




Series 100 Genie[®] Membrane Separators[™] (original two part bolted construction)






Purpose

- ▶ Sample conditioning and analyzer protection by removal of entrained liquid and fine particles from gas (vapor) streams.

Notes

- ▶ Each model has several Genie[®] phase separation membrane types available for handling a wide range of applications.*
 - ▶ Flow rates cited pertain to the flow through the membrane and DO NOT reflect the bypass flow.
 - ▶ If the sample stream contains a large quantity of solid particles, there will be a need to pre-filter the sample before it reaches the Genie[®]. Please see the Avenger[™] Series Selection guide to determine the appropriate model for pre-filtering.
- * Refer to the membrane comparison chart for more detailed information on the available types of membrane, and see the corresponding product sheets for additional information.

	<p>Model 170</p> <ul style="list-style-type: none"> ▶ Protects small, portable gas analyzers requiring very low sample flow rates (eg: Lab GC) from liquid and fine particle damage when the normal amount of liquid present in the sample gas is low (aerosols or occasional droplets) ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 300 cc/min for Type 5 & BTU membrane ▶ 750 cc/min for Hi-Flow/Hi-Flow Backed ▶ Rated for 500 PSI (MOP) ▶ Ports require 1/16" low volume fittings ▶ "Universal Assembly" available which is a pre-assembled kit including all necessary components for easy installation into an existing sample system.
	<p>Model 101</p> <ul style="list-style-type: none"> ▶ Protects Gas Chromatographs (GC) and other "on-line" analyzers requiring low sample flow rates from liquid and particulate damage when the normal amount of liquid present in the sample gas is low to medium (aerosols, occasional droplets, or continuous droplets) ▶ 18 years of success in this application ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 1,440 cc/min for Type 5 & BTU membrane ▶ 5,000 cc/min for Hi-Flow/Hi-Flow Backed ▶ Liquid Block[™] Valve Retrofit available for automatic gas flow "shut-off" when excessive liquid is present in the sample gas ▶ "Universal Assembly" available which is a pre-assembled kit including all necessary components for easy installation into an existing sample system. ▶ Stainless Steel housing rated for 1,000 PSI (MOP)
	<p>Model 102A</p> <ul style="list-style-type: none"> ▶ Protects "on-line" analyzers requiring higher flow rates than a GC, from liquid and particulate damage, when the normal amount of liquid present in the sample gas is low (aerosols or occasional droplets) ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 11,440 cc/min for Type 5 & BTU membrane ▶ 37,800 cc/min fir Hi-Flow/Hi-Flow Backed ▶ Rated for 450 PSI (MOP)

	<p>Model 102AX</p> <ul style="list-style-type: none"> ▶ Same applications as the Model 102A except it has two (back to back) membranes resulting in 2 times the flow capacity of the Model 102A ▶ Only one set of ports (inlet, outlet, bypass, and drain) accommodates both membranes ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 22,800 cc/min for Type 5 & BTU membrane ▶ 75,600 cc/min for Hi-Flow/Hi-Flow Backed ▶ Rated for 450 PSI (MOP)
	<p>Model 130</p> <ul style="list-style-type: none"> ▶ Protects “on-line” analyzers from liquid and particulate damage when the normal amount of liquid present in the sample gas is higher than the Model 101, 102A, or 102AX can accommodate (continuous flowing liquid) ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 5,130 cc/min for Type 5 & BTU membrane ▶ 18,000 cc/min for Hi-Flow/Hi-Flow Backed ▶ Stainless steel housing rated for 500 PSI (MOP)
	<p>Model 130M</p> <ul style="list-style-type: none"> ▶ Internal geometry provides inertial pre-separation of liquids increasing its total liquid handling capacity. This makes it better suited to accommodate even larger amounts of liquid than the Model 130 ▶ All other characteristics are essentially the same as the Model 130 ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 5,130 cc/min for Type 5 & BTU membrane ▶ 18,000 cc/min for Hi-Flow/Hi-Flow Backed ▶ Stainless steel housing rated for 500 PSIG (MOP)
	<p>Model 130HPM</p> <ul style="list-style-type: none"> ▶ Same application as the Model 130M with a higher pressure rating ▶ Rated for 1,500 PSI (MOP) ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 5,130 cc/min for Type 5 & BTU membrane ▶ 18,000 cc/min for Hi-Flow/Hi-Flow Backed
	<p>Model 130HPMX</p> <ul style="list-style-type: none"> ▶ Same application as the Model 130M with a higher pressure rating ▶ Rated for 3,000 PSI (MOP) ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 5,130 cc/min for Type 5 & BTU membrane ▶ 18,000 cc/min for Hi-Flow/Hi-Flow Backed




