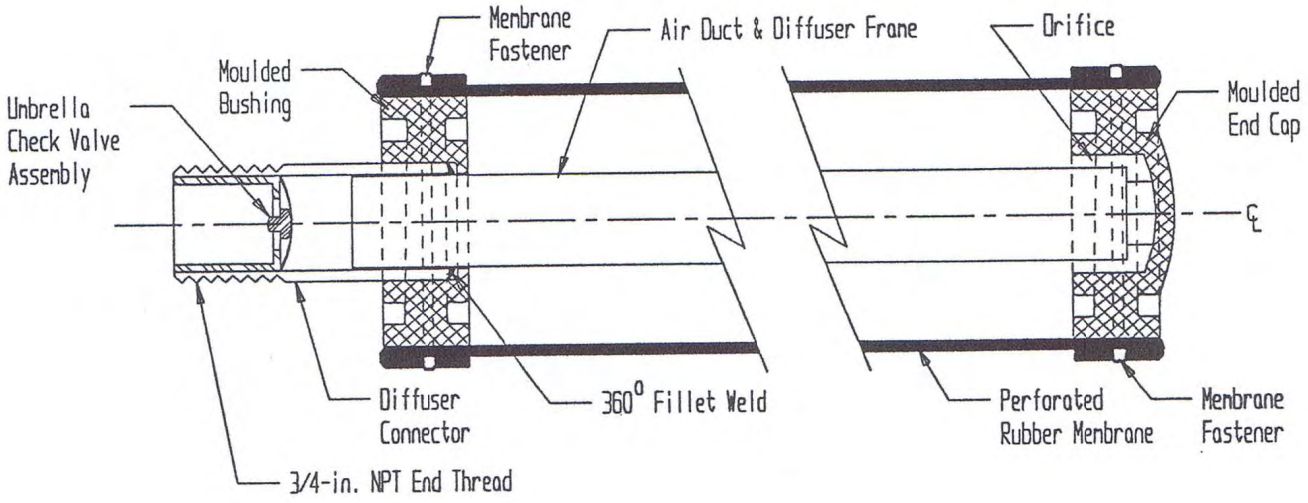
MODEL S-225

FEATURES

- stainless steel end connector
- all stainless steel diffuser frame
- strong EPDM membrane
- unique flow control and umbrella check valve assembly



SIDE VIEW



CUT AWAY VIEW

Aertec®

AERMAX™ MEMBRANE TUBE DIFFUSER PRODUCT INFORMATION

MODEL S-225

Design and Operation Specifications

- Airflow Range - 0.5 to over 10 SCFM
- Headloss Range - 4 to 24 inches H_2O
- SOTE at 15-ft. Depth - 25 to 40 percent
- Five Year Mechanical Guarantee
- Component and Material Options Below
- Standard Diffuser Data:
  - Length 27-in. nominal
  - Diameter 2.5-in. nominal
  - Weight 2.0 lb. nominal
- Custom lengths and sizes available

Diffuser Assembly Component Selection

Component	Design Features	Materials of Construction	Options
Diffuser Membrane	Tough, flexible thick wall membrane available in four standard uniform perforations for maximum oxygen transfer and minimum headloss	EPDM rubber extruded membrane	Special perforation and materials available
Membrane Fastener	Permanent or reusable fasteners constructed of high strength corrosion resistant materials for positive membrane fastening	100% 304 stainless steel construction	Special fasteners available
Diffuser Connector	High strength machined fitting with standard 3/4-in. NPT air header connector cannot break or corrode	304 stainless steel	Special thread or material available
Moulded End Fittings	Rugged, high strength fittings take no bending load and are totally corrosion resistant	HDPE, UV stablized	None
Diffuser Frame	0.035-in. thick tubular frame 3/4-in. diameter will not break, bend, or corrode	304 stainless steel	Special materials available
Umbrella Check Valve Assembly	Prevents liquid backflow into diffuser and air distribution piping and functions as airflow control orifice	Soft molded rubber and stainless steel housing	None

AERMAX™ MEMBRANE TUBE DIFFUSER SPECIFICATION
(Wide Band Fine Pore Diffuser)
MODEL P-225

GENERAL

Diffusers shall be AERMAX™ perforated membrane tube type as manufactured by Aeration Technologies, Inc. (AERTEC). The diffuser shall be hollow cylindrical shape with integral air duct and plenum design to insure completely uniform distribution of air over the entire operating range of air flows. The diffuser shall be furnished totally assembled by the manufacturer, ready for installation.

