



## The safest and most versatile probes available on the market!

Liquid carry over from the pipeline into the sample conditioning system should be prevented when sampling natural gas as it can directly impact the accuracy of the compositional analysis and also damage the analyzer. Industry standards state that equipment used to remove liquid from the sample must be operated at flowing temperature and pressure conditions. Genie® Probes™ provide a means to insert Genie® Membrane Technology™ directly into a pipeline for the purpose of separating unwanted liquid and particulate from the gas sample at flowing temperature and pressure conditions, in compliance with industry standards.

The GP2™ probe consists of a housing and a membrane tip probe. The housing is installed in a depressurized pipeline through a vertically mounted thread-o-let or flange, and contains a “foot valve” in its lower end. Inserting the probe into the housing opens the “foot valve”, allowing pipeline gas to flow freely through the membrane. Retracting the probe from the housing closes the foot valve, making it possible to perform probe maintenance without depressurizing the pipeline. This insertion/retraction method is considerably less expensive and complex than pneumatic or hydraulic methods.

An optional flow restrictor is available to prevent liquids from being forced through the membrane, and should be selected when the probe is being used in spot and composite sampling applications.



### Product Brief

#### Applications

- Extract a representative sample from a multi-phase gas source
- Spot, composite or continuous gas sampling
- Protection against liquids
- Online and portable analyzers
- BTU, H<sub>2</sub>S, Moisture, and others
- Gas sampling of mixtures containing less than 30% hydrogen

#### Benefits

- API 14.1, GPA 2166 and ISO 10715 probe compliance
- Helps to preserve sample integrity
- Protects analyzers
- Helps to improve safety of personnel and equipment
- Does not require hydraulic fluid
- Probe maintenance without line depressurization

#### Features

- Genie® Membrane Technology™
- Vibration resistant
- No dead volume
- Low internal volume
- J-slot safety



### Technical Specifications

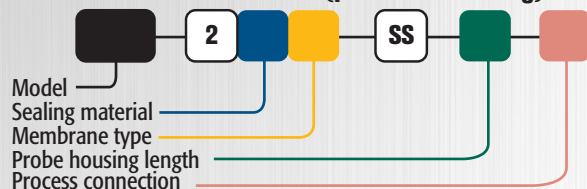
<b>Maximum Pressure Rating</b>	3,500 psig (241.3 barg)
<b>Temperature Ranges</b> * Actual limit depends on sealing material chosen. Refer to Temperature Range Comparison Chart.	Type 6 membranes: -35°F (-37°C) to 185°F (85°C) *Type 7 membrane: -35°F (-37°C) to 300°F (149°C)
<b>Maximum Recommended Flow Rate</b> Results in approx. 2 PSI pressure differential. For higher flow rates, contact the factory.	Type 6 Best Rejection: 4.1 LPM (8.7 CFH) (actual conditions) Type 7 Highest Temps: 7.6 LPM (16.1 CFH) (actual conditions)
<b>Internal Volume</b>	13.758 cc
<b>Outlet Port Size</b>	GP2: 1/8" female NPT; GPCSA: 3/4" female NPT
<b>Process Connection Requirement</b>	3/4" or 1" male NPT
<b>Thread-o-let Requirement</b>	3/4" female NPT* *The inner diameter of all openings in pipe wall and thread-o-let must not be less than 0.910" 1" female NPT** **Inner diameter must not be less than 1.141" for 1.1" diameter housing or less than 0.910" for 0.9" diameter housing
<b>Mounting Orientation</b>	Vertical (Preferred), or 45° maximum angle relative to vertical required
<b>Wetted Materials</b>	Machined parts: 316/316L stainless steel / NACE compliant All other metal parts: stainless steel / NACE compliant Foot Valve sealing material: Perfluoroelastomer Probe sealing material: User defined Membrane: inert

## Model Numbering & Additional Part Numbers

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

<b>Model</b>	GP2 = Probe w/ 1/8" FNPT outlet	GPCSA = Probe w/ adapter for YZ, PGI, & Welker Sampler
<b>Sealing material</b>	0 = Neoprene	J = RGD resistant HNBR (other materials available upon request)
<b>Membrane type</b>	6 = Better Rejection; Rejects ALL types of liquids from vapor 7 = Highest Temps; Rejects ONLY high surface tension liquids	
<b>Probe housing length</b>	Blank = 4"	B = 7"      C = 9"
<b>Process connection</b>	Blank = 3/4" NPT x 0.9 dia.*    1 = 1" NPT x 1.1 dia.    1A = 1" NPT x 0.9 dia.* *Not recommended for welding	
<b>Flow restrictor (recommended)</b>	Part # ACC-SS-4-SRA2EA Part # GP-CMA-5_6	1/8" MNPT x 1/4" FNPT (sold separately) (contains 2 complete assemblies - sold separately)

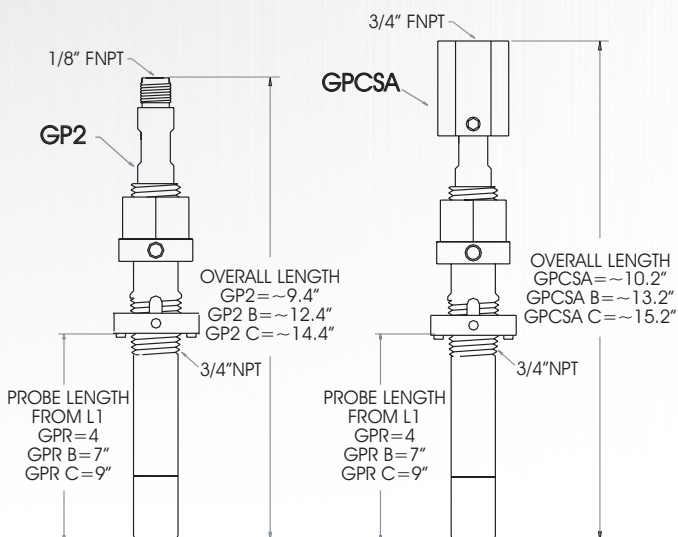
### How to build the model number (probe and housing):



## Dimensions

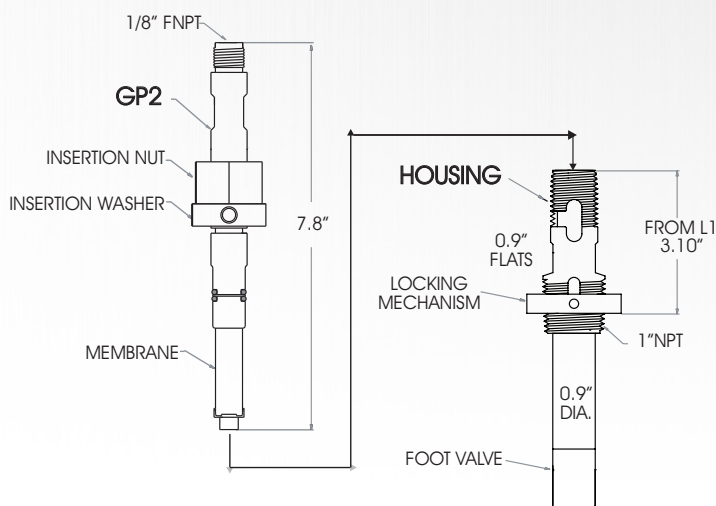
### Inserted

3/4" NPT x 0.9" DIAMETER HOUSING SHOWN



### Extracted

1" NPT x 0.9" DIAMETER HOUSING SHOWN



Analytically Correct™ sample systems, sample conditioning components, and revolutionary gas and liquid sampling technology.

Contact us for expert product application assistance.

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