



# GENIE<sup>®</sup> 701

Portable Insertion Probe™

## Extremely lightweight yet surprisingly rugged

Liquid in a sample conditioning system can damage analyzers and lead to inaccurate sample analysis; directly affecting the bottom line. Applying our Analytically Correct™ designs to your sampling system can prevent these occurrences.

Our Genie<sup>®</sup> Model 701 Portable Insertion Probe is a simple, safe and economical solution to extract a representative vapor phase sample from a gas source. Our exclusive Pressure Balance™ technique allows for effortless insertion of the probe without the need for additional tools or pneumatic and hydraulic methods. Inserting the probe is easily accomplished by simply turning the handle with fingertips. This probe's lightweight design makes it ideal for use as a spot or portable analyzer sample probe. However it can also be used in a permanent installation as part of a continuous or composite sample system.

When using the Model 701 for spot sampling, our flow restrictor and Spot Sampling Manifold are recommended. The flow restrictor prevents liquid from being forced through the membrane as a result of excessive flow while the Spot Sampling Manifold provides an easy means to connect the cylinder to the probe and purge the sample path from probe tip to cylinder inlet valve.

We are the only manufacturer that provides Analytically Correct™ membrane tipped sample probes for insertion inside a pipeline or vessel. Using a membrane tip conforms to API 14.1 and GPA 2166 standards. Our patented Genie<sup>®</sup> Membrane Probes™ are the most efficient means for separating entrained liquid from the sample at source conditions.



### Technical Specifications

|   |   |
|---|---|
| <b>Maximum pressure rating</b>  | 3,000 psig (206.8 barg)   |
| <b>Temperature Ranges</b>   | Type 6 membranes: -35°F (-37°C) to 185°F (85°C)<br>Actual limit depends on sealing material chosen.<br>Refer to Temperature Range Comparison Chart.                       |
| <b>Port size</b>  | Outlet: 1/4" female NPT   |
| <b>Insertion depth</b><br>For greater insertion depths contact the factory. | L: Adjustable up to 12" (304.8mm)   |
| <b>Installation valve requirement</b>                                       | 1/2" NPT full opening valve   |
| <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 |

### Singapore Exclusive Distributor



**Pacific Rim Technical Instrumentation & Systems**  
71 Ubi Crescent, #02-09 Excalibur Centre, Singapore 408571  
Tel: +65 6483 2905  
Fax: +65 6483 2635  
Email: Joel@pacrim.com.sg

### Product Brief

#### Applications

- Gas sampling:
  - Petrochemical refineries
  - Chemical production facilities
  - Natural gas plants and pipelines
- Gas sampling of mixtures containing less than 30% hydrogen

#### Benefits

- Rejects entrained liquid in the source
  - Preserves sample integrity
  - Protects sample system from liquid and particulates
  - Achieves natural gas standards compliance
- Eliminates the need for:
  - Line depressurization
  - Multiple probes (spot or portable sampling)

#### Features

- Field proven and patented:
  - Genie<sup>®</sup> Membrane Tip Technology™
  - Pressure Balance™ Technique
  - Harmonic resonance during dampening
- Lightweight and portable with fingertip insertion
- Insertion depth scale and magnetic indicator ring
- Flow restrictor and manifold for spot sampling
- Analytically Correct™ design
- Robust slide lock mechanism



## Model Numbering & Additional Part Numbers

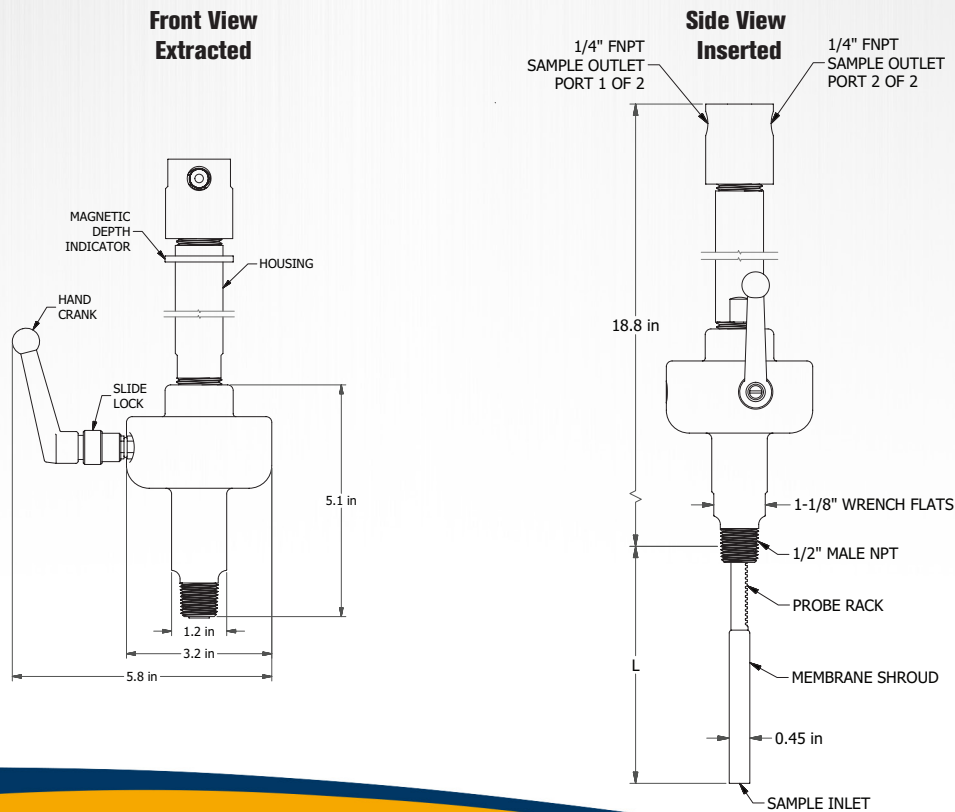
Your model number is determined by your specific needs. Choose options below.

|                                   |   |                        |   |
|-----------------------------------|---|------------------------|---|
| <b>Sealing material</b>           | 7 = Neoprene rubber   | J = RGD resistant HNBR | (other materials available upon request)      |
| <b>Membrane type</b>              | 6 = Rejects ALL types of liquids from vapor                                 |                        | (other membrane types available upon request) |
| <b>Flow restrictor</b>            | Part # ACC-SS-4-SA-EA (1/4" MNPT x 1/4" FNPT)                               |                        |   |
| <b>Spot sampling manifold</b>     | Part # 701-ACC-8111   |                        |   |
| <b>Complete membrane assembly</b> | Part # 701-CMA-576(square body) or Part # 701-2CMA-576 (current round body) |                        |   |

How to build the model number:



## Dimensions



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Pacific Rim Technical Instrumentation & Systems  
 71 Ubi Crescent, #02-09 Excalibur Centre, Singapore 408571  
 Tel: +65 6483 2905  
 Fax: +65 6483 2635  
 Email: [Joel@pacrim.com.sg](mailto:Joel@pacrim.com.sg)