The nominal diffuser length shall be 24 inches as measured from outside ends of the diffuser frame excluding threaded end connector for attaching the diffuser to the air distribution pipe. The nominal diameter of the diffuser shall be 2.5 inches.

DIFFUSER ASSEMBLY

Each diffuser shall consist of the following:

- one 3/4-inch NPT threaded stainless steel diffuser connector
- one HDPE diffuser frame
- one EPDM diffuser membrane
- two stainless steel membrane fasteners
- one PVC threaded end bushing
- one ABS threaded end cap

DIFFUSER MEMBRANE

The diffuser membrane shall consist of EPDM rubber compound 40K6 extruded into a one piece flexible tube with the following characteristics:

Parameters	Standard	Value/Unit
Elongation at Break	ASTM D412	600%
Tensile Strength	ASTM D412	1,450 psi
Tear Growth Resistance	ASTM D624	100 lbs./in. (against grain)
Tear Growth Resistance	ASTM D624	110 lbs./in. (with grain)
Hardness	ASTM D2240	40 ±5

The tubing shall be perforated with precision die punch slits that open under pressure.

The surface of the membrane shall be reasonably smooth to prevent biological growth build-up, no increase in headloss, and to provide for easy cleaning. Non-rubber membranes that do not exhibit elastic characteristics are not acceptable. Plasticized PVC and polypropylene sheaths are not acceptable. Membranes manufactured using a longitudinal seam are not acceptable.

The membrane shall be 2.7-in. nominal diameter by 0.07-in. nominal thickness with an overall length of 26 inches. Perforated length on diffuser membrane shall be 22 inches.

Membranes shall have a 0.5-in. non-perforated strip at the top of the diffuser to reduce bubble coalescence. A 0.75-in. non-perforated section shall be provided at the bottom of the diffuser to act as the positive backflow prevention valve.

The total active surface area of the diffuser membrane shall be 160 square inches. Demonstration of full utilization of perforated area shall be provided to the Engineer upon request. Incomplete utilization of perforated surface area under design conditions shall not be acceptable.

MEMBRANE FASTENER

The diffuser membrane shall be fastened with circular crimped 304 stainless steel ring fasteners at each end of the diffuser. The fastener shall guarantee a 360° seal through use of a tongue and groove design that leaves no steps, gaps or unbridged parts on the inner circumference. The fastener shall have a built-in spring action which permits the fastener to "breathe" without loosening, and shall not require retightening. Fasteners using worm gears, screws, or other components which could tear the membrane, leave gaps or require retightening shall not be acceptable.

DIFFUSER SUPPORT FRAME ASSEMBLY

The diffuser membrane shall be fully supported over its full length and circumference with a diffuser frame. Each frame shall be approximately 24 inches long and have a nominal outside diameter of 2.4 inches. The frame shall be fabricated of SDR 9 HDPE extruded cylinder pipe with air release orifices along its length. The inlet end of the diffuser frame shall have a full diameter threaded bushing for acceptance of the 0.75-in. stainless steel connector. In addition, each diffuser unit shall be provided with removable end cap. The end cap shall be full diameter to facilitate flushing of the diffuser assembly should cleaning be required.

DIFFUSER CONNECTOR

The diffuser connector shall be manufactured of a standard 0.75-inch 304 stainless pipe with NPT thread on both ends. One end shall be used to screw into the inlet end bushing and the other end shall be used to connect to the air distribution piping. Plastic nipple connectors shall not be acceptable. The mounting connection employed for the diffuser element shall be capable of withstanding an external load of 400 ft.-lbs. without structural failure. Small diameter threaded connections shall not be acceptable to attach diffusers to the air piping. The connecting end shall be shipped with plastic thread cover to protect the threads during shipment and handling.

