

# GENIE<sup>®</sup>133

Supreme Membrane Separator



U.S. Patent 7,555,964

## Genie<sup>®</sup> Supreme<sup>™</sup> Model 133 Probe Mount Assembly Installation & Operation Instructions

### Manufacturing Contact Information

**A+ Corporation, LLC** *Call for expert product application assistance:*  
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Gonzales, LA 70737 Fax: (225)-644-3975 E-mail: [sales@geniefilters.com](mailto:sales@geniefilters.com)

### Safety Warnings

- ⚠ Failure to abide by any of the safety warnings below may result in equipment failure and serious injury or death.
  - ▶ Valve off the sample flow before installation.
  - ▶ Do not exceed any equipment pressure ratings.

### Tools Required

- ▶ 13/16" open end wrench
- ▶ Thread sealant

## Technical Specifications

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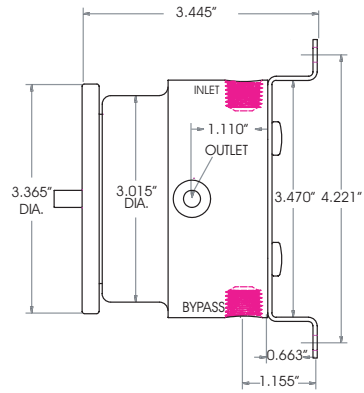
|  |   |
|--|---|
| <b>Maximum pressure rating</b>   | 3,000 psig (206.8 Bar) Probe Assembly: 2,500 psig (172.4 barg)  |
| <b>Maximum Liquid Block™ valve auto-reset pressure</b>   | 2,000 psig (137.9 barg)<br>Slowly open the supply pressure so that the minimum differential pressure required to shut off the Liquid Block™ is not met or exceeded.   |
| <b>Temperature range</b>   | Type 6 membrane: -15°F (-26.1°C) to 185°F (85°C)<br>*Type 7 membrane: -15°F (-26.1°C) to 300°F (149°C)<br>*Actual limit depends on sealing material chosen.<br>Refer to Temperature Range Comparison Chart. |
| <b>Maximum Recommended Flow Rate</b><br>Results in approx. 2 PSI pressure differential.<br>For higher flow rates, contact the factory. | Type 6 Best Rejection: 5.4 SLPM (11.4 SCFH)<br>Type 7 Highest Temps: 7.1 SLPM (15.0 SCFH)<br>Models with Liquid Block™ require 70 psig minimum inlet pressure to achieve maximum flow.                      |
| <b>Bypass flow rates</b>   | Requirement varies with application   |
| <b>Port sizes</b>  | Inlet, Outlet, & Bypass: 1/4" female NPT  |
| <b>Internal volume (cc)</b><br>Listed with and without<br>Liquid Block™ respectively   | Total: 43.7, 44.9<br>Upstream of membrane: 40<br>Downstream of membrane: 3.7, 4.9   |
| <b>Wetted materials</b>  | Machined parts: 316/316L stainless steel / NACE compliant<br>All other metal parts: stainless steel / NACE compliant<br>Sealing material: User defined<br>Membrane: Inert                                   |