Supreme Series 100 Genie® Membrane Separators™ (Supreme Series™ with screw on membrane cover)

Purpose

- ▶ Sample conditioning and analyzer protection by removal of entrained liquid and fine particles from gas (vapor) streams.

Notes

- ▶ Each model has several Genie® phase separation membrane types available for handling a wide range of applications.*
 - ▶ Flow rates cited pertain to flow through the membrane and do not reflect the bypass flow.
 - ▶ If the sample stream contains a large quantity of solid particles, there will be a need to pre-filter the sample before it reaches the Genie®. Please see the Avenger™ Series selection guide to determine the appropriate model for pre-filtering
 - ▶ A Liquid Block™ feature provides automatic gas flow “shut-off” when excessive liquid is present in the sample gas, offering redundant protection against entrained liquid.
 - ▶ The maximum Liquid Block™ valve auto-reset pressure refers to the maximum pressure difference between the inlet and outlet port that will allow the Liquid Block™ valve to open itself after having been actuated to a complete shut off.
 - ▶ The following characteristics apply to all of the “Supreme” style Genie® Membrane Separators™.
 - ▶ The cover, containing the membrane, screws into the body and can be removed for membrane inspection/replacement without disconnecting any sample lines, making it easier to access the membrane than in the original Series 100 Genies® that are bolted together.
 - ▶ All ports are located on the body which is fastened to the mounting bracket
- * Refer to the membrane comparison chart for more detailed information on the available types of membrane, and see the corresponding product sheets for additional information.

	<p>Supreme Model 120</p> <ul style="list-style-type: none"> ▶ Same application and flow rate capability as the Model 101 with a higher pressure rating ▶ Especially suited for inclusion in small enclosures or where the sample system is hot and difficult to access ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 1,440 cc/min for Type 5 & BTU membrane ▶ 5,000 cc/min for Hi-Flow/Hi-Flow Backed ▶ Rated for 2,000 PSI (MOP) ▶ Liquid Block™ valve auto re-set pressure is 35 PSI ▶ “Universal Assembly” provides pre-assembled kit including all necessary components for easy installation into existing sample system.
	<p>Supreme Model 123</p> <ul style="list-style-type: none"> ▶ Same application and flow rate capability as the Model 130 original style with a higher pressure rating ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 5,130 cc/min for Type 5 & BTU membrane ▶ 18,000 cc/min for Hi-Flow/Hi-Flow Backed ▶ Rated for 2,000 PSI (MOP) ▶ No Liquid Block™ feature available. If Liquid Block™ feature is desired, Model 123HP should be selected
	<p>Supreme Model 123HP</p> <ul style="list-style-type: none"> ▶ Same application and flow rate capability as the Model 123 except the Liquid Block™ valve feature is built into this model ▶ Maximum recommended membrane flow rates: <ul style="list-style-type: none"> ▶ 5,130 cc/min for Type 5 & BTU membrane ▶ 18,000 cc/min for Hi-Flow/Hi-Flow Backed ▶ Rated for 2,000 PSI (MOP) ▶ Liquid Block™ valve auto re-set pressure is 2,000 PSI