CHECK VALVE

Diffuser support frame and diffuser membrane shall be designed to act as a check valve to prevent entry of mixed liquor into diffuser or air piping on air shutdown or interruption of air supply. During shutdown conditions, the membrane shall contract and close around the HDPE diffuser frame. The section of rubber membrane over the air distribution orifices shall be solid without perforations to provide positive backflow capabilities. Backflow prevention capabilities shall be employed to allow intermittent operation and/or decanting of the aeration system.

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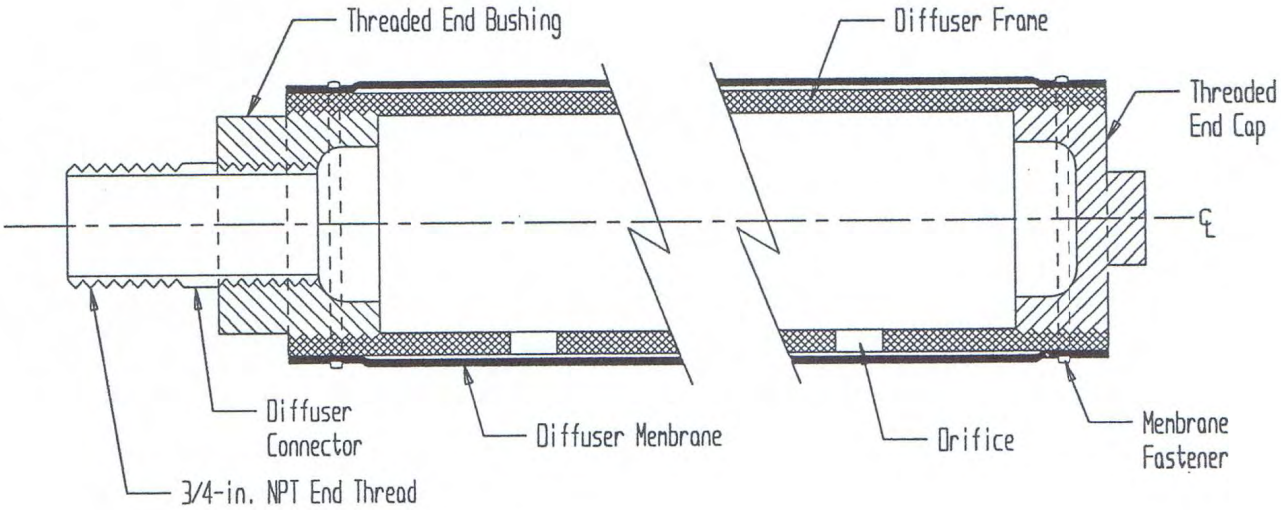
AERMAX™ MEMBRANE TUBE DIFFUSER
(Wide Band Fine Pore Diffuser)

MODEL P-225

FEATURES

- stainless steel end connector
- rugged HDPE cylindrical frame
- strong EPDM membrane
- optional sizes and components available

SIDE VIEW



CUT AWAY VIEW

Aertec®

AERMAX™ MEMBRANE TUBE DIFFUSER PRODUCT INFORMATION

MODEL P-225

Design and Operation Specifications

- Airflow Range - 0.5 to over 10 SCFM
- Headloss Range - 7 to 32 inches H_2O
- SOTE at 15-ft. Depth - 20 to 35 percent
- Five Year Mechanical Guarantee
- Component and Material Options Below
- Standard Diffuser Data:
  - Length 27-in. nominal
  - Diameter 2.5-in. nominal
  - Weight 2.0 lb. nominal
- Custom lengths and sizes available

Diffuser Assembly Component Selection

Component	Design Features	Materials of Construction	Options
Diffuser Membrane	Tough, flexible thick wall membrane available in four standard uniform perforations for maximum oxygen transfer and minimum headloss	EPDM rubber extruded membrane	Special perforation and materials available
Membrane Fastener	Permanent or reusable fasteners constructed of high strength corrosion resistant materials for positive, quick, and easy membrane fastening	100% 304 stainless steel construction	Special fasteners available
Diffuser Connector	High strength machined fitting with standard 3/4-in. NPT air header connector cannot break or corrode	304 stainless steel	Special thread or material available
Threaded End Bushing	Machined for exact fit of diffuser connector to ensure maximum strength and tightness	PVC	None
Diffuser Frame	Rugged high strength thick walled industrial plastic is suitable for all wastewater environments	HDPE, UV stabilized	None
Threaded End Cap	Removable for easy maintenance of diffuser	ABS	None