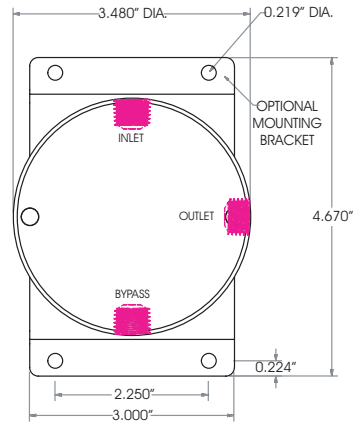
## Dimensions

### Individual product

Side View

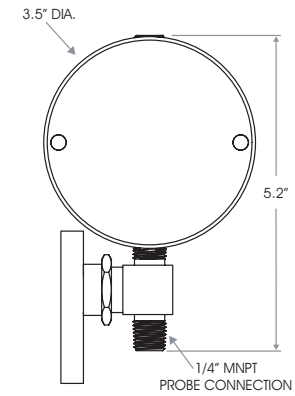


Front View

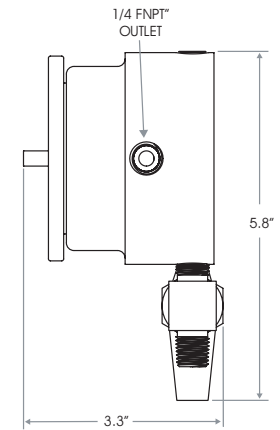


### Probe mounted assembly

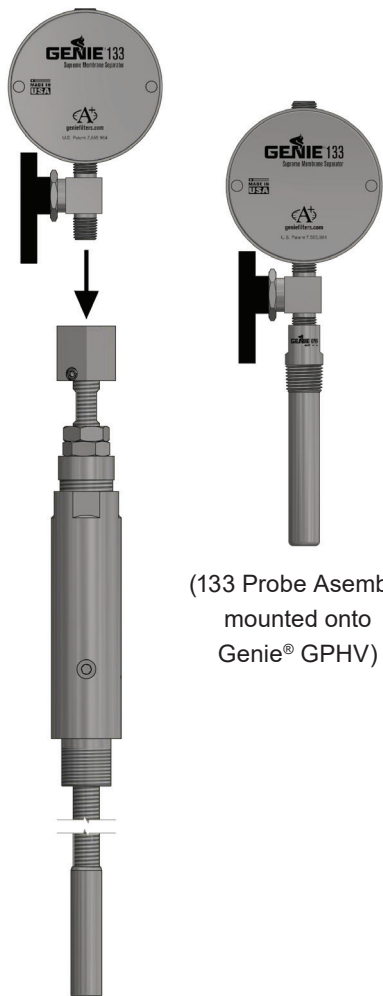
Front View



Side View



Refer to 760 or GPHV product sheet for probe dimensions and technical informati



(133 Probe Assembly  
mounted onto  
Genie<sup>®</sup> GPHV)

(133 Probe Assembly with  
Direct Drive<sup>™</sup> 760 probe)

## Installation Instructions

Note: This product is intended to be mounted on the outlet of a sample probe, as seen illustrated on the Genie<sup>®</sup> GPHV. If using a Direct Drive<sup>™</sup> 760 Probe, verify that you have the correct version of the 760 probe. A 760 with vertical outlet port orientation is required.

### Step 1. Attach the 133 assembly to probe

- ▶ Apply thread sealant, such as Teflon<sup>®</sup> tape, to inlet valve threads on the 133 assembly.
- ▶ Using a 13/16" open end wrench, attach the 133 assembly to the outlet port of the probe.
- ▶ If using a probe that is already installed, skip to step 3. If not, move on to step 2.

### Step 2. Install the 133 assembly and probe into the process

- ▶ Follow the installation instructions included with your probe for this step.

### Step 3. Connect tubing to the 133 assembly

- ▶ Connect tubing from the 133 assembly outlet port to the analyzer or next device in the system.

## Operating Instructions

Note: The distance between the Genie<sup>®</sup> and the analyzer should always be minimized. If the sample dew point is typically above the ambient temperature, then heat tracing may also be required to prevent condensation.

- Maintain the sample flow rate through the Genie outlet port below the maximum recommended flow rate. This typically keeps the membrane differential pressure below 2 PSI, providing that all of the membrane area is available for flow. Very few liquid components will flow through the membrane when the membrane differential pressure is below 2 PSI.

## Model Numbering & Additional Part Numbers

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Your model number is determined by your specific needs. Choose options below.

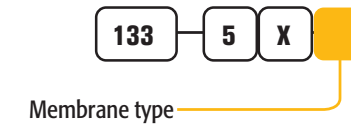
|                             |   |                        |  |
|-----------------------------|---|------------------------|--|
| <b>Sealing material</b>     | 0 = fluoroelastomer   | 1 = perfluoroelastomer | <i>(others available upon request)</i> |
| <b>Membrane type</b>        | 6 = Better Rejection; Rejects ALL types of liquids from vapor<br>7 = Highest Temps; Rejects ONLY high surface tension liquids |                        |  |
| <b>Liquid Block™ option</b> | Blank = No Liquid Block™  | LB = Liquid Block™     |  |
| <b>Mounting bracket</b>     | Part # 133-509-SS (sold separately)   |                        |  |

#### Model number:



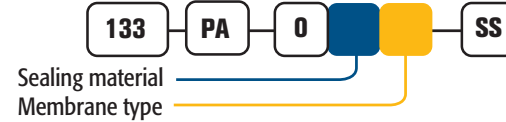
#### Replacement membrane kit number:

Five membranes per kit. O-rings sold separately



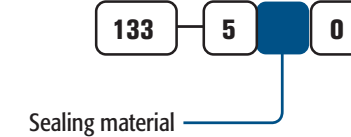
#### Assembly for probe mounting:

Refer to 760 or GPHV product sheet for probe dimensions and technical information.



#### Membrane replacement sealing material number:

One o-ring per kit.



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