

# GENIE®

membrane separator  
Model 170



U.S. Patent 5,476,586

## Applications

- ▶ Protection against liquids
  - ▶ On-line and portable analyzers
  - ▶ GC's, Mass Specs, O<sub>2</sub>, H<sub>2</sub>S, Moisture, and others
- ▶ Spot, composite, or continuous gas sampling in any process industry including natural gas, petrochemical, and oil refining

## Benefits

- ▶ Superior analyzer protection
- ▶ Helps preserve sample integrity
- ▶ Improves analyzer reliability
- ▶ Reduces analyzer maintenance

## Features

- ▶ Genie® Membrane Technology™
- ▶ Low internal volume
- ▶ Simple design
- ▶ No elastomers required for sealing
- ▶ Universal Assembly™ option

## Quick Study

### The Series 100 Genie® Membrane Separators™

remove 100% of entrained liquid and particulate in gas samples, which allows only gas sample to flow to analyzers. This action protects analyzers and sample system components against liquid damage. The original Genie® Series 100 models are available in several body styles with different membrane types to accommodate a wide variety of applications. The Genie® Supreme Series™ 100 models accommodate the same applications, yet they offer an improved housing design for easy maintenance and the innovative Liquid Block Technology™ that prevents liquid from being forced across the membrane should sample line pressure conditions become upset.

**The Model 170** protects gas systems requiring very low sample flow rates on a continuous or intermittent basis. Its small internal volume and low dead volume 1/16" ports allow the Genie® Model 170 to purge quickly, which is ideal for the removing liquid aerosol droplets from gas samples; it is also perfect for protecting components such as laboratory gas chromatographs. Please note that special low volume fittings must be ordered to use a Genie® Model 170 properly.

A Universal Assembly™ preassembled kit is also available which includes all the necessary components required for easy, proper installation into an existing sample system. This model includes a 316 SS Genie® Model 170 equipped with your choice of membrane, rotameter, mounting bracket, and all basic fittings (outlet tubing not included).

## Technical Specifications

<b>Maximum pressure rating</b>	170: 500 psig 170UA: 100 psig (due to rotameter limitations)
<b>Maximum recommended supply pressure</b>	Lowest possible pressure consistent with application* *Must not exceed "Pressure rating" listed above
<b>Maximum temperature</b>	185 °F (85 °C) for Type 6/BTU membrane 302 °F (150 °C) for Hi-Flow membrane
<b>Maximum recommended membrane flow rate</b> (For higher flow rates contact the factory)	300 cc/min for Type 6/BTU membrane* 750 cc/min for Hi-Flow membrane* *Maximum flow results in approximately 2 psi membrane differential pressure
<b>Port sizes</b>	Inlet, Outlet, & Bypass: 1/16" low volume fittings
<b>Internal volume</b>	0.16 cc
<b>Wetted materials</b>	Machined parts : 316 stainless steel / NACE compliant All other metal parts: stainless steel / NACE compliant Membrane: Inert



An ISO 9001:2008 certified company



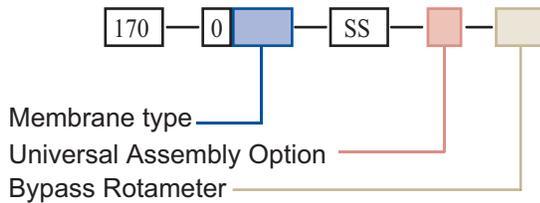
Genie®, Genie® Membrane Technology™, Genie® Membrane Separators™ are trademarks or registered trademarks of A+ Corporation, LLC. All other referenced trademarks are the property of their respective owners.

# Model Numbering & Additional Part Numbers

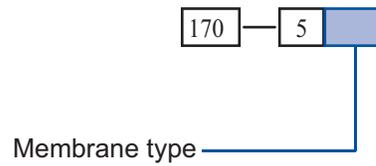
Your model number is determined by your specific needs. Choose options below. Part # 170-005-SS-U-1 is recommended for most applications.

<b>Membrane type</b>	T2 = Hi-Flow (bonded to Teflon gasket)	6 = Type 6/BTU	
<b>Universal Assembly option</b>	Blank = No Universal Assembly option	U = Universal Assembly option	
<b>Bypass Rotameter*</b> (only if option U is selected) *Dwyer Rotameter with Integral Valve	0 = Without Rotameter	1 = 10-100 cc/min*	2 = 100-1000 cc/min*
<b>Mounting bracket accessory</b>	Part # 170-509-SS (sold separately)		
<b>Fitting kit accessory</b>	Part # 170-Ferrule (sold separately - 3 sets per kit)		

## How to build the model number:



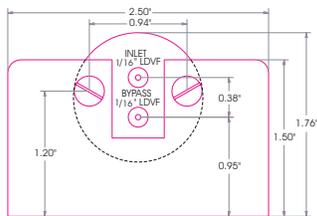
## How to build the replacement membrane kit number:



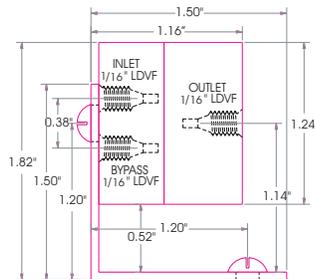
**⚠** We cannot recommend specific sealing materials due to the complex nature of sample stream compositions. Temperature and pressure also may be factors.  
**⚠** Unless specified otherwise, the product will ship with our standard sealing materials and materials of construction stated in the technical specifications section of the corresponding Product Sheet. **⚠** Please refer to [www.dupontelastomers.com](http://www.dupontelastomers.com) for sealing material recommendations and advice. It is the user's responsibility to specify the sealing materials and other materials of construction for their application.

## Dimensions

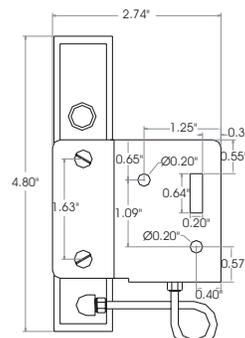
**Back View**



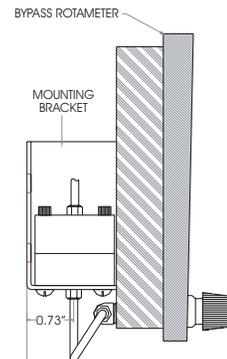
**Side View**



**Back View**



**Side View**



## Local Distributor:



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## Manufacturer

**A+ Corporation, LLC**

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