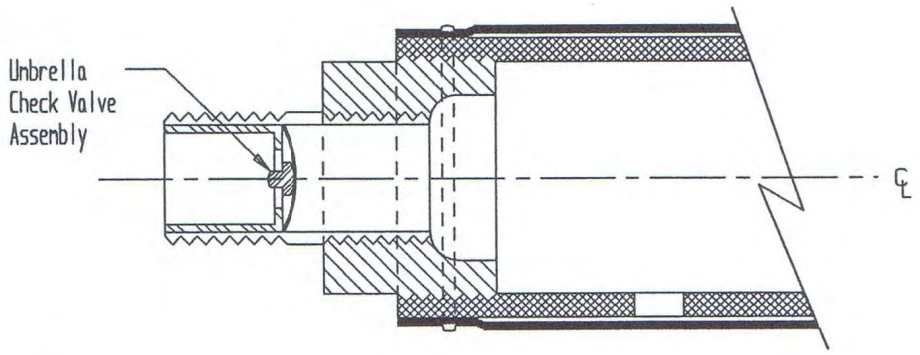
AERMAX™ MEMBRANE TUBE DIFFUSER
PRODUCT INFORMATION

MODEL P-225

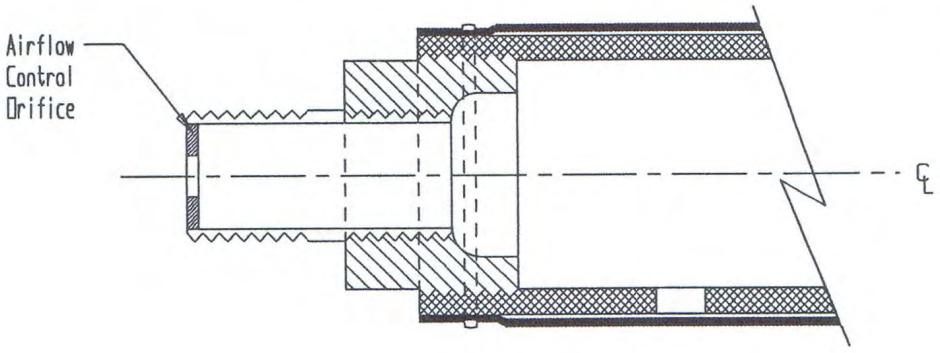
Optional Components

Component	Design Features	Materials of Construction	Options
Umbrella Check Valve Assembly	Prevents liquid backflow into diffuser and air distribution piping and functions as airflow control orifice	Soft molded rubber with stainless steel housing	None
Airflow Control Orifice	Precise airflow control and air balancing for special applications	machined 1/8-in. thick brass	Special materials available

Option Details



Umbrella Check Valve



Airflow Control Orifice

MODEL P-225
SUPPLEMENTAL SPECIFICATIONS
(Optional Features and Services)

CHECK VALVE AND AIR METERING ORIFICE ASSEMBLY

The diffuser assembly shall be equipped with a circular umbrella check valve specially manufactured for the service, and it shall be of soft molded rubber requiring a slight positive pressure to open. The purpose of the check valve shall be to exclude water from the diffuser and air distribution piping upon shutoff of the air. The check valve shall not impede airflow and keep headloss to a minimum. The check valve shall be designed such that positive closure is assured. Flap valves of sheet material are not acceptable. Housing for the check valve shall act as an air metering orifice to insure equal distribution of air through all diffusers. The housing shall be press fit into the entrance end of the diffuser connector.

CONTROL ORIFICE
(Special applications only)

The engineered control orifice shall be manufactured of 1/8-inch brass and press fit into the diffuser connector. The control orifice shall be sized for a specific pressure drop to match the system airflow delivery requirements and/or system. Airflow balancing and maldistribution analysis shall be submitted if requested.

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PERFORMANCE
(Configuration and submergence dependent)

Each diffuser shall have the following oxygen transfer efficiency and headloss characteristics when tested at ____ feet submergence and at the project geometric configuration.

Diffuser Air Flow, SCFM	Min. SOTE, %	Max. Headloss, Inches of Water
1.0		
3.0		
5.0		
7.0		

The manufacturer shall furnish actual test results by an independent laboratory supporting the above, if requested.

(Consult manufacturer to determine appropriate performance values as performance is related to submergence, diffuser density and placement in the tank.)

MANUFACTURER SERVICES

The manufacturer shall provide the services of a competent factory trained representative familiar with the installation of the diffusers and air piping system, as required to assist the contractor in the proper installation of the equipment and to instruct the owner's personnel in the equipment's operation and maintenance.

The following service times shall be furnished:

	man hours of instruction on the installation of the aeration equipment
	man hours for the supervision of the installation of the aeration system
	man hours for the inspection of the completed system
	man hours for the start-up of the system and for operator training and maintenance and care

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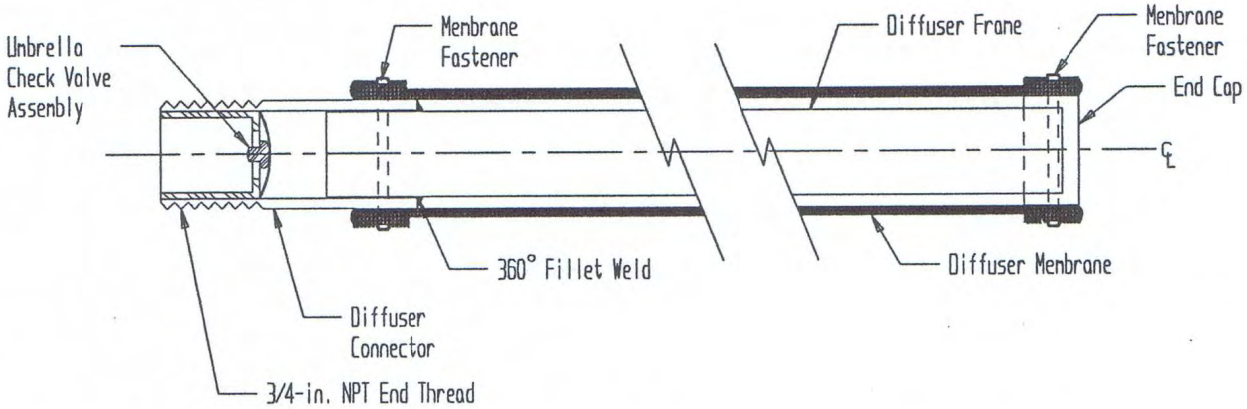
AERMAX™ MEMBRANE TUBE DIFFUSER
(Wide Band Fine Pore Diffuser)

MODEL S-125

FEATURES

- stainless steel end connector
- all stainless steel diffuser frame
- strong EPDM membrane
- unique flow control and umbrella check valve assembly

SIDE VIEW



CUT AWAY VIEW

Aertec®

AERMAX™ MEMBRANE TUBE DIFFUSER
PRODUCT INFORMATION

MODEL S-125

Design and Operation Specifications

- Airflow Range - 0.5 to over 10 SCFM
- Headloss Range - 4 to 24 inches H_2O
- SOTE at 15-ft. Depth - 25 to 40 percent
- Standard Diffuser Data:
- Five Year Mechanical Guarantee
- Component and Material Options Below
- Custom lengths and sizes available

	Overall Length	*Diameter*	*Weight*
◊ S-125-24	26-in.	1.25-in.	1.50 lbs.
◊ S-125-30	32-in.	1.25-in.	1.75 lbs.
◊ S-125-36	38-in.	1.25-in.	2.00 lbs.

Diffuser Assembly Component Selection

Component	Design Features	Materials of Construction	Options
Diffuser Membrane	Tough, flexible thick wall membrane available in four standard uniform perforations for maximum oxygen transfer and minimum headloss	EPDM rubber extruded membrane	Special perforation and materials available
Membrane Fastener	Permanent or reusable fasteners constructed of high strength corrosion resistant materials for positive membrane fastening	100% 304 stainless steel construction	Special fasteners available
Diffuser Connector	High strength machined fitting with standard 3/4-in. NPT air header connector cannot break or corrode	304 stainless steel	Special thread or material available
Diffuser Frame	0.035-in. thick tubular frame 3/4-in. diameter will not break, bend, or corrode	304 stainless steel	None
End Cap	High strength corrosion resistent material	304 stainless steel	None
Umbrella Check Valve Assembly	Prevents liquid backflow into diffuser and air distribution piping and functions as airflow control orifice	Soft molded rubber and stainless steel housing	None

AERMAX™ MEMBRANE TUBE DIFFUSER SPECIFICATION
(Wide Band Fine Pore Diffuser)
MODEL S-125

GENERAL

Diffusers shall be AERMAX™ perforated membrane tube type as manufactured by Aeration Technologies, Inc. (AERTEC). The diffuser shall be hollow cylindrical shape with integral air duct and plenum design to insure completely uniform distribution of air over the entire operating range of air flows. The diffuser shall be furnished totally assembled by the manufacturer, ready for installation.

The nominal standard diffuser lengths shall be 24, 30, or 36-inches as measured from outside ends of the diffuser frame excluding threaded end connector for attaching the diffuser to the air distribution pipe. The nominal diameter of the diffuser shall be 1.25 inches.

DIFFUSER ASSEMBLY

Each diffuser shall consist of the following:

- one 3/4-inch NPT threaded stainless steel diffuser connector
- one stainless steel diffuser frame and plenum
- one EPDM diffuser membrane
- two stainless steel membrane fasteners
- one stainless steel end cap
- one check valve and air metering orifice assembly

DIFFUSER MEMBRANE

The diffuser membrane shall consist of EPDM rubber compound 40K6 extruded into a one piece flexible tube with the following characteristics:

Parameters	Standard	Value/Unit
Elongation at Break	ASTM D412	600%
Tensile Strength	ASTM D412	1,450 psi
Tear Growth Resistance	ASTM D624	100 lbs./in. (against grain)
Tear Growth Resistance	ASTM D624	110 lbs./in. (with grain)
Hardness	ASTM D2240	40 ±5

The tubing shall be perforated with precision die punch slits that open under pressure.

The surface of the membrane shall be reasonably smooth to prevent biological growth build-up, no increase in headloss, and to provide for easy cleaning. Non-rubber membranes that do not exhibit elastic characteristics are not acceptable. Plasticized PVC and polypropylene sheaths are not acceptable. Membranes manufactured using a longitudinal seam are not acceptable.

The membrane shall be 1.25-in. nominal diameter by 0.07-in. nominal thickness with an overall length of 28, 34, or 38-inches. Perforated length on diffuser membrane shall be 22, 28 or 34 inches.

The total active surface area of the diffuser membrane shall be 41 square inches per linear foot of membrane. Demonstration of full utilization of perforated area shall be provided to the Engineer upon request. Incomplete utilization of perforated surface area under design conditions shall not be acceptable.

END CAP

The end cap shall be machine formed of 304 stainless steel sheet stock. The circumference of the cap shall be smooth and free of sharp edges whever it could damage the membrane.

MEMBRANE FASTENER

The diffuser membrane shall be folded double over each end of the diffuser frame and shall be fastened with circular crimped 304 stainless steel ring fasteners. The fastener shall guarantee a 360° seal through use of a tongue and groove design that leaves no steps, gaps or unbridged parts on the inner circumference. The fastener shall have a built-in spring action which permits the fastener to "breathe" without loosening, and shall not require retightening. Fasteners using worm gears, screws, or other components which could tear the membrane,

leave gaps or require retightening shall not be acceptable.

DIFFUSER FRAME

The membrane frame shall be a tubular 304 stainless steel tube 0.75-in. diameter with 0.035-in. wall. The frame shall be finished with a smooth radiused end at the discharge end. The inlet end shall be inserted into and full 360 degree fillet welded to the diffuser connector.

DIFFUSER CONNECTOR

The diffuser connector shall be manufactured of a standard 0.75-inch 304 stainless pipe with NPT thread on one end. One end shall be used to hold the diffuser frame and the other end shall be used to connect to the air distribution piping. Plastic nipple connectors shall not be acceptable. The mounting connection employed for the diffuser element shall be capable of withstanding an external load of 400 ft.-lbs. without structural failure. Small diameter threaded connections shall not be acceptable to attach diffusers to the air piping. The connecting end shall be shipped with plastic thread cover to protect the threads during shipment and handling.

CHECK VALVE AND AIR METERING ORIFICE ASSEMBLY

The diffuser assembly shall be equipped with a circular umbrella check valve specially manufactured for the service, and it shall be of soft molded rubber requiring a slight positive pressure to open. The purpose of the check valve shall be to exclude water from the diffuser and air distribution piping upon shutoff of the air. The check valve shall not impede airflow and keep headloss to a minimum. The check valve shall be designed such that positive closure is assured. Flap valves of sheet material are not acceptable. Housing for the check valve shall act as an air metering orifice to insure equal distribution of air through all diffusers. The housing shall be press fit into the entrance end of the diffuser connector.

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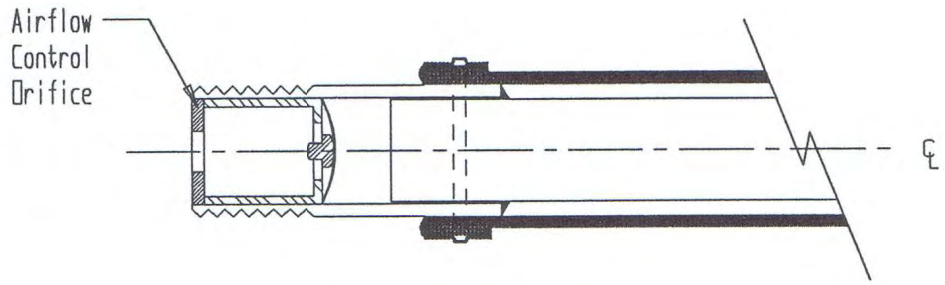
AERMAX™ MEMBRANE TUBE DIFFUSER
PRODUCT INFORMATION

MODEL S-125

Optional Components

Component	Design Features	Materials of Construction	Options
Airflow Control Orifice	Precise airflow control and air balancing for special applications	machined 1/8-in. thick brass	Special materials available

Option Detail



Airflow Control Orifice

MODEL S-125
SUPPLEMENTAL SPECIFICATIONS
(Optional Features and Services)

CONTROL ORIFICE
(Special applications only)

The engineered control orifice shall be manufactured of 1/8-inch brass and press fit into the diffuser connector. The control orifice shall be sized for a specific pressure drop to match the system airflow delivery requirements and/or system. Airflow balancing and maldistribution analysis shall be submitted if requested.

* * * * *

PERFORMANCE
(Configuration and submergence dependent)

Each diffuser shall have the following oxygen transfer efficiency and headloss characteristics when tested at ____ feet submergence and at the project geometric configuration.

Diffuser Air Flow, SCFM	Min. SOTE, %	Max. Headloss, Inches of Water
1.0		
3.0		
5.0		
7.0		

The manufacturer shall furnish actual test results by an independent laboratory supporting the above, if requested.

(Consult manufacturer to determine appropriate performance values as performance is related to submergence, diffuser density and placement in the tank.)

MANUFACTURER SERVICES

The manufacturer shall provide the services of a competent factory trained representative familiar with the installation of the diffusers and air piping system, as required to assist the contractor in the proper installation of the equipment and to instruct the owner's personnel in the equipment's operation and maintenance.

The following service times shall be furnished:

	man hours of instruction on the installation of the aeration equipment
	man hours for the supervision of the installation of the aeration system
	man hours for the inspection of the completed system
	man hours for the start-up of the system and for operator training and maintenance and care

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